International Association of Oil & Gas Producers

POSITION STATEMENT | MARCH 2026

IOGP Europe recommendations on workable solutions for the upcoming CO_2 markets and infrastructure legislative proposal

Summary of the key recommendations:

1) **Adopt a principles-based, phased EU framework focused on transport gaps**. Provide cross-border legal and investment certainty without locking CCS into a premature market model; build on the CCS Directive for storage aspects and prioritize workable CO_2 transport rules and capture–transport–storage interfaces.
2) **Scale storage through bankable, contract-led access**. In the ramp-up phase, storage access should remain market-based and tailored to geology and liabilities under the CCS Directive; prescriptive EU-wide third-party access risks delaying investment and capacity build-out.
3) **Keep tariff regulation proportionate and evidence-based**. Avoid EU-wide predetermined tariff- and access regimes and leave the tariff design to Member States; apply sector-specific tariff regulation only where evidence shows persistent bottlenecks or market power risks, reflecting regional and onshore/offshore realities.
4) **Accelerate deployment by streamlining permitting, de-risking the value chain and gradually introducing standards**. Establish a coherent permitting framework with clear timelines and sufficient capacity; deploy de-risking and funding instruments to unlock shared infrastructure; gradually introduce technical standards and ensure grandfathering so that early projects can proceed while interoperability improves over time.

Executive summary

The European Commission's upcoming legislative proposal on CO_2 markets and infrastructure will be a key enabler for scaling industrial carbon management and delivering the EU's climate objectives, expected by Q3 2026. It represents an important step towards enabling safe, reliable, and cross-border CO_2 flows from capture sites to transport networks and geological storage facilities. The framework should provide cross-border legal and investment certainty while avoiding premature market design choices for a value chain that remains nascent and heterogeneous across Member States.

The EU approach should be principles-based and phased. Core principles such as transparency, non-discrimination, proportional oversight, and predictable cross-border operability should be set now, while more detailed EU-wide economic and technical rules should be introduced only as operational evidence and market maturity justify them. In the near term, requirements should remain targeted and proportionate to support first movers towards Final Investment Decision (FID), preserve private investment incentives, and protect projects already in advanced development through appropriate transitional arrangements.

The main bottlenecks for large scale CCS development today do not lie around a lack of economic regulation, but rather on the enabling conditions that prevent projects at initial stages from progressing at the necessary pace. These factors include slow and complex permitting, insufficient legal clarity and coordination for cross-border transport, restrictions on storage development in some Member States (including bans), limited early-stage public support to catalyze first-mover

investments, and uncertainty over future CO_2 volumes needed to underpin long-term contracting. To support the timely development of the CCS value chain, regulatory efforts should, therefore, prioritize the removal of these barriers through targeted enabling measures that focus on accelerating permitting, enhance cross-border operability, and strengthen investor confidence.

This paper is structured around key building blocks of an effective EU framework. It also addresses a number of enabling elements that fall outside the scope of the public consultation (to which IOGP Europe provided input to)[1] but remain critical to CCS deployment and therefore represent a practical limitation to scale-up. On this basis, it sets out recommendations to inform and support the development of the forthcoming legislative proposal.

1. EU framework for CO_2 transport

The upcoming CO_2 markets and infrastructure legislative proposal should **establish a limited set of EU-level principles that strengthen legal certainty and investor confidence without prescribing a single market model for a value chain that is still developing**. Core principles should include transparency, non-discrimination, proportionate oversight, and predictable cross-border operability.

The upcoming framework should be targeted at closing the current regulatory gaps across the CCS value chain, in particular permitting, and the rules and procedures needed to enable efficient cross-border CO_2 transportation between Member States. The proposal should build on the existing EU approach to CO_2 storage and extend a comparable, principles-based framework to the missing parts of the chain, using the CCS Directive[2] core principles as a coherent baseline across the CO_2 value chain. This would provide a common minimum level of legal certainty for project developers and Member States, while preserving flexibility for the market to evolve.

As CO_2 transport develops into a cross-border market, it is important that the framework is designed in a way that allows all transport modalities to be used based on technical, legal and commercial realities, reflecting pipelines, shipping, rail and other solutions, as well as key nodes like loading/reloading hubs and terminals. Eligible modalities should be recognized consistently across relevant EU legislation, including ETS provisions, supported by robust MRV so that regulation supports, rather than distorts, efficient modality choices.

