

FEEDBACK TO THE PUBLIC CONSULTATION ON CO₂ TRANSPORTATION INFRASTRUCTURE AND MARKETS

Europe is setting the course for infrastructure rules that will underpin its carbon management system for decades. The upcoming Regulation will make up the network blueprint that will define who gets to participate in Europe's carbon management – and who is left behind. The stakes are high, but the litmus test is simple: **Does the system keep the door open for carbon removals (and utilisation) – or simply defaults to incumbent CCS use cases?**

While tempting, designing the carbon transport and storage system only for today's industrial emitters means building it too small. Europe-wide cross-border CO₂ network is an expensive long-lived asset that must be used to its full potential to recover its costs and unlock wider value. If planned solely around point-source CCS, it risks being underutilised from the start. That means higher per-tonne costs, costly future retrofits, and public money sunk into infrastructure that only serves yesterday's emitters.

Get it wrong, and we create a rigid, stranded system that brings the industry down with it. Get it right, and CO₂ infrastructure becomes a resilient backbone of Europe's industrial decarbonisation, supporting jobs, clean growth clusters, and long-term competitiveness.

Europe cannot afford to under-build. This Regulation must deliver an open, inclusive CO₂ infrastructure and market. We therefore recommend that the upcoming proposal:

1. Develop network rules with CDR projects in mind

The legislative framework must serve not only point-source capture from industrial emitters, but also CDR technologies like Bioenergy with Carbon Capture and Storage (bioCCS) and Direct Air Capture and Storage (DACCS).¹ While early CDR projects will look small, fragmented, and relatively uneconomic compared to large industrial CCS anchors, they are recognised as essential by the European Commission, the European Scientific Advisory Board on Climate Change (ESABCC), and pioneer Member States.²

Without explicit safeguards, however, early removals will be crowded out by incumbents with stronger bargaining power, and Europe will lose critical capacity before it even starts. But if built with diverse users in mind, it can gain a network fit for both industrial decarbonisation and negative emissions.

That's why the Regulation must enshrine open and non-discriminatory third-party access to CO₂ transport and storage for fossil, biogenic, and atmospheric CO₂.

2. Plan for one integrated carbon management system – not three silos

It is important that the Regulation treats the network as a holistic, integrated carbon management system. CCS, CCU and CDR all rely on the same carbon management backbone: pipelines, hubs, storage reservoirs, permitting rules and MRV standards, liability regimes. Removals like DACCS and bioCCS overlap with CCS in capture, transport, and storage; with CCU – in capture and transport. Designing separate systems for each would overlook the reality of their interdependence, leading to inefficiencies, missed synergies, and underbuilt infrastructure.

¹ European Commission. *Towards Ambition Industrial Carbon Management for the EU*, COM/2024/62 (2024).

² European Commission. *Securing our future: Europe's 2040 climate target*, COM/2024/63 (2024). See also European Scientific Advisory Board on Climate Change. *Scaling up carbon dioxide removals – Recommendations for navigating opportunities and risks in the EU* (2025) <https://climate-advisory-board.europa.eu/news/new-report-from-the-eus-climate-advisory-board-outlines-recommendations-to-scale-up-carbon-dioxide-removals-while-addressing-opportunities-and-risks>.

This integrated approach is already reflected in the Net-Zero Industry Act (NZIA), which identifies CCS, CCU, and CDR as part of a single strategic net-zero technology family.³ Aligning the Regulation with this vision will ensure that infrastructure is planned as one coherent system based on shared use and future demand for all types of projects.

3. Coordinate at the EU level to resolve cross-border bottlenecks

Building an integrated CO₂ network requires EU-level coordination. Without it, cross-border bottlenecks will stall the system before it starts. While several Member States are advancing national plans for CO₂ transport and storage, fragmented regulation creates unnecessary friction, cost, and legal uncertainty.

The challenge is visible in the Nordics: Sweden and Finland have significant capture potential but no viable storage. Their removal projects depend on shipping CO₂ to neighbouring Norway and Denmark.⁴ Without clear EU-level rules for cross-border cooperation, such projects will be delayed or derailed unless governments proactively negotiate bespoke bilateral agreements. Coordination, therefore, is the only way to unlock shared infrastructure.

