CCSA

CCUS Delivery Plan Update 2025

December 2025

About the CCSA

About the CCSA

The CCSA is the lead trade association accelerating the commercial deployment of CCUS, with offices in the UK and Belgium. We work with members, governments and other organisations to ensure CCUS is developed and deployed at the pace and scale necessary to meet net zero goals and deliver sustainable growth across regions and nations.

The CCSA represents more than 120 member companies engaged across the full carbon management value chain—including carbon capture and removal technologies, CO_2 transportation by pipeline and ship, utilisation, and geological and other permanent storage solutions. Our membership spans power generation, industrial production, waste management, fuels and hydrogen producers, as well as engineering, construction, supply-chain specialists, and legal and financial advisers.

www.ccsassociation.org

Acknowledgments

Thank you to all CCSA members who took part in the research behind this Delivery Plan: this data and insight is invaluable and helps us better understand the issues and concerns across the UK CCUS industry.

Thank you also to the NSTA CTS Task Force subgroup for allowing us to use the data gathered as part of work on estimating licensed storage capacity in the UK.

Finally, thank you to everyone who reviewed and commented on the draft report.

Foreword

The UK's Carbon Capture, Utilisation and Storage (CCUS) sector is at a pivotal moment.

Since the 2023 CCSA Delivery Plan Update, the sector has made decisive progress, with the first projects entering construction and a substantial pipeline of follow-on projects ready to scale. This momentum has been recognised in the Government's *Modern Industrial Strategy* and is already unlocking significant private investment, creating new jobs, safeguarding vital industries, and strengthening domestic supply chains. At the same time, major analyses—including the Government's *Carbon Budget and Growth Delivery Plan* and the Climate Change Committee's *Seventh Carbon Budget*—continue to make clear that there is no credible route to net zero without CCUS.

The findings of the CCSA's latest research finds a sector that is ready to deliver. The UK's project pipeline now includes more than 100 capture projects, with projected captured volumes that exceed long-term carbon budget requirements. Substantial storage capacity is also in development – estimated to be enough to store over 100 million tonnes (Mt) of CO_2 per year, opening up the UK's geological potential not only for domestic emissions but for the wider European market. Together, these projects offer the opportunity to protect the UK's foundational industries from continued deindustrialisation, secure a low-carbon power system, enable large-scale greenhouse gas removals, and unlock new export-led growth.

However, this Delivery Plan Update also highlights that the UK CCUS sector is at a critical juncture. While confidence in bringing the first capture and storage projects online before 2030 remains strong, uncertainty across the policy and regulatory landscape is beginning to slow progress. This survey identifies 27 projects that have been cancelled or mothballed, and delays are widespread. Developers warn that unless momentum is sustained—with clear policy signals in the next year — investment may shift to more attractive international markets. Without timely action, the UK risks losing not only CCUS projects, but also the economic benefits they underpin; over £94 billion in Gross Value Added (GVA) and more than 50,000 jobs by 2050.

2026 is therefore a decisive year. The CCSA will work with Government and industry to build on the progress made over the past twelve months and set the course for the next wave of CCUS deployment. The build-out of the East Coast Cluster and HyNet must accelerate, development funding secured for the Acorn Project and Viking CCS, and a clear nationwide route to market for other clusters and projects. Market enabling policies must be advanced—including support for non-pipeline transport, alongside low-carbon products, greenhouse gas removals, and cross-border CO_2 storage markets — to help the sector mature into a self-sustaining, competitive market.

The UK has the expertise, the industrial base, and the project pipeline to build a world-leading CCUS sector. The opportunity is real and the benefits are substantial—but the window to seize it is limited. By working in partnership, industry and Government can ensure the UK not only meets its net zero goals but does so in a way that strengthens prosperity for decades to come.

Olivia Powis
Chief Executive of the CCSA

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CCUS in the UK – at a glance

UK achievements

77 $MtCO_2pa$ capture in the pipeline to the mid-2030s

exceeding CCC CB7 estimate of **73 $MtCO_2pa$** by 2050.

2 transport and storage networks

&

3 capture projects have reached financial close and begun construction.

4 CO_2 storage permits granted.

Industry delivering 50% UK content in construction of projects.

Number of CO_2 capture projects have grown from **~90 projects** in 2023 to OVER **100** projects in 2025.

Industry potential

OVER **1/3** of projects that responded to our survey said they would need non-pipeline transport, with more also looking to receive emissions from Europe.

Almost **14** **GW** of low carbon dispatchable power capacity in the pipeline.

22 **CO_2 storage licenses in progress,** with an estimated combined storage capacity of over **100 $MtCO_2pa$** by the mid-2030s.

44 **$MtCO_2pa$** of EU-captured CO_2 would be most cost-effectively stored in UK sites.

OVER **18** $MtCO_2pa$ greenhouse gas removals in the pipeline.

Funding commitments

£21.7Bn

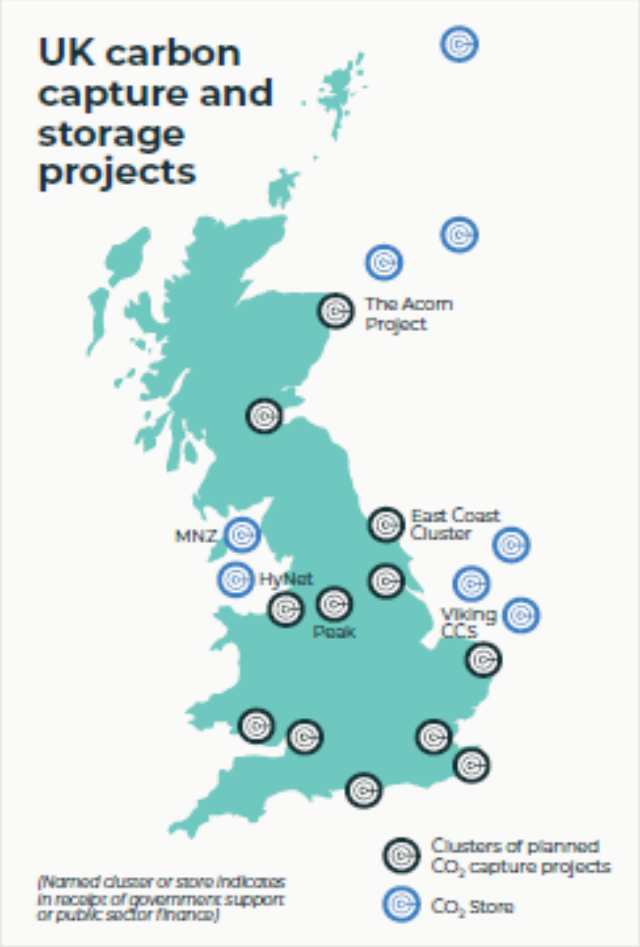
committed over 25 years to support initial CCUS projects.

£9.4Bn

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.

£28.6M

National Wealth Fund equity investment in MNZ | Peak Cluster.



What is at risk?

27 CANCELLED

CCUS projects have been mothballed or cancelled since 2023.

ALMOST 1/3 of projects that responded to our survey have already **paused spending on project development in the UK.**

Project timelines have slipped by an average of **2 YEARS**

due to government delays and uncertainty.

64% of projects that responded to our survey are **at risk if they don't get clarity from government ASAP.**

2026: a crucial year for maintaining momentum

Executive Summary

The UK's Carbon Capture, Utilisation and Storage (CCUS) sector is now more advanced than ever, with two Transport & Storage (T&S) networks and three capture projects having reached final investment decisions (FIDs) with Government. These are underpinned by government funding commitments that have enabled significant private investment to enter the UK.

Maintaining this momentum is essential, as a substantial pipeline of future projects is ready to be deployed, bringing opportunities for economic growth, job creation and decarbonisation. Achieving this will require a clear understanding of how projects in development view the current market, and the specific actions needed to build a fully established and self- sustaining industry.

The CCSA has conducted new research across the CCUS sector to assess the status of UK developments. Through surveys and interviews with project developers — both members and non-members — we have gathered the latest information on projects. This report updates the CCSA's previous Delivery Plan publications from 2022[1] and 2023[2] and, as in past years, sets out the status of the CCUS pipeline across the full value chain.

The research presents a mixed picture. Significant progress and momentum has been achieved, and there is now real confidence that projects are on course to be operational before 2030. However, uncertainty persists, as the majority of capture and storage projects still lack a clear route to market, with several having been paused or cancelled. As a result, the UK's CCUS sector stands at a critical juncture.

Building the momentum

For the first time, this Delivery Plan is able to include projects that have entered the construction phase, creating new jobs and stimulating the local supply chain. This marks a major milestone for the UK CCUS sector and is underpinned by a government commitment of £21.7billion over 25 years to support early deployment.

The role of CCUS is now firmly embedded within both the Government's industrial and decarbonisation strategies. CCUS and Greenhouse Gas Removals (GGRs) are together identified as one of six 'Frontier Clean Energy Industries' in the Government's *Industrial Strategy*,[3] while the Government's *Carbon Budget Delivery and Growth Plan* reaffirms that CCUS is "part of the most cost-effective route to net zero and represents a significant economic opportunity, decarbonising industry and power in a way that drives growth."[4]

Similarly, the Climate Change Committee's (CCC) Sixth and Seventh Carbon Budget advice both identify a critical role for CCUS, with the latter stating that the CCC "cannot see a route to net zero without CCS," emphasising its critical role across power, industry, fuel supply, waste management, and engineered GGRs.

1. CCSA (2022) *CCSA Delivery Plan 2025*
2. CCSA (2023) *CCSA Delivery Plan Update – 2023*
3. CCSA (2025) *Next Steps for UK CCUS Deployment*
4. DBT and DESNZ (2025) *Clean Energy Industries Sector Plan part of The UK's Modern Industrial Strategy 2025*
5. DESNZ (2025) *Carbon Budget and Growth Delivery Plan*
6. CCC (2025) *The Seventh Carbon Budget*

Key milestones in CCUS delivery across the industry in 2024 and 2025

- **October 2024**, Government announced £21.7 billion over 25 years to support delivery of first Track 1 projects in HyNet and East Coast Cluster (ECC).
- **December 2024**, the Northern Endurance Partnership T&S infrastructure and Net Zero Teesside Power reached Financial Close on the ECC.
- **April 2025**, Perenco successfully concluded the UK's first CO_2 injection test for CCUS, as part of Project Poseidon.
- **April 2025**, Eni Liverpool Bay T&S Infrastructure reached FID, enabling the HyNet Cluster to enter the construction phase.
- **May 2025**, UK-EU Reset talks took place with the resulting Common Understanding committing to negotiations on aligning the UK and EU Emission Trading Schemes. This opened the potential for agreements on cross border CO_2 storage.
- **June 2025**, UK's Modern Industrial Strategy and Infrastructure Strategies were published. 'CCUS including GGRs' identified as one of six "Frontier Clean Energy Industries."
- **June 2025**, Comprehensive Spending Review committed £9.4 billion in capital funding this parliament, to support filling the storage capacity in the ECC and HyNet clusters, plus committed development funding for The Acorn Project and Viking CCS to work towards FID within this parliament, subject to readiness and affordability.
- **July 2025**, National Wealth Fund (NWF) announced £28.6m equity investment, to support the development of MNZ | Peak Cluster, specifically to help development of the pipeline between the Peak Cluster and Morecambe Net Zero (MNZ).
- **July 2025**, the Department for Energy Security and Net Zero (DESNZ) ran a market-sounding exercise to gather data on potential projects in Teesside looking to connect to ECC.
- **July 2025**, Ofgem approved additional development expenditure (devex) by the Northern Endurance Partnership (NEP) to appraise expansion stores in 2025-26, to serve ECC in the Humber and Teesside
- **August 2025**, Government published the HyNet Expansion: Project Negotiation List (PNL). Confirming 10 capture projects being progressed into negotiations with Government. Five marked as 'Priority' and five as 'Standby'.
- **September 2025**, the first HyNet PNL priority projects, Heidelberg Materials' Padeswood CCS cement works & Encyclis' Protos Energy Recovery Facility (ERF), reach FID with government.
- **October 2025**, first appraisal well drilled on North Sea Transition Authority (NSTA)'s first-round carbon storage licence for Eni's Bacton CCS project.
- **November 2025**, Government confirmed intention to launch a new ECC Teesside selection process for capture projects in early 2026.

UK CCUS in numbers

Overall, our research finds that the current UK policy environment has enabled a robust pipeline of potential projects to emerge, which includes:

Over **100** CO_2 capture projects

at some stage of development, from concept to having started construction. This is an increase from over 90 identified 2023.

Total projected capture volume of **77 $MtCO_2$pa**

exceeding the CCC's Carbon Budget 7 which estimates a need for 73 $MtCO_2$pa by 2050.

Over **100 $MtCO_2$pa** of storage capacity

could be delivered by the mid-2030s, if all currently licensed CO_2 stores become operational.

2 Transport and Storage (T&S) networks have reached FID:

Liverpool Bay T&S, (serving HyNet), and Northern Endurance Partnership T&S (serving the East Coast Cluster).

4 CO_2 storage permits

having been granted for the first 2 clusters.

50% UK content

for first projects, in line with industry-wide voluntary ambitions.

22 CO_2 storage licences are in progress

accompanied by strong demand for UK storage of CO_2 captured in the Europe, opening storage export opportunities.

44 $MtCO_2$pa of EU-captured CO_2 could be cost-effectively stored in UK sites

2 T&S networks with committed government supported devex

The Acorn Project and Viking CCS, are in active bilateral engagement with government with intention to take FID this parliament.

£28.6m National Wealth Fund

equity investment in MNZ | Peak Cluster, as development funding for the pipeline between the Peak Cluster and Morecambe Net Zero. Also with the intention of taking FID in this parliament.

3 CO_2 capture projects have reached FID

Net Zero Teesside Power, Padeswood CCS cement works and Protos Energy Recovery Facility.

Just under **14 GW** of CCUS-enabled low carbon power projects

that could be deployed by 2035, to contribute to energy security. This puts the UK on track to meet CCUS requirements for both the Government's Clean Power Mission and the CCC's seventh carbon budget.

4.9 $MtCO_2$pa of industrial CCUS projects

are in the pipeline and are currently at pre-FEED or FEED[7], **with a further 8.3 $MtCO_2$pa in earlier development stages**, all of which have the potential to deliver a low carbon future for key foundational industries in the UK.

A potential for **18.2 $MtCO_2$pa** of greenhouse gas removals

that could be delivered by 2035, putting the UK on course to meet the CCC's anticipated need for 20.7 $MtCO_2$ pa by 2040.