The **regulatory framework should be flexible, market oriented, and introduced with rules developed and implemented in stages**. Early requirements should remain targeted and proportionate, focused on enabling deployment and supporting first-mover projects towards FID, while preserving incentives for private investment and allowing different models to develop across the EU and EEA. **Detailed ex ante economic regulation, including prescriptive access regimes and tariff methodologies, should not be put in place before operational evidence is available that competition is not developing. Alignment with relevant secondary legislation should also be ensured to support consistent implementation**.

The upcoming framework **should also reflect regional differences in CO_2 transport market dynamics without creating separate regimes or embedding a one-size-fits-all model**. CO_2 transport and storage are fundamentally different from other mature energy sectors, like natural gas, and directly mirroring those regulatory frameworks would risk **constraining an emerging value chain**, discouraging investment, and locking the sector into a legislative path that may prove difficult to adjust as technologies, business models, and competitive dynamics evolve. In practice, targets do not deliver projects; business cases do. The current gap to reach the 50mtpa CO_2 storage injection capacity by 2030, with only 0,025mtpa of in operation,[3] reflects missing enabling conditions, notably permitting delays, incomplete cross-border rules, and insufficient commercial viability across supply chains to secure long-term demand. The **priority of the upcoming EU legislation should be to address these missing elements**, notably with an efficient permitting framework, legal clarity for cross-border transport, and predictable conditions for investors including support mechanisms, rather than replicating mature-sector market design.

[1] https://iogpeurope.org/resource/iogp-europes-response-to-co%e2%82%82-markets-and-infrastructure-consultation/
[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009L0031-20181224
[3] https://www.yumpu.com/en/document/read/70917768/e-world-p-preview-2026-the-pillars-of-the-new-energy-economy-renewables-ai-and-gas-strategy/37

Within that approach, **differences between onshore and offshore development should be recognized through proportionality**. Offshore transport may show stronger prospects for competition in some basins, particularly in the North Sea, where pipelines and shipping are developing in parallel across several Member States and neighboring countries. In such contexts, imposing regulated third-party access or unbundling requirements would be unnecessary and potentially detrimental, as it would reduce commercial flexibility and weaken investment incentives while the market is still forming. In other regions, including parts of the Mediterranean, a carefully designed regulated approach, complemented by targeted support mechanisms where appropriate, may help attract private capital by improving certainty over investment returns and reducing project risk.

Onshore transport conditions vary widely across Europe, depending on geography, industrial cluster, and the availability of alternative modes (e.g., inland waterways, rail, or road). In some networks, pipelines may exhibit natural-monopoly characteristics; in others, competitive alternatives may exist. Given these uncertainties, it **would be premature to assume monopoly conditions EU-wide or to introduce detailed ex ante economic regulation before observing actual market behavior**. Potential market power concerns should be addressed through existing competition law safeguards, with any additional sector-specific measures introduced only where evidence demonstrates a persistent problem. Member States should retain the flexibility to apply a regulated approach for onshore CO_2 transport where market conditions warrant it, particularly in regions where competition is structurally limited and where a regulated model could help ensure investment certainty and de-risk projects.

Across both onshore and offshore contexts, **CO_2 transport solutions are expected to remain project and location specific**, reflecting local geography, available modalities, and individual storage configurations. Preserving this flexibility is essential to ensure cost-effective deployment and avoid locking the market into a single, prescriptive transport model.

Finally, the proposal should **include grandfathering and transitional arrangements to protect projects** that have reached advanced milestones (e.g., key permits, transport and storage agreements in Front End Engineering Design (FEED), secured financing or FID) from retroactive changes that could undermine bankability. This is particularly relevant given that some CCS projects in Europe have already taken FID or are technically at an advanced stage of development,[4] with contractual structures and financing assumptions agreed under the current framework. **Stability clauses, transitional measures and, where appropriate, time-limited exemptions** for early infrastructure are essential to maintain investor confidence and avoid penalizing first movers while the framework evolves.

