

CCSA Non-Pipeline Transport Working Group

30 January 2026



Agenda

Nr.	Time	Item	Presenter
1.	13:00 (10 mins)	Introductions & Housekeeping <ul style="list-style-type: none">• New member introductions• CCSA competition law notice• Agenda review	Yanxi Zhou
2.	13:10 (20 mins)	Reminder: ongoing CCSA responses to consultations <ul style="list-style-type: none">• CCSA Update• DESNZ third-party access consultation• Humber Market Survey and East Coast Cluster Selection Process.	Mark Sommerfeld
3.	13:30 (50 mins)	Reminder and CCSA positions: DESNZ NPT consultation <ul style="list-style-type: none">• Reminder of expected proposals in NPT consultation• Establishing initial positions and identifying further evidence that can be provided• Next steps	Mark Sommerfeld
4.	14:20 (~10 mins)	Q&A, AOB	Mark Sommerfeld

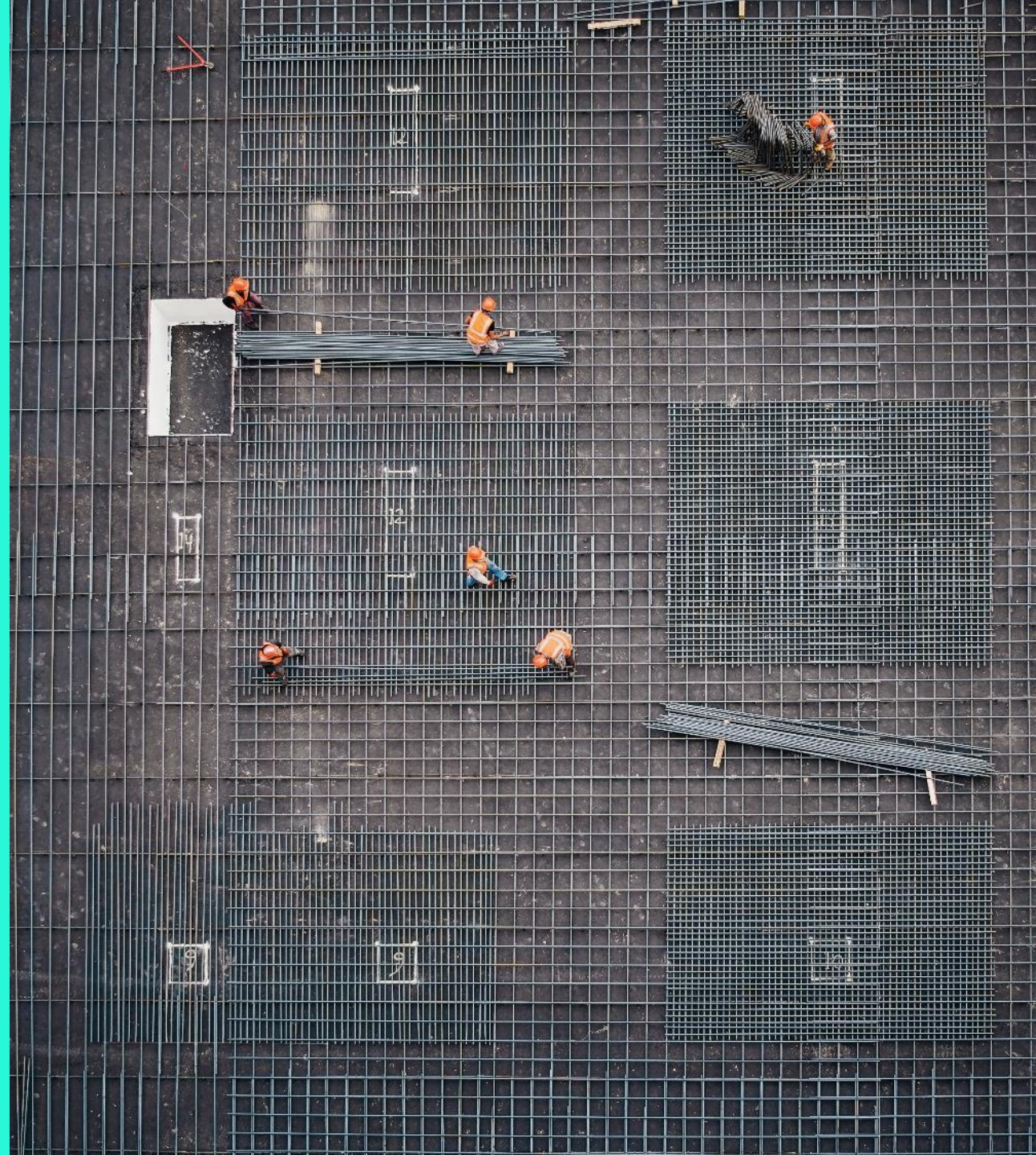
House Keeping

- Meeting is being recorded for internal note taking purposes
- CCSA Competition Law Policy notice is attached to the meeting invite
- If you are not speaking please mute your microphone
- Please **raise your hand** if you wish to comment, you will be invited to come off of mute, if you can also turn on your camera
- Please also pose any **comments in the chat** and these will be picked up by the secretariat
- **Introductions:** CCSA Members who are new on the call (name & organisation)

Reminder: ongoing CCSA consultation & policy response

- CCSA Update
- DESNZ Third-party Access consultation
- Humber Market Survey and East Coast Cluster Selection Process

Mark Sommerfeld (CCSA UK Director)



Status of UK CCUS

Hynet and ECC

- Oct 24: £21.7 billion, over 25 years, to support Hynet and East Coast Cluster.
- **Financial Close ECC:** Northern Endurance Partnership & Net Zero Teesside; Emitter Selection Process to open imminently and Humber Market Survey ongoing.
- **Financial Close Hynet:** Eni Liverpool Bay & Padeswood CCS & Encyclis

HyNet Expansion Project Negotiation List Published

- 5 Priority and 5 Standby announced
- Projects now in development negotiations with government
- PNL capacity review taking place summer 2026

Viking Project and Acorn CCS – Committed Development Funding

- Development Funding committed as part of £9.4bn at spending review
- Next steps being agreed in bilateral discussions – aiming for allocation in Q1 2026.
- Lessons learnt process from Track 1 being developed to streamline process.
- Final investment decision this parliament, subject to readiness and affordability.