36% of the CO_2 capture projects surveyed

stated that they would or might need non-pipeline CO_2 transport.

7. FEED – Front-End Engineering and Design; Pre-FEED – Preliminary Front-End Engineering and Design

Understanding the challenges

Despite this progress and substantial pipeline of projects, our research also reveals a significant level of uncertainty. The pace of delivery has fallen short of the trajectory set out in our 2023 Delivery Plan Update, as demonstrated in our survey responses:

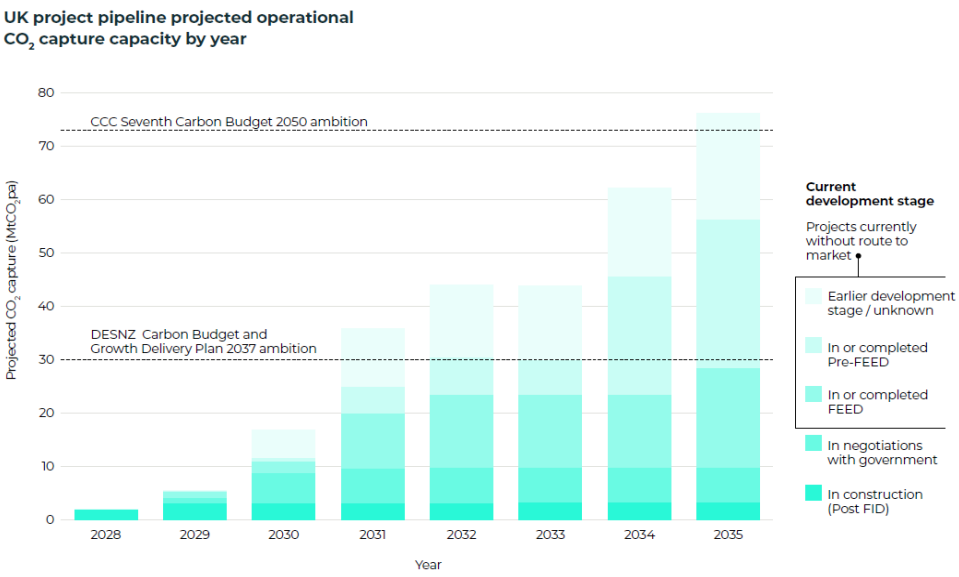
- **27 CO2 capture projects have been cancelled or mothballed** since being counted in the last delivery plan (2023).
- **Over 15 MtCO2pa** of capture projects in the pipeline lost since 2023, reflecting, in part, the loss of UK industries that could have been decarbonised with CCUS, along with the jobs and essential materials they would have continued to provide.
- **Average projected CO2 capture per project has fallen from 0.8 MtCO2pa in 2023 to 0.4 MtCO2pa in 2025.**
- **2-year average slippage to project timelines** of the projects we gathered data on in both 2023 and 2025, almost all have seen delays to their project timelines.
- **75% of respondents** would consider reallocating UK development expenditure (devex) to other markets if government policy does not move on quickly.
- **Over 30% of projects** that responded stated they had already paused some form of devex spend on CCUS in the UK.

Together, these responses make clear that, although the CCUS sector has established a solid foundation, the future project pipeline faces significant uncertainty.

This places the significant levels of private sector devex investment — much of it concentrated in the UK's industrial heartlands — along with the associated future tax revenue, at risk, as developers' boards consider whether to redirect investment to other markets. In turn, this jeopardises the sector's potential economic contribution, risking the loss of over £94 billion in GVA and more than 50,000 jobs by 2050.[6]

There are several factors contributing to this ongoing uncertainty. Delayed decision-making across successive governments has meant key polices are still not in place to enable projects to move forward. Most immediately, this includes The Acorn Project and Viking CCS, who await confirmation on when development funding committed through the 2025 Spending Review will be allocated. These clusters, alongside all clusters and projects outside the first committed projects, require a defined route to market to be established, alongside the development of a future allocation framework for government support contracts where necessary in the value chain.

Figure 1: UK project pipeline projected operational CO2 capture capacity by year



8. Wider enabled benefits identified through a literature review of the cluster-specific studies for the Track - 1 and Track - 2 clusters. See CCSA SR25 response for further details.

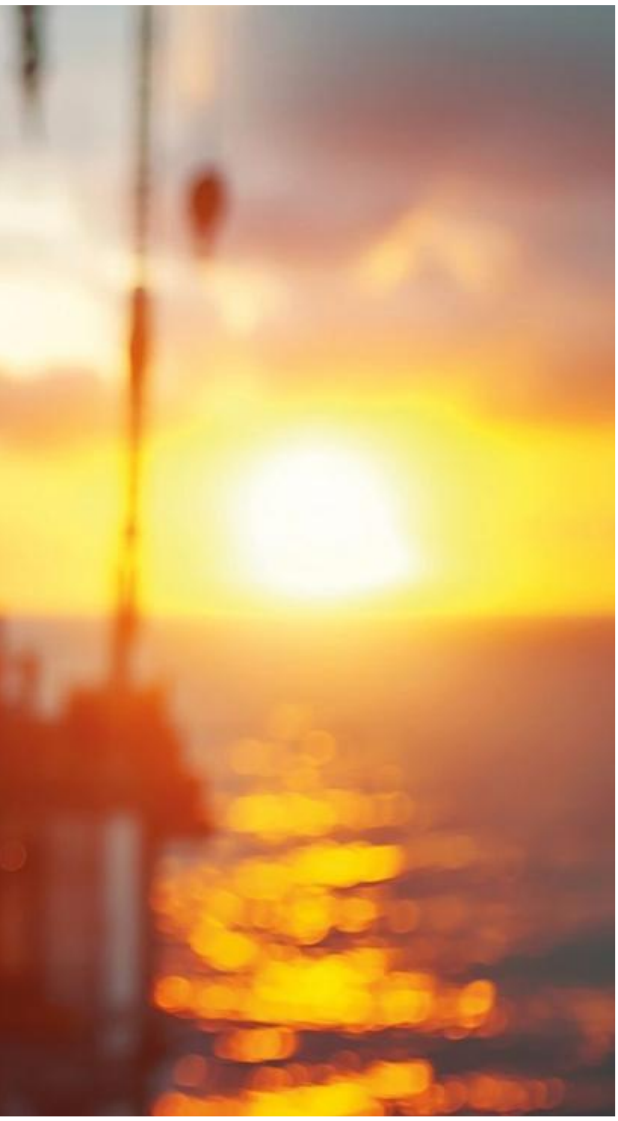
Moving the market forward in 2026

Addressing these challenges in 2026 will be critical to maintaining momentum, reducing market uncertainty, and ensuring delivery across the identified project pipeline. Several significant market and political milestones are approaching (See figure 2). Notably, this includes the 2027 Spending Review (SR 27), the outcome of which will be pivotal in driving future project delivery and advancing the sector. Achieving this will require close collaboration between industry and Government to both consider next steps and demonstrate how the sector can deliver cost reductions and transition toward a self-sustaining model.

Additional deadlines also exist across the policy and regulatory landscape. Current storage licences begin to expire from 2027 onwards, meaning storage developers will need clarity in 2026 to continue progressing their projects. It is equally vital that non-pipeline transport (NPT) market frameworks are advanced at pace, following recent delays, to unlock the advantages NPT offers. These include lowering the cost of managing cross chain risks, supporting merchant CO_2 stores, facilitating CO_2 storage exports, and catalysing private investment for regional emitters not connected to pipelines.

Looking further ahead, the EU's Net Zero Industry Act (NZIA) introduces a review in 2028 and a 2030 deadline that is also relevant to the UK market. Under NZIA, obligated parties must have access to sufficient storage capacity to inject substantial volumes of CO_2. Ensuring UK storage capacity is progressing now, alongside removing regulatory barriers to cross-border CO_2 storage, is essential if the UK is to have the option to provide CO_2 storage opportunities to European emitters.

For capture projects, the priority remains the creation of supportive revenue markets that enable them to build viable business cases and reduce reliance on Government support. In 2026, focus should therefore be placed on developing these markets – expanding low-carbon product markets, establishing cross-border CO_2 storage agreements to access EU markets, and stimulating demand for GGRs. Together, these measures will help generate new revenue streams and drive long-term sector value.



Recommendations

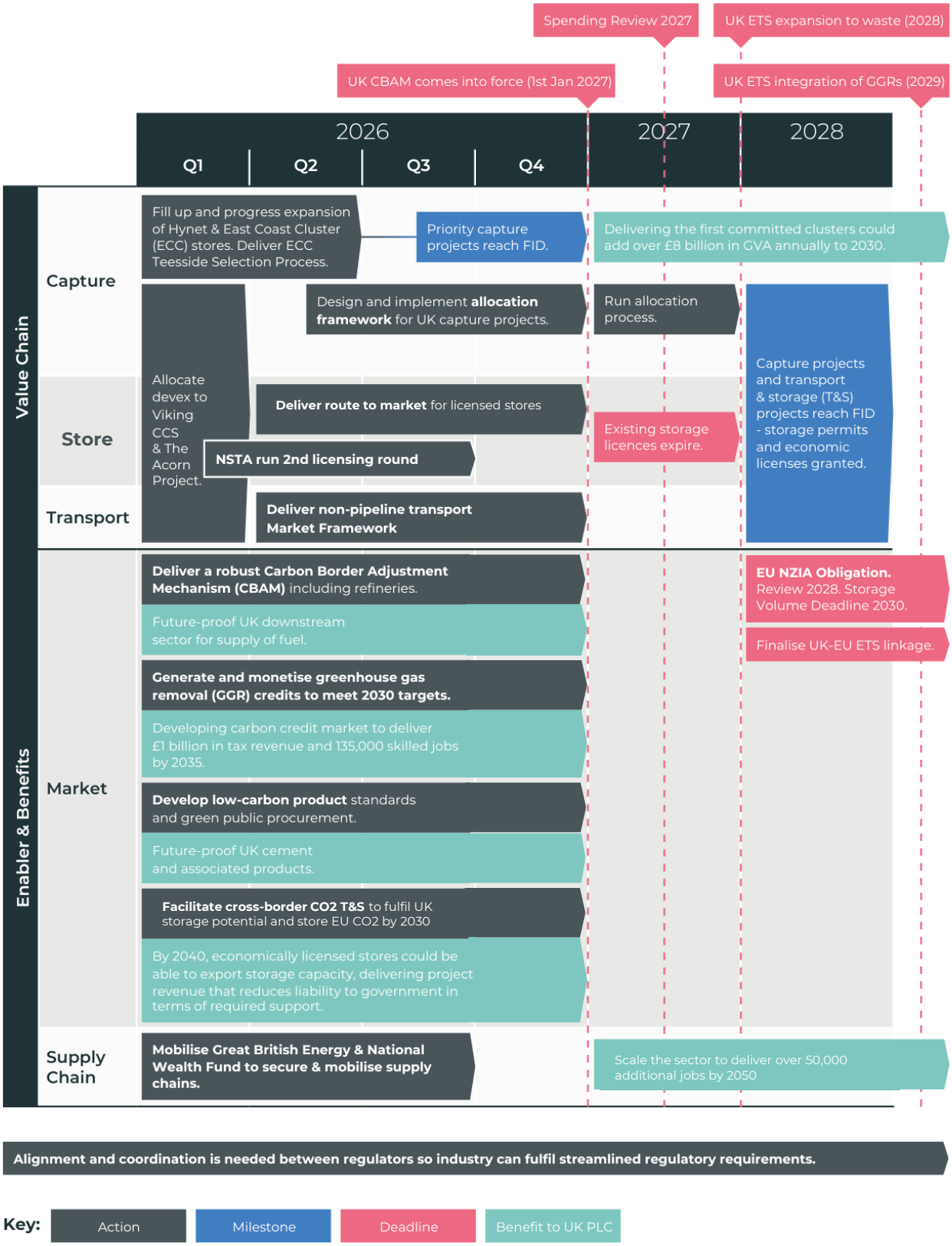
To achieve these aims and build on the success already achieved, we reiterate the key non-fiscal asks the CCSA has raised with Government ahead of the 2025 Autumn Budget. These are explored in more detail in the full report, but can be summarised as:

1. **Deliver the actions required to progress the build-out of the East Coast Cluster and HyNet, as well as confirm the allocation of the development funding committed to Viking CCS and The Acorn Project.**

2. **Provide an allocation framework for government support contracts in the 2027 Spending Review and a clear nationwide route to market for CCUS deployment. This should include enabling Viking CCS, The Acorn Project, ECC Humber Expansion and MNZ | Peak Cluster to reach FID within this Parliament, and support other projects and clusters to deploy, including those using CO_2 transport by ship, road, and rail.**

3. **Implement policies and regulations to stimulate low-carbon product, carbon removal, and European-wide CO_2 storage markets to enable the transition to a self-sustaining market.**

Figure 2: Actioning CCUS deployment



1. Progress in CCUS deployment

Since the last CCUS Delivery Plan update in 2023, government, industry, and stakeholders have made major strides towards deploying CCUS in the UK. This includes a £21.7 billion government funding commitment over 25 years to support initial projects.

The latest industry survey, examined in this report, shows that momentum has grown with over 100 projects now in development and representing a potential capture capacity of 77 $MtCO_2$pa in the pipeline.

The UK is now closer to large-scale CCUS deployment than ever, with two CO_2 transport and storage (T&S) networks and three capture projects having reached financial close in the past year. These are expected to capture and store over 3 $MtCO_2$pa, with first CO_2 capture and storage expected in 2028.

Further progress is anticipated this Parliament, with £9.4 billion from the 2025 Spending Review to maximise deployment to fill the storage capacity of HyNet and East Coast Cluster (ECC) and provide development funding to help The Acorn Project and Viking CCS T&S networks reach Final Investment Decisions (FID). The National Wealth Fund's £28.6 million equity investment in the Peak Cluster transport system, as part of the MNZ | Peak Cluster full value chain, also demonstrates the role public finance can play in driving project delivery and sectoral decarbonisation.

Similarly, CO_2 storage developers are advancing through licensing requirements, with **four permits for two projects granted** and a second storage licensing round expected soon. New CO_2 aggregation and transport concepts—particularly around terminals and ports—are emerging, alongside growing interest in EU/EEA-UK cross-border storage and non-pipeline transport options.

This progress reflects the Government's recognition of CCUS as central to both its decarbonisation and growth missions. CCUS and Greenhouse Gas Removals (GGRs) are identified as one of six **'Frontier Clean Energy Industries'** in the Government's *Modern Industrial Strategy*,[2] and the *Carbon Budget and Growth Delivery Plan* reaffirms CCUS as *"part of the most cost-effective route to net zero and represents a significant economic opportunity, decarbonising industry and power in a way that drives growth."*[3]

Complementary initiatives—such as development of a Hydrogen and CCUS Skills Curriculum, support for the ambition of 50% UK local content from 2030, and collaboration with the EU on cross-border CO_2 regulation—further strengthen this commitment.