2. CO_2 storage access and bankability in the ramp-up phase

Building on the need for a phased, principles-based framework that avoids premature market design, the storage segment requires an approach that protects bankability while enabling scale. In the current ramp-up phase, storage projects face high upfront investment requirements, long lead times, and site-specific technical and liability obligations under the CCS Directive. Moreover, under the NZIA, certain EU oil and gas producers are subject to an obligation to deliver 50mtpa CO_2 injection capacity by 2030. Meeting this requirement by 2030 will be very challenging[5] if not impossible and will require a framework that includes mechanisms supporting timely investment and long-term demand certainty. Arrangements must therefore remain financeable, flexible, and avoid rigid structures.

Access to storage should be competition-based and should not be subject to additional third-party access rules. The appropriate regulatory setting should reflect national market characteristics, including the extent of natural monopoly features and the scope for competition, which will differ across Member States and evolve over time. Where a national regulator observes that competitive conditions are inherently limited,[6] a carefully designed, regulated approach, complemented by targeted support mechanisms, may help attract private capital by improving certainty over investment returns and reducing project risk. Such arrangements should be determined at the national level in consultation with relevant stakeholders. This applies, in particular, to onshore storage which is likely to come with lower complexity and cost.

4 As illustrated on the CCS map from IOGP Europe, with a total of 53 CO2 storage projects in Europe, available on: https://iogpeurope.org/wp-content/uploads/2026/02/CO2-Storage-Projects-in-Europe-poster_Feb2026-2.pdf

5 https://iogpeurope.org/resource/iogp-europe-recommendations-to-address-the-implementation-challenges-of-the-net-zero-industry-acts-nzia-2030-co2-injection-capacity-objective/

6 For e.g. when the CO_2 storage market has evidence of natural monopoly characteristics.

Imposing a one-size-fits-all access regime risks undermining the long-term revenue certainty needed to develop storage capacity in compliance with the CCS Directive, while reducing flexibility to reflect geological realities and increasing exposure to volume and underutilization risk. This would raise the cost of capital and risk delaying FID decisions rather than accelerating deployment. Any regulatory intervention should therefore be evidence-based, strictly targeted to demonstrated problems, and proportionate to local market conditions and the sector's level of maturity.

This approach is consistent with lessons learned from Europe's energy market liberalization. In early electricity reforms following the first Electricity Directive (1996),[7] regulation focused on the natural-monopoly bottlenecks, transmission and distribution, while generation and retail supply were opened to entry and competition, with limited sector-specific intervention beyond general competition rules. The Directive itself provided for transitional models such as negotiated access, recognizing that **early-stage markets can function effectively with lighter-touch arrangements** before experience reveals where persistent bottlenecks or market power require more prescriptive rules.

A similar approach has also been applied in gas market reforms, including time-limited exemptions for new high-risk infrastructure such as certain cross-border pipelines and LNG terminals, allowing investors to rely on long-term contracts to make projects financeable.

3. Shared CO_2 infrastructure and cross-border coordination

EU-level coordinated planning can play a useful role in CO_2 infrastructure development by improving visibility, aligning expectations, and facilitating cross-border cooperation. However, planning cannot in itself deliver projects or secure sufficient volumes: the bankability of pipelines and shared infrastructure ultimately depends on market signals and contracting. **Planning should** therefore **remain proportionate and flexible**, avoiding premature assumptions about network scale, topology, or optimal configurations that may not align with evolving demand and storage availability.

Given the significant difference between Member States in industrial structure, storage availability, permitting systems, a one-size-fits-all, system-wide planning model is not suited to current realities. EU action should prioritize deliverability, focusing on the binding constraints: streamlined permitting, stronger administrative cooperation, and practical cross-border tools to avoid sequential and duplicative procedures. This is supported by the inclusion of CO_2 network projects in recent Project of Common Interest (PCI) Union lists,[8] improving visibility and facilitating cross-border coordination where applicable.

In that context, **planning should focus on practical coordination, not system-wide optimization**. A pragmatic approach would strengthen cooperation, enabling the sequencing of capture, transport, and storage investments and the timely scaling of capacity. This could be supported through:

- **Joint transport blueprints** developed by participating countries and competent authorities to align assumptions on volumes, timing, routing options, and interface points (including shipping hubs).
- **Cross-border cooperation tools** to synchronize permitting timelines and investment cycles, reducing delay risk caused by misaligned national processes.

