EREF European Renewable Energies Federation

EREF input to the public consultation on methodologies for certifying permanent carbon removals

Brussels, 22 September 2025

Introduction

EREF welcomes the opportunity to provide input to the consultation on the delegated act establishing certification methodologies for permanent carbon removals. We strongly support the development of a credible, transparent and workable framework that can strengthen the integrity of carbon removals in Europe and prevent greenwashing.

As a general principle, EREF underlines that carbon capture and storage or utilisation (CC(U)S) technologies can only play a complementary role in Europe's decarbonisation pathway. Renewable energy and energy efficiency must remain the primary drivers of climate neutrality, and carbon removals must not be used to delay the phase-out of fossil fuels or divert resources away from proven solutions.

Within this framework, however, EREF recognises the important contribution that nature-based solutions, in particular BioCCS (also referred to as BECCS) and biochar, can make. These approaches remove CO_2 from the atmosphere and enable its long-term storage, while also providing additional benefits such as reliable renewable energy, system flexibility, green molecules, fertiliser substitution and soil improvement. To unlock this potential, the Carbon Removal Certification Framework (CRCF) must embed the principle of additionality, ensuring that these tools are applied to address unavoidable residual emissions in hard-to-abate sectors, and provide operators with the clarity, predictability and investment certainty required to realise genuine negative emissions.

Alignment with the EU energy transition

The CRCF must be fully consistent with the Union's wider climate and energy objectives. It should accelerate, and never delay, the transformation to a fully renewable energy system. Under no circumstances should the framework provide incentives that prolong the use of fossil fuels or divert critical resources away from renewable energy and

efficiency. Instead, it should establish a robust and transparent framework for genuine removals that are consistent with long-term climate neutrality and sustainability.

Principles for responsible deployment

In this light, EREF underlines that any deployment of CC(U)S technologies must remain strictly limited to sectors where emissions cannot otherwise be avoided. Fossil-based CCS must not be incentivised under this framework and must not be used to prolong the operation of fossil fuel installations or even build new ones. Instead, priority must be given to renewable energy and efficiency, with CCS limited to complementary roles such as BioCCS and certain hard-to-abate industrial processes. To be considered "green" carbon storage, only nature-based carbon removals (such as afforestation, soil carbon sequestration, biochar and wetland restoration) and BioCCS should qualify. All other approaches must be clearly distinguished as fossil-based.

The CRCF should also ensure that carbon removal activities are developed where they are macro-economically viable and make efficient use of resources. Long-distance transport of CO_2 is associated with significant inefficiencies, costs and risks, and should not be the default solution. Instead, projects should be prioritised where capture, use and storage can be integrated regionally, making best use of existing infrastructure and minimising additional burdens.

BioCCS as a priority pathway

For BioCCS and biochar specifically, the delegated act should reflect their multiple contributions to climate and energy goals. Bioenergy already plays a central role in Europe's renewable energy supply, providing reliable renewable energy, flexibility and renewable molecules for heating and industrial applications. When combined with CCS, it can deliver significant negative emissions, estimated at up to 200 million tonnes per year (around six percent of EU emissions in 2022), while also delivering co-benefits such as soil improvement and fertiliser substitution. To unlock this potential, green storage solutions such as BioCCS should be given priority within a hierarchy of carbon removal technologies, supported by robust certification, long-term storage requirements and clear liability rules for leakage.

Market barriers and investment risks

To realise this potential, however, investment conditions must improve. An adequately designed framework, based on feasibility, economic efficiency and tangible climate benefits, can encourage companies to drive the market for negative emissions forward.

At present, market conditions remain challenging. Investment insecurity, low levels of support and highly volatile CO_2 prices have so far prevented many operators from realising projects or expanding existing plants in areas such as industrial process heat or heating networks combined with carbon capture. The delegated act must therefore provide clarity, reduce unnecessary complexity and help bridge what the Commission has rightly described as a funding gap.

To close this gap, financial and regulatory support must be directed towards green carbon storage solutions such as BioCCS and biochar. Investments in these technologies should be prioritised because they directly contribute to negative emissions, co-deliver renewable energy and system benefits, and avoid the lock-in risks associated with fossil-based approaches. Ensuring that funding flows into genuinely sustainable carbon removal options is essential for credibility, efficiency and the achievement of EU climate targets.

It should also be noted that reference to durability should not be used to lead to a tiered approach to investments, and that particularly nature-based solutions are not positioned as lower-grade solutions compared to technical solutions. This would cause false positioning and a distortion of a nascent market.

