

# Risk & Reward in the Offshore Transition: Challenges and Opportunities in CCUS

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# About the CCSA

The Carbon Capture and Storage Association is unique in its representation of the entire CCUS chain of capture, transport and storage; bringing together end-users, technology developers and supply chain.

Our teams, based in London and Brussels, focus on:



1

Advocating for policy developments in UK, EU and internationally towards a long-term regulatory and incentive framework for CCS.

2

Raising awareness of CCS as a vital tool in fighting climate change and delivering sustainable long-term clean growth.

3

Driving progress on commercial-scale projects.

4

A technology neutral approach (geological CO<sub>2</sub> storage and utilisation, capture from industry, power, hydrogen production, bioenergy, direct air capture and different capture technologies).

Find out more at [www.ccsassociation.org](http://www.ccsassociation.org)



# CCSA members - 122

## CO<sub>2</sub> Storage



## Power & Industrial



## Carbon Capture Developers



## Engineering & Equipment



## CO<sub>2</sub> Transport & Distribution



## Financial, Consulting & Others



# Status of UK CCUS

## East Coast Cluster

- Dec 24: [Northern Endurance Partnership \(FID\)](#)  
[Net Zero Teesside \(FID\)](#)
- Dec 25: CCUS Humber Capture Project Market Survey
- 5<sup>th</sup> Feb – 10<sup>th</sup> April : ECC Teesside Selection Process 1-2Mt CO<sub>2</sub>/yr (includes Transition Access Agreement)
- NPT Pathfinder to be launched alongside selection process.

## HyNet Cluster

- Apr 25: [Eni Liverpool Bay T&S Network \(FID\)](#)
- Sep 25: [Heidelberg Materials' Padeswood cement works \(FID\) and Encyclis' Protos Energy Recovery Facility \(FID\)](#)
- Hynet Project Negotiation List (PNL): 3 Priority, 5 Standby (review Summer 26)

## Viking Project and Acorn CCS

- SR 25: Devex committed as part of £9.4bn, allocation needed by end of Q1 2026.
- Anchor projects need to be selected
- Dec 25: ECC CCUS Humber Capture Project Market Survey
- Before 2029: FID this parliament, subject to readiness and affordability

## Peak Cluster

- July 25: National Wealth Fund invested £28.6 million in equity to support development of Peak Cluster's CO<sub>2</sub> pipeline to Morecambe Net Zero.

## Other UK Clusters and Projects

- Need route to market (allocation round and accompanying funding envelope)



### Despite progress, uncertainty remains:

- Projects lack route to market;
- Clusters with committed devex need urgent decisions;
- Fiscal constraints and bill-cutting pressures threaten further government sector support

# CCSA Delivery Plan Update – the opportunity

## UK achievements

**77** MtCO<sub>2</sub>pa  
capture in the pipeline to the mid-2030s  
.....  
exceeding CCC CB7 estimate of **73** MtCO<sub>2</sub>pa by 2050.

**2** transport and storage networks & **3** capture projects have reached financial close and begun construction.

**4** CO<sub>2</sub> storage permits granted.

Industry delivering **50%** UK content in construction of projects.

Number of CO<sub>2</sub> capture projects have grown from ~90 projects in 2023 to **OVER 100** projects in 2025.

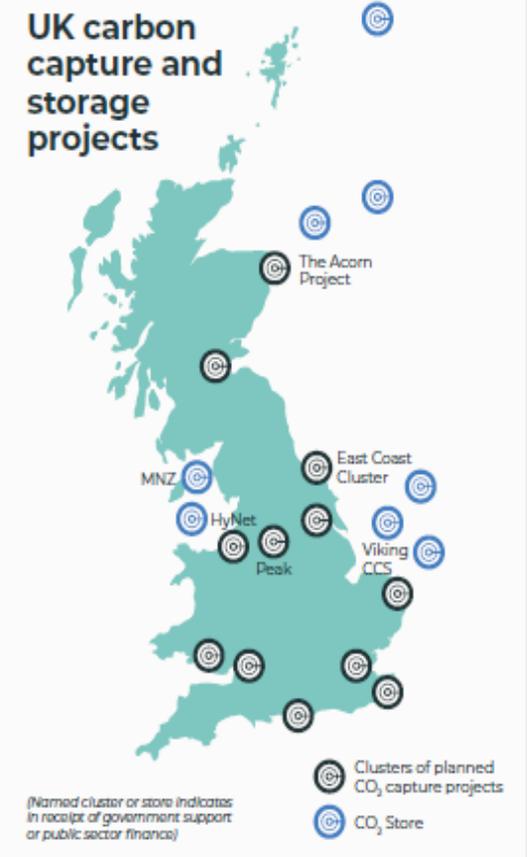
## Funding commitments

**£21.7** Bn committed over 25 years to support initial CCUS projects.

**£9.4** Bn in this parliament to support the build-out of HyNet and East Coast Cluster, and bring The Acorn Project and Viking CCS to financial close.