Together, these actions signal the UK's intent to accelerate CCUS deployment nationwide and to decarbonise domestic industries at pace.

1.1 Impacts of uncertainty and delays

Despite this progress, the rate of delivery has been slower than put forward in the CCSA's previous '2023 Delivery Plan Update'.[2] Delayed policy decisions - across multiple governments - has meant that many projects, especially those outside of the committed clusters, still lack clarity on their route to market. The results of our survey demonstrate the damage this is having on expected project delivery dates and investor confidence. If positive momentum stalls, restrictions on project development funding may follow, risking the loss of a fully self-sustaining CCUS industry and the substantial economic benefits it could deliver.

Our research and survey found:

- **27 CO_2 capture projects have been cancelled or mothballed** since being counted in the last delivery plan (2023), which represents;
- **Over 15 $MtCO_2$ pa** of capture projects in the pipeline lost since 2023.

While other projects are coming forward, the loss of these original projects also reflects the closure of existing industries that had intended to decarbonise using CCUS and have instead shut their UK operations. These are industries that would have continued to provide jobs and essential materials in the UK.

Project developers report that they are finding it increasingly difficult to secure budget for development work, and that they are slowing down project development activity to stretch limited budgets in light of uncertainty about the route ahead. Furthermore, where developers were working on several CO_2 capture projects, in many cases we have seen them focus their efforts on a subset of these, rather than developing them all in parallel.

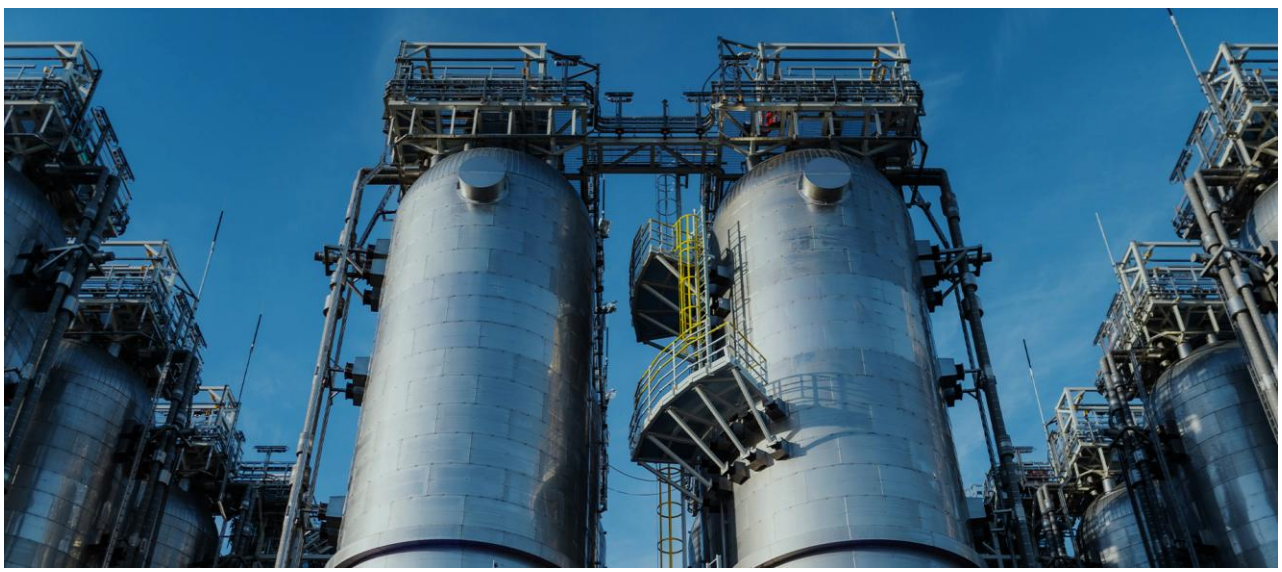
Overall, the study finds:

- **Almost two-thirds (64%) of projects that responded to the survey said that they needed clarity from government "as soon as possible"**, and in several cases, by the end of this year; a further 16% could only wait until mid-2026.
- **75% said**, if government policy does not move on, it was very likely that they **would reallocate their UK devex to other markets.**
- **Over 30% of projects** that responded stated that they had already paused some form of devex spend on CCUS in the UK**.** In some cases, project teams have been disbanded, meaning reviving the project would take much longer, and at higher cost, than if it had remained active but on a slower development path.
- **Average delays to project timelines of 2 years** for the projects we gathered data on in both 2023 and 2025, with almost all having seen some delay to their project.

Competition for devex funding

Alternative markets include EU member states, Norway, Middle East, SE Asia, India, USA and Canada. Spend is also at risk of being diverted away from CCUS and into other, potentially higher emitting, activities.

Box 1: Competition for devex funding



[8] DESNZ (2025) *Marine geological carbon dioxide stores: consenting lifecycle*

1.2 The need for a streamlined regulatory approach

A further commonly identified issue was the complexity and pace of the regulatory environment currently faced by a developing CCUS sector.

Respondents recognised the importance of a robust regulatory framework for storage, transport and capture sites, but highlighted that the existing system is inefficient, requires engagement with multiple (sometimes overlapping) regulators and demands substantial time and resources to navigate. This adds significant cost to project development, all of which remains at risk where projects lack a clear route to market.

For example, the Government's recent publication, *Guidance on Marine Geological Carbon Dioxide Stores*,[7] **identifies 16 separate Government and regulatory bodies** that storage developers may need to engage with throughout the development and operation of a site.

To reduce costs and enable timely delivery of the project pipeline, greater alignment and coordination between regulators is needed so that industry can comply with a streamlined and coherent set of regulatory requirements.

Key message from industry responses – the need for clarity

CO_2 capture and transport / aggregation projects need clarity on how and when access to storage, and to appropriate business models, will be available. Likewise, storage projects need confidence that they have a route to accessing the necessary licences and permits to be able to operate in the market. A very strong message from our survey was that investors need clarity:

- **On the government's processes, criteria and timetable for allocating support.**
- **On the government's commitment to non-pipeline transport and to enabling cross-border CO_2 transport and storage.**

Uncertainty has been, and will continue to be, damaging to the industry, making it difficult for projects to successfully bid for internal budgets to continue development work. Industry also emphasised that a lack of a decision is, effectively, a decision and a signal to the market. Developers need Government to:

- **Commit to the process for supporting the next tranche of CCUS projects.**
- **Clearly communicate timescales and processes.**
- **Work with industry, and neighbouring countries, to allow project developers working on longer term projects e.g. greenhouse gas removals & non-pipeline transport, confidence that a route to market will be forthcoming to enable ongoing project development.**
- **Deliver greater alignment and coordination between regulators so that industry can comply with a streamlined and coherent set of regulatory requirements.**

Box 2: Industry call for clarity

[8] DESNZ (2025) *Marine geological carbon dioxide stores: consenting lifecycle*

2. CCUS project pipeline (2025)

The CCSA has surveyed CCUS project developers – both members and non-members – to understand the projects they are developing, including capture volumes, timing and development status. We have carried out similar surveys in 2022 and 2023, so are developing a time series of data that shows how the industry is evolving.

With the first projects having now moved into construction, the survey also shows that new projects are developing all the time, both over a wider range of CO_2 capture applications and with a wider range of CO_2 transport and storage configurations.

2.1 CO_2 capture project pipeline

There are now **over 100 CO_2 capture projects in development** in the UK – an increase since our last Delivery Plan update, despite 27 projects having been cancelled or mothballed. However, newer projects have, on average, smaller projected CO_2 capture volumes. In 2023 the median projected CO_2 capture was 0.8 $MtCO_2pa$; in 2025, it is 0.4 $MtCO_2pa$.

Despite there being more active projects in the pipeline, the total projected capture volume, if all are delivered, is **77 $MtCO_2pa$**. This is lower than the **94 $MtCO_2pa$** reported in the 2023 Delivery Plan Update, but still well above the **30 $MtCO_2pa$ by 2037** required under the Government's *Carbon Budget and Growth Delivery Plan*.

Looking further ahead, however, the current project pipeline is only slightly above **the 73 $MtCO_2pa$ required by 2050** under the CCC's *Seventh Carbon Budget*. This highlights a narrowing headroom, meaning delivery of the full current pipeline remains critical.

Figure 4 shows the full pipeline of projects in development. Project developers have indicated that:

- **An additional 7.8 Mtpa of CO_2 capture** – on top of the almost 10Mtpa from projects that have either reached FID or been named on the HyNet PNL - could deploy by 2030, given the right conditions.

Projects are progressing through the development stages:

- **11 projects in addition** to those in discussions with government are in, or have completed, FEED
- **A further 26 are in**, or have completed, Pre-FEED
- If all projects that are in, or have completed, FEED (plus those that have taken FID or are in negotiations with government) are deployed, they would capture **almost 29 $MtCO_2pa$ by 2035**.

Projected annual CO_2 capture from UK projects in development, aiming to deploy by 2030 and 2035

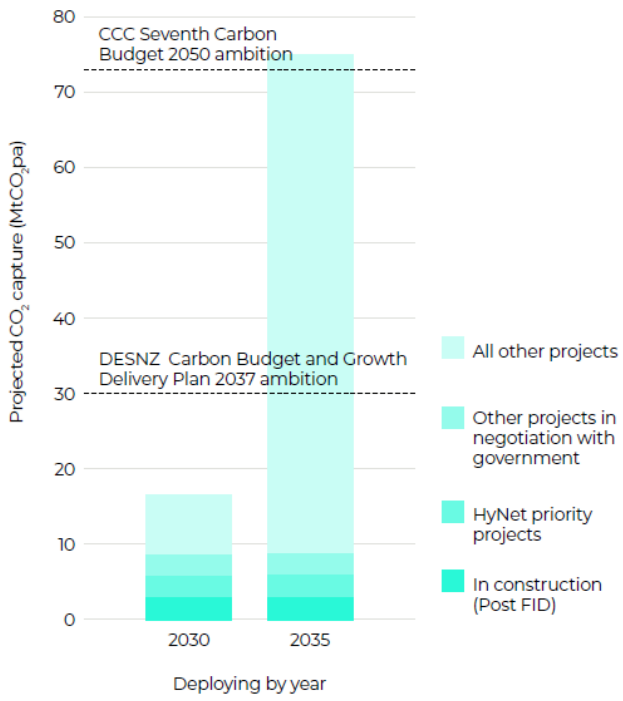


Figure 3: Projected annual CO_2 capture from UK projects in development

However, as Figure 4 shows, the majority of projects are not in negotiations with government and currently lack a route to market – and are therefore being developed at risk by the companies working on them. Hundreds of millions of pounds of private sector investment have been committed and, as with CO_2 storage licensees, CO_2 capture project developers report finding it increasingly difficult to justify ongoing devex spend on UK CCUS projects to their boards, particularly when competing with opportunities in other jurisdictions or sectors.

This internal competition for funding – and the need for clarity on how a project could find a route to market, whether through government support or market drivers – is also an issue for projects that are seeking to aggregate and transport captured CO_2 .

Change in the project pipeline since 2023

Combining the project information we gathered for our 2023 Delivery Plan update with the information provided by project providers in 2024 and 2025, we now have information on **138 CO_2 capture projects**. These range from early concepts to projects that have taken FID and begun construction. This also includes **27 projects** that we know or believe to have been cancelled or mothballed.

Box 3: Change in the project pipeline since 2023

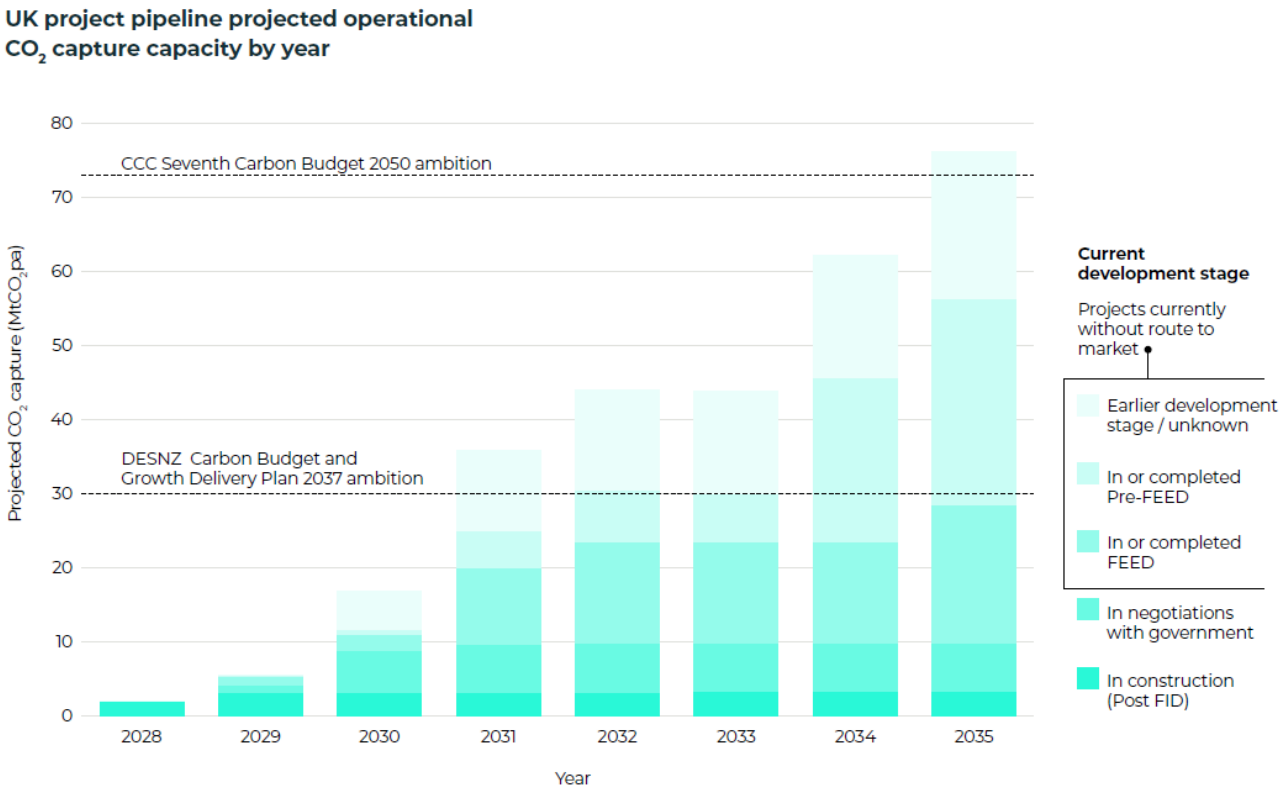


Figure 4: UK CO2 capture project pipeline to 2035

2.2 CO_2 storage pipeline

When we published our last Delivery Plan update, the NSTA had just awarded 21 new CO_2 storage licences. Since then, two of these have been relinquished, but the rest are in progress, with work programmes scheduled to run to between early 2027 and early 2031. In addition, the first four CO_2 storage permits, supporting HyNet and the East Coast Cluster, have been granted.

