

Eurogas Priorities for the CO₂ Markets and Infrastructure Framework

Eurogas recommendations

Industrial carbon management (ICM) technologies are crucial for achieving the EU's climate target by 2050, enabling emissions reduction while ensuring a globally competitive European economy. In particular, **Carbon Capture, Utilisation and Storage (CCUS) technologies** play an essential role in safeguarding competitiveness and enabling negative emissions, thereby complementing, emission reduction and deployment of renewable energy.

Eurogas **welcomes** the European Commission's work on developing a regulatory framework for the CO₂ market and infrastructure, notably through the upcoming **CO₂ Markets and Infrastructure Package**. However, the market remains at an **early stage of development**, with limited projects and infrastructure currently in operation, largely due to the **significant financial and regulatory challenges** they face.

Existing frameworks, such as the [CCS Directive](#), the [Net-Zero Industry Act \(NZIA\)](#), EU competition law, and the [London Protocol](#), provide a solid foundation. However, to avoid overly prescriptive rules, in particular in the early phases, that could hamper the development of this market, the European Commission should adopt an approach whereby, **in the short term**, priority is given to **funding and de-risking measures** to enable early CO₂ market deployment.

Nevertheless, **additional regulatory measures may be required in the longer term**, particularly in the event of **market failures**. In this context, market needs should be regularly assessed, and identified issues addressed through a **phased approach**, allowing regulation to be tailored and adapted to evolving market conditions.

More broadly, a well-functioning CO₂ market and infrastructure framework should be designed on the basis of **technological and sectoral neutrality**, while ensuring **non-discriminatory access** to CO₂ transport and storage capacity for all emitters.

Finally, the European Commission's work should also consider developments **in the EU Emissions Trading System (ETS)**, which remains the central instrument for driving decarbonisation and creating incentives for investment in CCS and CCU technologies. Ensuring coherence between the CO₂ market framework and the ETS will be key to maintaining a stable and predictable carbon price signal that supports long-term investment decisions.

Against this backdrop, we believe that the **following recommendations** should be taken into consideration to support the scale-up of the CO₂ market and infrastructure without hindering its development.

Prioritise De-risking and Funding

In the short term, priority should be given to **funding and de-risking measures** across the value chain to enable early CO₂ market deployment. Considering the early-stage development phase of the CCS market, it

is crucial that the regulatory framework under development in Europe properly addresses key risks currently hindering project development, ensuring financial viability of capture facilities as well as transportation and storage infrastructures, without posing a disproportionate financial burden on first capture/infrastructure projects. Financing and de-risking measures will be needed until the market reaches maturity and industry can absorb the associated risks. In this context, **public financing**, including grants, guarantees, subsidies, and incentives, may be needed across the value chain, in a coordinated manner between the EU and Member States level (e.g. aligning different subsidies and commercial operational dates). Such support is key to de-risking early investments and catalysing market growth, particularly in initial phases or to address specific conditions, such as the development of CCUS solutions in landlocked regions. **Early public support will be critical to unlock investment and enable the scale-up of projects across the value chain**, particularly to support early movers and de-risk low initial volumes in nascent transport and storage networks. This could apply to non-pipeline transport solutions too, on a case-by-case basis.

Business Interruption Risk

The business interruption risk or double penalty risk represents a **significant barrier** for the development of the CO₂ market and should be addressed to ensure that emitters are not exposed to **high impact, low probability events** that could undermine their willingness to invest in carbon capture technologies.

In the event of **major disruptions** of a component of the CCUS value chain, in particular system outages related to CO₂ transport disruption or storage outages, emitters would have to surrender corresponding ETS allowances. In addition, they would still have their ship-or-pay obligations towards infrastructure operators that are not themselves at fault. In certain cases, depending on the design of the relevant scheme, capture projects may also lose financial support provided through national Carbon Contract for Difference (CCfD).

