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Cascade Climate

Cascade Climate's Response to EU ETS Review Consultation: Integrating Carbon Removal with Safeguards

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Cascade Climate is a philanthropy-backed climate non-profit organization focused on addressing underrepresented and underresourced aspects of the climate challenge. These challenges—which have significant potential impact on climate and our way of life—are unlikely to be resolved through decarbonization alone.

For these emerging climate solutions, Cascade helps remove the biggest bottlenecks to progress by leading ambitious initiatives spanning markets, policy, and science. Our initial focus is Enhanced Rock Weathering (ERW) as a promising durable[1] carbon dioxide removal and agronomic solution.

While our initial focus has been accelerating progress in ERW, we are first and foremost a climate organization. Integration of carbon dioxide removal (CDR) into the EU's Emissions Trading Scheme could unlock demand for carbon removal if done correctly. However, this must not come at the expense of climate mitigation. We also believe the ETS is just one policy lever to support CDR demand, and other options should be considered, particularly over the next five to ten years.

Cascade Climate supports careful consideration of integrating CDR into the EU ETS, but only with robust safeguards that preserve the system's primary function of driving emissions reductions. Any integration must be designed to complement, not substitute for, deep decarbonization efforts.

CDR Integration Safeguards

We support the EU considering carbon removal integration into the ETS only with appropriate safeguards in place, including but not limited to:

Avoiding Mitigation Deterrence

CDR incorporation should not lead to changes in the gross emissions cap trajectory. CDR should complement, not substitute, emissions reduction efforts. The ETS's primary function—driving down absolute emissions—must be preserved.

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[1] The terms "durable" and "permanent" are often used interchangeably when referring to carbon storage on longer time scales (typically 1,000+ years). However, "durable" is more scientifically accurate since no carbon storage is truly permanent on geologic timescales.Different removal methods achieve different durability periods—from centuries to millennia. We use "durable" throughout this document unless referencing policies or frameworks that use "permanent" to maintain consistency with the source.

Limiting Integration to Durable Removals Following the "Like for Like" Principle

All regulated entities covered in ETS should prioritize emissions reduction to the extent possible. For any residual emissions that cannot be abated, we advocate for prioritizing carbon removal projects with durable carbon storage reservoirs such as in geologic formations, through carbon mineralization, and through dissolved bicarbonates.

Afforestation, reforestation, or storage through other types of terrestrial biomass is considered short-term and not equivalent to a fossil fuel emission reduction. In such cases, the ETS is not a good candidate for integration, and alternative mechanisms should be used to incentivize adoption.

ERW is considered permanent under the current EU Carbon Removal Certification Framework (CRCF) since the practice leads to carbon storage via dissolved bicarbonates in the ocean on timescales of tens of thousands of years. However, additional safeguards around measurement, reporting, and verification (MRV) would be needed before considering ERW's integration into the ETS.

Requiring Robust Measurement, Reporting, and Verification (MRV)

Only removals meeting robust quality and environmental integrity criteria, such as those described under the CRCF, should be considered for potential integration.

Much of our work at Cascade has been to set a high-rigor bar for MRV in the field of ERW through the development and publication of our a framework distilling the best available science and practices for ERW. This framework was developed with support from over 50 academic scientists, 20 commercial project developers, and numerous not-for-profit organizations.

ERW should only be considered for integration into the ETS if underpinned by robust methodologies with limited uncertainty in the calculated carbon removed. Furthermore, monitoring and liability frameworks would need to allow for fungibility across carbon removal methods.

Addressing the Price Differential Between Carbon Removal and Emissions Reduction Projects

If the EU decides to integrate carbon removals into the ETS, we recommend incorporating additional design features. Due to the current and anticipated price differential between carbon removal and emissions mitigation credits, direct integration into the ETS without removal requirements will contribute little demand. Design options could include minimum CDR quotas, pathway-specific targets, or separate price support mechanisms.

Complementary Near-Term Policies

The EU should also consider complementary policies to support demand for carbon removals, particularly over the next five to ten years. If the EU decides to integrate removals into the ETS,

the process could take years to design and implement and would contribute little to near-term demand signals.

Strong near-term demand signals for carbon removal are pivotal for sustaining the momentum and preparing for the scale-up of the industry. The Intergovernmental Panel on Climate Change's sixth assessment report indicates gigaton-scale carbon removal will be needed alongside deep emissions reductions to meet mid-century climate targets. Near-term demand support is critical alongside considering longer-term incorporation into compliance markets. Example policies that should be considered include:

Procurement Policies

The EU can directly purchase carbon removal credits or establish a buyer's club to encourage additional public and private purchasing of carbon removal credits. This creates predictable demand, helps establish pricing benchmarks, and provides market validation for emerging technologies.

Activity-Based Payment Policies

Government payments for implementing removal activities, particularly in agricultural contexts such as ERW or biochar application, can incentivize carbon removal deployment. Key design elements must include dual recognition of the climate and agronomic benefits of the practices and technical assistance for implementation and monitoring. For example, ERW has potential to provide soil health benefits such as pH control, improved nutrient availability, and—through these benefits—increased crop yield. One approach could include incorporating CDR activities into Common Agricultural Policy incentives such as eco-schemes.

Conclusion

Cascade Climate supports careful consideration of CDR integration into the EU ETS, but only with robust safeguards that preserve the system's primary climate mitigation function. CDR integration must complement, not substitute for, deep decarbonization efforts.

Our key recommendations include: maintaining the gross emissions cap trajectory, limiting integration to durable removal methods, ensuring high-quality removal units through robust MRV requirements, and incorporating design features to address price differentials. For ERW specifically, robust MRV safeguards are essential before ETS integration.

Importantly, the EU should pursue complementary near-term policies—including procurement and activity-based payments—to support CDR demand while longer-term ETS integration is being designed. The climate urgency demands both immediate action and careful long-term policy design.