Only around 8.5 Mt CO_2 annual storage capacity currently has a permit. More capacity is being appraised under CO_2 storage licences, and there is likely to be sufficient storage capacity in this first licensing round to meet the CCC's Seventh Carbon Budget requirement of 73 $MtCO_2pa$ storage by 2050.

Figure 5 draws on data voluntarily provided by the NSTA CTS Task Force subgroup – a UK Carbon Storage workgroup chaired by the NSTA and comprising licence holders from the first CCS licensing round – supplemented by public sources. The darkest bar in the chart (around 8.5 $MtCO_2$ annual capacity) represents sites with permits; the remainder are still under appraisal. Storage volumes are classified as either contingent or prospective, depending on appraisal progress:

- Cont
  expe

  FID and secures a permit. Currently, none of these licences have a route to market, though developers of The Acorn Project and Viking CCS networks are in government negotiations and reasonably expect to reach FID.
- Prospective volumes are less certain. Greater clarity will emerge as appraisals progress. For this analysis, we assume 60% of prospective capacity will prove technically viable, and this risked volume is shown on the chart.

Figure 5 indicates that, collectively, this first licensing round could provide sufficient storage to meet the CCC's seventh Carbon Budget requirement of 73 $MtCO_2pa$ by 2050. It also shows that HyNet and East Coast Cluster alone will not deliver enough capacity to meet the Government's target of ~30 $MtCO_2pa$ per year by 2037 (end of the sixth Carbon Budget).

Although there is substantial licensed CO_2 storage potential under appraisal, licence holders need a viable route to market in order to be able to fulfil their commitments. These work programmes are costly and require significant upfront investment at risk from the licence holder and culminate in an application for a CO_2 storage permit.

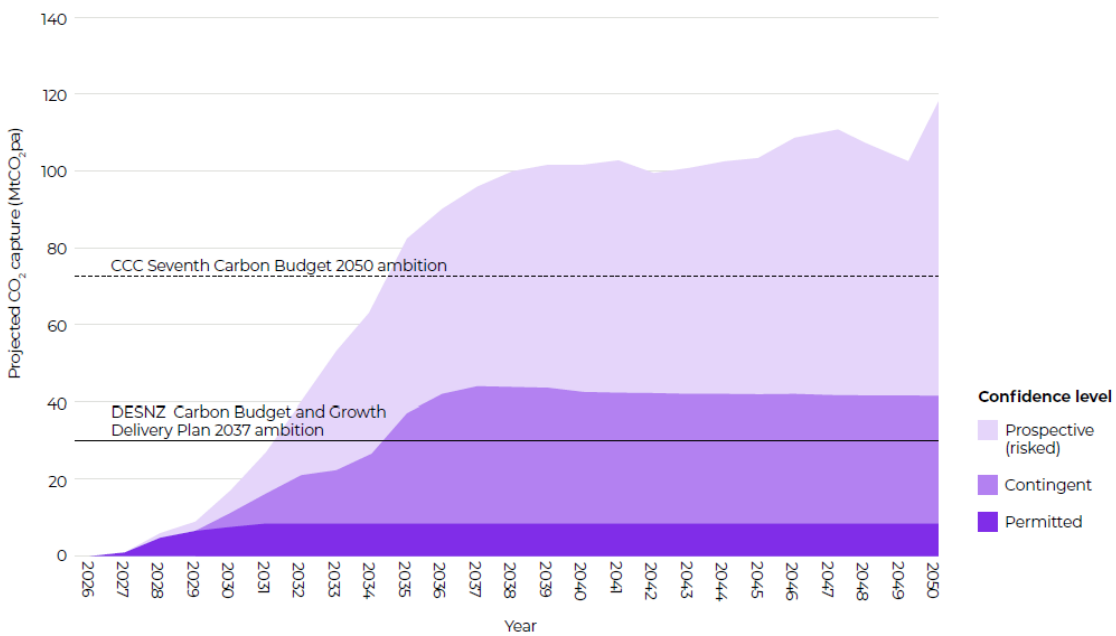


Figure 5: Estimated licensed CO_2 storage capacity

Without the ability to operate commercially, developers cannot apply for a permit or economic licence and would ultimately default on their CO_2 storage licences.

This challenge is now urgent. Without confidence in a credible pathway to extend or progress licences beyond their current expiry date (for many this is Q1 2027), licence holders are unlikely to commit further development expenditure. Storage developers already report finding it increasingly difficult to persuade their boards to provide the budget for furthering CO_2 storage licence activities. This jeopardises the continuation of T&S projects and risks undermining existing storage capacity for domestic emissions.

It also undermines the UK's ability to participate in a cross-border CO_2 storage market and the timeline for this is short. The EU's Net Zero Industry Act (NZIA) introduces a 2030 deadline that obligated EU parties must have access to sufficient storage capacity to inject substantial volumes of CO_2. Ensuring UK storage capacity is progressing now is therefore essential if UK stores are to be able to offer storage services to European emitters. More licences will be needed, both to meet the government's upper targets for storage of CO_2 captured in the UK, and to meet the expected demand for CO_2 storage services from other countries, making the most of the UK's unique geological advantages and enabling countries with less CO_2 storage capacity to decarbonise using CCUS.

CO_2 storage licence activities

CO_2 storage licences are time-bound and contain specified activities that licence-holders must carry out. These vary depending on the nature of the store, but all require that the licence-holder applies for a CO_2 storage permit once the appraisal activity has been completed. A licence-holder must have the necessary funding in place in order to be granted a permit: this means that they must have either an expectation of receiving the necessary economic licence from the government or the ability to operate on a merchant basis. Up until that point, all work on storage licences is at the developer's own risk, and if the time given for the licence runs out, then they may lose the licence altogether.

Analysis of existing storage licences found that the industry is set to deliver:

- At least 5, and up to 11 seismic data acquisitions
- At least 4, and up to 12 appraisal wells
- Between 1 and 3 injectivity tests

Box 4: CO_2 storage licence activities

2.3 CCUS projects in negotiations with government

Two CO_2 transport and storage networks – HyNet and ECC – are now in construction, as are three of the CO_2 capture projects that will connect to them. The three - CO_2 capture projects, expecting to capture over 3 Mt-CO_2pa combined, which have now taken FID and are entering the construction phase are:

- Net Zero Teesside Power (BP, East Coast Cluster)
- Padeswood Cement Works Carbon Capture Project (Heidelberg Materials, HyNet)
- Protos Energy Recovery Facility (Encyclis, HyNet)

2.3.1 HyNet Project Negotiation List

Eight further projects on the HyNet Project Negotiation List are currently in active negotiations with Government, three of which are marked as 'Priority' with the current expectation of being delivered first, and five marked as 'Standby' which could move forward should the cluster configuration be reviewed, or additional T&S capacity be made available.

In terms of capture projects in some form of active negotiation with government, either having reached FID, or are at some stage of discussion to move towards FID, we estimate an initial capture capacity of 10.4 Mt-CO_2pa (See figure 6).

Projected annual CO_2 capture volume from projects in construction or on HyNet expansion Project Negotiation List

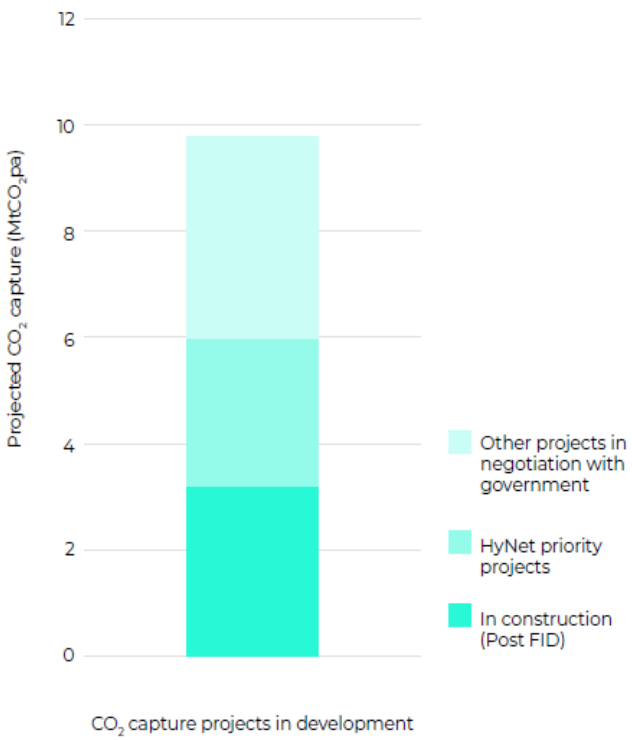


Figure 6 Projected annual CO_2 capture volume from projects in construction or on HyNet expansion Project Negotiation List

HyNet Expansion Project Negotiation List, published August 2025

Priority:

- Connah's Quay Low Carbon Power, Uniper
- Hanson Padeswood Cement Works Carbon Capture Project, Heidelberg Materials – FID reached
- Hydrogen Production Plant 1 (HPP1), EET Hydrogen
- Ince Bioenergy with Carbon Capture and Storage (InBECCS), Evero Energy
- Protos Energy Recovery Facility, Encyclis – FID reached

Standby:

- Essar Energy Transition Industrial Carbon Capture (EET ICC), EET Fuels
- Hydrogen Production Plant 2 (HPP2), EET Hydrogen
- Parc Adfer Energy from Waste Industrial Carbon Capture Project, Enfinium Group Ltd
- Runcorn Carbon Capture Project, Viridor
- Silver Birch, Climeworks UK Ltd

Box 5: HyNet Expansion Project Negotiation List

2.3.2 East Coast Cluster Selection Process

Unlike the published HyNet Project Negotiation List, there has, so far, been no similar announcement for the ECC. While some capture projects were named under Track 1 processes, enabling bilateral engagement with Government, there is currently no direct route for capture projects in Teesside or the Humber to enter new Government contract discussions.

To begin addressing this gap, DESNZ conducted a market-sounding exercise in July 2025 to gather information on potential Teesside projects seeking to connect to the ECC. This exercise led the Government to issue a market signal in November 2025 announcing its intention to launch a Teesside Selection Process early 2026. As part of this, Government indicated it is exploring options to broaden participation, including the potential eligibility of both merchant and non-pipeline transport (NPT) enabled projects.

The timeframe of the selection process it is not yet confirmed. There is some industry expectation that lessons from previous selection processes could lead to an accelerated timeline and that this should enable some further projects to reach financial close before the end of this parliament.

It is also noted that, as yet, there is no clarity around how capture projects in the Humber may enter future selection processes as part of building out the ECC. However, NEP is licenced to carry out development activities on an onshore pipeline in the Humber, including DCO preparation, on an approved user reference case, once news of an actual user selection process is confirmed. They are aiming to see the ECC Humber Expansion reach FID by the end of the parliament.

2.4 Deploying the next projects and clusters

The vast majority of CO_2 capture projects in development currently have no route to market. Figure 7 shows how these projects break down by sector, and by development stage. Over the following sections we explore each of these sectors in detail, examining project progress and identifying the critical policies and market developments required over the coming year to advance the transition to a self-sustaining CCUS market.

Status of UK CCUS projects by sector, currently not in negotiation with Government

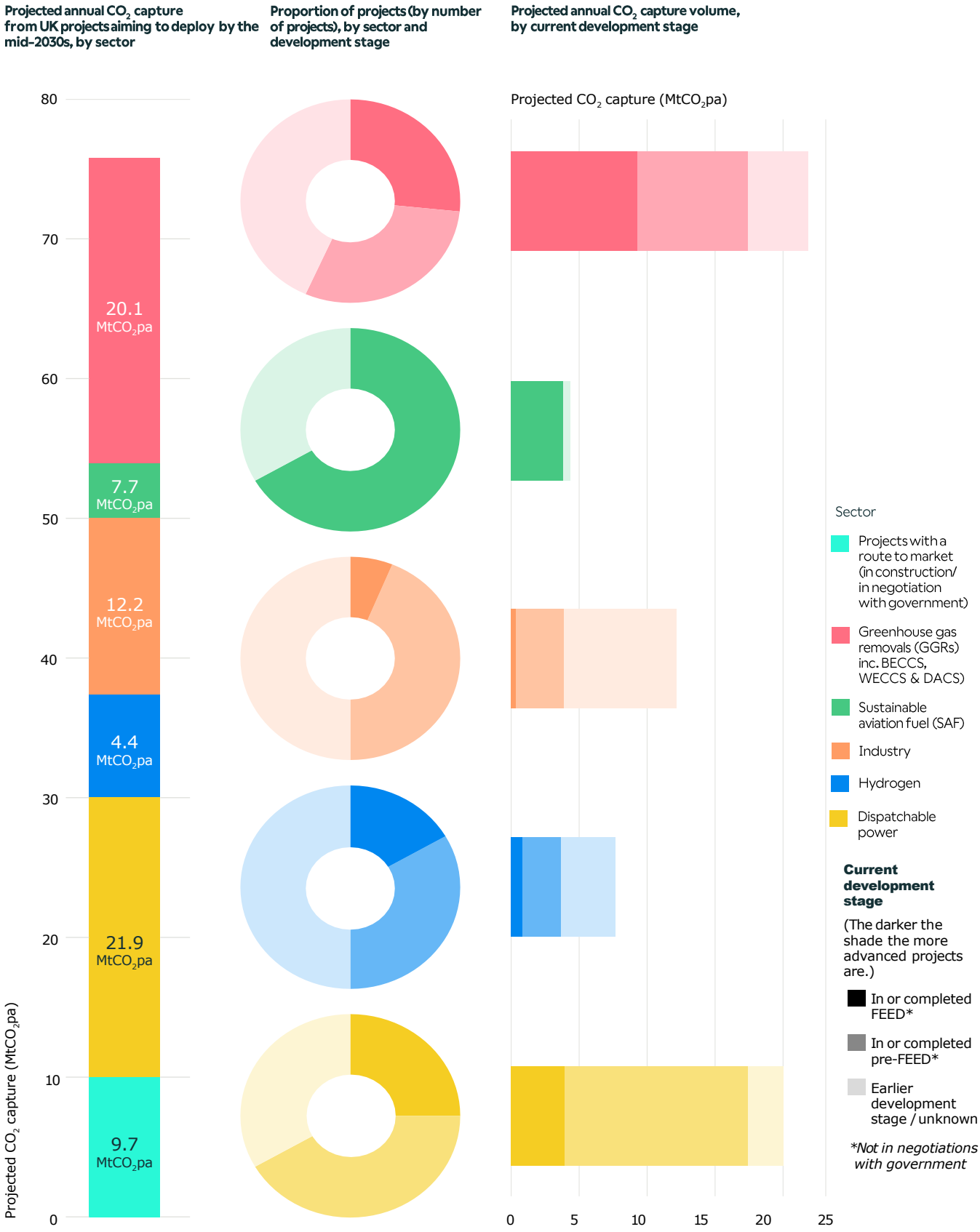


Figure 7: UK CO_2 capture projects currently without a route to market

A small portion of the £9.4 billion committed at the Spending Review is intended to support development funding for the next expected clusters, Viking CCS and The Acorn Project. Both projects are currently in bilateral engagement with the Government regarding the timing and allocation of this funding. The ambition is to bring both projects to financial close before the end of the Parliament, subject to project readiness and overall affordability

This process may also include decisions on cluster configuration and the selection of emitters that will form the anchor projects for these clusters. However, this remains subject to negotiations and the Government confirming a committed pathway. As such, it is not yet possible to state projected capture and storage volumes for these clusters based on the related projects included in our survey. We note, however, that Viking CCS is targeting a reduction of 4 $MtCO_2pa$ by 2030, increasing to 10 $MtCO_2pa$ from the mid-2030s, while The Acorn Project is targeting a further 5–6 $MtCO_2pa$.

