

# Distributed Solar PV Portfolio

Invest Net Zero Cheshire

IKIGAI



CATAPULT  
Energy Systems



**Project reference number:** 005

**Project name:** Distributed Solar PV Portfolio

**Project type:** A community and private sector investment opportunity for utility scale ground mounted solar PV generation up to a maximum of c.840MW across 8 sites within the Cheshire West and Cheshire borough ranging between 57MW – 167MW. Power to be exported either by private wire to large, local energy consumers or to the grid via an export connection.

**Site selection:** Selection criteria included: avoidance of ALC grades 1 & 2; avoidance of 15% slope or greater; avoidance (+50m buffer) from Areas of Outstanding Natural Beauty, National Parks, World Heritage Sites, Conservation Areas, Ancient Monuments, Historic Parks and Gardens (full criteria available on request).

**Project maturity:** Early-stage development (pre-planning but with strong local authority support).

**Key strategic drivers:** Community investment initiative, affordable, sustainable electricity for local demand and improved electrical resilience.

**Locations:** 8 sites covering 1,350 hectares, 4 are located at the eastern borough boundary near Northwich, and 4 are located directly south of Ellesmere port and border the M56 motorway

**Proposed phases:** To be considered in line with forecast stakeholder demand, appetite for private wire or sleeved corporate Power Purchase Agreements (“PPA”). All sites require planning consent from the local authority, an environmental impact assessment, grid connection agreements and technical due diligence. Phasing to be considered further with prospective investors.

**Total est. carbon savings p.a.** c.176,765 tonnes CO<sub>2</sub> / year based on c.840 MW installed

**Est. project costs:**

- Development cost: c.£1.75 million
- Capital investment cost: c.£378 million
- Grid Connection: SP Energy Networks are supportive of the projects and have provided distances to the closest connection point however further feasibility is required to provide firm connection costs.

**Technology, construction and operation:**

- Panels + Mounting + Inverters: Multiple-options available. Focus on proven technologies, warranted capacity, creditworthiness of the suppliers and futureproofing.
- Construction: EPCM/EPC, to be considered further with prospective investors. A preference for local, bankable contractors.
- O&M: Only highly experienced operators with strong sustainability credentials will be considered. A preference for local, bankable contractors.

**Revenue streams:** Electricity sales revenue under multiple long-term PPAs either via private wire or sleeved corporate PPA

**Initial stakeholders:** This is an Invest Net Zero Cheshire initiative based on land availability and non-renewable electricity demand of project stakeholders.

**Professional advisors to date:** Ikigai (bankability); EA Technology (electrical technical); Energy Systems Catapult (Whole systems modelling); Dulas (site identification)

**Opportunity:** Either on a whole project or piecemeal basis. Seeking community investment, co-development, technology, construction, and operation partners and renewable energy offtakers

# **Invest Net Zero Cheshire**

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