

IPLOCA 58th Annual Convention 2026

Athens

28 September-2 October



WORLD PIPELINES®

Elizabeth Corner

Senior Editor

Palladian Publications

World Pipelines Magazine

WORLD PIPELINES®

READING THE CCS LANDSCAPE



Northern Endurance Partnership

The analysis and information contained in this presentation are for informational and educational purposes only. While every effort has been made to ensure accuracy, the content is provided 'as is' without any express or implied warranties. This presentation does not constitute professional business, financial, or legal advice. The recipient should independently verify all data and consult with appropriate professionals before making any business decisions based on this material.

CONFIDENCE

Take the leap





Wait and see

© World Pipelines 2026

WORLD PIPELINES CCS FORUM

18 March 2026
London, UK





© World Pipelines 2026

Reuters

World Business Markets Sustainability Legal More My

Carbon capture edges forward despite cost challenge

By **Eduardo Garcia**

March 30, 2026 5:14 PM GMT+1 · Updated March 30, 2026

Aa

Society of Petroleum Engineers International + Follow
249,355 followers
2w

Harbour Energy has secured development funding approval for its Viking CCS project, bringing one of the UK's largest carbon storage developments a step closer to a final investment decision.

Located in the Humber region, the project aims to capture and store up to 50% of the area's industrial CO_2 emissions and could eventually store up to 10 million metric tons of CO_2 per year. The development is expected to play a key role in supporting the UK's net-zero ambitions.

Read more: https://lnkd.in/ezE3m2Sn

#SPEjpt #CCS #CarbonCapture #EnergyTransition #HarbourEnergy #Decarbonization



The HyNet project will:
✅Repurpose 75+ miles of existing pipelines
✅Reuse 3 offshore structures and an existing onshore treatment plant
✅Add 21 miles of new pipeline infrastructure
✅Capture CO_2 from cement, hydrogen and Energy-from-Waste industries
✅Store CO_2 permanently in depleted offshore gas reservoirs
✅Provide 4.5 million tonnes per year of storage capacity

The project is expected to support around 2,000 construction jobs and unlock approximately £2 billion of supply chain investment across the North West and North Wales with first CO_2 injection targeted for 2028.





Aida Nonn · 2nd
Co-Founder & CEO @ Aixima GmbH
1mo · Connect

🚀 **We are excited to share that Aixima's predictive pipeline fracture technology has been independently validated once again — under strict blind conditions.**

As part of the **Aramis CCS project**, **TotalEnergies** contracted **Aixima** to perform a blind prediction of a full-scale dense-phase CO_2 burst test conducted by **RINA** in Sardinia, Italy — before the experimental results were disclosed. The test involved a nearly **100 m dense-phase CO2 central test section**, making it a highly relevant full-scale validation case for running ductile fracture assessment in CO_2 pipelines.

This result further demonstrates the industrial maturity, reliability, and predictive power of **Aixima**'s fully coupled **fluid–structure interaction (FSI)** simulation technology for CO_2 pipeline fracture assessment.

🔬 **Aixima**'s simulation showed strong agreement with the full-scale test results, including:



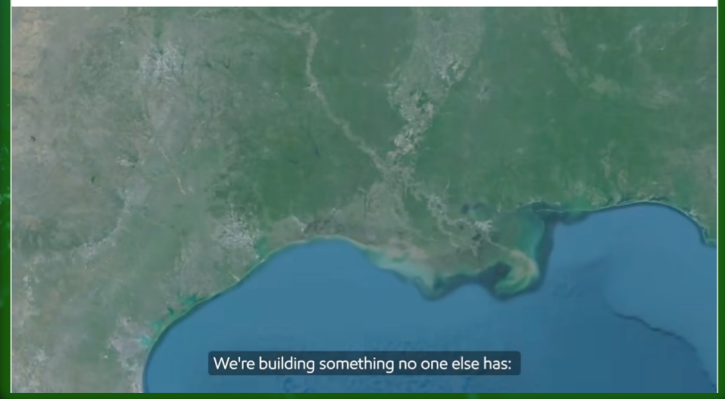
ExxonMobil
3,943,711 followers
4w

Our integrated carbon capture and storage (#CCS) network along the U.S. Gulf Coast is designed to give our customers choices.