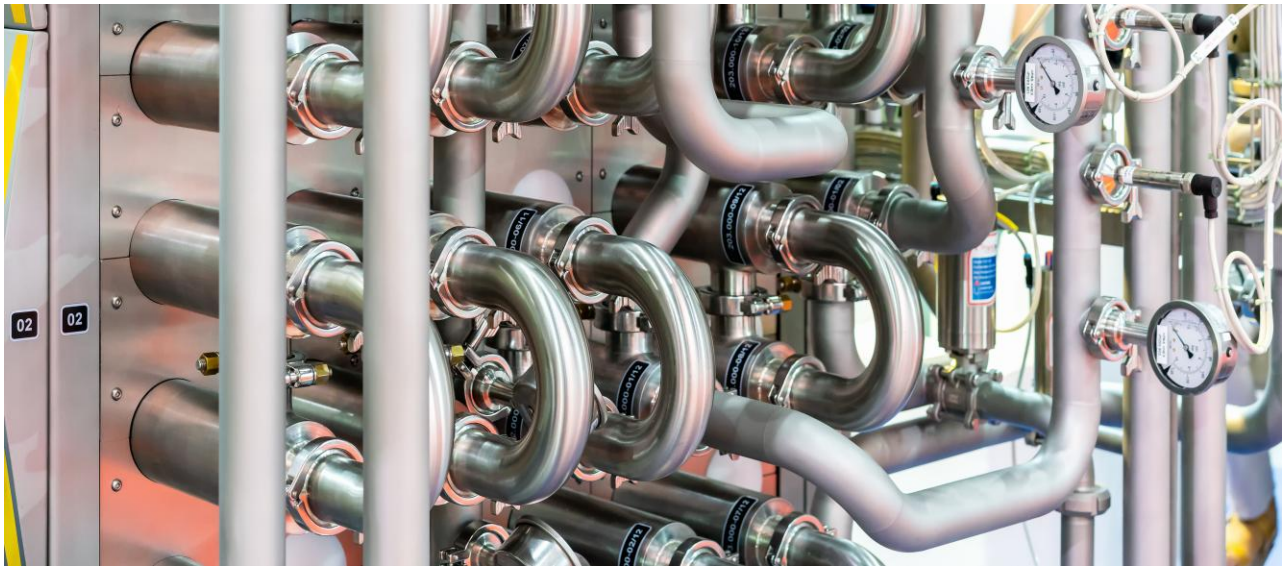
Alongside this, MNZ | Peak Cluster has received £28.6 million in equity funding from the National Wealth Fund to support development of the pipeline between the Peak Cluster and Morecambe Net Zero (MNZ), with an expected 3 $MtCO_2pa$ capture and storage starting in 2032 and rising with the connection of additional sources of CO_2. This investment recognises the crucial role of CCUS in securing the future of the UK's cement and lime industries and highlights the impact of public finance in driving sector progress.

A significant pipeline of further cluster projects and CO_2 stores also exists across the UK—including Bacton Thames Net Zero, $7CO_2$, South Wales Industrial Cluster, Poseidon, Solent, Veri and Medway Hub.

All of these projects fall outside the Government's currently committed clusters, but they represent substantial potential carbon capture volumes and infrastructure that will be required to meet future carbon budgets, achieve net zero, and maintain critical foundational industries. Critically many of these projects rely on the delivery of non-pipeline transport market framework, as well as some being enabled to operate on a merchant basis.

In order to realise these next projects and clusters, Government should:

- **Confirm next steps for allocating the development funding committed to Viking CCS and The Acorn Project.** This must be finalised in early 2026 to ensure continued development investment.
- **Provide an allocation framework for government support contracts in the 2027 Spending Review and clear nationwide route to market for CCUS deployment**. This should include enabling Viking CCS, The Acorn Project, ECC Humber Expansion and MNZ | Peak Cluster to reach FID within this Parliament, and support other projects and clusters to deploy, including those using CO_2 transport by ship, road, and rail.



2.5 Power generation

Projected annual CO_2 capture volume from power CCS projects aiming to deploy by the mid-2030s, by project type and current development stage

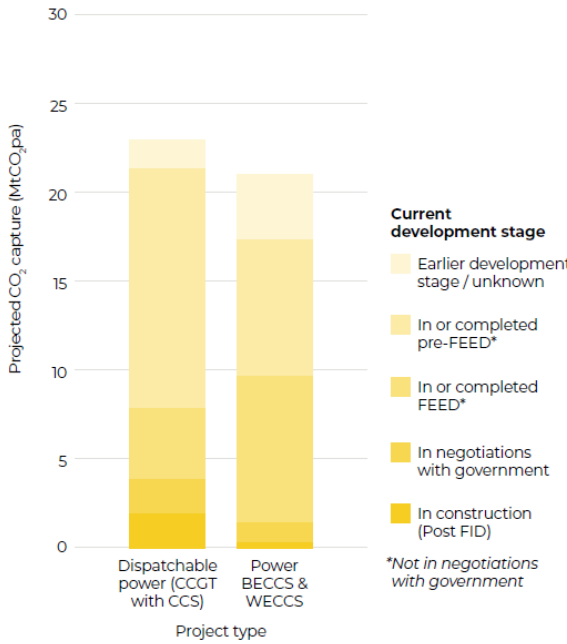


Figure 8: Power CCS projects aiming to deploy by the mid-2030s

Power CCS projects pipeline - generation capacity, by current development stage

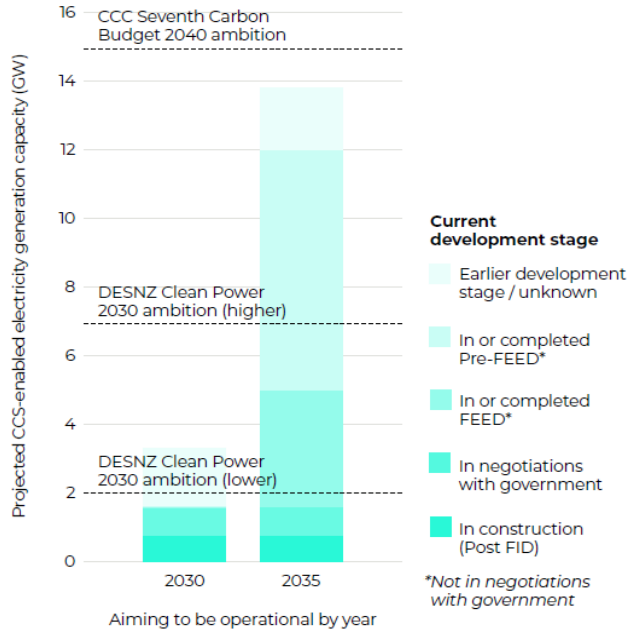


Figure 9: Power CCS projects' generation capacity. Note that the Clean Power 2030 target of 2-7GW includes hydrogen-to-power capacity, which is not covered in this report

In 2024, the Government published its *Clean Power 2030 Action Plan*, outlining the steps required to achieve its headline mission of delivering a fully net zero power system by 2030. Central to this plan is the deployment of between 2–7 GW of low-carbon dispatchable power by 2030.[8]

The CCC's Carbon Budget 7 advice reinforces this trajectory, projecting a scale-up of low-carbon dispatchable capacity to 8 GW by 2035, 15 GW by 2040, and 38 GW by 2050, implying an average deployment rate of 1.8 GW per year from 2030 onward.[5]

Within this report, low-carbon dispatchable power technologies include power bioenergy with carbon capture and storage (power BECCS), gas CCUS and waste-to-energy with CCUS (WECCS). The potential of hydrogen-to-power projects in providing dispatchable low carbon power is also recognised, but not captured within the research survey, so its number are not included here.

When taken together, we note a current development pipeline of just under **14 GW** of CCUS-enabled power projects by 2035.

Low-carbon dispatchable power will play a crucial role in strengthening domestic energy security and reducing the costs of energy storage and grid stability provision. It complements high volumes of renewable generation by providing system flexibility and resilience when renewable output is low, while simultaneously reducing reliance on unabated gas.

The use of dispatchable low-carbon generation is also recognised as a cost-effective route to a decarbonised electricity system. Analysis by the National Energy System Operator (NESO) indicates that incorporating such generation reduces total system costs by lowering curtailment and export costs and improving the alignment between supply and demand. Notably, even modest levels of dispatchable capacity significantly ease the challenge of meeting the 2030 clean power target.[8]

Low carbon dispatchable power (gas with CCUS):

- One dispatchable power project – Net Zero Teesside – has reached financial close and is expected to be operational in 2028. It will be able to produce up to 742 MW of flexible, dispatchable power, and capture up to 2 $MtCO_2pa$.
- A further 11 dispatchable gas power projects are in development, although only one – Connah's Quay – is currently in negotiations with government as part of the HyNet PNL. If all these projects are delivered, they would provide around 11 GW of additional low-carbon dispatchable generating capacity and capture an additional 21 $MtCO_2pa$ by 2035.

Low-carbon baseload power with greenhouse gas removals:

- In addition to low carbon dispatchable power, 34 WECCS and power BECCS projects are in development, with a potential total generating capacity of almost **3GW** by 2035.
- One WECCS project - Encyclis' Protos Energy Recovery Facility – has reached financial close with Government. It has a generating capacity of up to **49.9MW** and expected to capture 380,000 tonnes of CO_2 per year **(0.38 $MtCO_2pa$**) – around half of which is biogenic in origin, and so providing greenhouse gas removals as well as electricity.
- Two more WECCS and one power BECCS project are on the HyNet project negotiation list

2.5.1 Clean Power 2030 and beyond

In total, 15 CCUS-enabled power projects (including Power BECCS, WECCS, and gas with CCUS) have indicated in the survey that they could deploy by 2030 but would require the right circumstances (e.g. if they had access to CO_2 transport and storage, and a viable route to market). If all manage to deploy this would bring the CCS-enabled low carbon power generation capacity to 3.5GW (noting that about half of these projects would be retrofit to exiting waste to energy plants). As such, this suggests there is a pipeline of CCUS-enabled power projects that could meet the Clean Power 2030 targets of between 2-7 GW, if a clear delivery pathway is delivered. This would also mean around 11 $MtCO_2pa$ total CO_2 capture, around 2.5Mt of which would be greenhouse gas removals.

Power projects that have already either taken FID or are in negotiations with government are expected to deliver 1.5GW of capacity by 2030.

Looking beyond 2030, just under **14GW** have indicated that it could be deployed by 2035, as identified in Figure 9. The projects in this chart include gas with CCS, power BECCS and WECCS, indicating a pipeline that can deliver against the longer term CCC trajectory for dispatchable low carbon power.

The forthcoming Hydrogen Refresh Strategy will also be critical for clarifying the long-term role of CCUS-enabled hydrogen production across the energy system. Clear policy signals on priority hydrogen usage, including potential hydrogen-to-power (H2P) applications, would help unlock investment in low-carbon hydrogen projects and support deployment of CCUS infrastructure. Given that H2P is included within the Government's definition of low-carbon dispatchable power, but not included in this report, its use within the power sector could make a material contribution to delivering on the Clean Power Mission

2.6 Hydrogen

Projected annual CO_2 capture volume from CCUS-enabled hydrogen production projects aiming to deploy by the mid-2030s, by current development stage

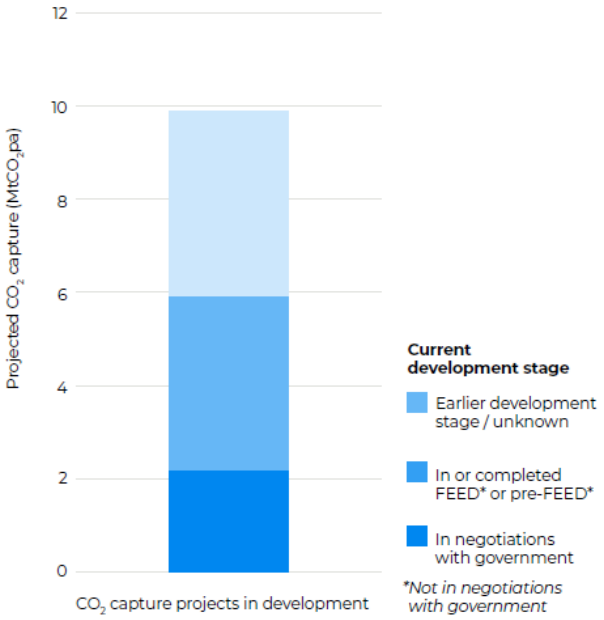


Figure 10: CCUS-enabled hydrogen projects aiming to deploy by the mid-2030s

CCUS-enabled hydrogen, alongside electrolytic hydrogen, continues to play an important role in delivering both low-carbon power and industrial decarbonisation ambitions. Critically, CCUS-enabled hydrogen offers scale and speed of deployment, providing a lower-cost route to low-carbon hydrogen production. It is also highly scalable, can support flexible demand profiles, and can be readily deployed within industrial clusters.