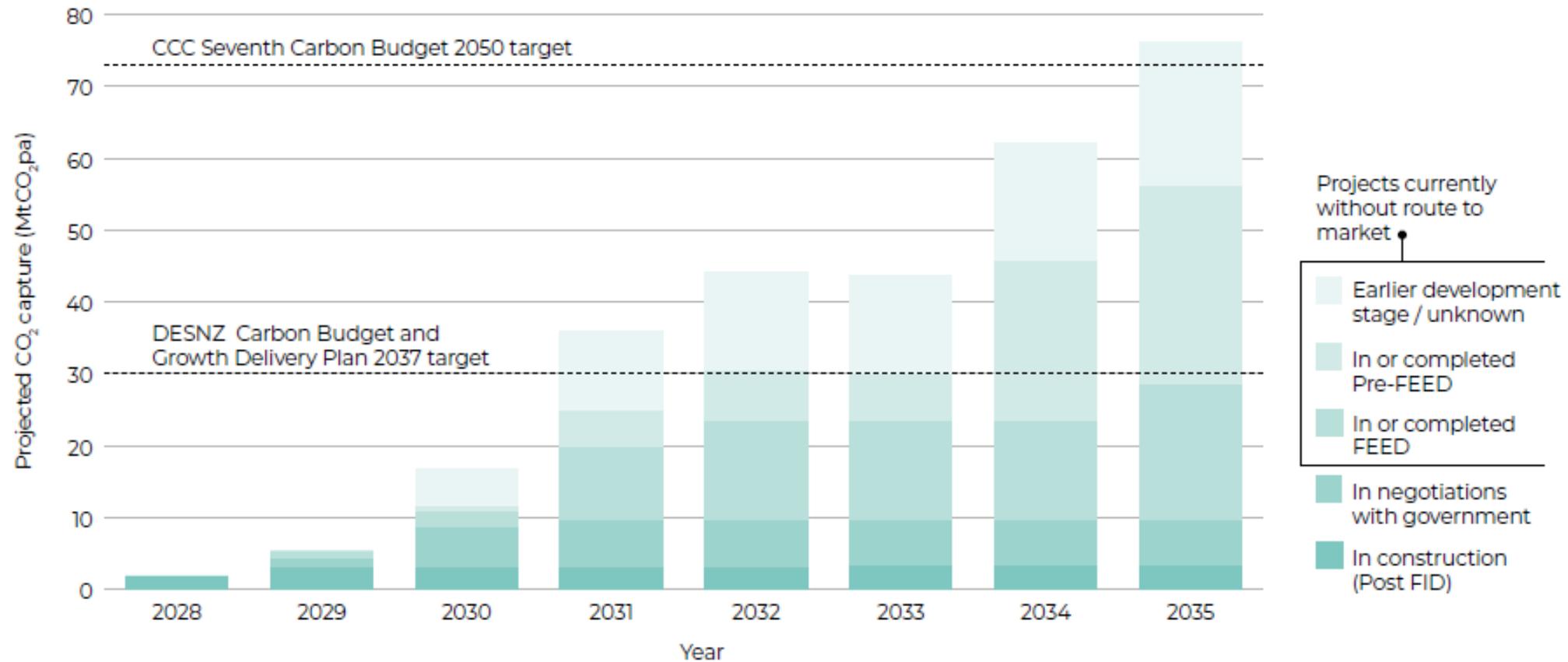
**£28.6** M National Wealth Fund equity investment in MNZ | Peak Cluster.