We're helping shift CCS from a system of simple, point to point connections to a sophisticated carbon superhighway built to scale. In our latest video, we show how captured CO_2 moves through our superhighway to storage or utilization, while being monitored every step of the way.

Learn more: https://lnkd.in/gVuNwdKY

#LowCarbonSolutions #CarbonCapture #RealWorldProgress





DESFA
36,658 followers
1mo · Edited · + Follow

Driving industrial competitiveness and accelerating decarbonization through the first CCS hub in Southeast Europe

The APOLLOCO$_2$ project represents a major step forward in the development of a large-scale Carbon Capture and Storage (CCS) value chain in Greece and Southeast Europe.

As the region's first integrated, open-access and cross-border CCS hub, APOLLOCO$_2$ will provide critical infrastructure enabling hard-to-abate industries to reduce their carbon footprint while preserving industrial competitiveness and supporting Europe's climate objectives.

At the heart of this ambition, Revithoussa is set to become a Mediterranean hub for innovation and decarbonization, with the development of a state-of-the-art CO_2 liquefaction facility funded with €169.3 million by the European Union through the **#InnovationFund CINEA - European Climate, Infrastructure and Environment Executive Agency**.

📽 Watch the video to discover how this pioneering EU-funded project is advancing the infrastructure needed for industrial decarbonization and a sustainable low-carbon future.

#DESFA #ApolloCO2 #CCS #Revithoussa #EU



Carbon Herald
1h

Peak Cluster is seeking land access from Wirral Council to survey its proposed £5 billion CCS pipeline network.... more



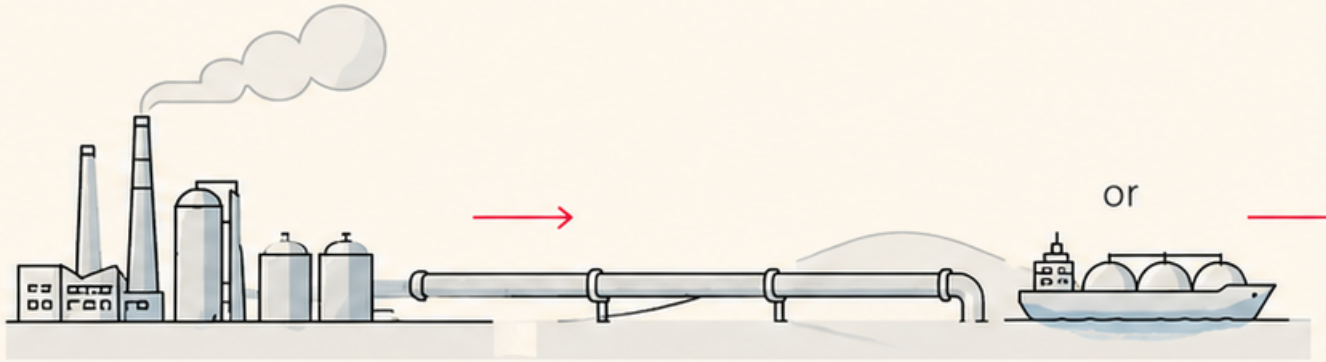
Peak Cluster Requests Wirral Council Land Access For £5B Carbon Pipeline Surveys
carbonherald.com

2 1 repost

Like Comment Repost Send

WHAT IS CCS?

Capturing CO_2 from industrial emissions, transporting it, and permanently storing it deep underground.



1

CAPTURE

Industrial plant

CO_2 is captured from industrial processes such as steel, cement, chemicals and other hard-to-abate industries.