Where onshore networks connect to offshore transport and storage, planning should explicitly address the interaction between onshore networks and offshore options (pipelines and shipping), ensuring that development retains flexibility and can adjust as competitive transport solutions emerge.

Any coordinated approach should also include EEA countries explicitly in scope, reflecting the role of wider regional storage resources and cross-border flows. Planning should remain coherent with relevant electricity, gas, and hydrogen planning processes, recognizing key interdependencies such as power needs for capture and compression and co-location dynamics in industrial clusters.

[7] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31996L0092

[8] In particular, the 6th Union list, adopted in November 2023 (published in April 2024), that includes 14 key cross-border CO_2 network projects, and the 7th Union list, adopted in December 2025, which includes 17.

Finally, deliverability also depends on legal clarity under relevant international and regional marine conventions. For the London Protocol, CO_2 export and import within the EEA can rely on the EU legal framework as the relevant "arrangement" enabling cross-border movements. Proper and timely ratification and implementation of the London Protocol provisions enabling transboundary CO_2 transport for offshore storage remains important to secure durable legal certainty. In the Baltic Sea, the Commission should also issue interpretative guidance confirming that the HELCOM regime does not prohibit geological CO_2 storage beneath the seabed, supporting consistent interpretation and aligning practice with the North Sea. This would support consistent interpretation across contracting parties, strengthen investment certainty, and align the Baltic Sea approach with established practice in the North Sea.

4. CO_2 standards and interoperability

Technical standards are important to support interoperability, safety and market integration across the CO_2 value chain. However, in a market that is still forming, **overly prescriptive EU-wide technical requirements risk locking in conservative assumptions before operational learning has been generated and before business models have stabilized**. The establishment of standards should therefore follow a phased approach: providing practical guidance to enable early projects and cross-border coordination, while reserving detailed harmonization for later stages when there is sufficient operational evidence to justify it.

CO_2 quality standards should reflect how CCS networks will develop in practice. Cluster-based projects may legitimately operate to different specifications than cross-border networks, reflecting local conditions such as transport modality, operating pressure/temperature envelopes, and storage-site requirements. Standards are therefore best developed initially at Member State/cluster level, drawing on operational experience and contractual arrangements, with progressive convergence as backbone and cross-border infrastructure expands. **Early EU requirements should focus on high-level, risk-based parameters that protect integrity** (e.g., corrosion and phase control) **and enable interoperability where it is needed, while avoiding one-size-fits-all purity requirements that can impose disproportionate costs and energy penalties**.

Standard-setting should build on the European standardization system, with CEN–CENELEC (and other relevant bodies), in particular CEN/TC 474[9] translating this emerging Member State/cluster experience into guidance and, where appropriate, harmonized standards over time (e.g., composition ranges, pressure/temperature envelopes, metering and monitoring protocols).

To support near-term delivery, regulatory continuity is essential. **New technical requirements should be accompanied by grandfathering and transitional arrangements**, avoiding retroactive application to infrastructure already in advanced development or at FID, except where clearly justified on safety grounds. Where additional certainty is needed to unlock strategic projects, the framework should allow **targeted, case-by-case flexibility** under clear and transparent conditions.

5. De-risking measures for early CO_2 transport and storage investment

Regulation alone will not address the market failure currently constraining CCS deployment. **Effective deployment requires a combination of targeted regulatory measures and financial and non-financial de-risking instruments** that together provide the business case clarity needed for first-mover investment decisions.

In the current ramp-up phase, early CO_2 transport and storage projects combine high upfront capital needs with uncertain utilization and "cross-chain" dependencies (capture, transport, storage must all come online in sync). Proven technologies are available, but deployment is primarily held back by financing gaps, not by a lack of technical readiness.

These risks are amplified by how liabilities are distributed along the chain. Under the EU ETS[10] (Articles 14 and 15), each operator is required to monitor, report, and verify its emissions and to surrender allowances corresponding to those emissions on an annual basis.