While part of this risk could potentially be reallocated contractually, the failing operator or the emitter cannot reasonably be expected to bear alone the costs associated with the entire value chain. Therefore, **public intervention appears necessary to remove this barrier**, which could otherwise become a significant obstacle to final investment decisions at this stage. This could be better achieved if implemented at the EU level, to ensure a level playing field for projects under development across different Member States.

In this regard, we believe that the forthcoming **CO₂ Markets and Infrastructure Package** should play a key role in this discussion, as the definition of the risks to be addressed, and consequently the scope of any guarantee mechanism, should form an integral part of the broader framework governing the development of the European CO₂ market. In parallel, the upcoming **ETS revision** represents the appropriate policy window to address the potential risks that emitters may face, while at the same time supporting the deployment of CCUS projects and EU climate ambitions, and ensuring that CO₂ emissions continue to be properly accounted for under the ETS framework.

In this regard two complementary mechanisms could be envisaged:

- **A European guarantee fund** could be established to **refund the cost of ETS allowances** surrendered by emitters for business interruption in the CO₂ transport and storage infrastructure. This support mechanism should be designed in accordance with the following principles:

- **Eligibility and scope:**
 - It should be made available to projects reaching Final Investment Decision (FID) before 2035, with priority given to earlier projects;
 - It should cover only the ETS exposure arising from low-probability, high-impact events that are beyond the emitter's control and affect the CCUS value chain, particularly during the early stages of market development. Risks associated with normal operations should remain outside the scope of the mechanism. For example, routine availability fluctuations of approximately $\pm 10\%$ and genuine underperformance in the range of 20–30% should be managed through commercial arrangements and market-based solutions;
 - The guarantee should also cover European emitters using transport and/or storage infrastructure in third countries, as well as non-pipeline infrastructure (e.g. liquefaction plants), whose unavailability still leaves the emitters exposed to ETS prices.
- **Triggering conditions:**
 - The mechanism should apply where the availability of CO₂ transport or storage infrastructure falls below a predefined threshold. This could include:
 - availability below 50% for a sustained period despite reasonable recovery efforts; or
 - severe outages caused by high-impact, low-probability events beyond the emitter's control, such as availability falling below approximately 70-75%.
 - In all cases, the triggering events and eligibility criteria should be clearly defined ex ante;
 - The mechanism should only be activated once both the capture facility and the relevant transport and storage infrastructure have been commissioned.
- **Coverage:**
 - Once activated, the fund should cover the cost of the ETS allowances that the emitter is required to surrender during periods when the CO₂ transport and storage infrastructure is unavailable;
 - The primary focus of the mechanism should be to verify whether a qualifying high-impact, low-probability event has occurred. The verification process should build on existing monitoring, reporting and verification (MRV) requirements under the EU ETS or equivalent rules in case of third country transport and storage infrastructure. Where such verification confirms that the event falls within the predefined scope of the mechanism, compensation should be provided in full, subject to the applicable rules on avoiding over-compensation.
- **Duration:**
 - The mechanism should be time-limited and designed to support the development of the emerging CO₂ transport and storage market;
 - As the market matures, the mechanism could gradually evolve from a fully public guarantee fund to a hybrid model combining public and private financing, based on a periodic assessment of market conditions and available private derisking and insurance mechanisms.;
 - The termination of such coverage should be based on predefined criteria and the availability of market-based insurance instruments;
 - The mechanism should complement, rather than replace, existing contractual remedies and risk-allocation arrangements.
- **Financing:**

- Such a fund could be financed through a dedicated share of Member States' or EU ETS revenues. One possible approach would be to ring-fence dedicated funding, for example through the Industrial Decarbonisation Bank, to establish a pre-funded guarantee mechanism supporting first movers in the CCUS value chain. As said in the section above, the fund should also incorporate a dynamic allocation mechanism, enabling its size to scale with increases in the ETS price and ensuring that available resources remain aligned with the level of risk coverage required by the market.
- The size of the guarantee fund should be determined on the basis of:
 - the number of transport and storage projects covered by the mechanism;
 - the estimated probability of infrastructure unavailability events;
 - the estimated quantity of CO₂ that cannot be transported and permanently stored as a result of such events;
 - the ETS price exposure requiring coverage.

