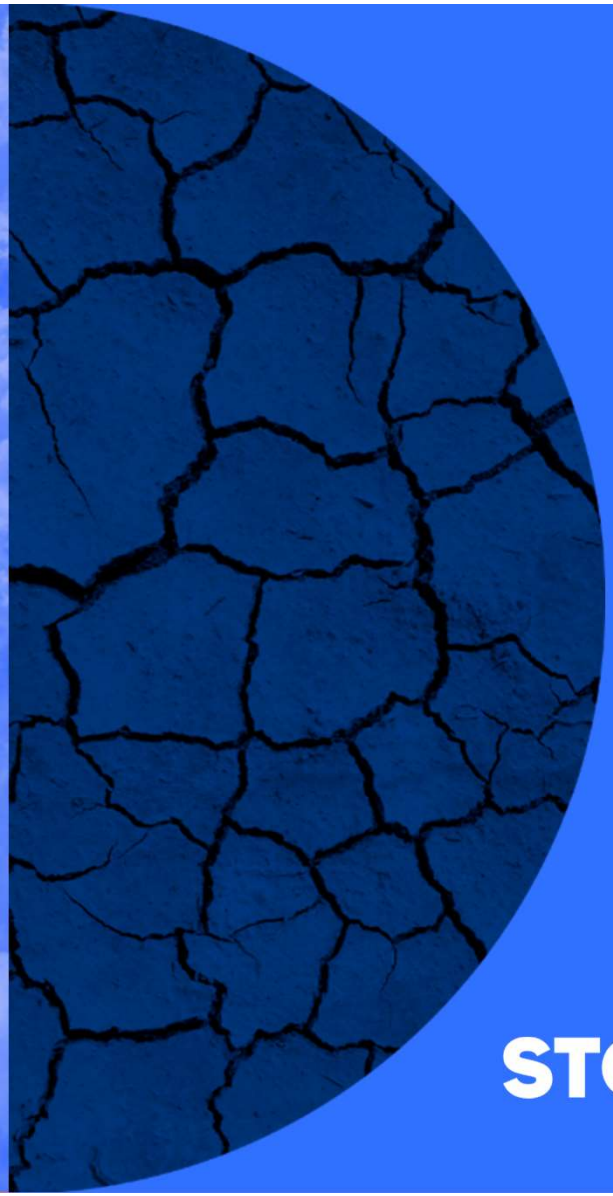
CCS & HYDROGEN DEVELOPMENTS – IMPLICATIONS FOR EIA



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Storegga at a Glance

STOREGGA

Pure-play global developer of low-carbon solutions across the CCS and hydrogen value chains

Core Proposition

Carbon Capture & Storage (CCS)

North Sea

- Transport & storage projects in UK and Norway
- Strategically located stores
- Acorn project remains well-positioned given impact on UK and Scotland's Net Zero targets due to major emitters

North America

- 2 projects in the Gulf of Mexico
- 2 additional CCS projects in late-stage negotiations

Electrolytic Hydrogen

UK Electrolytic Hydrogen

- Industrial users targeted in northeast Scotland
- Developing Cromarty and Speyside projects, with first COD in 2026
- 500 MW potential from these projects

Scaling Volumes

Carbon Management Services

- Facilitating access of emitter volumes to Storage assets
- MoUs signed with key customers
- Smart partnering across CCS value chain

Engineered Removals

- Removal of atmospheric CO_2 can scale Storage assets
- Direct Air Capture plant under consideration by Storegga as an Acorn customer
- Technology agnostic

CCS-Enabled Hydrogen

- Scalable CCS-enabled hydrogen production hub at Acorn
- Pathway to grow to 2.4 GW
- Regulatory business model being established

Scalable Solutions

- Developing pipeline of customer-led electrolytic hydrogen projects
- Assessing Power-to-X Opportunities
- Over 3 GW potential (gross capacity)

Significant international opportunity set, with new ventures under evaluation across all business lines