2

TRANSPORT

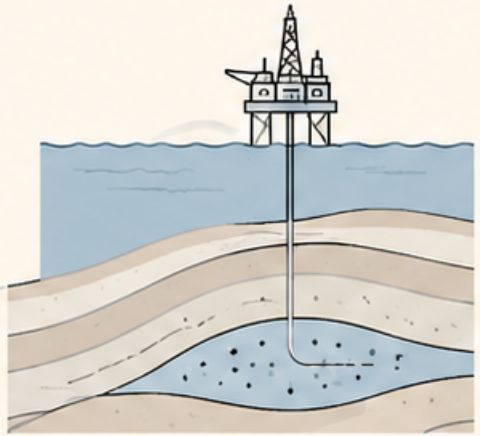
Pipeline (or non-pipeline)

CO_2 is transported, typically via high-pressure pipelines (transport can also be by ship or other means).

3

STORAGE

Geological storage



CO_2 is permanently stored deep underground in geological formations, for example offshore in depleted oil and gas fields or saline aquifers.

© World Pipelines 2026

“

REAL, BUT NOT MATURE

”

© World Pipelines 2026

30 YEARS

of operational evidence

The Global CCS Institute counted 77 CCS projects operating worldwide in its 2025 status report, with another 47 under construction



The Northern Lights Carbon Capture and Storage facilities at Øygarden outside of Bergen

Northern Lights

Sleipner: Norway, 1996

1 million tpy of CO_2 since 1996.
The first large-scale capture/injection project with dedicated CO_2 storage and monitoring.

Moomba CCS: Australia, 2024

Commercial-scale geological storage in depleted Cooper Basin reservoirs.
It had stored more than 2 million t by May 2026.

Brevik CCS + Northern Lights: Norway, 2025

Industrial cement capture connected to a shared transport-and-storage system.
Brevik is the first industrial-scale CCS facility in cement.
Northern Lights received and permanently stored its first CO_2 in 2025.

