

“CCS is a necessity, not an option.”

Committee on Climate Change, May 2019

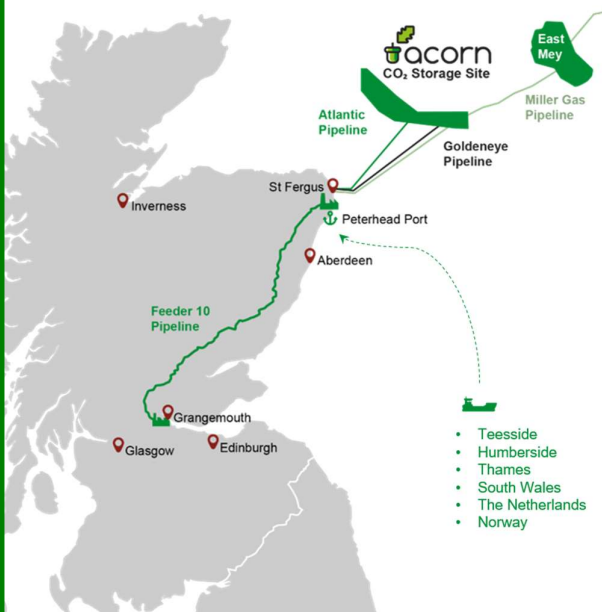


There are 2 elements to the Acorn project – carbon capture and storage (CCS) and hydrogen. Acorn CCS is a low-cost, low-risk, carbon capture and storage project that provides CO₂ mitigation infrastructure essential for meeting the Scottish and UK Government Net Zero targets.

Acorn CCS is designed to be built quickly, taking advantage of existing oil and gas infrastructure and a well understood offshore CO₂ storage site which has the first UK CO₂ appraisal and storage license to be awarded by the Oil and Gas Authority.

Through the Acorn Hydrogen project, North Sea natural gas would be reformed into clean hydrogen, with CO₂ emissions safely mitigated through the Acorn CCS infrastructure. Hydrogen would be used in transport applications, and in the gas grid to decarbonise heating in our homes and industries.

Acorn CCS has been designated a European Project of Common Interest (PCI) and together with Acorn Hydrogen, is a very important catalyst for clean growth in the north east of the UK and beyond.



Phase 1: Establishing the CCS infrastructure



Low capital cost start

Around 340,000 tonnes per year of existing CO₂ from the St Fergus gas terminal.



Pipeline reuse

More than £750 million cost savings from reuse of high capacity on and offshore pipelines.



World class CO₂ stores

Two large, well understood CO₂ stores with plenty room for growth.

Phase 2: A catalyst for clean growth



A major hydrogen production and CCS hub at St Fergus.



An economic opportunity for the deep-water port at Peterhead to include CO₂ import facilities.



A repurposed onshore pipeline to deal with Scotland's major industrial emissions.



An international CO₂ storage hub in the Central North Sea.

The project is led by Pale Blue Dot Energy, with funding and support from industry partners (Chrysaor, Shell and Total) the UK and Scottish Governments, and the European Union.

With the continued support of Governments and industry, Acorn CCS could be operating by 2024.