[9] Technical Committee on CO_2 capture, transportation, utilization, storage (CCUS) and carbon accounting.
[10] Directive 2003/87/EC

Combined with demand uncertainty and the risk that other parts of the chain are delayed or downsized, this weakens bankability for first movers, especially for cross-border and multi-user infrastructure. Against this backdrop, financial and non-financial de-risking measures are essential: **CCS deployment ultimately depends on a viable business case, and the absence of predictable revenue streams, compounded by the business interruption risk[11] under the EU ETS, will continue to constrain investment**.

Different risks sit in different parts of the value chain, and no single measure can simultaneously address volume risk, cross-chain risk, and affordability at the same time. Therefore, a coherent approach should treat de-risking as a toolbox, combining:

a) **Demand-side revenue certainty (closing the "value gap")**: deploy Contracts for Difference (CCfDs) or equivalent ETS-linked guarantees financed through ETS revenues to provide predictable revenues for verified captured and permanently stored CO_2 volumes, bridging the gap between ETS price formation and the total cost of CCS. An efficient EU-wide competitive CCfD mechanism, for example via a dedicated "CCS Bank"[12] with competitive allocation to support cost-effectiveness, would materially strengthen business case clarity for first movers, as existing support instruments alone are often insufficient to reduce revenue risk to bankable levels. This could be complemented by stronger market pull for low-carbon products, building on the forthcoming Industrial Accelerator Act (IAA)[13] including a voluntary low-carbon label for industrial products, including steel, and procurement/support criteria that aims to improve low emissions performance and demand visibility.

b) **Infrastructure finance and anticipatory investment support**: establish targeted EU and national funding windows for first-of-a-kind networks and shared terminals or hubs, including support for anticipatory sizing where justified by credible demand signals, to avoid serial, undersized build-out and repeated permitting cycles. Complement this with cross-border cost allocation mechanisms that recognize the EU-wide value of shared infrastructure and help avoid stranded "first-link" investments, especially for backbone or interconnected projects.

c) **Volume and cross-chain risk sharing**: use public measures such as capacity bookings or government-backed guarantees to reduce early underutilization risk, and structure risk sharing so costs are distributed across low-carbon product value chains, emitters, transport and storage operators, and the public sector, reflecting the system-wide climate value created during ramp-up.

d) **Storage-specific financial security design that lowers upfront barriers**: implement Article19 of CCS Directive financial security in ways that reduce upfront barriers, for example through levy-based mechanisms per ton stored, while ensuring long-term obligations are covered; coordinated approaches across borders can support consistency and a level playing field.

De-risking can also include non-financial measures that improve visibility and coordination across the value chain, helping reduce transaction costs and support timely FIDs. Voluntary EU CO_2 platforms could assist by enabling transparency and basic matchmaking between emitters, transport operators and storage operators, using existing public or voluntarily disclosed data and respecting commercial confidentiality. Any such platform should avoid standardized contracts or additional compliance burdens and could be particularly useful for smaller or dispersed emitters where voluntary aggregation helps to bring forward bankable volumes.

[11] This refers to the "double penalty" issue, where CCS users pay twice for the same CO_2 emissions: first, through fixed tariffs and "take-or-pay" contracts for capture, transport, and storage services (even during outages); and second, by surrendering EU ETS allowances for uncaptured-equivalent volumes if chain-wide disruptions (e.g., injection downtime or permitting delays) occur involuntarily. This compounds financial risk for first-mover emitters in shared infrastructure, as they bear both contractual obligations to transport and storage operators and full carbon-price exposure without relief.

[12] https://iogpeurope.org/resource/policy-proposal/

[13] Proposal for Industrial Accelerator Act Regulation

National examples of CCS risk-sharing and delivery models

Different national approaches already illustrate workable risk-sharing models that can inform EU design, without importing a single "one-size-fits-all" template:

- **UK**: the Transport & Storage Regulatory Investment (TRI) model uses an economic license and regulated "allowed revenue" (that includes a revenue reconciliation mechanism funded by the government in case tariffs do not cover the allowed revenues) to attract investment into first-of-a-kind networks, under an independent regulatory framework administered by Ofgem.
- **Denmark**: State-aid approved schemes to support CCS roll-out through competitively awarded support, structured to incentivize delivery while ensuring payments are linked to verified outcomes.
- **Norway**: the Longship value chain demonstrates how state support agreements can allocate risk across multiple actors and enable open-access transport and storage infrastructure.
- **Netherlands**: projects such as Aramis and presence of de-risking mechanism such as the SDE++[14] illustrate the role of public-private collaboration and open-access infrastructure development to enable scale.
- **Belgium**: the Antwerp@C approach illustrates how shared, open-access CO_2 transport and export infrastructure (including an intra-port CO_2 pipeline network plus liquefaction, buffer storage and marine loading) can be enabled through EU funding support and industrial anchoring customers, helping de-risk early investment in multimodal cross-border CO_2 chains.