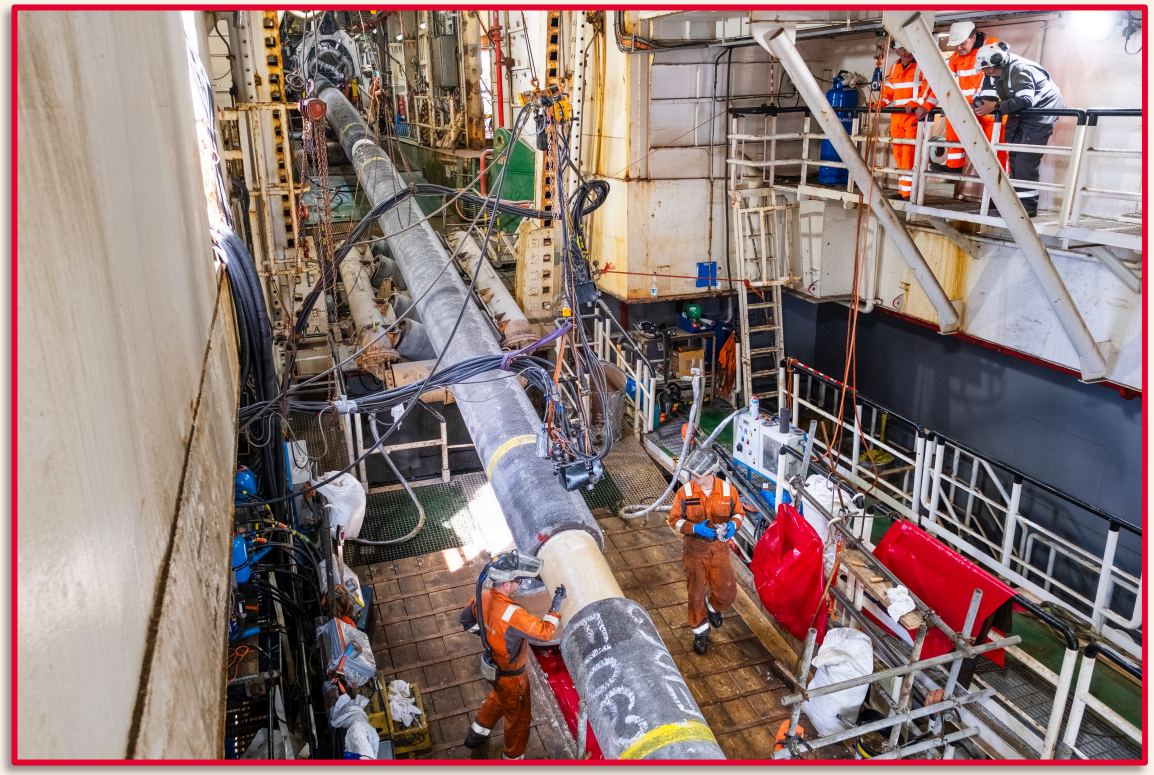
30 CCUS PROJECTS

reached FID in the past two years (IEA)



CCS Hub (OGCI)

Kasawari CCS project's facilities under construction at Malaysia Marine and Heavy Engineering's Pasir Gudang yard in southern Malaysia



Porthos CO_2

Pipelaying offshore Porthos (Allseas)

© World Pipelines 2026



Saipem's *Casterone* pipelay vessel has arrived in the southern North Sea

Northern Endurance Partnership.

© World Pipelines 2026

“

REAL, BUT NOT MATURE

”

© World Pipelines 2026

The latest IEA assessment says CCUS continued to progress in 2025, but weak demand, financing problems, permitting and project economics caused pauses, delays and cancellations: including some projects that had already reached FID



Navigator Heartland Greenway, USA:
CANCELLED 2023

1300 miles (2092 km), planned across five Midwestern states.
Collecting CO_2 from more than 20 ethanol facilities for storage in Illinois.
Navigator blamed the “unpredictable” regulatory/government process.

H2Teesside, UK:
DISCONTINUED 2025

bp withdrew its Development Consent Order and planning to discontinue the project in December 2025.
Largest of the European CCS-linked cancellations it tracked in 2025, representing around 2 million tpy of proposed CO_2 capture capacity.

Air Products Louisiana Clean Energy Complex, USA:
CANCELLED, June 2026

Proposed US$4.5 billion blue-hydrogen/CCS development.
Air Products says expected financial returns failed to meet its return criteria.
Air Products recorded major exit charges across the portfolio actions.

