

October 2021

STOREGGA



Harbour Energy

Acorn Project Update

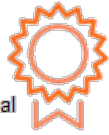
Petrofac 

Introducing Petrofac – A life of asset energy services provider

Petrofac by numbers

#20

ENR Top 250 International contractors of the world



+200

Major projects delivered



9,400

worldwide employees



>4.5 MN

Annual engineering man-hours



>US\$2 BILLION

Procurement spend (on average per year)



>200 MILLION

Average annual direct construction man-hours



40 year

Track record

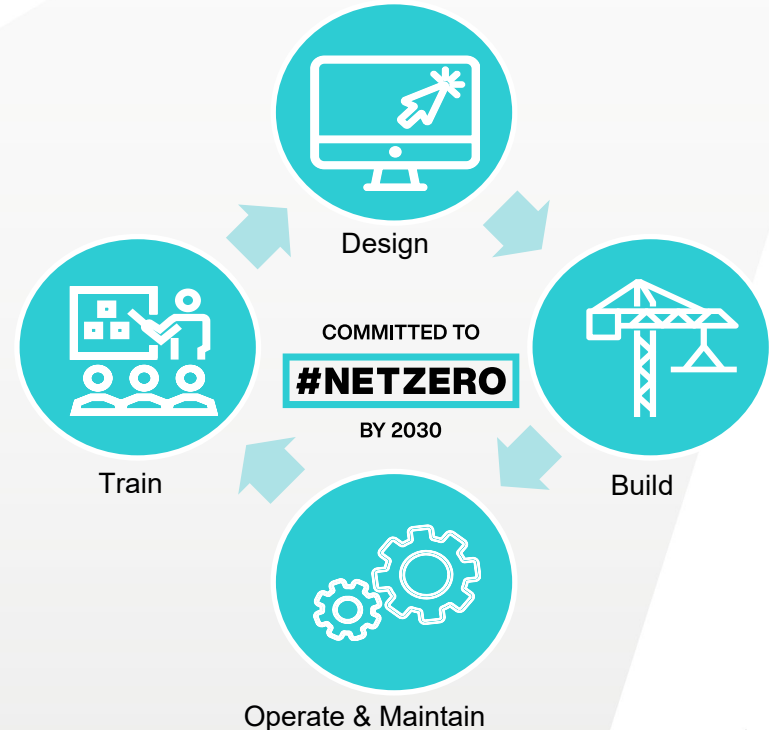


31 offices

Worldwide 29 countries



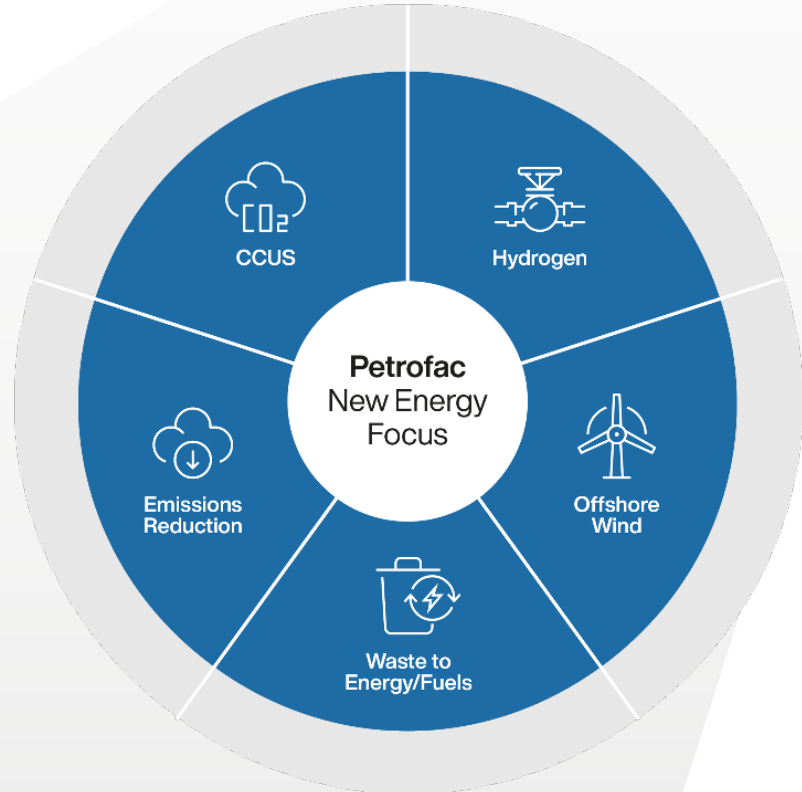
Our life of asset offering



CCUS is one of our five focus areas in New Energy Services

Our CCUS Track Record:

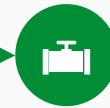
- PMO/OE for Storegga on the Acorn project (Scottish Cluster)
- FEED for Storegga on the Acorn Subsea & Pipeline package
- Concept and Pre-FEED for Storegga on the Direct Air Capture project (Carbon Engineering Technology)
- Concept for Storegga on the Peterhead CO2 Import Terminal
- Pre-FEED of the Carbon Capture Unit for Shell on their original Peterhead project
- FEED for Stockholm Exergi for the Carbon Capture and Export on their 375 MW CHP biofuel power plant at Värtaverket



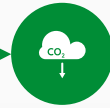
acorn: Phase 1 – establishing the infrastructure



Capture
at St Fergus
gas terminal



Transport
through
Goldeneye
pipeline



Store
in the Acorn
CO₂ Storage
Site



The project is led by **STOREGGA**, who are partnered with and



Acorn CCS starts with existing CO₂ emissions from the St Fergus gas terminal (340ktpa)

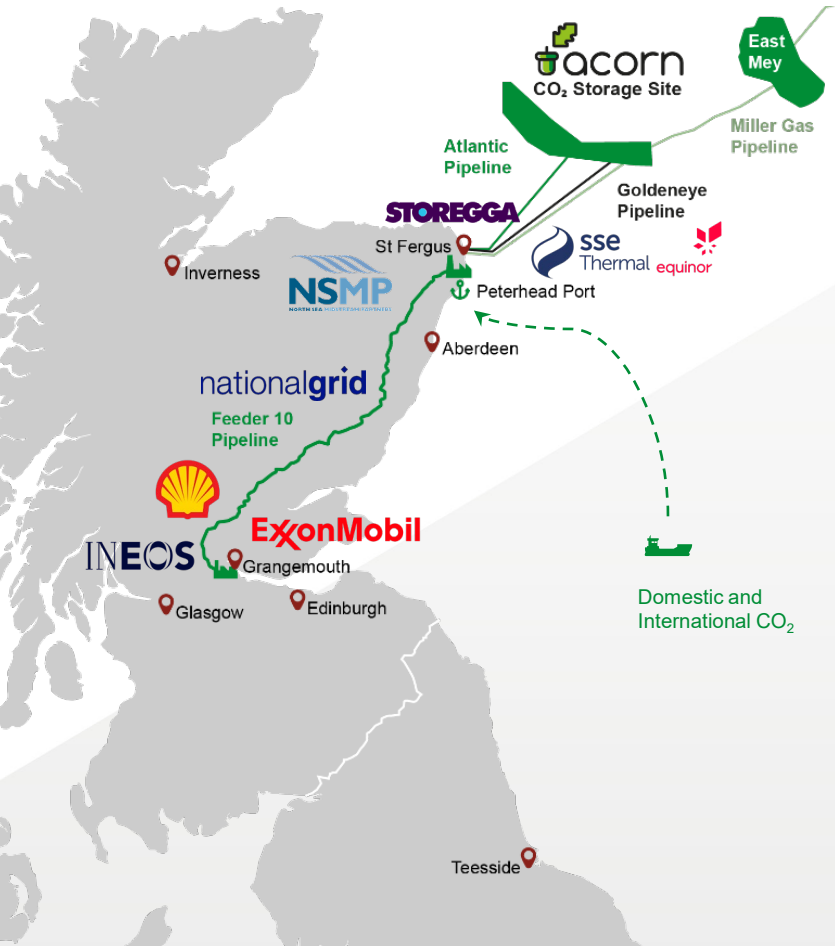


This unlocks a very large CO₂ transportation & storage solution, with lots of options for further growth – 150MTpa storage initially available



Acorn, as part of the Scottish Cluster, is one of five CCUS project currently vying to be one of the first two CCUS projects backed by the UK Government

acorn: Phase 2 – a catalyst for clean growth



CO₂ from H₂ production hub

35%

of all natural gas used in the UK comes onshore at St Fergus.

An ideal site for a major H₂ production hub. H₂ can be fed directly into the gas grid for blending and decarbonising gas.

CO₂ import facilities at the deep-water Peterhead Port

8 Miles

from St Fergus gas terminal, Peterhead Port offers huge development opportunities.

Providing a CO₂ transport and storage solution for industrial clusters across the North Sea Basin.