With regard to the potential loss of CCfD support, this issue could be addressed either through:

- the guarantee fund covering both ETS exposure and the loss of CCfD-related support; or
 - the guarantee fund covering ETS exposure in combination with amendments to national schemes preventing the suspension of CCfD support during qualifying outages.
- **An EU ETS allowances reserve** drawing on the volume held in the **Market Stability Reserve (MSR)** could be envisaged. This deposit could be created through two potential mechanisms:
 - First, a defined share of the allowances withdrawn annually from the market and transferred to the MSR could be redirected to a dedicated reserve;
 - Second, in light of the European Commission's proposal to discontinue the automatic invalidation of allowances held in the Market Stability Reserve (MSR) above the 400 million allowance threshold, thereby preserving these allowances as a buffer to support future market stability, a portion of such allowances could be allocated to a dedicated emergency reserve.

In both cases the allowance reserve would serve as a **contingency instrument** and would only be activated under the circumstances **set above**¹.

When activated, allowances from the reserve would be granted to eligible emitters to cover **emissions directly associated with the exceptional disruption**. This would prevent affected installations from bearing the ETS compliance costs resulting from major CO₂ transport or storage disruptions beyond their control, while ensuring the continuity of industrial activity and strategic value chains.

Beneficiaries would remain **fully subject to the EU ETS framework**, including all monitoring, reporting, and verification requirements, as well as the Linear Reduction Factor and any future tightening of the emissions cap. The mechanism would therefore provide **temporary and targeted** relief without undermining the long-term decarbonisation objectives of the EU ETS and the agreed reduction pathway.

¹ See sections on eligibility and scope, triggering conditions, coverage and duration under the European Guarantee Fund.

Finally, any mechanism should ensure that **failures in CCUS chains are avoided** as much as possible while at the same time **maintaining the ETS integrity**. In this regard, purely unconditional exemption mechanisms or waivers do not appear to be the preferred approach.

Market Risk

Transport and storage operators face a different set of risks compared to capture projects that are particularly relevant in the early stages of CCUS development and therefore require careful mitigation. These include:

- **market risk**, where infrastructure may be developed ahead of sufficient demand, leading to underutilization and revenue uncertainty;
- **delay or volume risk**, arising from potential mismatches between planned and actual CO₂ deliveries by emitters; and
- **counterparty risk**, linked to the possibility that emitters fail to meet contractual obligations, thus creating revenue shortfalls. Moreover, operators are exposed to low-probability but high-impact events, such as stranded assets or disruptions, which face current unavailability or insufficient capacity of industry insurance mechanisms and therefore cannot be efficiently borne by individual actors.

Introducing de-risking measures for infrastructure operators may play a critical role in supporting the overall market, providing more certainty to private investors and ultimately fostering the scale-up of CO₂ capture projects. De-risking measures could, for example, be relevant to solve market failures and/or mismatches in timelines across the value chain.

Regulatory certainty for existing projects

To preserve **regulatory certainty** and **avoid disrupting ongoing projects**, retroactive regulatory impacts on projects currently under development should be avoided through mechanisms such as grandfathering, opt-in regimes, or tailored exemptions. In this context, any exemptions granted should remain **proportionate** and be time- and event-limited, such as the expiry of initial contracts, integration into a wider network, or the outcome of a regulatory review based on predefined criteria.

Such mechanisms should build existing national legislation developed by early-mover Member States, recognising permits and frameworks already in place and ensuring smooth integration into the EU-wide system.

Streamline the Permitting Process

Ensuring **alignment across EU legislation and streamlining administrative procedures** is essential to accelerate the development of the CO₂ infrastructure. This includes **aligning permitting rules** across EU framework and establishing a permanent, **baseline permitting process** applicable to all projects, including those outside the NZIA or PCI/PMI status, with **clear maximum timelines** set in the EU law.