Platform

Deep CCS Experience

CO2 DeepStore — Initial UK CCS demonstration projects

Pale Blue Dot. — NSTA licensee & Acorn project launched

STOREGGA — Broadened focus beyond UK

Shareholders

MACQUARIE · GIC · MITSUI & CO. · M&G · snam

Global Portfolio

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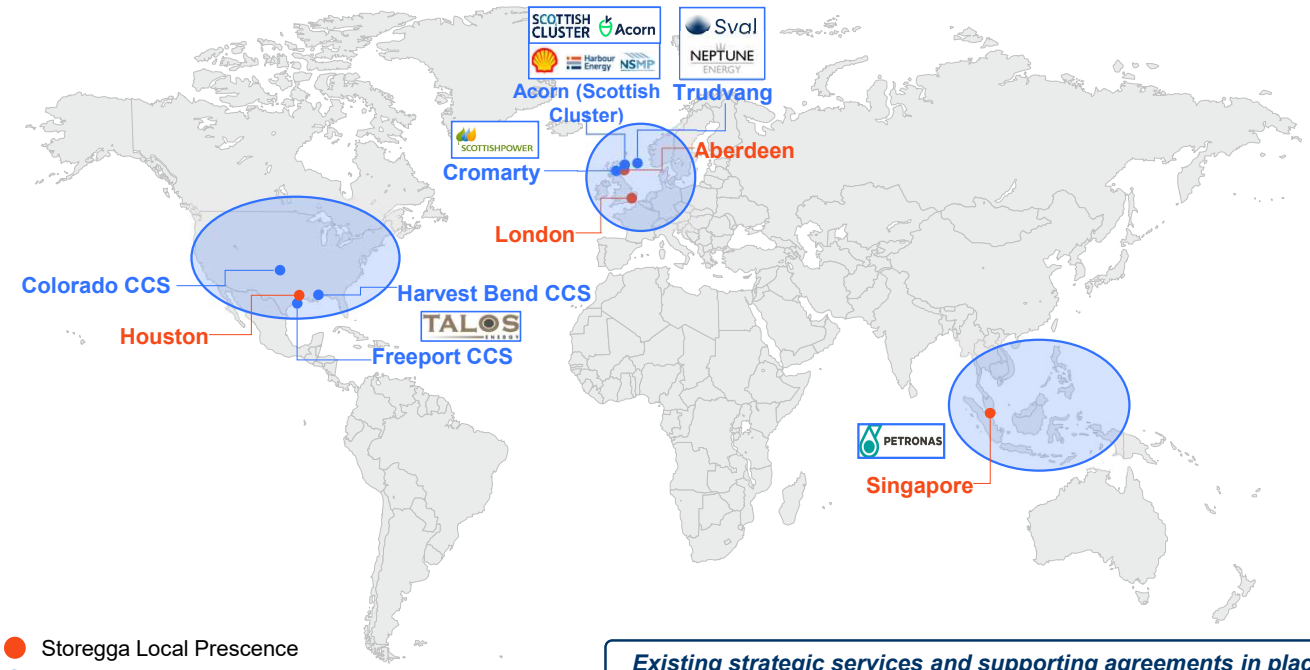
Global portfolio of partnerships and projects, with broader pipeline of new business opportunities under discussion



- Storegga Local Prescence
- Advanced Projects
- Areas of Collaboration under Existing Arrangements

Existing strategic services and supporting agreements in place to leverage the relevant expertise of existing shareholders

MACQUARIE snam MITSUI & CO.

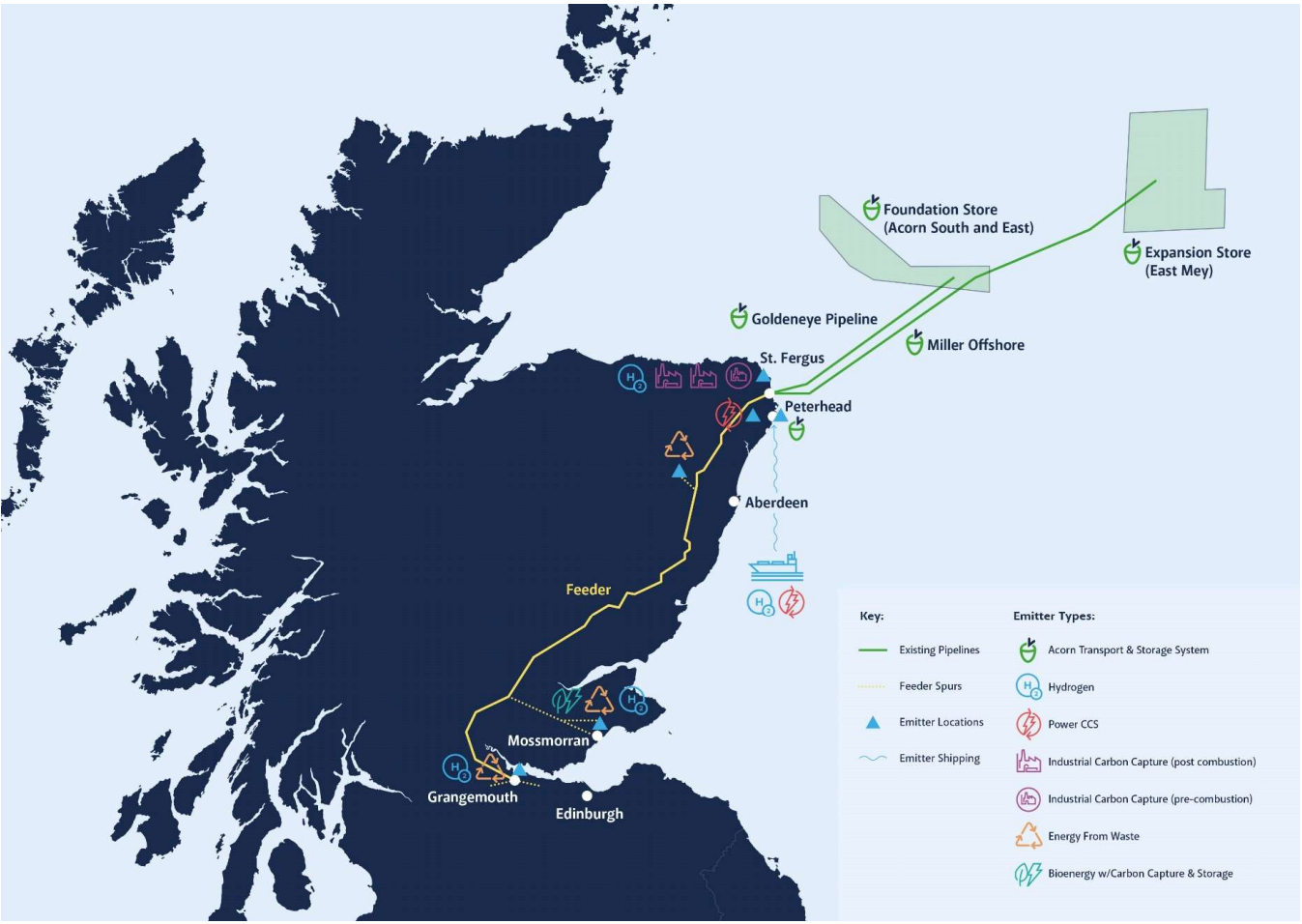
Global Opportunity Set

- Scaling up of domestic projects
- Translating subsurface expertise and strong stakeholder relationships in Europe, North America and Asia into early-mover advantages
- Creating value via key strategic partnerships
- Ability to prioritise regions that offer most attractive risk-adjusted returns

Screening Criteria

- Favourable fiscal system
- Supportive governments
- Identified stores
- Industrial hubs
- Available renewable power
- Scale-up potential

Scottish Cluster & Acorn



Stores

- **5-10 Mtpa** CO_2 stored per year by 2030
- **Up to 20 Mtpa** CO_2 stored beyond 2030
- **Est 240 Mt** Resource

Infrastructure

- **420 km** Existing Offshore Pipelines
- **30 %** UK Storage within 50km of Pipelines
- **35 %** UK Gas Processed at St Fergus

Peterhead Port

- **Up to 14 m** Depth Berthing Capacity
- **8 km** From St Fergus Facilities
- **Up to 12 Mtpa** Import Capacity from UK and Europe

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Acorn at St Fergus

Image courtesy of Google Maps

Re-use of Infrastructure

- Goldeneye Pipeline (102km)
- Miller Offshore Gas Pipeline (240km)
- Miller Onshore Gas Pipeline (18km)
- Feeder Pipeline (280km)

CO_2 supply to Acorn T&S System

- Post-combustion capture: SEGAL and FUKA
- Natural gas CO_2 removal: SAGE
- Peterhead Carbon Capture Power Station – new power station including post-combustion capture
- New Blue Hydrogen plant – Acorn H_2
- Central Belt emissions via Feeder pipeline
- Liquid CO_2 import facility at Peterhead

CCS – Carbon Capture Facilities

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- Post-combustion capture
- Retrofit onto existing facilities with additional adjacent plant or new build facilities
- Environmental impacts are largely similar to other industrial facilities
  - E.g. visual impacts will be integrated into existing industrial setting, noise can be mitigated through standard industrial techniques

CCS – Carbon Capture Facilities

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Air quality impacts differ from existing industries

- Especially in solvent based capture facilities using amine
- Amine emissions have the potential to react with NOx to form nitramines and nitrosamines, collectively known as N-amines which are carcinogens
- Complex atmospheric chemistry & atmospheric dispersion modelling
- No baseline levels & very limited data on toxicology of different amine species to base EALs of different amine species.
- Stringent EAL of n-amines of 0.2 ng/m3
- Use of e.g. SCR to reduce NO_x introduces ammonia slip which is a significant pollutant for sensitive habitats
- Potential cumulative impacts from clusters of emissions sources yet to be understood

