

For Housing Net Zero

Invest Net Zero Cheshire

IKIGAI



CATAPULT
Energy Systems



Project reference number: 27

Project name: ForHousing Net Zero

Project type: There are 152 flats across the 3 tower blocks within ForHousing's portfolio known as Joseph Groome Towers, Ellesmere Port, CH65 2BZ. These are ideal for the Collective Self Consumption business model as the towers are self-contained. Each tower block is estimated to host a 15kWp photovoltaic (PV) array on the tower roof facing south. This equates to 0.3kW peak per flat. A single 22.5kWh battery pack was modelled for each of the 3 tower blocks, which equates to 0.45kWh per unit.

Project maturity: Early-feasibility

Key strategic drivers: Decarbonisation of electrical demand. Social housing decarbonisation will require a strategic approach and landlords should consider ways in which they can deliver energy services themselves, potentially through owning part of the supply where appropriate e.g., communal supply.

Locations: Joseph Groome Towers, Ellesmere Port, CH65 2BZ

Proposed phases: TBC

Total est. carbon savings p.a. TBC

Est. project costs: The estimated cost of the solar and battery solution (exc. access costs) for the 152 flats across the 3 tower blocks is £109,000 plus VAT.

Technology, construction and operation:

- Panels: Multiple-options available. Focus on proven technologies, warranted capacity, creditworthiness of the supplier and futureproofing
- Mounting Structure: Roof top mounting to be considered further with technical advisers once the roof design has been finalised.
- Construction: Suitably qualified main contractor
- O&M: Only highly experienced operators with strong sustainability credentials will be considered. A preference for local contractors.

Revenue streams: Electricity sales to residents and a value for Firm Frequency Response (FFR) availability has been included in the model, however this does not include a value for utilisation.

Initial stakeholders: An emerging supply chain can support with the higher CAPEX technology and new services required for net zero as long as their services and solutions are aligned with RSL objectives and operations. 3rd party capital is available to support with net zero, but the layering of different stakeholders, contractual value flows and structures must be understood.

Professional advisors to date: EA Technology (electrical technical); Energy Systems Catapult (Whole Systems Modelling)

Opportunity: TBC

Outline Business Case status: Available for review subject to ForHousing permission (contact ESC)

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