The CCC's Carbon Budget 7 advice highlights the need for 11 TWh of CCUS-enabled hydrogen production by 2030, increasing to 14 TWh by 2035 and 29 TWh by 2050.[5]

2.6.1 Progress in CCUS-enabled hydrogen

Two hydrogen projects are in negotiations or discussions with government. Delivery of these projects is critical to establishing the sector, as well as keeping the UK on track with what is required to meet Carbon Budget Seven.

In our survey we have identified a further seven CCUS-enabled hydrogen projects in development, but delivery of these (and indeed all hydrogen projects) is dependent on there being both a clear government commitment to the delivery of CCUS-enabled hydrogen within a twin track approach, and clear decisions on the use of hydrogen in the economy to enable more certainty about demand.

However, there remains uncertainty around the Government's ambitions and route-to-market for CCUS-enabled hydrogen. While hydrogen is recognised within the Industrial Strategy, with £500 million committed to support the first regional hydrogen network, and with the first hydrogen transport and storage allocation rounds scheduled for 2026, limited progress has been made in establishing a clear route-to-market for CCUS-enabled hydrogen with key policy commitments yet to be made.

The Government is currently reassessing its hydrogen delivery policies, with a refreshed Hydrogen Strategy expected before the end of 2025. To meet both industrial decarbonisation and clean power targets, it is critical that this strategy advances the build-out of both CCUS-enabled and electrolytic hydrogen, on a twin track approach.

2.7 Industry

Projected annual CO_2 capture volume from industrial carbon capture projects aiming to deploy by the mid-2030s, by current development status

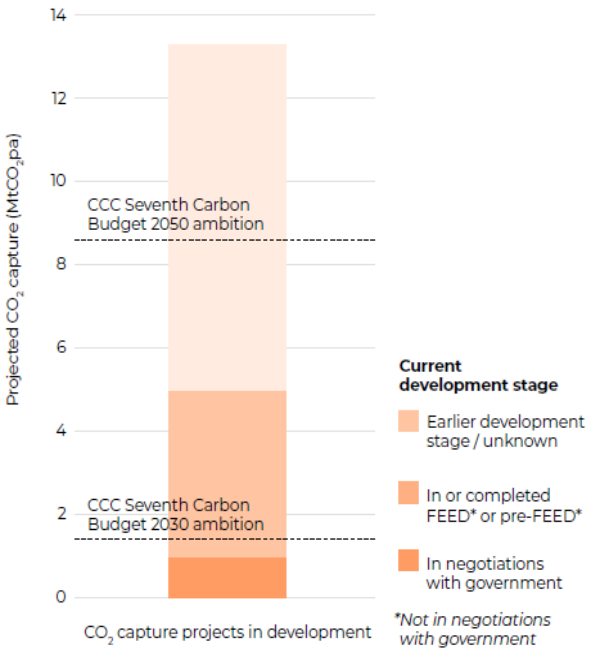


Figure 11: Industrial carbon capture projects aiming to deploy by the mid-2030s

The UK Government has already recognised CCUS as a critical driver for growth, identifying it as one of six 'Frontier Clean Energy Industries' in the Government's Industrial Strategy. This recognises that CCUS provides a lifeline for foundational industries – such as cement, glass, fuels and chemicals– enabling renewed investment in UK industrial communities, delivering decarbonisation and keeping production, jobs, and demand in the UK. This is required to directly address a growing pattern of deindustrialisation.

Industrial CCUS is also considered critical to meeting the UK's Carbon Budget targets. In its Seventh Carbon Budget advice to government (CB7), the CCC estimated that UK industry would need to capture around 1.4 $MtCO_2$pa by 2030, rising to 8.6 $MtCO_2$pa by 2050.

Decarbonisation not deindustrialisation

UK manufacturing and processing continues to face significant commercial pressures, including high energy costs, which are eroding competitiveness, putting jobs and communities at risk.

Safeguarding the UK's vital industrial base means creating an environment where businesses can invest with confidence, remain competitive and progress climate ambitions.

Part of the challenge is ensuring heavy industries can decarbonise in ways that strengthen competitiveness, maintain UK supply chains, and be able to lead global low carbon product markets. Achieving this requires clear policy frameworks alongside affordable clean energy. CCUS offers a route that will help enable industrial decarbonisation not deindustrialisation, providing product security, while safeguarding jobs and preventing businesses from moving overseas.

The regions that once powered the UK's industrial growth and now stand at the heart of its low carbon transformation need support to withstand today's global competitive environment. The UK cannot afford to lose more industrial capacity: its future prosperity depends on ensuring that industries are empowered to lead the global low carbon transition.

Box 6: Decarbonisation not deindustrialisation

2.7.1 Progress in industrial decarbonisation

- One of the first capture projects to reach financial close is Heidelberg Materials' Padeswood cement works, expected to capture 0.8 $MtCO_2$pa.
- There is one other industrial carbon capture project – EET ICC – on the HyNet PNL, but a total of 4.9 Mt-CO_2pa of industrial CCUS currently is in, or having completed, pre-FEED or FEED. This includes the projects in the MNZ | Peak Cluster.
- A further **8.3 $MtCO_2$pa** of industrial carbon capture projects are identified in the pipeline in early stages of development. This suggests a healthy pipeline for meeting the Seventh Carbon Budget targets, however, without a defined route to market there is not yet confidence that this will be delivered.

- There is an estimated **4.4 $MtCO_2pa$** capture from SAF projects in the pipeline.
- It is noted that WECCS projects receive support through the government's Waste Industrial Carbon Capture Business Model. This includes the Encyclis' Protos Energy Recovery Facility, which has already reached financial close and expected to capture 0.38 $MtCO_2pa$. However, as WECCS projects also generate low-carbon power, capture volumes have been included within the power generation section of this report. Accordingly, these volumes are not reflected in the capture figures presented in this section to avoid double counting.

2.8 Greenhouse gas removals

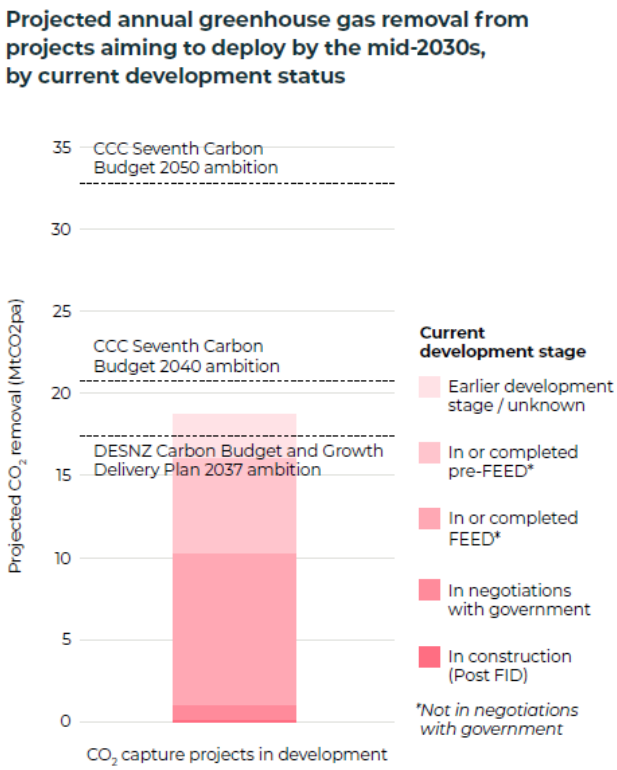


Figure 12: Projected annual greenhouse gas removal volumes

Note: some of these projects are WECCS or power BECCS, so are also included in calculations of CO_2 capture in relation to low-carbon power. Only the biogenic portion of CO_2 captured by WECCS projects is included in this chart.

The Government's Independent Review of Greenhouse Gas Removals, led by Dr Alan Whitehead CBE, highlights the importance of GGRs in reaching net zero, noting that the delivery of carbon removals, using a portfolio of GGR technologies, will be required to address where emission reductions cannot be achieved in alternative ways.

The Government's *Carbon Budget and Growth Delivery Plan* identified the need for 17.4 $MtCO_2pa$ by 2037 to meet the 6th Carbon Budget. This aligns with the CCC CB7 advice, which anticipates the need for 20.7 Mt-CO_2pa of removals by 2040, rising to 32.8 $MtCO_2pa$ by 2050.

This will include engineered removals from a range of sources, including BECCS, WECCS and direct air carbon capture and storage (DACS).

Our survey identifies the potential for **18.2 $MtCO_2pa$** being delivered by 2035, on track to meet both the Government and CCC CB7 ambitions.

3. The transition to a self-sustaining market

2026 is expected to be a pivotal year for the development of multiple CCUS sectors in the UK and internationally. The Government has also stated its intention to move away from the cluster sequencing process used to date, instead adopting a portfolio approach to progress additional clusters. In line with the Government's 2023 CCUS Vision document, this shift should move the sector into a transition phase characterised by cost reductions and the derisking or reallocation of risk, enabling progress toward a self-sustaining sector and reducing Government liability.[9]

This will require the development of supportive revenue markets and targeted industrial policies that can enable the transition towards a self-sustaining sector. This includes cross border CO_2 transport and storage, strong carbon markets that include GGRs, and demand for low carbon products, all supported by a predictable carbon price and robust carbon border adjustment mechanism, so that market revenues can replace government contracts.

The development of these markets will allow commercial models to mature, reducing dependency on government support and help secure the long-term growth of emerging industries.

3.1 Progressing domestic and cross-border CO_2 storage

Recommendations:

- **Provide confidence early in 2026 to licence holders that current expiry dates will be extended.**
- **Provide confidence, ahead of licence expiry dates in 2027**, that a future allocation framework for emissions will be forthcoming so that development funding can be committed to further develop stores.

Remove legal and policy barriers that currently prevent and disincentivise cross-border CO_2 transport and storage:

- **Finalise UK and EU ETS linkage by 2028**, ensuring that cross-border CO_2 transport and storage is addressed and that captured and stored CO_2 receives equivalent regulatory treatment in both markets.
- **Make the necessary changes to UK legislation** to put this approach into law.
- **By 2028 enter into bilateral agreements with EU Member States** and others in the EEA to enable the provisional application of the London Protocol.

These recommendations are explored in more detail in the CCSA report, *Accelerating a Europe-wide CO_2 storage market.*[10]

With two storage projects permitted, 22 CO_2 storage licences in progress, and a second licensing round anticipated soon, there is appetite to develop CO_2 storage in the UK.

While more licences will be needed to meet the government's upper targets for storage of CO_2 captured in the UK, as identified, there is also concern relating to the ability of current licence holders to progress given the lack of a route to market. This challenge is now urgent. Without confidence in a credible pathway to extend or progress licences beyond their current expiry date (for many this is Q1 2027), licence holders are unlikely to commit further development expenditure.

Most of the CO_2 storage developers surveyed are also either open to, or base their business model on, storing CO_2 captured overseas. Previous studies commissioned by the CCSA have suggested that the UK CO_2 storage sector could grow to be worth £30bn per year by 2050 through the creation of multiple CCUS clusters and enabling CO_2 shipping, supporting UK storage utilisation and reducing the need for government funding. This is also good news for European emitters: modelling by Xodus for the CCSA found that UK offshore sites are the most cost-effective storage option for 44 Mtpa of EU-captured CO_2—over a quarter of the EU's offshore storage volumes—offering a 28% (€16/t) cost reduction for EU emitters. [10]

Facilitating cross border CO_2 storage is key to making CO_2 storage a self-sustaining market: providing resilience in the system, bringing down transport and storage costs for emitters, and thus making more capture projects viable

Accelerating a Europe-wide CO_2 storage market

Our research suggests that most licence holders anticipate providing CO_2 storage services for CO_2 captured outside the UK, whether as their core business, or in addition to storing domestic CO_2. For this reason, EU CCUS policy – both at the European Union and at the Member State level – will have an impact on the UK CCUS industry.

Central to this is the UK–EU Reset discussions, launched in May 2025, through which both sides agreed a Common Understanding that commits to negotiations on aligning the UK and EU Emissions Trading Schemes (ETS). The treatment of cross-border CO_2 storage is expected to be part of these discussions. Below we summarise the key EU policy timelines that may influence the opening of cross-border CO_2 storage opportunities for UK developers:

The Net Zero Industry Act - 2028 review, 2030 implementation

The Net-Zero Industry Act establishes an EU-wide CO_2 storage target of 50 million tonnes per year until 2030, with a review of the obligation taking place in 2028, some of which must be developed by a specific list of oil and gas producers. If cross-border CO_2 is enabled, there is potential for UK stores to be able to contribute to meeting this obligation.

CO_2 transport infrastructure and markets regulatory package – adoption in 2026

Open for consultation at the time of writing, this will create the policy framework for CO_2 transport in the EU.

EU ETS Revision – 2026

Carbon Border Adjustment Mechanism (CBAM) – in force from 1 January 2026

The EU ETS is currently under review to assess the feasibility of including the aviation and maritime sectors, carbon dioxide removals, and waste-to-energy. Understanding the differences in sectoral coverage between the EU ETS and the UK ETS—and how their respective CBAMs operate—will be a key consideration as the UK and EU pursue linkage of the two schemes.

Carbon Removals and Carbon Farming Regulation – ongoing

This includes methodologies for certifying permanent carbon removals, including in the context of their inclusion EU ETS, and is a further area that may require alignment or equivalence between EU and UK rules.

Projects of common and mutual interest – ongoing

Projects of Common Interest between EU Member States (PCIs) and Projects of Mutual Interest between Member States and third-party states (PMIs) are a key mechanism to coordinate cross-border projects. The award of these projects can hold important indications to the direction of development of EU-based CO_2 infrastructure.

Multiannual Financial Framework 2028 to 2034 – adoption 2026

Includes dedicated funding for cross-border CO_2 transport infrastructure under the Connecting Europe Facility

Box 7: Accelerating a Europe-wide CO_2 storage market

3.2 Enabling Non-pipeline Transport

Recommendations:

- **Commit to finalising the NPT consultation and response by mid-2026**.
- **Invite bids for NPT projects in the next CCUS Allocation Round ahead of SR27.**
- **Provide clear market signals throughout 2026** on the progression of NPT within The Acorn Project and Viking CCS clusters
- **Use Industrial Strategy Zones (ISZ), Freeport funding, or public finance** (from GB Energy, National Wealth Fund, or the British Business Bank) to support regional NPT developments.

The four recommendations above are required to restore confidence in NPT development, recognising both government funding constraints, and SR27 significance.

