

In or Out: What's best for carbon removals and the EU ETS?

As the Commission assesses the potential inclusion of negative emissions in emissions trading, we set out our position: CDR is not ready for inclusion in the ETS, nor is it needed for the market to function until 2040.

CDR technologies which could deliver permanent removals, including Direct Air Carbon Capture and Storage (DACCS) and Capture and Storage of Biogenic CO₂ (BioCCS), still need to mature. These technologies have yet to be demonstrated at scale in the EU and important gaps remain, both in Monitoring, Reporting and Verification (MRV) standards and infrastructure for transport and storage of CO₂. Finally, the sustainability of biomass-dependent CDR needs to be carefully considered; in particular impacts on biodiversity, water use, and land use must be assessed in conjunction with competition for land and demand for biomass from other sectors when assessing the lifecycle emissions of biomass-dependent CDR.

CDR is not needed for the ETS before 2040

Surplus allowances accumulated in previous years are sufficient to meet demand under the Commission's base policy scenario until 2040. Including carbon removal units in the ETS prematurely could exacerbate oversupply issues that have historically undermined the ETS's efficiency. Attempts to control the supply are unlikely to work in practice, as the flow of issued carbon removal units is hard to estimate before projects are invested in. Keeping the "gross cap" (cap + removals supply) constant would have other negative impacts and would also not work after 2038.

Integrating CDR prematurely would pose a risk to the environment

As long as permanent removal units are not proven to be strictly equivalent to abated CO₂, using them to counterbalance residual emissions in the ETS could lead to spiralling emissions, as investment would likely flow towards the cheapest CDR technologies rather than industrial abatement measures. Using Carbon Contracts for Difference (CCfDs) to balance cost differences between carbon removal units and allowances might exacerbate this issue and further weaken the incentive for industries to reduce their emissions.

Investment (rather than a market) is needed to develop permanent removals

Permanent CDR might be our only chance to achieve long-term climate neutrality and net negative thereafter. Yet, they require investment to overcome the above-mentioned limitations. Market mechanisms alone cannot drive investment in early-stage development or shared infrastructure under uncertain regulatory conditions. Some public funding (i.e. Horizon Europe, Innovation Fund) is already accessible, but a dedicated public investment vehicle is likely needed to fund early-stage projects and infrastructure. Contributions to a public fund could be mandated for ETS polluters, duly mirrored by the Carbon Border Adjustment Mechanism (CBAM) to ensure fair competition.

Uncertainties currently surrounding the development of permanent removals would make inclusion in the EU ETS premature and risky, and could undermine the system's environmental integrity. Nevertheless, exploring and investing in these technologies is essential, as they will be needed to achieve climate neutrality and negative emissions in the long term. Until the existing challenges—such as technological maturity, MRV standards, and infrastructure—are resolved, CDR should remain outside the ETS. With proper investment and development, permanent removals could become viable for a post-2040 market, reducing market instability and aligning with the EU's climate goals.