Sark replacement power system





Update Jan 2024



CfR's role

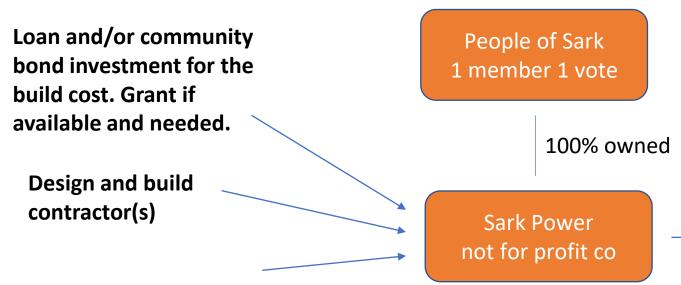
- 1. Help set up the new island-owned energy company
- 2. Help develop a finance strategy and manage the financing process
- Manage a staged tender process to find an experienced contractor to DESIGN and then BUILD the replacement system. At this stage the island is only committing to the DESIGN phase

Alongside CfR

- Energypeople have supported the drafting and review of the tender docs.
- Guernsey Electricity reviewed the tender docs and supported the bidder interviews.
- Bailiwick law officers will be supporting company set up, contracting and financing agreements.



What could island-ownership look like?



Operations contractors

- Service and maintenance, including island engineers
- Fuel supply
- Metering and billing
- Company admin
- Insurance
- Accounts

Island energy system generation and grid

Island Electricity supply at fair open book cost at price needed to cover operating and finance costs and build up prudent reserves

Island ownership does not mean Sark residents have to provide all the capital – it is about the system being owned by a not for profit community company, locally governed and with its community purpose written into its articles.

Finance options

We have explored a number of finance options:

- Channel Islands community bond raise (20 years at 7%)
- £330m States of Guernsey Treasury Bond (20 years at 3.75%)
- Energy Services Company (likely to be more expensive)

There is still significant uncertainty in the build costs. We need to complete the design phase to progress discussions with funders.

The electricity system is essential infrastructure. A Crown grant may be required to keep electricity at affordable levels.

£8million is in the mid-range of the capital raisings CfR has managed for community-owned energy projects, using a combination of community shares/bonds, public sector investment and debt finance.

Tender phase 1: Oct 22 to March 23

- Request for expressions of interest (EOI) sent to over 50 companies and to the open market via Guernsey Gov's procurement portal
- Responses received from 7 companies
- 3 companies short-listed following Q&A:
- Eaton + Vattenfall
- Schneider + Sustainable Development Capital Ltd
- Infinite Renewables Ltd (IRL) + Sancus Utilities

Tender phase 2 – March 23 to Sept 23

- Full tender sent to the 3 short-listed companies
- Island visits held through April and May
- Initial tenders received in June
- Separate tender issued for design and build of distribution system
- Took to end of Sept to get enough information from each bidder to make a recommendation

Recommendation (made end Sept):

- Split the generation system and distribution system into separate contracts
- Select IRL to design and (subject to design and contract negotiations) build the generation system
- Select Sancus to design and (subject to design and contract negotiations) build the generation system

Infinite Renewables and Sancus



www.infiniterenewables.com

Sancus

www.sancus-utilities.co.uk



www.aurora-power.co.uk



Replacement system indicative spec and cost

Generation system £3.1million

- 2 x 225kW (30m tower and 29m diameter rotor) wind turbines
- 500 kWp solar farm (1 field)
- A battery to provide system stability
- 100% diesel back-up
- 'Micro gird' control management system

Distribution system £4.8million

- Replacement 11kVA (or 3.3/6.6kV alternative) high voltage network built and maintained to UK standards
- Low voltage network replaced up to individual properties
- Scalable to future needs where cooking, heating and transport are electrified
- Control and billing system to enable low cost 'heat tariff' for hot water and storage heating when there is a surplus of wind or solar

Total c.£8.5million inc financing, project management and other development costs. <u>Costs</u> <u>are indicative only and subject to design phase</u>

Next steps – design phase £175,000

Detailed system design and costing

- Design and spec for diesel only transitional system.
- Design for spec of renewables-based system (with diesel back-up).
- Design and spec of replacement distribution network.
- Identify sub-contractors (including Sark contractors), to be subject to Sark Power's approval.
- Line-item costing.
- Plan and budget for transport of components and construction equipment to Sark.

Planning application and island engagement

Finance and setting up Sark Power

- Negotiate contract heads of terms and agree form of contract.
- Progress funder discussions once we have a design and business case.
- Progress set-up of island owned energy company Sark Power.