The Government's CCUS Vision acknowledges that NPT will be critical to expanding UK carbon capture by enabling CO_2 to be moved by road, rail, and ship. This is particularly true for projects outside of industrial clusters or those lacking direct offshore pipeline access, as well as helping develop a cross-border CO_2 storage market.

NPT's modularity improves cost-effectiveness and flexibility by enabling CO_2 redirection, supporting merchant storage, facilitating exports, and attracting investment from regional emitters. This ultimately broadens the UK CO_2 storage user base and reduces utilisation risk.

Of the CO_2 capture projects surveyed, 36% stated that they would or might need non-pipeline CO_2 transport. This proportion is roughly the same as in our 2023 update but is likely to be an underestimate across the whole future CCUS requirement in the UK. This is because NPT will open the CCUS market as a decarbonisation option to dispersed sites, which do not currently have capture projects in development. This includes a range of potential GGR projects, including dispersed energy from waste, biomass and biomethane sites, which are currently not served by pipeline developments.

While the initial stores that have completed negotiations with government are based on pipeline transport, both onshore and offshore, many subsequent stores that are being developed are either partly or fully based on CO_2 arriving by ship (in some cases with injection direct from the ship into the stores, in others with transfer to pipelines at ports) and/or by road or rail. These projects, along with the supporting infrastructure, continue to progress. The survey includes developers working on terminals and ports designed to aggregate captured CO_2 for onward transport to storage. As a result, private sector investment is flowing not only into capture projects and stores, but also into NPT networks needed to connect them.

However, progress on NPT has been slow. With a significantly delayed consultation this year, a market framework decision is now unlikely before mid-2026, and further support depends on the 2027 Spending review. This represents a notable departure from the CCUS Vision, which anticipated NPT eligibility for capture project selection from 2025. Most UK NPT projects are therefore unlikely to reach financial close before 2028 or start operating before 2032, while European competitors, particularly Norway, are already advancing.

Of the CO_2 capture projects surveyed, 36% stated that they would or might need non-pipeline CO_2 transport.

3.3 Delivering low carbon products markets

Recommendations

- **Drive demand for low-carbon products** through development of standards and green public procurement requirements, by 2028, to enable supply-chain investment.
- **Protect UK industries from carbon leakage** by aligning UK and EU ETS by 2028 and ensuring a stable, predictable UK ETS price.
- **Deliver a robust CBAM by 2027** extending protection to currently excluded sectors such as refining and chemicals, with clarity provided on future inclusion of these and other sectors (e.g., glass, ceramics).
- **Provide guidance, during 2026, on how the CBAM will interact with UK ETS free allocations** and with the implementation of the EU CBAM**.**

CCUS can enable the UK to become a low carbon product superpower, enabling the development of emerging low carbon sectors and supporting foundational industries to produce these products. This will unlock significant economic benefit and export opportunities for the UK economy, while also creating new revenue markets that will help transition the sector to a self-sustaining market.

Examples of industries actively looking at CCUS, captured within the survey, include:

- **The cement and lime sector**: The UK is well placed to benefit from rising global cement demand. Cement, concrete and lime are central to the mineral products sector, which generates £8bn GVA annually and employs 80,000 people, with cement manufacturing alone contributing £3.6bn.[11] The industry supports thousands of high-skill, high-wage jobs, often in more remote regions such as the Peak District.
- **Refineries**: CCUS provides a critical route to decarbonisation and opens up opportunities for new products. The UK's downstream sector supplies 96% of transport fuel, with 55% from domestic production and 45% from imports.[12] Refineries using CCUS will be essential for producing lower-carbon products, including sustainable aviation fuel, and components for alternative fuel vehicles such as lightweight plastics, fire retardants, tyres, adhesives, and lubricants.
- **Sustainable aviation fuels (SAF):** CCUS is critical to SAF production pathways and will be required to scale the sector. Analysis suggests that SAF, now critical to the Government's plans for a third Heathrow runway and delivering on the SAF mandate, is projected to grow at a Compound Annual Growth Rate (CAGR) of 26.2% between 2022 levels to 2050.[13]

A future allocation framework for capture projects, as described above, will help to deliver further industrial CCUS projects, however for cost reductions to be realised and to enable the transition to a self-sustaining sector, it is important that the market for low carbon products is further developed, growing new revenue markets against which projects can invest. The demand for low carbon products is already being demonstrated in other markets, for example Heidelberg Materials have forward sold its entire first year of production of carbon-capture cement from the Brevik CCS plant in Norway.[14]

Sustainable Aviation Fuel

Sustainable aviation fuel is an example of low-carbon product manufacturing that has been driven by a mandate, which came into effect in 2025. Airline fuel suppliers are required to supply a specified and rising proportion of SAF, and this guaranteed demand is expected to drive the growth of SAF production projects.

Given this demand, it is possible that CCUS-enabled sustainable aviation fuel projects have the potential to operate on a merchant basis – if they are able to access CO_2 transport and storage. There is also likely to be a market for sustainable marine fuels, produced with similar feedstock and processes, in order to support decarbonisation of shipping.

There is an estimated 4.4 $MtCO_2pa$ capture from SAF projects in the pipeline.

Box 8: Sustainable aviation fuel

3.4 Delivering GGR Projects

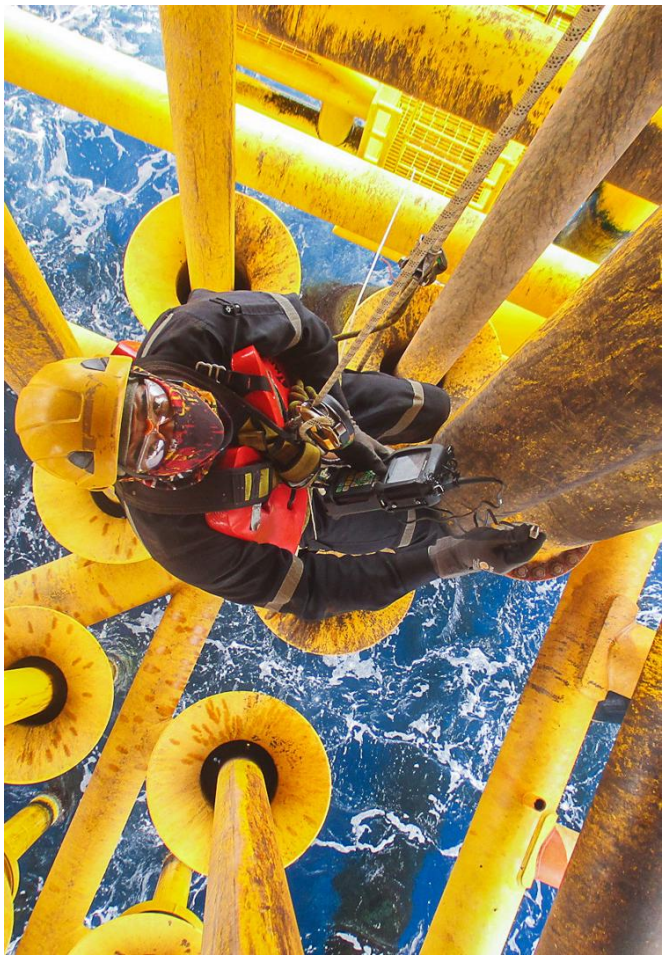
Recommendations

- **Engage industry on the recommendations of the GGR Independent Review to inform the Government response.** This should set out the next steps for the sector by end of Q1 2026.
- **Utilise public finance, from GB Energy and the National Wealth Fund, to accelerate early deployment of GGR projects.** Reform National Wealth Fund criteria, particularly the £25m minimum ticket size, to enable wider access to support.
- **Strengthen market demand for GGR credits in 2026**, by enabling policies to encourage corporate purchasing through the voluntary carbon markets.
- **Create an international GGR buyers' club to harness global demand**, led by the UK and other developed economies that are already deploying CCS and GGRs
- **Continue evolving UK BSI GGR Minimum Quality Thresholds** and pursue mutual recognition or alignment with the EU's CRCF to avoid market fragmentation.

The CCSA has warmly welcomed the publication of the GGR Business Model this year, recent decision to integrate GGRs into the UK ETS from 2029 and the Government's Independent Review of Greenhouse Gas Removals, led by Dr Alan Whitehead CBE.

The independent review highlighted GGR's critical role in reaching net zero, noting that the delivery of carbon removals, using a portfolio of GGR technologies, will be required to address where emission reductions cannot be achieved in alternative ways. The recommendations of the Review, need to be carefully discussed with industry, with consideration given to how they should be taken forward within the Government response to the Review.

GGRs are also identified as a critical growth industry in the UK's Modern Industrial Strategy. Over 30 million tonnes of GGR credits have now been sold globally, with more than half of that having been contracted in the period between March 2025 and October 2025.[15] Looking forward, the global market for carbon dioxide removal is forecast to be as large as $1 trillion, according to McKinsey.[16] The potential share of this market in the UK, given its geological storage advantage, could well exceed $100bn, however this is dependent on GGR projects being able to move forward.



Public finance—via GB Energy or the National Wealth Fund (NWF)—could also help drive early deployment of GGR projects. However, it is noted that the NWF's £25 million minimum ticket size is above the scale of many individual capture or transport-and-storage projects, particularly GGR projects. Projects with pre-FID development costs below £50 million are automatically excluded. This prevents most emitter projects from accessing support. Addressing the minimum threshold on a project-by-project basis, and assessing investment potential at the aggregated, cluster-wide level, could accelerate the development of GGR projects, as well as CCS clusters and wider merchant models.

Notably, the stronger the GGR market becomes, the more the sector can transition away from government support, as robust global demand will provide the revenue foundation for a sustainable business model.

To secure and stabilise this emerging market, the Government should work to expand demand for GGR credits. It is encouraging to see groups like '*The Coalition to Grow Carbon Markets*' focusing on how buyers and investor can look to aggregate and scale demand. This includes a focus on how policy can encourage corporate credit purchases of high-integrity carbon removal credits via the voluntary carbon market.

One way to do this would be via the establishment of an internationally backed buyers' consortium, led by the UK alongside countries already deploying CCS and GGRs—such as Canada, Norway, Switzerland and Denmark. A global GGR consortium would boost demand, attract investment, expand the buyer base, and distribute financial and deployment risks. Helping to develop an international carbon credit market. Each country could choose its level of involvement. For the UK—already equipped with a GGR Business Model—participation could emphasise showcasing existing support, committing to buy GGR credits (e.g., for public-sector emissions), and adopting policies that encourage corporate credit purchases. Funding could come from a share of UK ETS revenues or other environmental levies.

The CCSA also welcomed this year the publication of the BSI Minimum Quality Thresholds for greenhouse gas removal specifications for both BECCS and DACS. These standards provide a benchmark standard for defining what constitutes a high-quality carbon removal. However, they must continue to evolve, with input from a broad and diverse range of stakeholders. It will also be crucial to ensure either mutual recognition or adoption of the EU's equivalent developing standard, the Carbon Removal and Carbon Farming Framework (CRCF), to avoid unnecessary barriers between markets

3.5 Enabling CO_2 Utilisation

Recommendations

Develop the CCUS policy market framework to include CCU, including:

- **A CCU Business Model, providing a financing pathway to CCU projects in the UK.**
- **Drive demand for CCU low-carbon products through development of standards and green public procurement requirements,** by 2028, to enable supply-chain investment.
- **Enable non-pipeline transport of CO_2 for CCU purposes in 2026**, to access value for stranded sites.
- **Develop a government-endorsed approach to life-cycle analysis for CCU**.

While CO_2 utilisation (CCU) was not directly covered by the current Delivery Plan survey, it is important to recognise the potential this area may have in future delivery of the sector. Known and emerging CO_2 utilisation pathways and processes include:

- Carbon mineralisation / carbonation to produce low-carbon building materials
- Conversion of CO_2 to low carbon fuels (this includes some sustainable aviation fuel processes)
- Use of CO_2 as a feedstock for green chemicals
- Utilisation in food and drink

There are potential synergies between CCU and CCS and, as such, the deployment of CCU at scale can play a role in maintaining momentum. This includes:

- CCU technologies deployed now can help demonstrate capture technologies until access to CO_2 transport and permanent geological storage becomes available to them. It can also add value to 'stranded' sites for the same reason.
- Utilisation of CO_2 presents a strong business case to attract investment into CCS.
- CCU can also enable NPT, and test transport logistics at smaller scale at this stage of the market formation.
- CCU can offer a number of economic opportunities for private sector investment in CCS clusters. Where infrastructure and resources are shared, there may be opportunities to reduce capture and transport costs and de-risk investments.
- CCU technologies assign value to CO_2 as a resource, therefore promoting a sustainable, circular economy, providing a secure supply of biogenic CO_2 to industrial sectors that need it, and reducing the overall carbon intensity of industrial processes.
- Permanent sequestration of CO_2 in products, such as low-carbon cement and building materials can contribute to the creation of a low-carbon products market in the UK, demand for which is quickly ramping up domestically as well as in export markets.

More detail on these and on the policy drivers for, and barriers to, CCU is given in the CCSA's 2025 position paper, *The role of Carbon Capture and Utilisation (CCU) within the CCUS framework*.

3.6 Growing supply chains and skills

Recommendations

- **Develop a clear long-term CCUS allocation framework with timetable, ahead of SR27** to establish a predictable, multi-year pipeline of CCUS projects to provide the demand certainty required for sustained supply-chain investment and skills growth.
- **Ensure that committed funding for public supply chain investment,** previously Green Growth Industries Accelerator (GIGA), is allocated through GB Energy and the National Wealth Fund from 2026 onwards.
- **Act on Green Jobs Delivery Group recommendations in 2026** by completing further analysis of workforce needs in CCUS transport and storage and integrating findings into national skills strategies.
- **Work with industry and wider stakeholders in the development of the Hydrogen & CCUS Curriculum,** announced within the Clean Energy Jobs Plan.
- **Develop cross-sectoral mechanisms to promote easy mobility of workers** between sectors and build 'local' workforces.

The CCUS industry has set an ambition to achieve at least 50% UK content from 2030. This target is already being realised, and expected to be exceeded, in HyNet and East Coast Clusters, which are actively collaborating with a wide range of UK-based suppliers and contractors as they progress into the construction phase.

The UK supply chain is well placed to capture this growth. Its CCUS market is expected to rise from £1.6bn in 2030 to £2.6bn in 2040, with the wider sector worth up to £100bn for domestic manufacturers.[17] This is helped by the building on strong foundations—drawing on the legacy of its oil and gas sector and leveraging expertise in engineering, procurement, construction, and manufacturing. High-value opportunities already present in the UK include column vessel manufacturing, heat exchangers, process controls, modular CCS technology, and offshore network services.