Governance and administration should be strengthened through the full digitalisation of permitting procedures, the creation of a **single point of contact** for CO₂ capture, transport, collection and conditioning facilities and by requiring the Member States **to allocate adequate administrative resources** in line with National Energy and Climate Plans (NECPs) and NZIA reporting obligations.

In parallel, **procedures should be streamlined** by introducing simplified processes for repurposed infrastructure and expanding support measures under the upcoming [Grids package](#) and the [Industrial Accelerator Act](#) (IAA). These measures could include tacit approvals and industrial manufacturing acceleration areas, which should ensure access to and capacity of CO₂ transport and infrastructure, as well as hydrogen infrastructure.

Finally, improved access to data, ensuring the availability and sharing of environmental, geological, CO₂ production and capture hubs and technical information, while **limiting disclosure to raw data** and **safeguarding commercially sensitive information** are crucial.

Ensure Cross-Border CO₂ Transport

Addressing legal and technical barriers is essential to **enable cross-border CO₂ transport**.

In this regard, despite **the London protocol** provides a solid basis when it comes to cross-border CO₂ transport, **Article 6 of the treaty**, as amended in 2009, has not been widely ratified, meaning that bilateral agreements are currently required for cross-border CO₂ transport. While the European Commission's interpretation, in its [2022 Position Paper](#) suggests that such agreements may not always be necessary, **legal uncertainty persists**, underscoring the need for **clear EU guidance** to ensure the cross border- CO₂ transport and for encouraging swift ratification of the 2009 amendment.

In parallel, to enable cross-border CO₂ transport, it is important that the European Commission prioritise the swift implementation of the **EU-UK ETS linkage**, in order to provide European industry with sufficient regulatory certainty to enable CCUS projects on both sides, across the entire value chain, to advance.

Finally, ensuring **interoperability and common standards is key**. This includes developing shared technical parameters, such as pressure and purity, to guarantee system compatibility, while tailoring CO₂ specifications to minimum safety and integrity requirements across different segments of the value chain. Efforts should build on ongoing standardisation work (e.g. CEN 474) and strengthen cooperation between projects and actors of the value chain. Promoting interoperability and cross-border trade, both within the EU and with third countries such as the UK and Norway, will be crucial. At the same time, in the early stages, market driven cross-border solutions should be prioritised with binding requirements considered only if gaps emerged. The standardization of technical norms to ensure interoperability across the CCUS value chain and across countries should always taking into account the scope of individual projects and, more generally speaking, the actual needs, for this standardization to always constitute an enabler for the CCUS market and not an obstacle to its development.

Incentivise the Demand for a CO₂ Market

Industrial Accelerator act

In view of the European Commission publication of the Industrial Accelerator Act, **sufficient incentives** should be provided for low-carbon products decarbonised with the support of CCS and the reuse of captured CO₂ (CCU). In fact, we believe that a relevant degree of de-risking for the development of CO₂ markets should be provided through demand creation.

CO₂ Transparency Platform

An **EU-wide interactive online map** would be a practical way to deliver visibility and transparency on the CCUS value chain, offering a clearer picture of both the value chain and the current state of the market. This tool could show data on existing and planned projects, as well as available transport infrastructure and storage sites.

By contrast, introducing a CO₂ demand aggregation mechanism at this stage would be **premature** for such a small-scale market. If considered in the future, it should be preceded by a comprehensive impact assessment, with any aggregation features remaining strictly voluntary. Instead, **commercial CO₂ aggregators** are well placed to deliver this service as part of their business activities, developing demand aggregation as a flexible, market-driven activity based on market needs.

Social Acceptance and Public Engagement

The large-scale deployment of the CO₂ infrastructure will require broad **political trust and support**. Transparent communication, early and continuous stakeholder engagement, and structured dialogue at local and regional level are therefore **essential enablers** for project development and permitting.