REAL, BUT NOT MATURE

Take the leap

There is enough reality here to justify attention and investment





Wait and see

Distinguish announcements from committed infrastructure

© World Pipelines 2026

NO ONE MARKET

© World Pipelines 2026

Policy — Regulation — Carbon price — Financial incentives — Storage

Infrastructure — Industrial base — Risk allocation — Public acceptance

1

Different starting points

2

Different system architectures

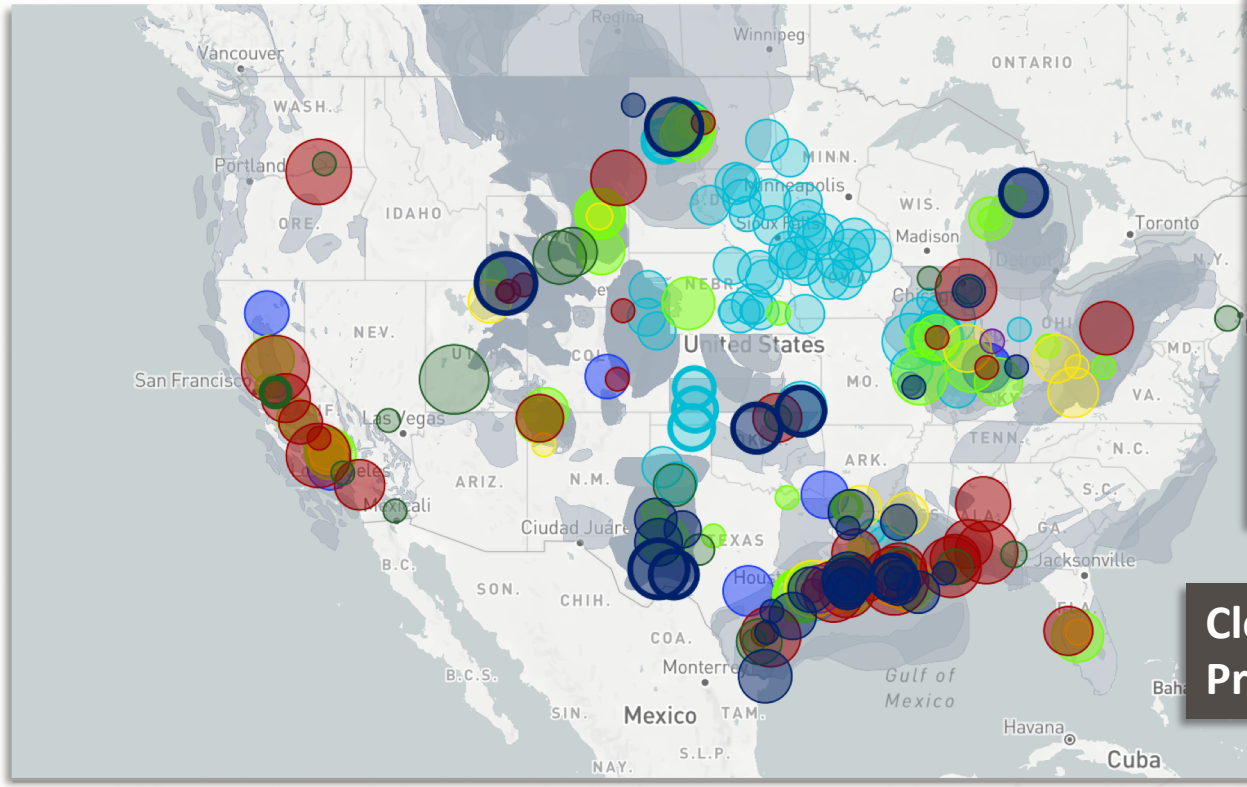
3

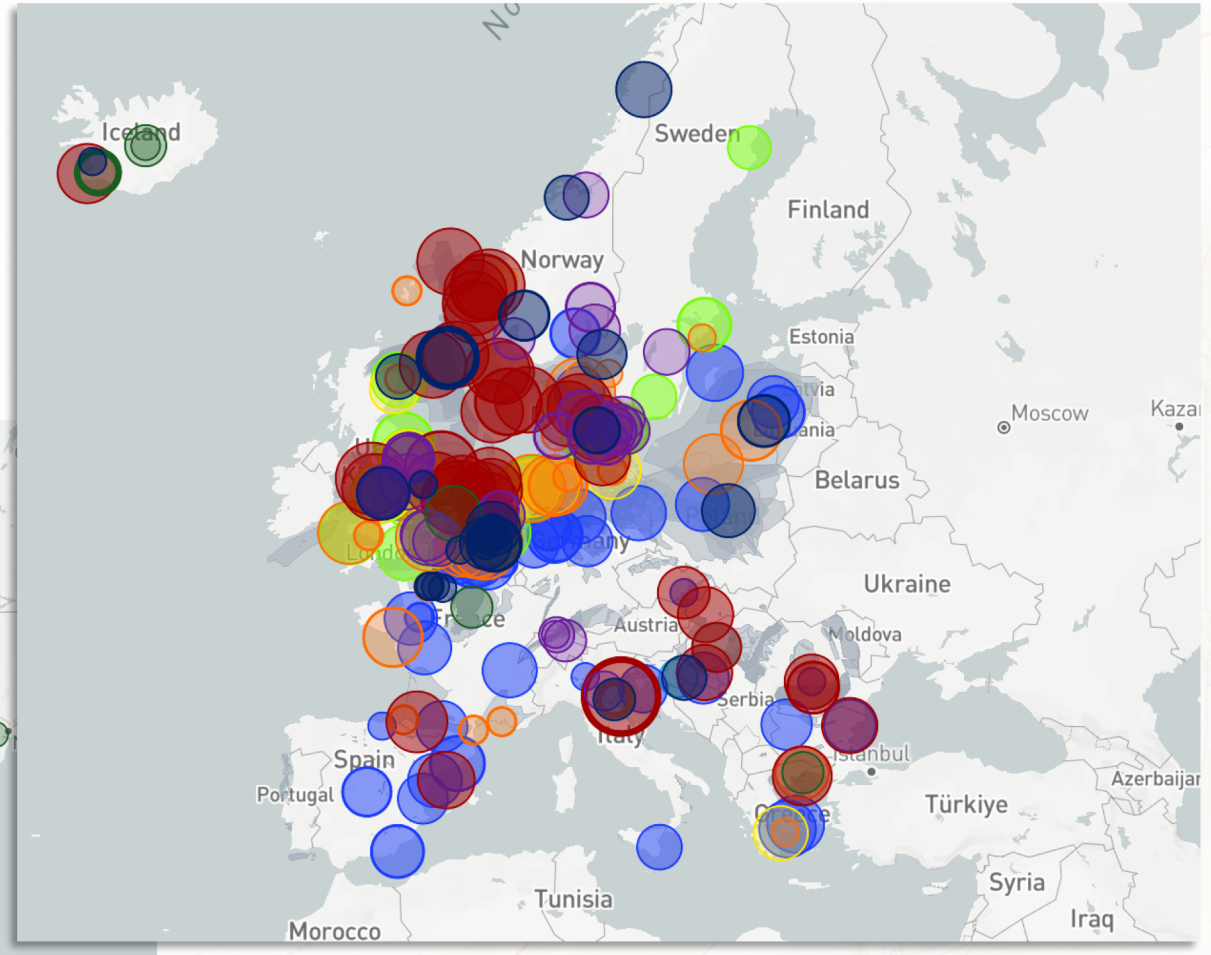
Different dependencies and incentives

© World Pipelines 2026

1

Different starting points





Clean Air Taskforce Global Carbon Capture Activity and Project Map

© World Pipelines 2026

Policy — Regulation — Carbon price — Financial incentives — Storage

Infrastructure — Industrial base — Risk allocation — Public acceptance

1

Different starting points

2

Different system architectures

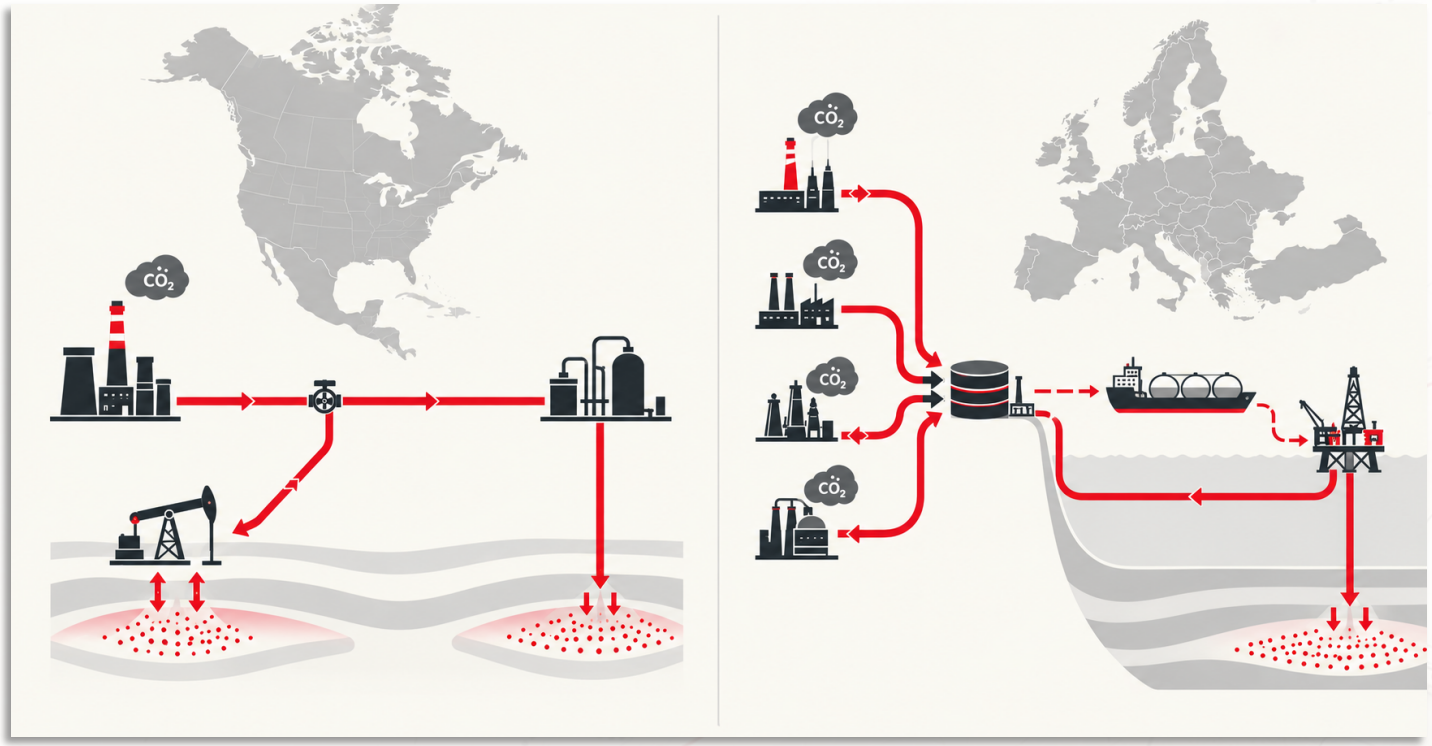
3

Different dependencies and incentives

© World Pipelines 2026

2

Different system architectures



© World Pipelines 2026

Policy — Regulation — Carbon price — Financial incentives — Storage