Complementarity with existing biomass uses

It is equally important that carbon capture does not have a negative impact on existing plants and value chains. Biomass power plants, heating networks and the provision of heat in buildings already make a key contribution to the European economy and the defossilisation of the energy sector, and carbon capture should be a complementary extension of these contributions rather than a disruption.

With biomass being a limited resource, competing uses must be carefully considered. A rigid interpretation of the cascading principle would artificially direct material flows and neglect market realities. Instead, biomass must be used where it delivers the greatest economic and climate benefits. Valuable saw wood belongs in construction, while thinning material, forest residues such as crown material and branches, residues from the wood industry, agroforestry by-products, and waste wood are well suited for energy use where no higher-value alternatives exist. These synergies reflect the diversity of applications that sustain both markets and climate protection, and should not be undermined.

Clarification of definitions and terms

In this context, EREF welcomes the draft but stresses that clarifications and adjustments are necessary. The term “nameplate biomass consumption” is not sufficiently clear and requires further explanation to ensure uniform interpretation across Member States.

Several further definitions also require refinement. The definition of biochar should follow established standards, such as the European Biochar Certificate, making clear that biochar is a solid material with a maximum H/Corg ratio of 0.7 and resistant to biological degradation.

The definition of BioCCS must explicitly acknowledge that it concerns bioenergy facilities with carbon capture, in other contexts referred to as BECCS. Without this element, the scope remains incomplete.

The annex also refers repeatedly to “certification schemes” but does not define the term. The Commission should clarify that the definition in Article 2 of Regulation (EU) 2024/3012 applies.

Similarly, the definition of “capture facility” is incomplete, since such facilities cannot operate independently but are extensions of biomass plants. The delegated act should reflect that the operator of a capture facility is also the operator of the energy plant. To avoid legal ambiguity, the definition should clearly state that capture facilities are extensions of existing bioenergy plants and that the same operator bears responsibility for both installations.

EREF strongly supports the principle set out in Article 3(2, that biogenic CO_2 must only be captured as a by-product of energy, goods or services, and not produced solely for the purpose of storage, as this ensures the environmental integrity of BioCCS activities

Integration with existing EU frameworks

The delegated act should also be more coherent with other already existing frameworks. It currently refers only to the EU ETS registry, but there must also be a direct link to the Union Database (UDB) under the Renewable Energy Directive. Since RED sustainability criteria are already referenced, including the UDB would be a logical extension and an important step to avoid duplication and unnecessary administrative burden. In the same vein, biomass that already qualifies as sustainable under the RED must automatically be recognised as such under the CRCF. Requiring separate certification would create

unnecessary additional costs and bureaucracy for operators without providing any added value in terms of sustainability.

Recognition of BioCCU benefits

In terms of scope, the delegated act places its main emphasis on permanent storage of CO_2, but it leaves unaddressed the role of biogenic CO_2 use in value chains. A clear differentiation must be made between fossil and biogenic CO_2, since only the latter can contribute to a closed and sustainable carbon cycle. When biogenic CO_2 substitutes fossil CO_2, for example in the chemical industry and other sectors currently reliant on fossil inputs, it prevents additional carbon from entering the cycle. Even if this use does not constitute a permanent sink, it delivers real climate benefits and should be recognised as part of the natural carbon cycle. At present, BioCCU remains a blind spot. A framework that acknowledges its role and creates incentives for its development, without equating it with permanent removals, would be more comprehensive and better suited to encourage innovation and investment.

Biochar supply chain realities

For biochar in particular, the rules must be adapted to market realities. The draft describes biochar carbon removal as a project or activity with full responsibility placed on the plant operator, covering the entire chain from production to application. In practice, however, biochar is traded as a commodity, and only its final application determines whether it becomes a carbon sink. This makes robust monitoring and verification indispensable. It would be more accurate to refer to “carbon sink potential” until the biochar is actually applied and a sink is created.

Monitoring should be carried out digitally and along the supply chain, allowing certified intermediaries to assume responsibility. Plant operators must, of course, remain able to monitor their own activities, but they should also be able to delegate responsibility to other certified actors where appropriate. Such an approach would clarify the ownership of sink rights and allow responsibilities to be transferred, which is especially important for small and medium-sized operators who cannot realistically oversee the entire chain on their own. Digital MRV systems are indispensable for establishing legal certainty, ensuring transparency, and preventing disputes between operators and intermediaries.

