



North Sea
Transition
Authority

UK CCS Opportunity and the SNS Perspective

Alistair Macfarlane – Manager UK Carbon Transportation and Storage at
the North Sea Transition Authority

22 May 2024

© NSTA 2024

This presentation is for illustrative purposes only. The NSTA makes no representations or warranties, express or implied, regarding the quality, completeness or accuracy of the information contained herein. All and any such responsibility and liability is expressly disclaimed. The NSTA does not provide endorsements or investment recommendations. The North Sea Transition Authority is the business name for the Oil & Gas Authority, a limited company registered in England and Wales with registered number 09666504 and VAT registered number 249433979. Our registered office is at Sanctuary Buildings, 20 Great Smith Street, London, United Kingdom, SW1P 3BT.

We regulate and influence the oil, gas and carbon storage industries. We help **drive North Sea energy transition**, realising the significant potential of the UK Continental Shelf as a critical energy and carbon abatement resource. We hold industry to account on **halving upstream emissions by 2030**.

ENERGY SECURITY



Helping meet UK energy demand

Oil and gas licensing and stewardship

EMISSIONS REDUCTION



Regulating for emissions reduction

Driving electrification and zero routine flaring and venting

ACCELERATING THE TRANSITION



Carbon storage licensing and stewardship

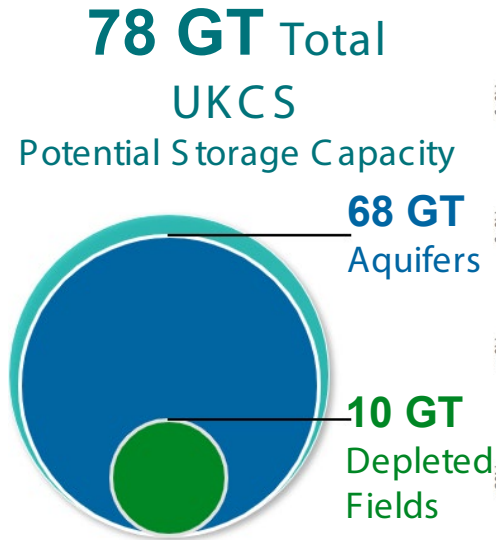
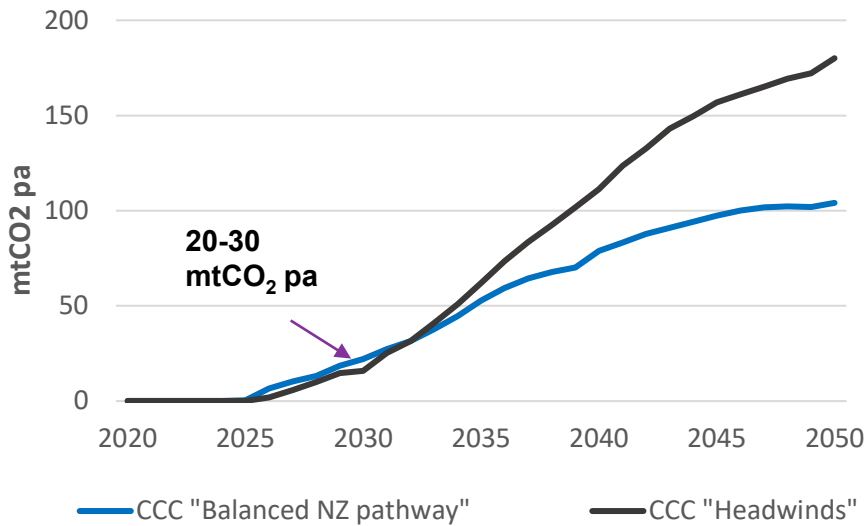
Promoting energy integration
Providing open access data

We aim to be an **integrating force in the UKCS**, helping realise its **full economic potential**.