CO2 is not a regulated discharge

- Impact of retrofitting capture facilities onto existing emissions sources
- Impact on balance & proportion of other components emitted to air – e.g. NOx or ammonia

CCS – Onshore CO_2 Transport System

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Acorn is reusing existing buried pipelines so new facilities are limited to tie-ins and standard compression & conditioning infrastructure

Power requirements need a new grid connection and associated substation with long connections timescales

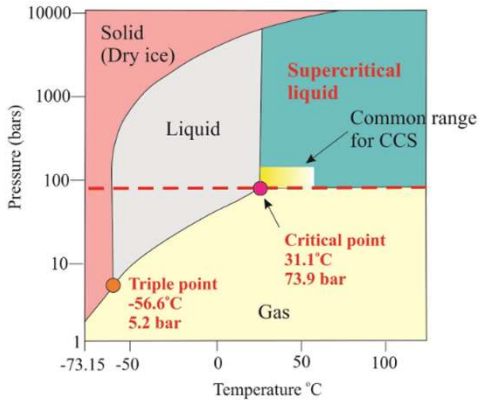
CO_2 is not currently defined as a dangerous substance under COMAH or as a dangerous fluid under Pipeline Safety Regulations

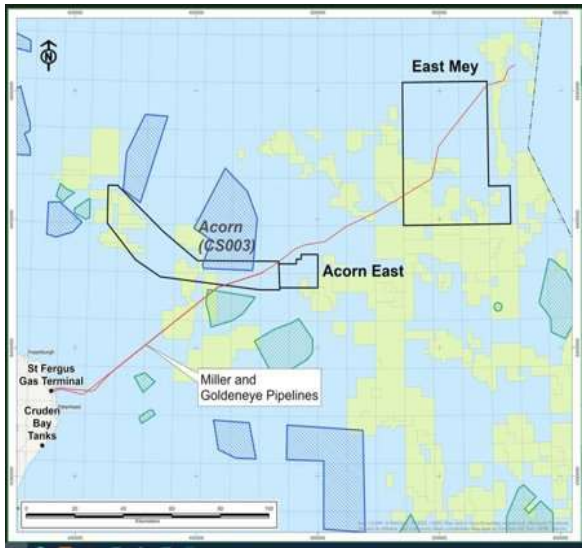
- Under review by HSEx
- Exhibits different behaviours in different states

EIA impacts are broadly known and do not substantially differ from existing industrial sites

Wider Peterhead area has a high level of planned development

- E.g. offshore wind cable landings, interconnectors, electricity grid reinforcements
- High potential for significant community concern regarding number of projects
- Cumulative impact assessments will need careful consideration
- Potential to impact future cluster developments





North of Scotland Hydrogen

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Blue and Green Hydrogen via North of Scotland Hydrogen Programme

Acorn Hydrogen Phase 1: Unit 1 300MW start 2029 (600ktpa CO_2)

Cromarty Hydrogen Phase 1: 30MW start within 2026 (60ktpa CO_2)

Speyside Hydrogen Phase 1: 80MW start in 2027 (140ktpa CO_2)

Hylander (Cromarty PtX) Phase 1: 600MW start in 2028 (670ktpa CO_2)

Full Build Out: Beyond Phase 1 900MW (1.8mtpa CO_2) tbc

Regional Build Out: up to 300MW by 2030 (0.6mtpa CO_2)

Regional Build Out: up to 200MW by 2030+ (0.4mtpa CO_2)

Regional Build Out: up to 5GW by 2035+ (6mtpa CO_2)

Future expansion ambition. Multi centre modular approach, storage and interconnectivity provide system resilience.

SCOTTISHPOWER STOREGGA PORT OF CROMARTY FIRTH

Hydrogen Developments

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Relatively significant water demand

- Potentially greater than can be supplied by Scottish Water mains supply
- Alternative source options often required e.g. abstraction from river, boreholes, waste water treatment outputs or desalination
- Northeast Scotland is an area of water deficit

Potentially long utility connections to private wire from renewable sources

- Compliance with Low Carbon Hydrogen Standard of 20gCO_2 per MJ_{LHV} H_2
- Green hydrogen development LCHS compliance heavily influenced by electricity grid factor

Methods of export of Hydrogen may impact road traffic

- Legislative changes required to allow hydrogen blend into pipelines
- Scotland geography favours road transport of hydrogen to dispersed end users
- Hydrogen by volume produces less energy than natural gas when burnt so end users switching from LNG to H2 may need larger number of tanker deliveries

<u>Otherwise, environmental impacts are very similar to existing industries & there is no expected wholesale impact on existing EIA processes from CCS and Hydrogen developments</u>

Thank you

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