However, sustaining and expanding this progress depends on a predictable pipeline of projects. A clear long-term deployment plan is essential to provide the demand signal that will enable supply chains to invest and develop, building on the existing capability of the UK supply chain. Without this, the momentum achieved to date risks being lost.

Similar progress has been made on workforce skills. In 2024, the 'Green Jobs Delivery Group - CCS Task and Finish Group' report highlighted the need for further analysis of workforce requirements within the CCS

Skills and training

The existing skills and training landscape for the CCUS workforce, is summarised in our 2023 report, the CCSA *Workforce and Skills Position Paper*. [19]

The UK CCUS sector is encountering a scarcity of skilled personnel, particularly in design and engineering construction, which has the potential to significantly extend timescales for completion of CCUS projects. This competition for skilled labour extends to other large-scale infrastructure projects which require the same workforce on similar timeframes. The need to replace or re-train an ageing and non-diverse workforce further intensifies the urgency of attracting and training new workers.

The position paper outlines a series of crucial recommendations, including the need to:

- broaden new entry pathways, with clarity on career progression;
- develop cross-sectoral mechanisms to promote easy mobility of workers between sectors and build 'local' workforces; and
- implement targeted recruitment measures to reach more diverse workforce demographics.

Box 9: Skills and training

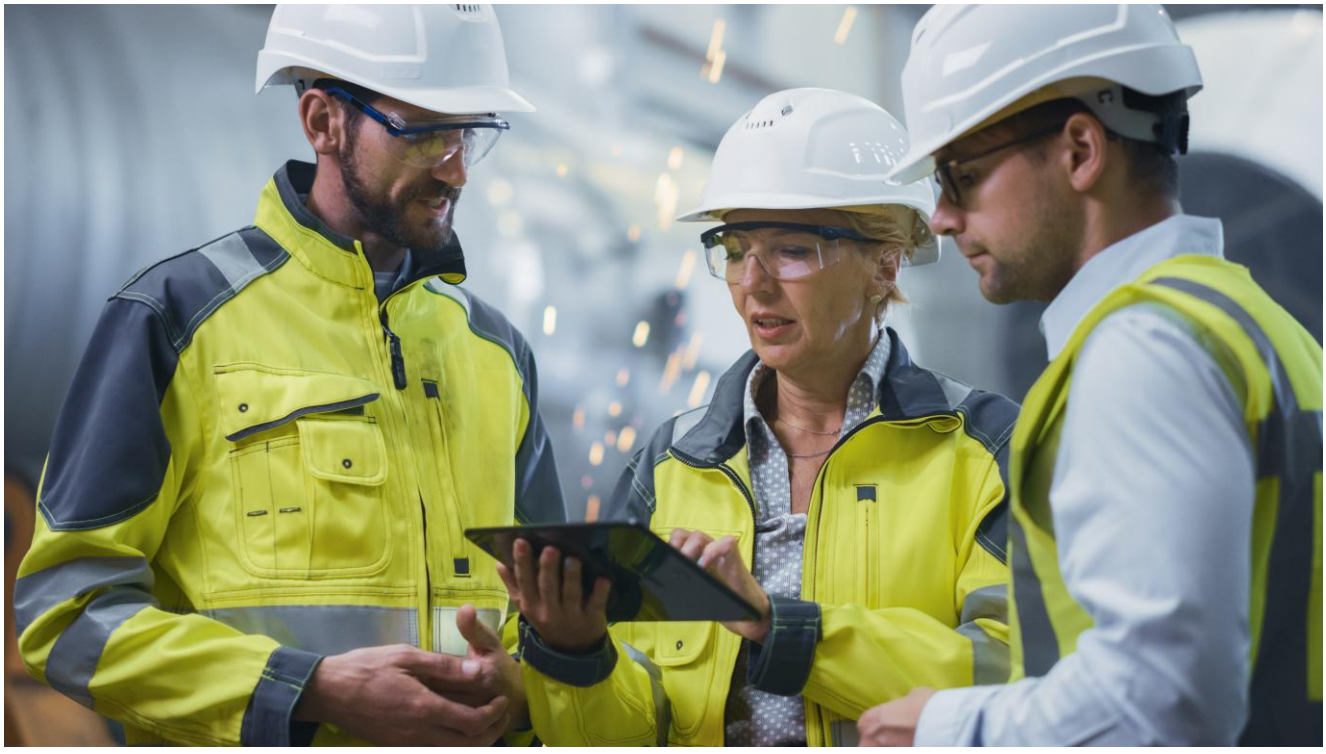
transport and storage sector and made recommendations for industry and government to strengthen skills provision.[18]

The Government has already introduced reforms to accelerate workforce entry across the economy, including changes to the apprenticeship levy, the launch of foundational apprenticeships, a youth guarantee for training, and the establishment of regional skills development hubs.

Most recently the Government also published their *Clean Energy Jobs Plan* which sets out the Government's analysis of workforce requirements and policies, initiatives and actions needed to deliver on the Government's clean energy ambitions. It sets out 55 actions across six themes to build a clean energy workforce, including over £1.2 billion per year by 2028–29 to support skills for 16–19-year-olds and the creation of five new Clean Energy Technical Excellence Colleges. Up to £20 million will help North Sea workers transition from oil and gas to clean energy, while £400,000 will fund development of a Hydrogen and CCUS skills curriculum.

However, the window for realising these skills and supply-chain opportunities is closing. For example, the oil and gas sector is facing particularly acute challenges. Industry reports indicate that the sector is losing around 1,000 jobs each month, with insufficient new opportunities in offshore wind, tidal energy, hydrogen, or CCUS to offset this decline. The UK is also experiencing wider deindustrialisation, including job and supply-chain losses in sectors such as chemicals and refining.

A strong and sustained pipeline of CCUS projects could play a role in reversing these trends by directing new investment into these industries, protecting existing jobs, and strengthening domestic supply chains.



4. Conclusion & Summary of Recommendations

Since the last CCSA Delivery Plan update, major progress has been made in deploying and establishing the UK's CCUS sector. Real momentum has been achieved. As set out in this report, a strong foundation is now in place for industry growth, supported by a substantial pipeline of projects ready to proceed across multiple sectors.

This pipeline is aligned with UK climate ambitions and contains enough projects to meet both the CCC's Seventh Carbon Budget advice and the Government's *Carbon Budget and Growth Delivery Plan*. If fully realised, the sector will drive significant economic growth, strengthen foundation industries, enhance energy security, and create and protect jobs across the country.

However, as identified, the delivery of this future pipeline is not certain. Confidence in the Government's long-term ambition for CCUS and clarity on the pathway to deployment is essential. Government can prevent the loss of further projects, investment and manufacturing capability if it acts quickly to set out, and sticks to, clear timetables for bringing all the further projects to financial close as soon as possible.

Achieving a self-sustaining market will require continued project deployment and the development of supportive revenue markets that drive down costs, reduce project risk, and ultimately lower dependence on Government support. Projects need a route forward to progress, either within existing Government committed clusters, or bidding into future allocation rounds and CO_2 storage licensing processes. Whether these are Government-supported or aiming to operate on a self-funding or merchant basis, success depends on a stable, appropriate, and consistent policy and regulatory framework. This will ensure that projects remain bankable.

4.1 Immediate actions

Our key recommendations to solidify progress and enable this transition are:

- Deliver the actions required to progress the build-out of the East Coast Cluster and HyNet, as well as confirm the allocation of the development funding committed to Viking CCS and The Acorn Project.
- Provide an allocation framework, alongside funding in the 2027 Spending Review, to establish a clear nationwide route to market for CCUS deployment. This should include enabling Viking CCS, The Acorn Project, ECC Humber Expansion and MNZ | Peak Cluster to reach FID within this Parliament, as well as a route forward for all clusters and projects.
- Prioritise delivery of a shipping, road and rail market framework to enable confidence for ongoing private development investment in non-pipeline transport projects critical to the further establishment of the sector.
- Disseminate lessons learned from the Track 1 process across other UK CCUS projects and relevant markets, including the EU.
- To reduce costs and enable timely delivery of the project pipeline, greater alignment and coordination between regulators is needed so that industry can comply with a streamlined and coherent set of regulatory requirements.
- Provide clear guidance on the pathways for Standby projects to secure a viable future connection to HyNet, and for projects seeking to connect in the future expansion of the East Coast Cluster in Teesside and the Humber

4.2 Sector recommendations

To support a transition to a self-sustaining market, we recommend the following policy measures for each critical sector:

4.2.1 Progressing domestic and cross-border CO_2 storage

- Provide confidence early in 2026 to licence holders that current expiry dates will be extended and that there will be a route to being permitted.
- Provide confidence ahead of licence expiry dates in 2027, that a future allocation framework for emissions will be forthcoming so that development funding can be committed to further develop stores.

Remove legal and policy barriers that currently prevent and disincentivise cross-border CO_2 transport and storage:

- Finalise UK and EU ETS linkage by 2028, ensuring that cross-border CO_2 transport and storage is addressed and that captured and stored CO_2 receives equivalent regulatory treatment in both markets.
- Make the necessary changes to UK legislation to put this approach into law.
- By 2028 enter into bilateral agreements with EU Member States and others in the EEA to enable the provisional application of the London Protocol.

4.2.2 Enabling Non-pipeline Transport

- Commit to finalising the NPT consultation and response by mid-2026.
- Invite bids for NPT projects in the next CCUS Allocation Round ahead of SR27.
- Provide clear market signals throughout 2026 on the progression of NPT within the The Acorn Project and Viking CCS clusters
- Use Industrial Strategy Zones (ISZ), Freeport funding, or public finance (from GB Energy, National Wealth Fund, or the British Business Bank) to support regional NPT developments.

4.2.3 Delivering low carbon products markets

- Drive demand for low-carbon products through development of standards and green public procurement requirements, by 2028, to enable supply-chain investment.
- Protect UK industries from carbon leakage by aligning UK and EU ETS by 2028 and ensuring a stable, predictable UK ETS price.
- Deliver a robust CBAM by 2027. extending protection to currently excluded sectors such as refining and chemicals, with clarity provided on future inclusion of these and other sectors (e.g., glass, ceramics).
- Provide guidance, during 2026, on how the CBAM will interact with UK ETS free allocations and with the implementation of the EU CBAM.

4.2.3 Delivering GGR Projects

- Engage industry on the recommendations of the GGR Independent Review to inform the Government response. This should set out the next steps for the sector by end of Q1 2026.
- Utilise public finance, from GB Energy and the National Wealth Fund, to accelerate early deployment of GGR projects. Reform National Wealth Fund criteria, particularly the £25m minimum ticket size, to enable wider access to support.
- Strengthen market demand for GGR credits in 2026, by enabling policies to encourage corporate purchasing through the voluntary carbon markets.
- Create an international GGR buyers' club to harness global demand, led by the UK and other developed economies that are already deploying CCS and GGRs
- Continue evolving UK BSI GGR Minimum Quality Thresholds and pursue mutual recognition or alignment with the EU's CRCF to avoid market fragmentation.

4.2.4 Enabling CO_2 utilisation

Develop the CCUS policy market framework to include CCU, including:

- A CCU Business Model, providing a financing pathway to CCU projects in the UK.
- Drive demand for CCU low-carbon products through development of standards and green public procurement requirements, by 2028, to enable supply-chain investment.
- Enable non-pipeline transport of CO_2 for CCU purposes in 2026, to access value for stranded sites.
- Develop a government-endorsed approach to life-cycle analysis for CCU.

4.2.5 Growing Supply chain and Skills

- Develop a clear long-term CCUS Allocation Framework with timetable ahead of SR27. This will establish a predictable, multi-year pipeline of CCUS projects to provide the demand certainty required for sustained supply-chain investment and skills growth.
- Ensure committed funding for public supply chain investment, previously Green Growth Industries Accelerator (GIGA), is allocated through GB Energy & the National Wealth Fund from 2026 onwards.
- Act on recommendations from the Green Jobs Delivery Group in 2026 by completing further analysis of workforce needs in CCUS transport and storage and integrating findings into national skills strategies.
- Work with industry and wider stakeholders in the development of the Hydrogen & CCUS Curriculum, announced within the Clean Energy Jobs Plan.
- Develop cross-sectoral mechanisms to promote easy mobility of workers between sectors and build ‘local’ workforces.

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List of figures and boxes

Abbreviations and units

BECCS	Bioenergy with CCS
CB7	Seventh Carbon Budget
CBAM	Carbon border adjustment mechanism
CCC	The Climate Change Committee
CCS	Carbon capture and storage
CCUS	Carbon capture, usage and storage
CCU	CO_2 utilisation
CO_2	Carbon dioxide
DACS	Direct air carbon capture
DESNZ	Department for Energy Security and Net Zero
Devex	Development expenditure
ECC	East Coast Cluster
ERF	Energy recovery facility
ETS	Emissions trading scheme (UK) / Emissions trading system (EU)
€/t	Euros per tonne
FEED	Front-End Engineering and Design
FID	Final investment decision
GB Energy	Great British Energy
GGR	Greenhouse gas removal
GIGA	Green Industries Growth Accelerator
GVA	Gross value added
GW	Gigawatt
HyNet PNL	HyNet Expansion Project Negotiation List
ISZ	Industrial Strategy Zone
MNZ	Morecambe Net Zero
$MtCO_2pa$	Megatonnes of CO_2 per year
Mtpa	Megatonnes per year
NEP	Northern Endurance Partnership
NESO	National Energy System Operator
NPT	Non-pipeline transport
NSTA	North Sea Transition Authority
NWF	National Wealth Fund
NZIA	EU Net Zero Industry Act
PCI	Project of Common Interest
PMI	Project of Mutual Interest
PNL	Project Negotiation List
Pre-FEED	Preliminary Front-End Engineering and Design
SAF	Sustainable aviation fuel
SR 27	2027 Spending Review
T&S	CO_2 transport and storage
TWh	Terawatt-hour
WECCS	Waste-to-energy with CCS

CCSA

The CCSA is the lead trade association accelerating the commercial deployment of CCUS, with offices in the UK and Belgium. We work with members, governments and other organisations to ensure CCUS is developed and deployed at the pace and scale necessary to meet net zero goals and deliver sustainable growth across regions and nations.

The CCSA represents more than 120 member companies engaged across the full carbon management value chain—including carbon capture and removal technologies, CO_2 transportation by pipeline and ship, utilisation, and geological and other permanent storage solutions. Our membership spans power generation, industrial production, waste management, fuels and hydrogen producers, as well as engineering, construction, supply-chain specialists, and legal and financial advisers.
www.ccsassociation.org