CO₂ from the Grangemouth cluster and beyond

90%

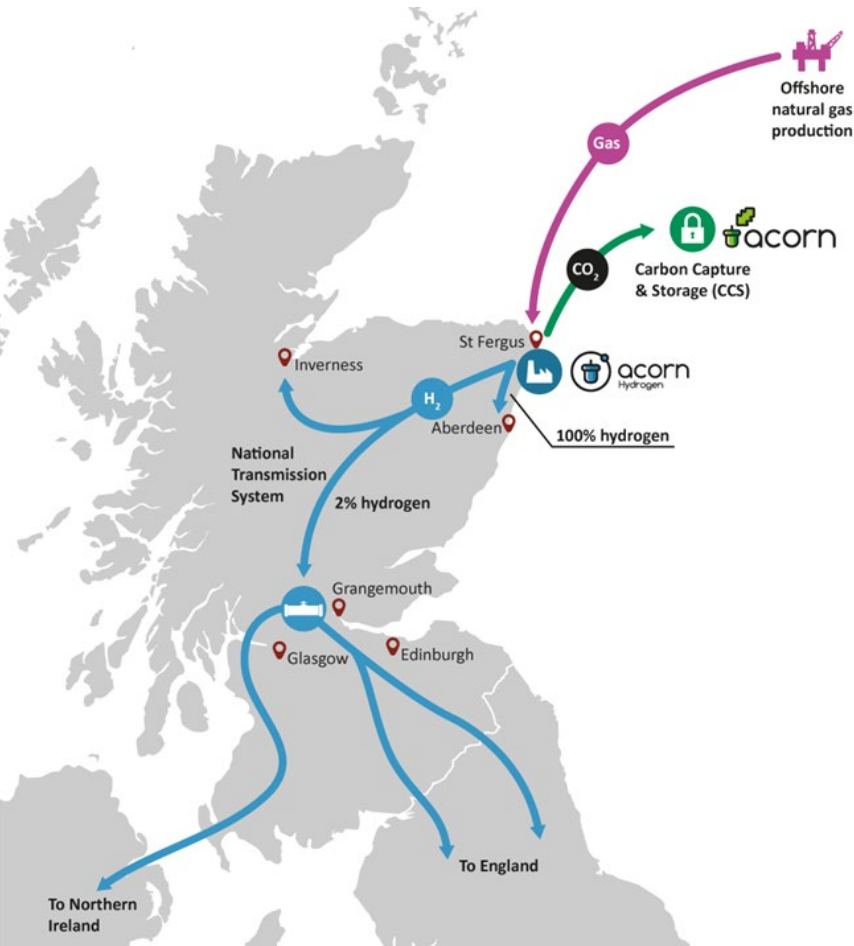
of Scotland's large site emissions are within 50km of Feeder 10, a natural gas pipeline ready for reuse.

An essential emission management tool for Scottish industries to meet the Net Zero 2045 target.



acorn: Decarbonising our homes, industry and transport

Hydrogen



Low-carbon heating is one of the toughest challenges for UK climate policy. (The Committee on Climate Change)



Around 85% of UK households currently use natural gas for heat.



Hydrogen offers an exciting way to deliver low carbon energy because when it is burned it doesn't produce CO₂, just water and heat.



Acorn will develop a scalable hydrogen production hub that offers significant benefits to the UK economy



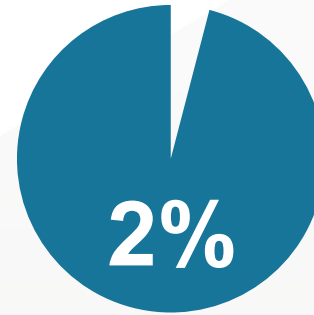
acorn: Phase 1

Hydrogen

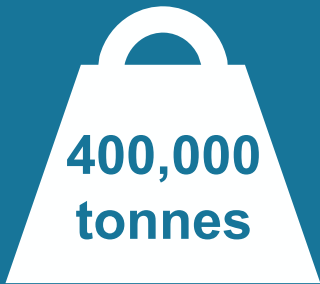
Starting in



with a 200 MW
hydrogen
production plant
at St Fergus



hydrogen blend
into the National
Transmission
System (NTS)



400,000
tonnes

a year of CO₂ emissions
managed through
Acorn CCS



to meet demand for
hydrogen blending,
industry, transport and
a dedicated local 100%
hydrogen network



Engineering consultancy and advisory support

DACCS project implementation - UK

PROJECT SUMMARY

As part of the MoU with Storegga, Petrofac is providing engineering consultancy and advisory support for a Direct Air Carbon Capture with Carbon Storage (DACCS) facility in NE Scotland.

Our work is focused on supporting final investment decision and applications for funding.