## UK carbon capture and storage projects

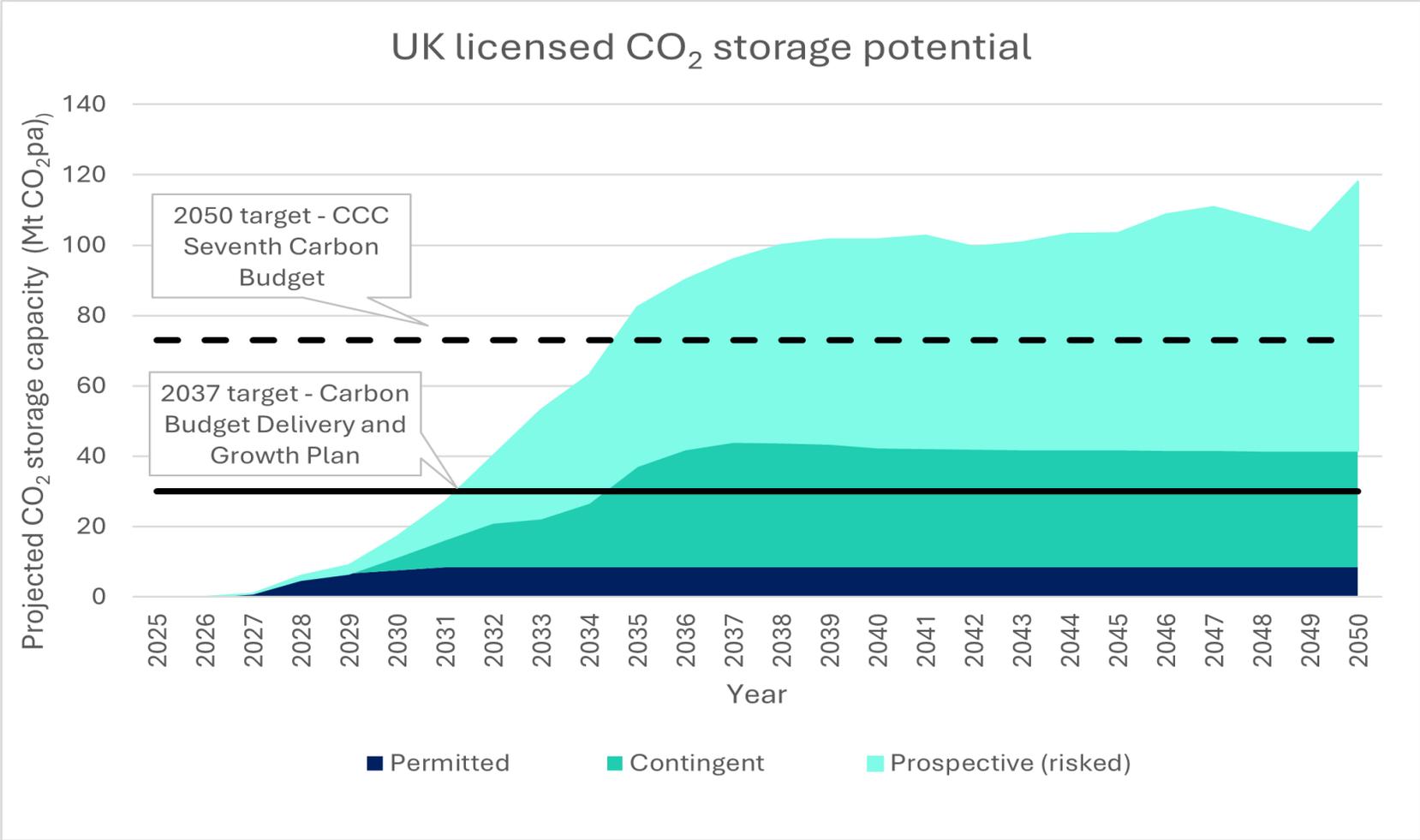


# Capture Project Pipeline

Figure 1: UK project pipeline projected operational CO<sub>2</sub> capture capacity by year



# Storage Potential



- Meeting the 2037 target requires a route to market for existing licensed projects
- Over 100 MtCO<sub>2</sub>pa capacity in development.
- 2027 expiry date for many licence holders creates significant risk.
- Licensing Round 2, underway, will be needed to get enough capacity moving through the system to be able to meet domestic and European storage needs.



# Recognising the potential, and what's at risk - challenges

## Industry potential



of projects that responded to our survey said they would need non-pipeline transport, with more also looking to receive emissions from Europe.



of low carbon dispatchable power capacity in the pipeline.



CO<sub>2</sub> storage licenses in progress, with an estimated combined storage capacity of over 100 MtCO<sub>2</sub>.pa by the mid-2030s.



of EU-captured CO<sub>2</sub> would be most cost-effectively stored in UK sites.



greenhouse gas removals in the pipeline.

## What is at risk?



**2026: a crucial year for maintaining momentum**

# The Opportunity Ahead for UK CCUS

## **Economic and Employment Impact**

Full pipeline of capture and transport & storage projects could generate:

- Up to **50,000** additional jobs by 2050 (CCSA)
- Delivering the first 4 Government-backed clusters could **add £8 billion+ in GVA** annually to 2030 – up to **£94 billion+ by 2050**

## **Energy Security and System Benefits**

- Pipeline of over **14 GW of CCUS-enabled** dispatchable power
- Reduce overall system cost and provide energy security

## **Product Security and support for Foundational Industries**

- Lifeline for industries such as **cement, waste, glass, and chemicals**.
- **e.g. mineral products sector** protects **80,000 jobs** and worth **£8 billion per year**

## **World-class geological storage capacity**

- *Potential* **£4bn/year CO<sub>2</sub> export revenues + £7bn capital investment by 2040** (CCSA/Xodus)
- UK storage sector alone could grow to be worth **£30bn per year by 2050<sup>4</sup>**

## **Lead the Global Greenhouse Gas Removal Market**

- A **\$1 trillion** global Greenhouse Gas Removal market. (*McKinsey*)
- **Climate Change Committee** forecast need for **35Mtpa** of engineered GGRs in UK by 2050 (*c. 50% delivered by mid 2030s*)
- *Industry revenues could be* **£14.25 - £17.75bn per annum from UK sales alone**



# Transitioning to a Self-Sustaining Market

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Facilitate cross **border CO<sub>2</sub> storage**  
44 MtCO<sub>2</sub>pa of EU-captured CO<sub>2</sub> could be cost-effectively stored in UK sites



Establish **low carbon product markets** through low carbon standards and green public procurement obligations.



Protect UK industries from carbon leakage through **UK and EU ETS alignment**, and delivering a robust **CBAM** in 2027



Create **demand for engineered Greenhouse Gas Removals**.

**Thank you!**

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