ZEP Briefing – Communication on Sustainable Carbon Cycles

Background

On 15 December, for the first time, the European Commission presented a Communication to support carbon dioxide removals. The Communication is not a legislative document, however, it clarifies the timeline for the upcoming legislative initiatives on Carbon Dioxide Removals (CDR) for 2022. Key elements of the communication of relevance for CCS, CCU, and CO_2 infrastructure are highlighted below.

Content

- The focus of the Communication is on nature-based and technology-based solutions. CCS and CCU, DACCS and BECCS are highlighted among the technological solutions.
- The Commission clarifies that by 2028, removed CO_2 that will be captured, transported, used, and stored by industries should be reported and accounted by its origin (fossil, biogenic or atmospheric). Criteria such as the duration of the storage and the risk of reversal will also be considered when developing the certification framework.
- The Commission sees the Innovation Fund (IF) as the main financial instrument to support the scale-up of industrial CDRs. The IF is expected to unlock around EUR 25 billion over the period 2021-2030 (based on a carbon price of EUR 50/tCO_2). Under the IF, the Commission will explore possible design options and implementation modes for carbon contracts for difference (CCfD) to support industrial CDRs. Funding for R&I development will be provided under Horizon Europe – specific calls on DACCS and BECCS will be part of the next work programme (2023-24).
- Strong emphasis on CO_2 infrastructure development as a key enabler for the upscale of industrial CDRs – the focus is on the creation of 'CCUS hubs', where many CO_2 emitters can benefit from a common infrastructure. The development of cross-border CO_2 infrastructure should be carried out in line with the Directive for geological storage of CO_2 (also referred to as 'CCS Directive'). The Commission sees the CO_2 infrastructure as 'open-access and cross-border transport network for CO_2' to ensure competition between different transport and storage operators.
- 5Mt of CO_2 should be annually removed from the atmosphere and permanently stored through frontrunner projects by 2030.
- CCU will be promoted in coherence with the accounting rules and the objectives described in the EU ETS Directive (*CO_2 used with the intention of permanent storage*) and ReFuelEU Aviation initiative (*supporting the demand for sustainable synthetic fuels*). Captured CO_2 from waste streams, sustainable sources of

biomass or directly from the atmosphere will replace fossil carbon in the sectors that will remain carbon-dependent.

Timeline and key actions

- A Commission proposal on certification for carbon removals will be presented in Q4 2022.
- The guidance documents for the Directive on geological storage of CO_2 covering risk management, monitoring, and financing will be updated.
- A call for Evidence to strengthen the Commission's understanding of carbon removals and key issues for their accounting and certification will be published in early 2022.
- Launch of a study on the development of the CO_2 transport networks (Timeline is unclear).

What to expect from the proposal for an EU regulatory framework for the accounting and certification of carbon removals

The planned proposal will provide an EU regulatory framework for the accounting and certification of carbon removals. The emphasis is on transparent, robust, proper reporting, which will consider the existing legal framework of the EU ETS and its rules for the monitoring and reporting of emissions, as well as on traceability of the carbon. The proposal will define the type of carbon removals that could be accounted in the period after 2030 to neutralise emissions in EU compliance frameworks. In the near-term up to 2030, such accounting and certification framework will be applied on a voluntary basis.

The certification mechanism should first focus on solutions taking place in the European Union that remove CO_2 from the atmosphere with sufficient guarantees on the storage duration, on measurement quality, the management of risk of reversal or risk of 'carbon leakage', supporting the EU's trajectory towards net-zero GHG emissions by 2050.