Peak Cluster

- National Wealth Fund invested £28.6 million in equity to support development of Peak Cluster's CO₂ pipeline to Morecambe Net Zero.

Other UK Clusters and Projects

- Need route to market (allocation round and accompanying funding envelope)
- Non-Pipeline Transport consultations expected mid-February
- Third-party access consultation open.
- CCSA focus on development of supportive markets – cross border CO₂, GGR, Low Carbon product, carbon markets.




Despite progress, uncertainty remains:

- Projects without a government commitment lack routes to market;
- Clusters with committed devex need urgent decisions;
- Fiscal constraints and bill-cutting pressures threaten further government sector support

CCUS UK Delivery Plan 2025

UK achievements



77

MtCO₂pa


capture in the pipeline to the mid-2030s


.....

exceeding CCC CB7 estimate of 73 MtCO₂pa by 2050.

4

CO₂ storage permits granted.





Number of CO₂ capture projects have grown from ~90 projects in 2023 to

OVER 100

projects in 2025.

2


transport and storage networks

&

3

capture projects

have reached financial close and begun construction.




.....

Industry delivering

50%


UK content in construction of projects.



Funding commitments

£21.7

Bn




committed over 25 years to support initial CCUS projects.

.....

£9.4

Bn




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

.....

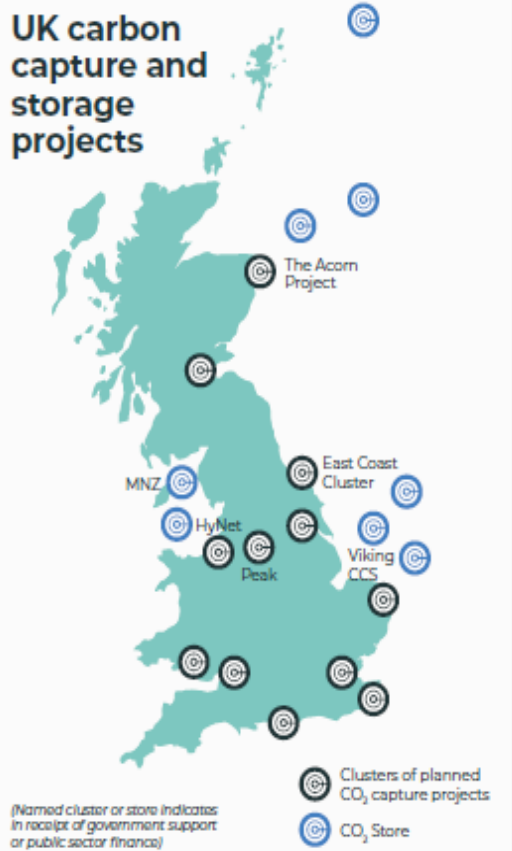
£28.6

M




National Wealth Fund equity investment in MNZ | Peak Cluster.

UK carbon capture and storage projects



(Named cluster or store indicates in receipt of government support or public sector finance)

