



4TH CCS SYMPOSIUM: EFFECTIVE CHARACTERISATION OF STORAGE SITES

Image supplied by Perenco

2nd – 3rd September 2025

The Geological Society, Burlington House, Piccadilly, London

In the North Sea and beyond, first of a kind CCS projects are reaching FID. To enable success for this nascent industry we are actively seeking real world examples from recent appraisal and testing programmes, including the acquisition and impact of new data and insights gained through advanced modelling. What can we learn from the more established CO₂ storage projects and which uncertainties remain poorly understood?

As an industry it is also important to consider what we realistically need to know to safely inject and how to reduce appraisal timelines, as these impact the full life cycle costs of the projects to the operator and cost per ton to emitter. How do we determine pragmatic, risk-based approaches for appraisal of depleted field and saline aquifer stores, balancing the need to demonstrate containment against commercial reality?

We invite abstracts that address these questions considering the following themes:

Containment - How best to quantify and address leakage risk?

- Assessment and mitigation of legacy wells
- Predicting fault and seal behaviour under injection conditions
- Assessing lateral leakage pathways that may be overlooked/under-represented?

Injection – Are flow tests always required? What can we learn from injection testing?

- The value of injection vs. production tests and injection fluid type
- Flow assurance challenges in severely depleted fields
- Extrapolating to full field reservoir characterisation

Capacity – How does reservoir geology affect CO₂ plumes and pressure over time?

- The impact of reservoir heterogeneities and faults on our ability to inject CO₂
- How do pressure constraints limit injection capacity in a hydraulic unit?
- Should depleted field capacity be limited by the original field conditions

Abstract submission Deadline: Friday 4th July

For further information please contact:

Email: energygroup@geolsoc.org.uk

Convenors:

Clare Glover
Exxon Mobil

Stuart Gilfillan
University of Edinburgh

Elizabeth Mackie
ENI

Graham Tarn-Dyson
Equinor

Kirsty Simpson
NSTA

James Preston
Shell

Eleanor Rollett
Tetra Tech RPS

Corporate
Supporters:

