

Brussels, 2 May 2022

Guiding principles for CDR methodologies

Negative Emissions Platform (NEP) welcomes and supports the Commission's initiative to design a Carbon Removal Certification Mechanism (CRC-M).

- NEP encourages the Commission to provide a framework that is robust, credible, implementable and well in line with science.
- NEP strongly encourages the Commission to develop a framework that establishes comprehensive and robust rules for each type of carbon removal, on top of a common EU minimum standard.
- A timely development of methodologies to enable policy support is critical. A direct implementation of the CRC-M makes for further possibilities to improve methodologies and gain real-life experiences that need to be driving the scale-up of carbon removal. Therefore, NEP encourages the Commission to implement methodologies as soon as possible, i.e. when robust assessments are achieved. Difficulties in the assessment of certain CDR methods shall not undermine progress towards implementation of approaches which are ready to be incentivized to scale in the short-term.

As discussed in a scoping paper to inform the CRC-M, the portfolio of options to remove CO₂ from the atmosphere is wide.¹ NEP believes that the variety of carbon removal methods requires specific assessments by removal type. We encourage the Commission to address design challenges outlined by McDonald et al.,² and build on this scoping paper. NEP offers the following design principles:

1. Mechanism governance

The mechanisms governance has to safeguard that:

 Transacted carbon credits are genuine, measurable, additional, not double counted, permanent, and based on method-specific robust assessment frameworks;

EU Transparency Register: 351267138656-84

¹ Bey et al., 2021. Certification of Carbon Removals. Part 1: A synoptic review of carbon removal solutions. Note that this paper was contracted by the Commissions' DG CLIMA.C.2 to inform the development of the CRC-M.

² McDonald et al., 2021. Certification of Carbon Removals. Part 2: A review of carbon removal certification mechanisms and methodologies. Note that this paper was contracted by the Commissions' DG CLIMA.C.2 to inform the development of the CRC-M.



ii. Support is given to enable an uptake and implementation of projects in order to maximise the potential positive impacts on the climate.

We welcome a framework that emphasises and critically assesses the permanence of carbon removals and favour a framework that is supportive of European sustainability targets in a broader sense, e.g. safeguarding against harms to biodiversity. We encourage the Commission to authorise and/or make use of existing frameworks from both, voluntary and compliance frameworks. Hurdles faced by project developers stemming from regulatory uncertainty and/or administrative costs shall be managed efficiently.

2. Additionality

Accounting and safeguarding against double counting

Permanent industrial carbon removal methods, such as BECCS, DACS and PyCCS are additional in terms of finance and regulatory requirements today. Due to the clear lack of financial incentives there is an overall shortfall of projects implemented in Europe contrasting with the required scale of permanent industrial removals that the EU needs to achieve its net-zero target by 2050 and a net-negative carbon balance thereafter.

Whilst the assessment of additionality is pointing towards market-based transactions only, we see the need for a registry that allows to track and monitor the amount of removals and reversals, in line with the objective specified in the Communication on Restoring Sustainable Carbon Cycles. The development of such a registry/accounting scheme can benefit from similar frameworks available for GHG emissions and register the physical tonnage stored. It should be based on capture and storage means and be reflective of carbon removals happening in Europe, independent of subsequent market transactions.

3. Carbon leakage and system boundaries Robust Life Cycle Assessment (LCA)

Carbon capture from the atmosphere (via photosynthesis or chemical processes) and its subsequent storage are both crucial elements of any credible removal project. Therefore, NEP strongly believes in the need for a robust LCA assessment with system boundaries that are looking at entire carbon removal systems from cradle-to-grave. This minimises leakage to a great extent and further incentivizes project developers to provide solutions that are sustainable throughout their value chain to the extent possible. The CRC-M should define the LCA methodology to ensure that removals are counted in the same way throughout the EU.



4. Permanence: Made to last

Carbon removal methods have different storage durability and ease of MRV. Whilst we need all kinds of removals to contribute to the EU sustainability targets, durability of storage is a crucial element to assess for removals. NEP believes that permanence of industrial carbon removal is well positioned to be assessed with existing European frameworks (e.g. the EU ETS and CCS directive for projects involving geological storage). Such a dedicated MRV framework that contains regulatory clarity over monitoring periods and liabilities shall result in a correspondingly high assessment of industrial carbon removals and their eligibility to present well-established baselines for the assessment of permanence.

5. Verification and validation: Trusted by third parties.

Given vast MRV experience from carbon markets for emissions and removals, validation and verification of projects can follow the logic of tested and approved schemes. We see synergies and potential collaborations with accredited non-public actors in the field and encourage the Commission to allow for a competitive ecosystem. Such an ecosystem shall be safeguarding the success of all centrally authorised frameworks/methodologies.

NEP cautions that methods not relying on permanent storage will, due to MRV issues, face considerable challenges in addressing many of the key questions of a CRC-M. The Commission should address these challenges, whilst keeping up the ambitious timeframes for the work of establishing a CRC-M for removals (especially those with permanent storage). We are happy to continue our support for robust frameworks and provide insights on concrete projects from members represented by the Platform.