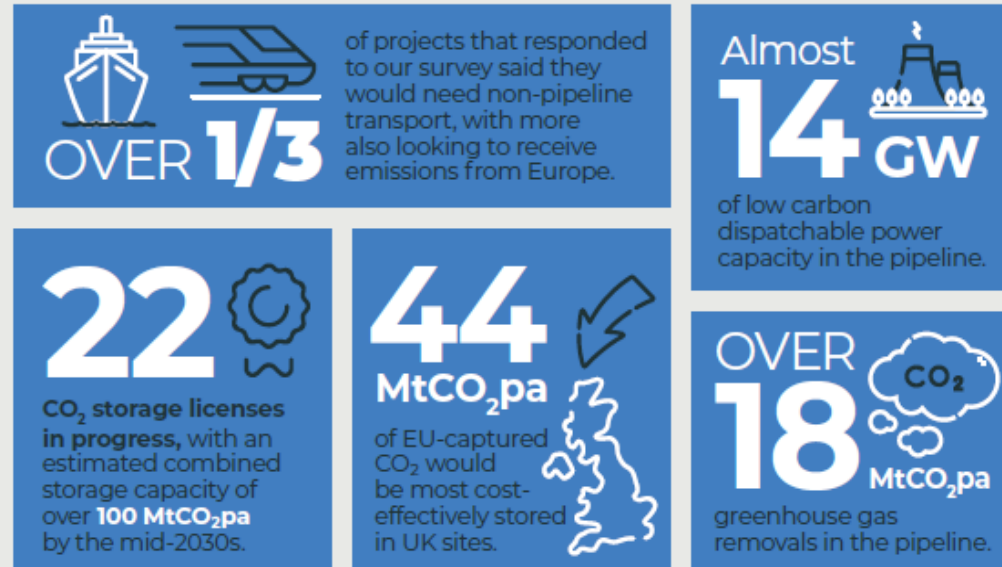


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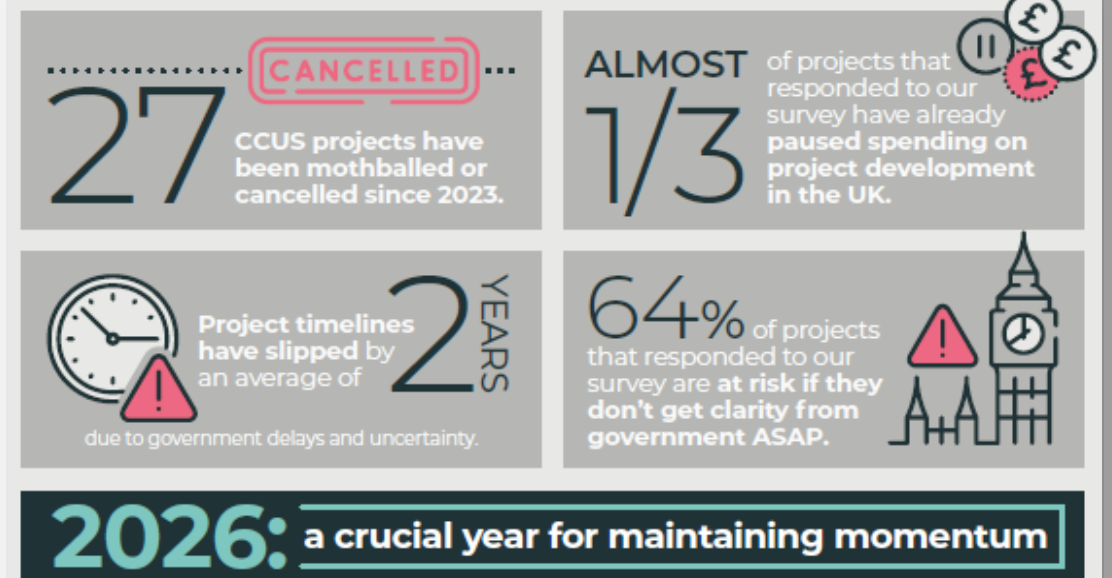
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Recognising the Potential and What's at Risk

Industry potential



What is at risk?



NPT Specific 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.

CCSA Focus in 2026

2027 Spending Review next opportunity to secure a new CCUS funding envelope; strong market signals are required before then.

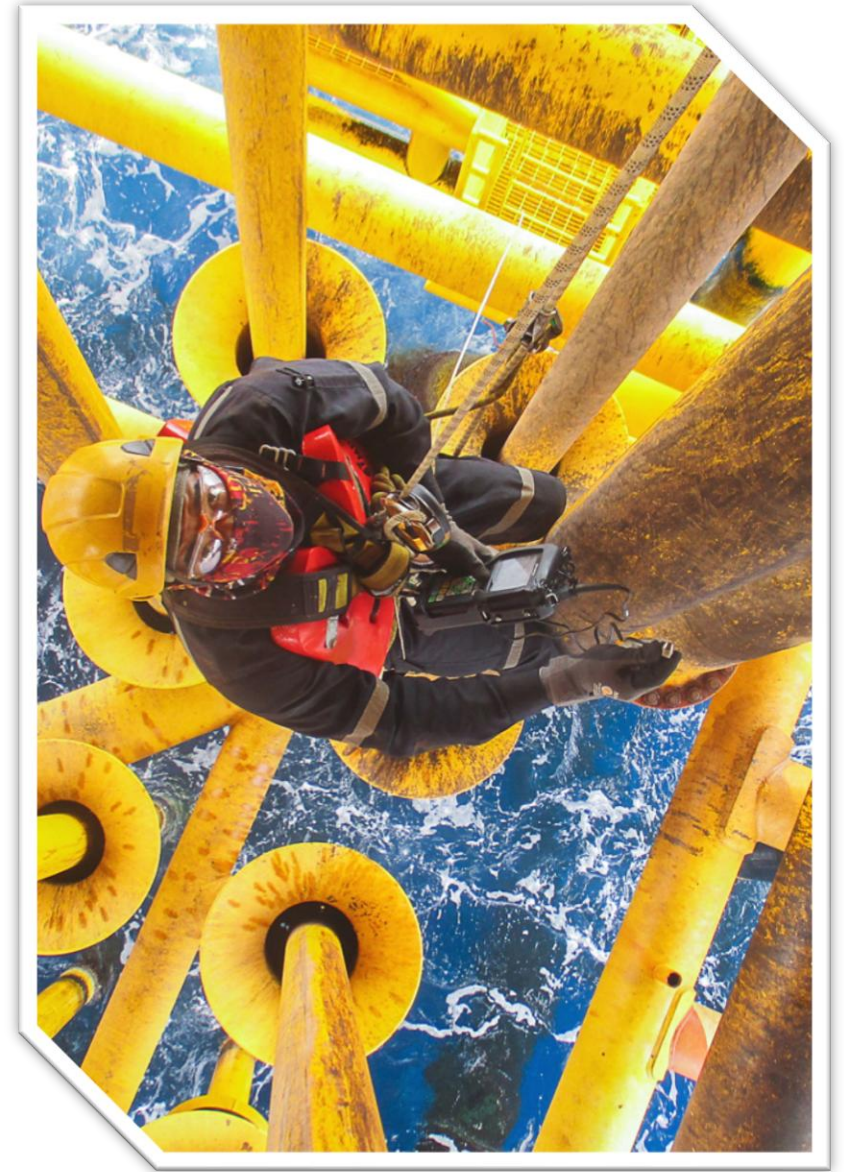
Market confidence: sustained Government signals are needed in 2026 to retain investors

Government expectation: further support depends on demonstrating sector growth potential—jobs, UK supply chains, and returns to the Exchequer.

Funding conditions: future support will need to show credible path to a self-sustaining market, including cost reductions, risk reallocation, and off-OBR balance-sheet treatment.