At EU level, **the priority is not to replicate any single national model, but to enable a coherent architecture that can accommodate diverse approaches**. This includes EU-level demand-pull instruments (e.g., CCfDs), cross-border cost allocation tools, and state-aid-compatible guarantee mechanisms, combined with rules that ensure interoperability and cross-border operability.

6. Permitting for CO_2 infrastructure

Across the EU, permitting remains a primary bottleneck for clean industrial investment and enabling infrastructure.[15] Evidence from CINEA's Innovation Fund permitting work[16] shows that permitting is widely experienced as a major challenge, with projects reporting lengthy timelines, high administrative efforts, and material schedule risk when permits are delayed. At the same time, delays are driven less by applicant readiness and more by systemic weaknesses in governance, administrative capacity, coordination, and legal predictability, especially in review and appeal stages and where requirements are interpreted inconsistently across authorities.

The EU acquis already contains a broad range of legislative instruments that impose substantive and procedural reporting obligations as a precondition for obtaining permits[17]. While each act serves legitimate objectives, taken together they create a dense and fragmented compliance landscape. Similar environmental, biodiversity, water and emissions assessments are often required under multiple legal bases, sometimes with differing methodologies, timelines, or competent authorities. These overlapping requirements are frequently administered by different national or regional bodies, leading to duplicative documentation, sequential procedures, and repeated information requests. In certain Member States, additional national gold-plating further increases complexity.

[14] The Netherlands' SDE++ (Stimulation of Sustainable Energy Production and Climate Transition) is an operating subsidy that covers the project's funding gap by paying the difference between project costs and market revenues for large-scale renewable energy or CO_2-reducing projects over a fixed support period (typically 12–15 years).

[15] https://iogpeurope.org/wp-content/uploads/2026/02/Joint-Statement-of-the-Informal-Coalition-on-Permitting-2.pdf

[16] https://cinea.ec.europa.eu/document/download/30fe079f-dfa3-48d8-b676-8d566d0cd896_en?filename=PERMITTING%20%20INSIGHTS%20FROM%20INNOVATION%20FUND%20PROJECTS.pdf

[17] Environmental Impact Assessment Directive (2011/92/EU), the Habitats Directive (92/43/EEC), the Birds Directive (2009/147/EC), the Industrial Emissions Directive (2010/75/EU), the Water Framework Directive (Directive 2000/60/EC), the EU Emissions Trading System Directive (2003/87/EC), the Ambient Air Quality Directive (2008/50/EC) as well as sectoral instruments such as the TEN-E Regulation (2022/869/EU) and the Net-Zero Industry Act (2024/1735/EU).

For CCS and CO_2 transport and storage infrastructure, this fragmentation has direct deployment consequences. Such projects inherently trigger multiple permit-granting procedures across capture, transport, and storage components. Where reporting obligations overlap and authorities operate in silos, timelines become lengthy and unpredictable, creating legal uncertainty and undermining investment decisions.[18] This complicates the synchronization of the value chain and affects the scalability and bankability of CO_2 infrastructure.

Improvements should therefore focus on enhancing procedural coherence within the existing acquis. A horizontally applicable coordination framework for CCS-related permitting could streamline overlapping reporting requirements, enable parallel processing across authorities, introduce binding timelines covering the full permit lifecycle, and designate a clear coordinating authority, without altering substantive environmental safeguards. Strengthening alignment and predictability would reduce fragmentation while maintaining high standards and would materially improve Europe's capacity to deploy CCS at scale.

[18] Trinomics Assessment of environmental administrative costs and the potential for simplification (slides of 26 January 2026) indicate that Across all instruments, businesses face approximately 250–400 administrative obligations in total.

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