

Protos CCUS Shared Infrastructure Project

Invest Net Zero Cheshire

IKIGAI



CATAPULT
Energy Systems



Project reference number: 016

Project type: Multi-emitter shared CCUS infrastructure at Protos Park.

Project maturity: Conceptual stage / early-feasibility

Key strategic drivers: Enabling carbon emissions to be reduced at Protos, with ambition to position Protos as a country-leading energy and industrial park for hydrogen and CCUS infrastructure.

Location(s): Protos Park, Ellesmere Port.

Proposed phases:

- Short term horizon- preparing Protos to be CCUS ready
- Mid-term horizon- develop initial carbon transport infrastructure connected to anchor tenants
- Long-term horizon- expansion of infrastructure to accommodate a greater volume of carbon emissions

Total estimated carbon savings p.a.: Enables the sequestration of approximately 8.6 million tonnes of CO₂ by 2050, with potential for a further 10 million tonnes of CO₂ by 2050 if expansion plans are fully realised. This is considering Scope 1 emissions only. Further due diligence will be necessary to define the Scope 2 and 3 emissions implications of the project.

Estimated project costs: Further work is necessary to accurately estimate the costs associated with each phase.

Technology, construction, and operation:

1. Carbon capture: the appropriate carbon capture technology will be chosen by each tenant at Protos to reflect the requirements of their specific industrial processes/flue gases.
2. Other technology: the infrastructure would take the form of a CO₂ pipeline network at Protos to take advantage of reutilisation and permanent storage opportunities as part of HyNet.

Revenue streams: The project will require long term carbon price signals and appropriate investment frameworks from UK Government, as is the case for the successful delivery of other CCUS projects in the UK.

Initial stakeholders: Peel NRE, Protos (including its tenants) and the HyNet North West Consortium and UK Government are crucial stakeholders in the project.

Opportunity: Strategic investors and technology partners.

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