CCSA approach: develop a strong evidence base to submit a comprehensive representation to the 2027 Spending Review

Developing Supportive Market structures: Delivering NPT to open up the market and help establish supportive revenue markets (GGRs, cross-board storage, low carbon products)



NPT Status Update

CCSA has continued to highlight importance of NPT in realising future market - *industry letter last year, APPG letter being prepared, regular engagement with DESNZ*

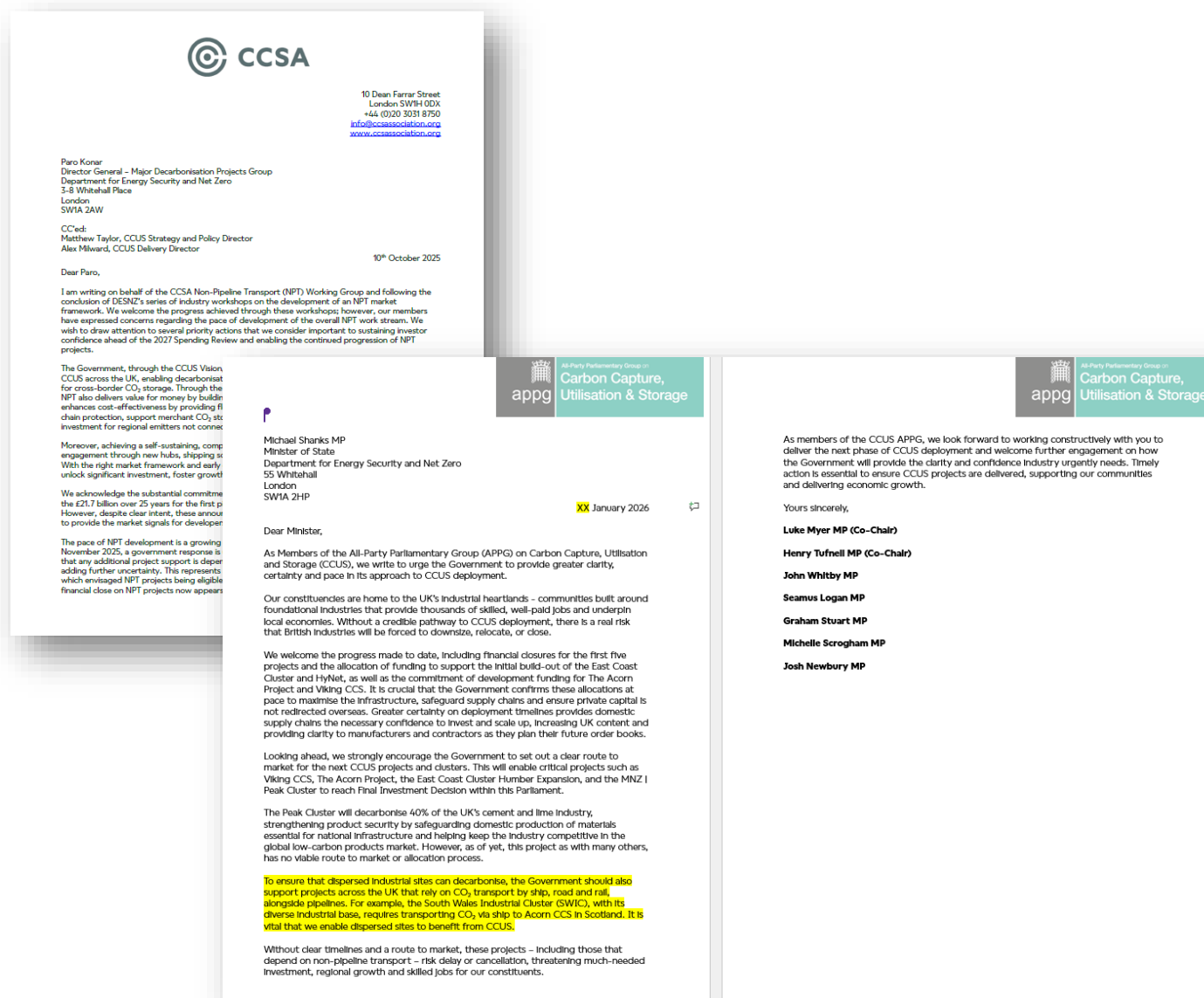
NPT consultation now expected **mid-February**

East Coast Cluster Selection process and Humber Expansion Market Survey also expected to deliver some NPT market development

Wider Market Consultations:

- Call for evidence on Future Networks touched on NPT last year,
- Third-party access consultation also currently open.

Net Zero Technology Centre/Xdous Study due soon on “*Enabling Infrastructure for Cross Border CO2 Transport*”



Humber Market Survey and East Coast Cluster Teesside Selection Process

East Coast Cluster Teesside Selection Process

- Expected to open early February, following Market Engagement survey last year
- DESNZ have stated they are exploring ways to broaden participation – including support for projects not expected to require ongoing government support and exploring **“the extent to which NPT-enabled projects could be made eligible”**
- Not clear if NPT will be able to enter competition but expect to see market development.

Humber Capture Project Market Survey

- Open until 13th February
- “Open to any project that may seek to connect by pipeline to ECC’s Humber network or to Viking CCS’s network, or **connect via non-pipeline transport (NPT) to either ECC’s Endurance store, the Bunter Closure Stores or the Viking CCS store.**”
- Not yet clear if it will be followed by a selection process, but important for demonstrating demand.
- DESNZ welcoming responses from both UK and EU emitters.



DESNZ Ensuring Fair Access to CO2 Infrastructure

(Third-party access consultation)

In November 2025, DESNZ published a consultation seeking views on ensuring fair access to CO2 infrastructure. [HERE](#).

The CCSA has circulated the first draft to members.

Please see the draft response [HERE](#).

- For any input, please contact max.musing@ccsassociation.org

Deadline: 20th February

Consultation considers:

- Access under the Licence and the Code
- Refusal of Access regulations
- Determination of disputes
- Access prior to construction
- Future network evolution
- Hybrid CCU/CCS situations
- Cross-border transport and Storage



CCUS: Ensuring fair access to CO2 infrastructure

A review of the Storage of Carbon Dioxide (Access to Infrastructure) Regulations 2011

Closing date: 20 February 2026
(closing date extended to allow more time for responses)

Department for Energy Security and Net Zero (2025)

CCSA Draft Response to Third Party Access Consultation – Key NPT Points

Regulatory Reform Required: Current Access Regulations cover pipelines only - updates are needed to legally and practically enable NPT, especially for cross-border trade.