The annex should therefore replace the notion of a “project/activity” with “supply chain” and explicitly allow for the delegation of responsibilities. Further clarification is also required on the monitoring period and on which actors are responsible for monitoring. In particular, the delegated act should specify which concrete activities fall under

monitoring obligations, and clearly assign responsibility to the appropriate actor in the supply chain to avoid disproportionate burdens on small operators. Digital MRV systems should not only complement but, where possible, replace rigid activity plans for biochar, ensuring that every shipment is tracked from production to final application.

Activity period and bankability

The rules on activity periods and responsibilities should also be reconsidered. The proposed ten-year activity period for BioCCS is too short, and the Commission should clarify the rationale for setting this specific timeframe. Capture facilities are built to last for decades, and financing models require longer horizons. Restricting the period to ten years risks misaligning certification timelines with investment cycles, undermining bankability and discouraging project development. A period of twenty to thirty years, or a more flexible arrangement, would better reflect the realities of project financing. At the same time, the framework should allow for shorter periods where activities do not endure as long, rather than imposing a rigid limit.

Furthermore, the requirement that capture facility operators take sole responsibility for activity and monitoring plans does not reflect the reality of the sector. Other actors in the value chain may have the necessary expertise, and the framework should allow them to assume responsibility for their respective parts of the process. This should apply not only to monitoring but also to the submission of activity plans, which should be open to all qualified operators along the value chain rather than being confined to the capture facility operator.

Exclusion of fossil CO_2

EREF also strongly supports the clear exclusion of fossil CO_2 from certification. Operators of co-firing plants must not be allowed to claim credits for capturing fossil emissions or to receive remuneration for doing so. The regulation must ensure that fossil CO_2 is clearly differentiated from biogenic CO_2, with definitions applied consistently and transparently. Without such clarity, there is a significant risk that fossil emissions could be fraudulently assigned as biogenic emissions, undermining the integrity and credibility of the framework.

This is essential to ensure that the CRCF does not create incentives that prolong the operation of fossil fuel installations or divert resources away from renewable energy and efficiency. Fossil-based CC(U)S carries significant lock-in risks, high costs, and very limited climate benefits, and it must not be allowed to undermine the CRCF's purpose of enabling genuine negative emissions. Only by maintaining a strict and enforceable

distinction between fossil and biogenic CO_2 can the regulation deliver an efficient, credible and environmentally sound EU climate policy instrument.

Sustainability and consistency with RED III

Finally, on sustainability, EREF welcomes the reference to Article 29 of RED III as the appropriate basis for ensuring sustainable biomass. Introducing new or stricter criteria beyond this would add complexity without improving outcomes. At the same time, experience from Germany shows that the RED is already difficult to reconcile with national forest legislation and further layering of regulation risks creating barriers rather than enabling investment. Ensuring consistency with RED III is therefore crucial for legal clarity, avoiding overlaps and fostering long-term investment security across Member States.

The application of the cascading principle must also remain consistent with RED III. Following Article 3(3), references to the cascading principle should apply only to energy support schemes and should not be interpreted in an overly rigid way that distorts existing value chains and market conditions. In this context, certification bodies should ensure compliance with national RED implementation, but additional verification requirements should be limited to cases where operators receive public support for energy production.

Biomass must continue to be used where it is most sensible in economic and climate terms, including in construction, furniture and paper industries as well as for energy in heating networks, industrial process heat and combined heat and power. The methodology should also recognise that combining carbon removals with energy generation creates distinct economic and environmental benefits compared to energy production alone.

Conclusion: robust framework as a complement

In conclusion, EREF supports a delegated act as an important step towards a coherent certification framework for carbon removals. However, the draft requires adjustments to definitions, stronger alignment with existing frameworks and a more realistic approach to implementation. This includes clarification of definitions such as “nameplate biomass consumption,” alignment of definitions for biochar, BioCCS and capture facilities, integration of the Union Database and automatic recognition of RED-certified biomass, acknowledgement of the role of BioCCU, improved MRV for biochar through supply-chain-based digital systems, longer activity periods to ensure

investment certainty, shared responsibilities across the value chain, strict exclusion of fossil CO_2, and consistency with RED III sustainability provisions.

At the same time, it must embed the overarching principle that carbon removals are only complementary to the Union's primary pathway: the rapid phase-out of fossil fuels and the full deployment of renewable energy and efficiency. Only under these conditions will the CRCF deliver genuine, credible and sustainable contributions to climate neutrality.

For more information, please contact

Prof. Dr. Dörte Fouquet

Director

doerte.fouquet@eref-europe.org

Dirk Hendricks

Secretary General

dirk.hendricks@eref-europe.org