Infrastructure — Industrial base — Risk allocation — Public acceptance

1

Different starting points

2

Different system architectures

3

Different dependencies and incentives

© World Pipelines 2026

3

Different dependencies and incentives



US

45Q

Incentivise the project

- Tax credits
  State incentives
  Permitting / public acceptance
- Project economics



CANADA

CARBON PRICE & ITCs

Price carbon and incentivise investment

- Carbon pricing
  Federal + provincial support
  Investment tax credits
- Provincial regulation/storage



UK

CLUSTER & RISK SHARING

Build the chain together

- Funding/grants
  Regulated business models
- Government risk-sharing
- Cross-chain coordination



EUROPE/SCANDANAVIA

ETS & STATE SUPPORT

Make emitting costlier; support infrastructure

- Carbon pricing
- EU and national support
- Cross-border coordination
- Storage / infrastructure access

© World Pipelines 2026

NO ONE MARKET

Take the leap

Choose where you leap; don't treat global CCS as one opportunity

Which CCS market am I focused on?





Wait and see

Watch the jurisdictions where the enabling conditions are lining up

Watch the conditions in the markets that matter to you

© World Pipelines 2026

POSITIONING



PREDICTION

© World Pipelines 2026

POSITIONING / PREDICTION



1

Develop capability before demand is completely certain

2

Participate in a market while it's rules are still being written

3

Preserve optionality

© World Pipelines 2026

POSITIONING / PREDICTION



1

Develop capability before demand is completely certain

2

Participate in a market while the rules are still being written

3

Preserve optionality

© World Pipelines 2026

POSITIONING / PREDICTION



1

Develop capability before demand is completely certain

2

Participate in a market while it’s rules are still being written

3

Preserve optionality

© World Pipelines 2026

POSITIONING / PREDICTION

Take the leap

Be selective about where you commit





Wait and see

Be active about how you wait

© World Pipelines 2026

REAL, BUT NOT MATURE

NO ONE MARKET

POSITIONING / PREDICTION

© World Pipelines 2026

THANKS, ATHENS!

Look out for the CCS Forum 2027 next year.

Announcement coming soon!



© World Pipelines 2026