Critical for System Resilience: NPT enables flexibility to manage CO₂ flow variations and reduce stranded-asset risk.

Enabler of Future Market Optionality: Switching between storage providers only becomes feasible once NPT solutions are fully enabled

Essential for Dispersed Sites & New Hubs: Provides viable transport routes for emitters not located near pipeline clusters and supports establishment of new CO₂ hubs and stores.

Foundation for a Self-Sustaining Market: NPT has an important role to play in delivering future market competition, merchant project participation, and flexible capacity products.

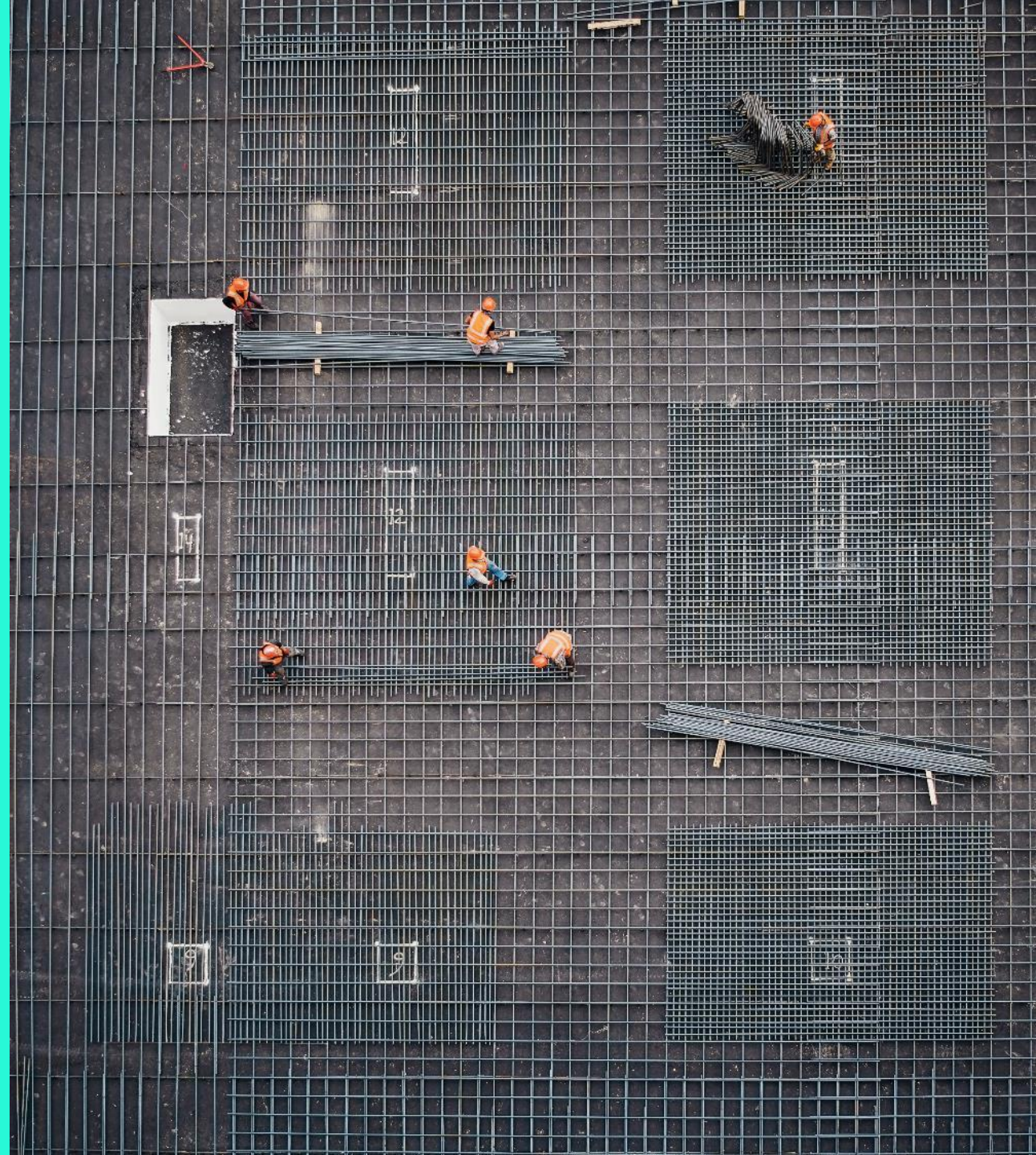
Vital for Hybrid CCU/CCS Projects: Pipelines are often uneconomic for intermittent CO₂ flows, making NPT essential for hybrid users and smaller-scale operators.

Key to International CO₂ Transport: Supports UK-EU cross-border CO₂ flows under the London Protocol amendment and requires harmonised technical and liability standards.

Reminder and CCSA positions: DESNZ NPT consultation

- Reminder of expected proposals in NPT consultation
- Establishing initial positions and identifying further evidence that can be provided
- Next steps

Mark Sommerfeld (CCSA UK Director) / All members



NPT consultation Context

In 2025, DESNZ held a series of stakeholder engagement sessions, each focused on specific policy areas within the consultation.

DESNZ noted that NPT faces additional unique challenges, for example:

- Coordination failure - the early-stage nature of the UK NPT market risks misalignment between T&SCos, capture projects, and government schemes not yet tailored to NPT.
- Information failure - industry lacks clarity on local NPT opportunities and long-term policy certainty.
- Positive externalities less considered during individual NPT project development.

The purpose of the NPT consultation is to provide NPT projects with information on key commercial areas that will help unlock their next step in project development.

- The consultation follows DESNZ NPT call for evidence (CfE), which was released in May 2024.