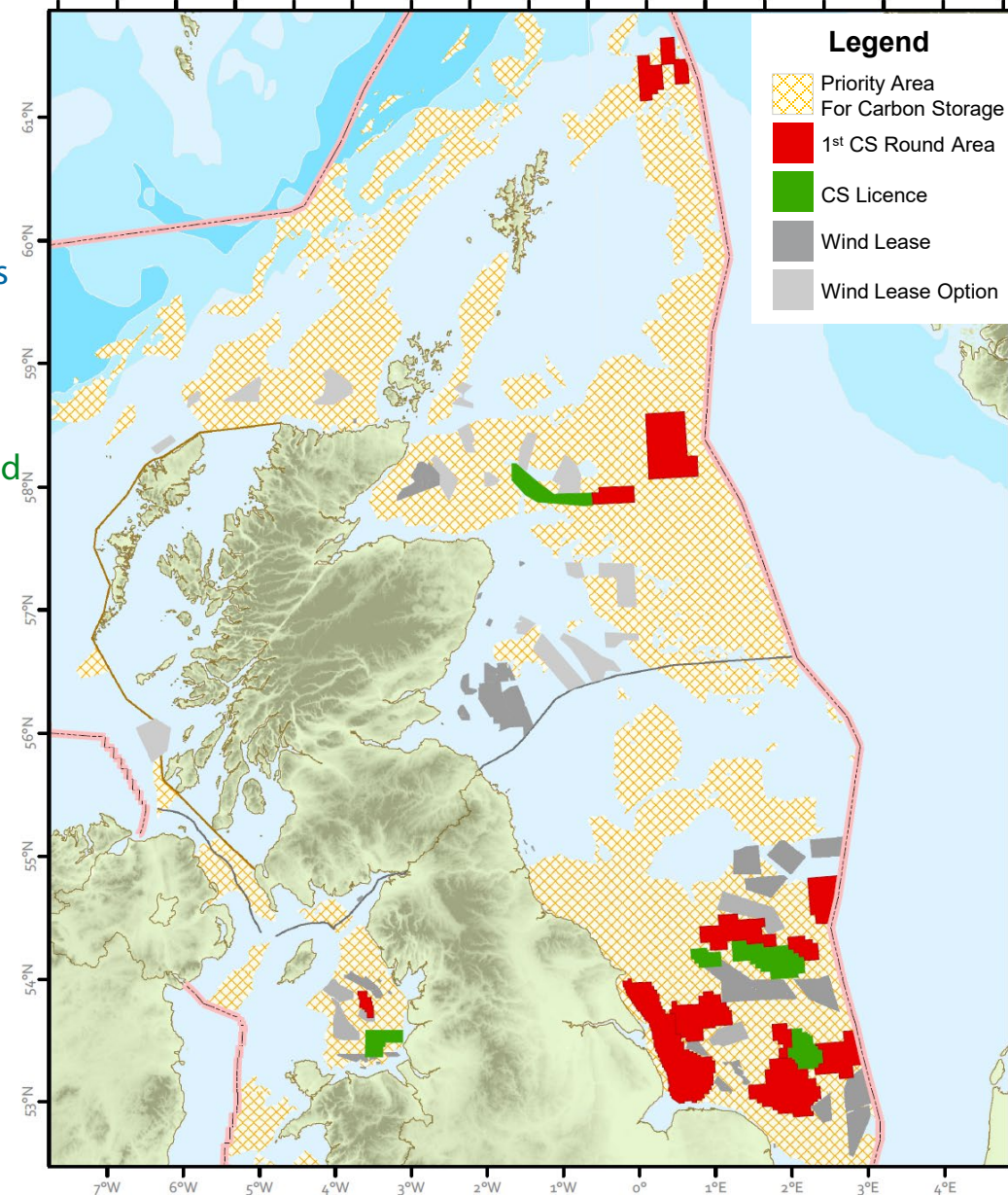
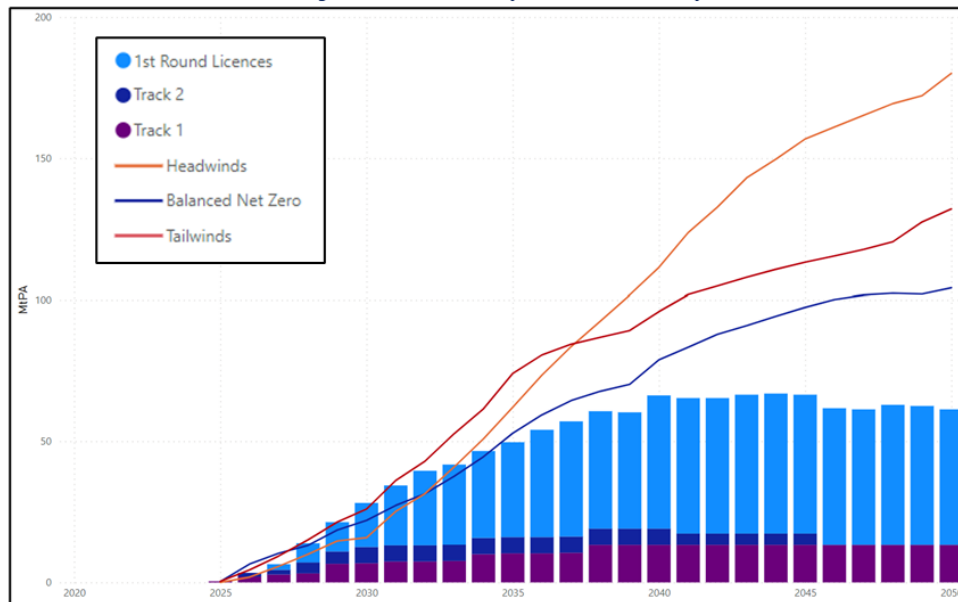
We champion **the supply chain** and **job creation** across the UK.

CCS – why we need it

UK CCS Net Zero Requirements – MTCO₂pa



Estimated annual injection rate (discounted)



Enough UK storage potential to store all the UK's emissions since the industrial revolution!

Carbon Storage Licence Lifecycle

Storage Permit
Application

Carbon Storage Appraisal Term

Storage Permit

Appraise Phase

Early risk assessment & data suitability assessment for site characterisation

Evaluation of the suitability of the proposed storage site and storage complex for CO₂ storage

Appraisal activity (e.g., wells, seismic)

1st CO₂ Storage Round Licences



Assess Phase

Full characterisation of storage site and complex

CO₂ transportation and facilities concept select

Track 2 CO₂ Storage Licences



Define Phase

Fully optimised development plan & detailed implementation plans

Storage Permit Application

Track 1 CO₂ Storage Licences



Execute Phase

Build the development

Finalise the operating plan



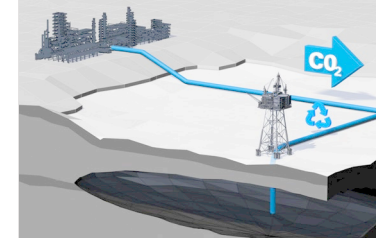
Operate Phase

CO₂ transport & injection

Monitoring

Metering

Maintenance



Post-Closure Phase

Decommissioning

Monitoring



Process & Planning Guidance

CO₂ Injection

Content Guidance

Carbon Storage Licences – Firm and Contingent Commitments



Primary Appraisal Activity

Wells



Seismic