The NZIA already acknowledges this need to streamline permitting procedures and enable cross-border infrastructure deployment for strategic net-zero technologies, including CO₂ transport and storage. The upcoming Regulation should reinforce and operationalise these principles by establishing harmonised EU-wide rules for liability, MRV, CO₂ quality standards, and third-party access. Alignment with NZIA will create the clarity and consistency needed for cross-border projects to scale.

The Regulation should also mandate the revision of the EU-wide CO₂ storage atlas (last updated in 2011).⁵ This will enable better planning and improve project bankability, as developers and investors need visibility on available and future storage options to make final investment decisions.

4. Prioritise existing and joint infrastructure projects

Building out multi-user CO₂ transport and storage hubs is a critical priority. Without them, smaller projects, including early CDR initiatives, will be stranded on the sidelines, unable to access infrastructure or reach viable scale. Shared hubs like Porthos in the Netherlands and Northern Lights in Norway show how joint infrastructure enables economies of scale, lower costs, and access for diverse users.⁶

The Regulation should prioritise mapping, co-funding, and fast-tracking such shared projects at the European level. This is essential to prevent fragmentation, avoid duplication, and reduce the risk of stranded assets.

Crucially, scale will only come with social licence. These hubs will not succeed unless local communities see clear benefits. For instance, public opposition to the Coda Terminal – a cross-border CO₂ transport and storage hub in Iceland – highlights the importance of securing social acceptability before billions are invested in novel projects.⁷ Local dividends, transparency, and robust engagement must be designed from the outset.

5. Make investments in CO₂ infrastructure attractive

Delivering a cross-border CO₂ transport and storage network requires major upfront investment – long before demand fully materialises.

³ Regulation (EU) 2024/1864 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2021/1058 (NZIA).

⁴ Nordic Carbon Removal Association. *The Nordics as Europe's carbon removals hub: A Blueprint for Nordic Action* (2025) <https://implementconsultinggroup.com/article/the-nordics-as-europes-carbon-removal-hub>.

⁵ European Commission. *European CO₂ storage database*, https://setis.ec.europa.eu/european-co2-storage-database_en.

⁶ Porthos, <https://www.porthosco2.nl/en/>; Northern Lights, <https://norlights.com>.

⁷ Coda Terminal, <https://www.carbfix.com/codaterminal>.

The scale of the challenge is immense. According to the ESABCC, meeting the EU's 2030 target of 50 Mt CO₂ per year of geological storage capacity requires an estimated €18 billion in investment by the end of the decade.⁸ Additional funding will be required to expand that capacity toward 2040 and beyond.

Strategic EU funding instruments – including the NZIA, the Connecting Europe Facility, and the Innovation Fund – must be actively leveraged to prioritise infrastructure for BECCS and DACCS, not just point-source CCS. When it comes to unlocking large-scale private capital, instruments like contracts for difference can reduce early risk, but credibility is what ultimately moves the needle. That means clear liability regimes, harmonised MRV rules, predictable tariffs, and robust access provisions.

Factoring in different users from the outset also helps de-risk the entire network. Infrastructure investors assess system viability based on total expected volume and diversification. The more flows moving through – CCS, CCU, and CDR – the lower the risk profile, and the stronger the case for building large, multi-user networks. Inclusive design from day one creates the scale and credibility needed to finance Europe's CO₂ backbone.

To conclude, with clear planning, coordination, and investment signals, the upcoming Regulation can build Europe's carbon management backbone – one system that underpins CCS, CCU, and CDR together. Done right, it will anchor new value chains, attract manufacturing and innovation, and position Europe as a global leader in clean technologies. Done wrong, we risk locking in outdated infrastructure that serves legacy emitters, while removals and emerging sectors are left without a way in. The opportunity is not just to meet short-term compliance, but to build infrastructure that enables long-term competitiveness and industrial renewal.

⁸ European Scientific Advisory Board on Climate Change. *Scaling up carbon dioxide removals – Recommendations for navigating opportunities and risks in the EU* (2025) <https://climate-advisory-board.europa.eu/news/new-report-from-the-eus-climate-advisory-board-outlines-recommendations-to-scale-up-carbon-dioxide-removals-while-addressing-opportunities-and-risks>.