Expected Consultation Content

Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5
Delivery mechanism for NPT support	Support for NPT costs	NPT fee options and cross-chain risk	Regulatory environment for the NPT solution	Standardisation and operational issues
<p>Potential models for delivering government support to NPT projects and identifies a preferred option. It explores how NPT costs could be integrated into existing capture business models and proposes the use of a consistent annex to adapt contracts.</p>	<p>This chapter introduces the “NPT fee” as a separate payment element within capture contracts to cover NPT-specific costs. It defines the overarching principles of the fee and proposed scope of costs covered. It also discusses principles for the oversizing of infrastructure.</p>	<p>This chapter presents options for the NPT fee, each with different approaches to managing revenue uncertainty in low / no throughput scenarios. It does not state a preferred option. It also discusses proposals for management of stranded asset, CO₂ quality, and timing mismatch risk.</p>	<p>This chapter assesses whether new economic regulation or licensing is needed for NPT infrastructure. The current position is not to introduce such regulation ahead of market formation, relying instead on existing competition law. It also explores how NPT infrastructure interacts with existing CCUS regulations.</p>	<p>This chapter focuses on the need for interoperability and standardisation across NPT solutions. It proposes an industry and regulator led approach to developing standards, rather than government-led principles. It also seeks evidence on topics related to the CCS Network Code and CO₂ specification.</p>

NPT Framework Approach

Option 1:

Direct contract between government and an NPT aggregator that operates the whole NPT solution (intermediary archetype).

Option 2:

NPT services are an expansion of the Transport and Storage network and is operated by T&SCos (store led archetype). Where if allowed by the regulator, some NPT infrastructure may be on an existing Regulated Asset Base (RAB).

Option 3:

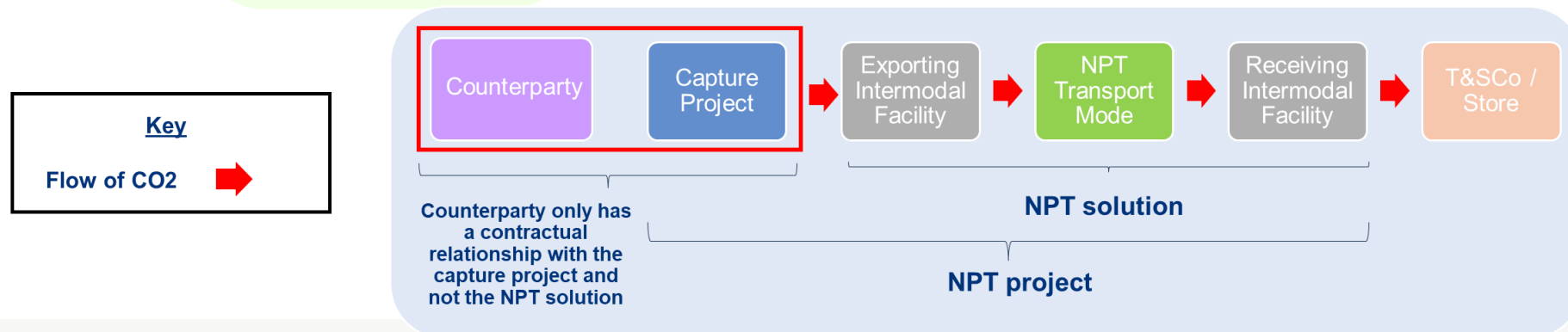
NPT services are an extension of, and operated by, the capture project. NPT costs are included within the capture contracts and considered as part of the overall capture business model support package (capture led archetype).

Option 4:

Government supports NPT service providers by providing one-off grant funding and/or offering an agreement on capital co-investment (e.g. loans, guarantees, equity shares).

Option 5 (Preferred option):

NPT costs are paid through the capture business models, but the NPT service provider is allowed to be a consignor of the CO₂ over the NPT value chain. Alongside enabling option 2 and 3, it allows the delivery of the intermediary-led archetype.



NPT Framework Approach – Current CCSA View

- Unclear if emitters will be happy to take this level of risk
- Key service providers may struggle if support requires the emitter to negotiate on behalf of the entire chain; operators will want to be co-signatories so their terms and liabilities are clearly defined.
- Clearer agreements are needed to determine who holds liability when parts of the value chain fail (e.g., emitter vs logistics provider).
- If each party must individually price in the risk of failure anywhere in the chain, costs will rise, leading to poorer value for money for government.
- Cross-chain risk pricing may be inflated and unnecessary, as many risks are manageable or unlikely to materialise.
- Pipeline-based CO₂ transport risk models show that risk can be effectively managed via commercial agreements across multiple parties. The same principles of commercial risk allocation should apply to NPT value chains.



NPT Fee Options

- *DESNZ not currently stating preferred position*
- *Option 5 – which saw greater underwriting had been dismissed*

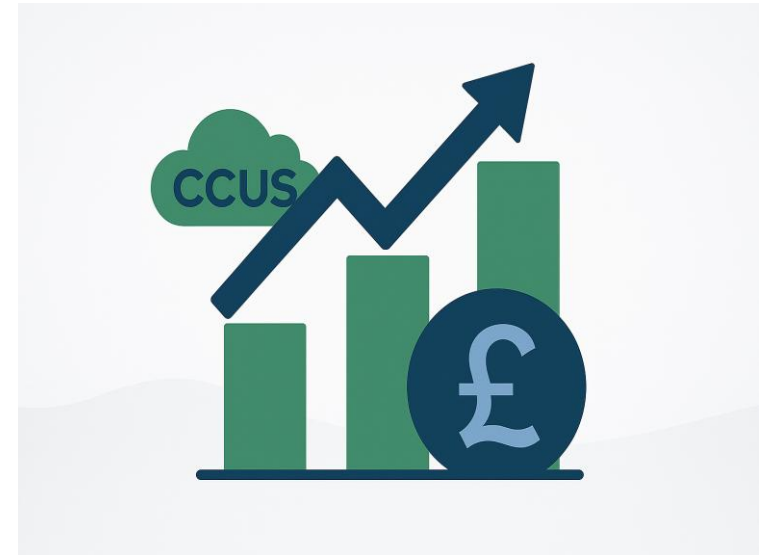
- Which option would you prefer?

Option	Description of option
1 – Capture costs and NPT fee based on volumes stored	<ul style="list-style-type: none"> • All NPT costs are included in one variable component meaning that the entirety of the NPT fee is paid based on the tonnes that reach the T&S delivery point (meter D). • Capture costs, where applicable, would be calculated based on tonnes reaching meter D.
2 – Fixed fee tapers down to zero based on full NPT solution performance	<ul style="list-style-type: none"> • The fixed component of the NPT fee covers contractually fixed costs and is tapered from an expected performance threshold down to zero as the performance of the whole NPT solution decreases. • Performance of the NPT solution is measured on the efficiency of transporting CO₂ between meter A and meter D. • The variable component covers other eligible costs which are not contractually fixed. The variable fee is paid based on flows through meter A. • When no CO₂ flows from the capture project, we could either not pay the NPT fee or pay the NPT fee based on a historic average.
3 – Fixed fee paid based on full NPT solution availability	<ul style="list-style-type: none"> • The fixed component of the NPT fee covers contractually fixed costs, and it is paid based on availability of the NPT solution. If the NPT solution is not available, there is no payment of the fixed fee. • The variable component covers other eligible costs which are not contractually fixed. The variable fee is paid based on flows through meter D. • Availability could be defined in two broad ways: <ul style="list-style-type: none"> a) availability would be dependent on the nature of the NPT asset. Mechanism to define and monitor availability is still to be developed. Downtime and operational maintenance regimes would also be considered in availability calculations to avoid perverse incentives. b) availability could be deemed available as long as the NPT solution did not cause the capture project to vent. Further work would be required to determine attribution of fault/cause of venting.
4 – Fixed fee paid based on individual NPT service provider availability	<ul style="list-style-type: none"> • The fixed component of the NPT fee covers contractually fixed costs, and it is paid based on availability of each NPT service provider. This can be delivered in two ways: <ul style="list-style-type: none"> a) The NPT project is responsible for attributing fault within the chain and is responsible for reporting this to the counterparty. Until fault attribution is complete, no fixed fee is paid. Once fault is determined, NPT entities not at fault are paid. b) The fixed fee is paid but later recouped once fault determination occurs. Recouped payments align with compensation agreements under a typical Send or Pay contract, for example when an off-hire event occurs. • The variable fee is paid based on flows through meter D. • Under option 4, to prevent over subsidy some of the fixed component would also be recouped when additional compensation is paid to NPT service providers for any business interruption.



Fee Structures – Current CCSA View

- Need clear definitions from DESNZ on availability thresholds, cliff edges, and how penalties apply when availability drops below required levels.
- Concern that proposals may create binary cliff-edge outcomes (e.g., full loss of fee at 84% vs 85% availability).
- Clarification needed on how availability is defined and applied across the value chain, given different contractual models across NPT projects.
- Option 4 (fees based on individual provider availability), need clarity on prorating payments, fault attribution and evidence requirements for partial/full fees.
- Principle that issues in a small part of the chain should not impact full emitter payments, recognising NPT flexibility.
- Industry is willing to work with DESNZ to agree common definitions and distinguish between necessary shutdowns vs unexpected outages.



Cross Chain Risk

Consultation
to cover five
cross chain
risk areas:

Temporary Outage

Revenue Uncertainty

Stranded Assets

CO2 Quality

Timing Mismatch



Managing Value Chain Risks – High Level CCSA View

- DESNZ should allow commercial contracts to manage risks rather than attempting full oversight of the entire value chain.
- Terminals, ports, and other supply-chain operators already manage day-to-day operations and disruption, and should continue to do so through established commercial relationships.
- Government should work with industry to understand how existing liability and risk-management practices (e.g., shipping chartering models) can be applied to CO₂ operations.
- Industry agrees Government should ensure operators are competent and safely operating, providing confidence in the reliability of the value chain.
- Given varied NPT business models, Government should set principles for the fee structure, rather than dictating a single value-chain design.
- A body such as LCCC underwriting the fee structure is essential to provide confidence, since individual operators cannot take on risk for failures elsewhere in the chain; clarity is needed on what evidence LCCC will require.

Timing mismatch

- As NPT value chains will be allowed to self-organise, government believes responsibility for managing timing mismatch risk should rest with the NPT project. These entities should ensure that the elements of the NPT solution are developed in lockstep, as they are likely better positioned to coordinate and align their operations to mitigate such risks.
- They intend to create an NPT solution readiness operational condition precedent (OCP) within the capture contracts which will see the NPT project as a single entity, making it their responsibility to manage schedules between themselves.
- Alongside an OCP, DESNZ expect there to be additional Initial Conditions Precedents (ICP) and technical evaluation criteria, ahead of commercial deployment that will need to be satisfied, similar to what currently exists in capture contracts, though these may differ in form for NPT entities.

Unclear how timing mismatch relates to lack of policy decision.

Timing mismatch – High level CCSA member view



- Noted current proposals are a significant departure of the approach between how DESNZ manage the NPT value chain versus the pipeline value chain – with potential to introduce significant cross-chain risk.
- For pipelines, T&SCos have the RSA that they can draw upon if there's a timing mismatch risk with commissioning; which the emitter business models have timing mismatch provisions if the T&S isn't available.
- Delay in pipeline availability can have costly implications for all emitter projects; while the flexibility of NPT assets means impacts are more manageable – so it is easier to match it to the most complicated part, which is capture or storage or both.



Operational issues

CO2 specification and monitoring

- Confidence in the NPT value chain's ability to characterise CO2 quality reliably and promptly.
 - Whether NPT operating processes should influence how CO2 quality is assessed at the T&S entry point.
 - How batch transfer in NPT affects testing requirements and whether it can help remediate non-compliant CO2 before delivery
- Need to be able to demonstrate confidence in existing processes and measuring equipment.

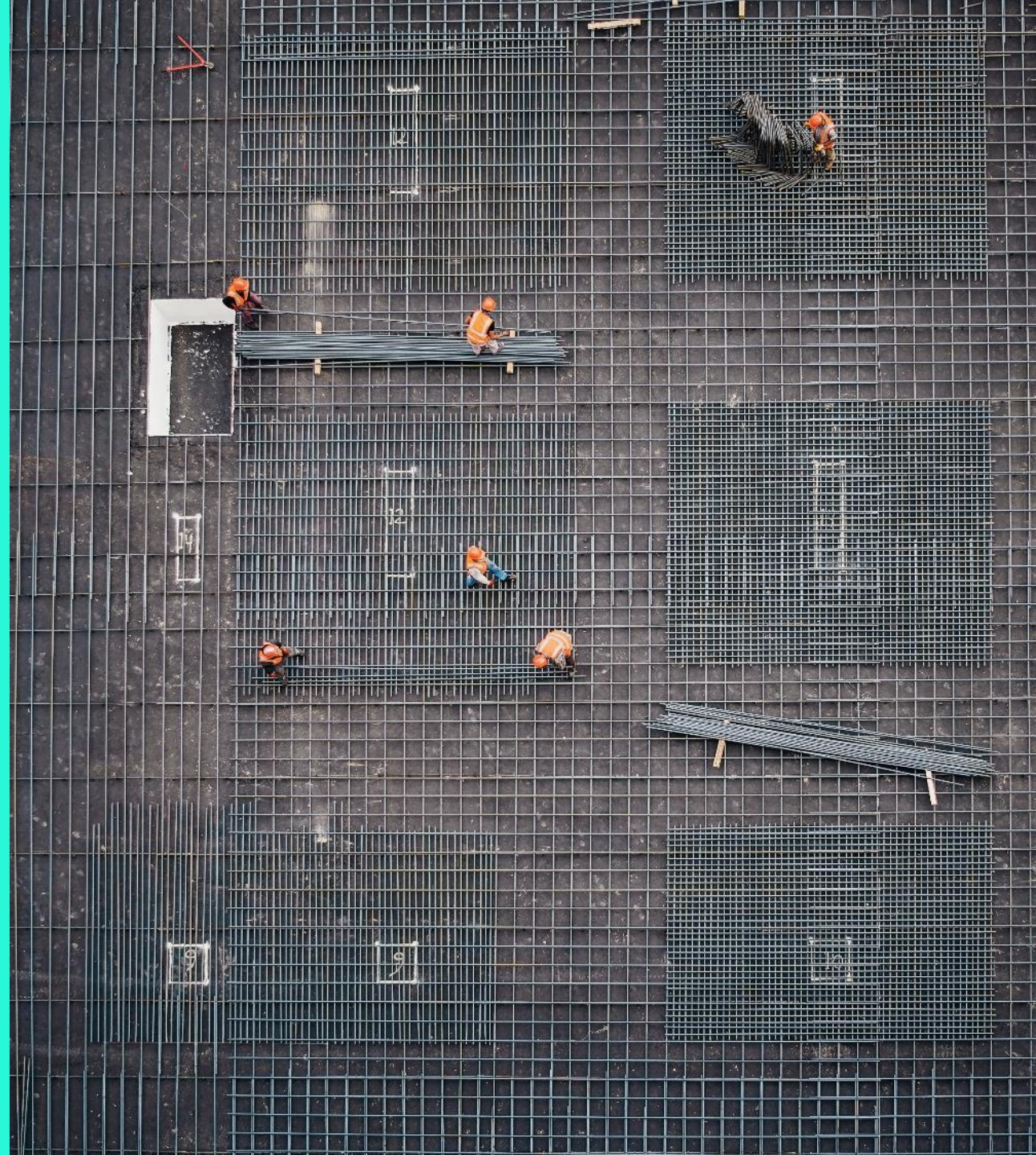
Network capacity

- Which entity in the NPT chain should hold Registered Capacity and why.
- Whether NPT service providers can vary flow rates, and what is needed to enable this technically, commercially, and operationally.
- Suggestions for new or alternative capacity products that accommodate NPT's flexibility.

Discussions:

Next Steps

All Members



Next Steps – High level Points

Asks for clear timeline and signals

- It is important that DESNZ need provide positive signals and more specific timelines for NPT delivery, or key value chain stakeholders could make decision to invest elsewhere in global portfolios.
 - We need a clear timetable, which specifically include the opening up of bids for future NPT projects ahead of the 2027 spending review – this could be set out as part of the consultation, but needs to be addressed if not.

Asks for the reprioritisation of NPT delivery

- DESNZ are trying to solve all the problems rather than engaging with the market to prioritise specific actions to get the market moving
- If government continues to develop NPT in the same way we've done in Track-1 and Track-2, we will probably continue to see slow progress.
 - Make use of the structures and timelines referenced within the industrial strategy
- This should include Free ports and industrial strategy investment zones: make a clearer the link between them and the delivery of NPT.
- Suggest setting out the NPT development sequence? Present it in more digestible chunks to DESNZ so they can get on with it rather than seek it as a whole.

CCSA NPT Consultation – What evidence do we need to provide?

Assuring Government that risks can be managed

- Set out each part of the value chain and how risks are already managed
- Build confidence that commercial agreements can already work

International Case Study

- Demonstrate that NPT is the norm for operation in Europe (Green Sands, Northern Lights)

Emphasise the importance of unlocking NPT to realise benefits for the UK

- Cross Border CO2 storage
- Benefits to clusters in development – filling capacity, reducing government liability
- Opening up more capture opportunities

AOB & Next Steps

- Next steps
 - Meeting once Consultation is launched
- AOB
- Meeting close