



Brussels, 7 January 2022

## **Response to the Communication on Restoring Sustainable Carbon Cycles**

### **To the attention of:**

**Mr. Frans Timmermans, Executive Vice-President, European Commission**

**Mr. Mauro Petriccione, Director General, DG Climate Action**

We welcome the publication by the Commission of a Communication on Sustainable Carbon Cycles setting out the vision to reduce the reliance on fossil carbon across the economy. We agree with the Commission that the *“development and deployment at scale of carbon removal solutions is indispensable to climate neutrality and requires significant targeted support in the next decade”*. We call on the Commission to ensure that technological solutions, alongside ecosystem-based methods, receive adequate levels of regulatory and financial incentives to realise their full potential.

### **Propose a binding target for technological carbon removals.**

The ‘aspirational objective’ of removing 5 MtCO<sub>2</sub>/pa by 2030 through carbon removal technologies is an insufficiently ambitious goal given the urgency to kick-start the market for high-integrity high-permanence solutions and their combined removal potential. We welcome the portfolio approach and the inclusion of Pyrogenic Carbon Capture and Storage (PyCCS) / biochar alongside DACS and BECCS among permanent removal solutions available today, as well as further consideration of long-term potential of land and ocean-based enhanced weathering in the technical assessment. However, a purely aspirational approach with regards to technological removal is at odds with the Commission’s own long-term objectives. PyCCS can alone deliver 235 Mt/ CO<sub>2</sub>eq removal by 2035 if current biochar market growth rates are held. Sweden alone is relying on BECCS for up to 2 Mt/CO<sub>2</sub> a year by 2030 and up to 10 Mt/CO<sub>2</sub> a year by 2045. Planned DACS projects are aiming to demonstrate scaling of removal capacity from thousands to millions tonnes in the next decade. We call for an adequately ambitious binding target aligned with the scenarios in the Long-term strategy



showing at least 200Mt/CO<sub>2</sub>eq removal required to compensate for residual emissions by 2050.

### **Develop a robust Carbon Removal Certification Mechanism to enable integration of removals into compliance frameworks.**

We welcome the plan to propose regulation for an EU framework for the certification of high quality carbon removals based on robust accounting rules by the end of 2022, which will be followed by a traceability system of every ton of fossil, biogenic or atmospheric CO<sub>2</sub> captured, transported, used and stored by industries by 2028. The tracking system is a much needed tool to ensure that only the methods that unambiguously remove carbon from the atmosphere are included in the CRC-M and the permanence of storage becomes one of its key metrics. Permanence of storage should be defined based on its timeframe (e.g. 1,000 years) vs the type (e.g. geological). This would incorporate the ability to store CO<sub>2</sub> into concrete, which provides millennia of storage and could accelerate the DACS and BECCS solutions. Methods with high integrity storage and with existing (PyCCS / biochar) or low-complexity MRV methods (DACs, BECCS) could in principle be integrated into compliance frameworks ahead of 2030. On the other hand, we caution against making carbon farming credits eligible to companies from outside of the bio-economy sector which would make it possible to 'compensate' for continued fossil emissions with highly reversible solutions.

### **Strengthen the EU innovation and R&D frameworks and cross-cutting regulation**

We welcome the proposal to increase the size of the Innovation Fund, the eligibility of permanent removal technologies, and the possibility to use state aid to close the financial gap of first of a kind (FOAK) projects. We propose that existing EU instruments and regulations are further strengthened in that respects through:

- creation of a dedicated funding stream for technological removals like DACs, BECCS and PyCCS under the Innovation Fund; support in increasing project implementation maturity level with Innovation Fund;



- inclusion of R&D funding streams in upcoming Horizon Europe work programme for currently underrepresented methods: PyCCS / applications of biochar in soils or materials and enhanced weathering on land;
- introduction of a sub-obligation and innovation credits for synthetic aviation fuels from atmospheric carbon delivering near carbon-neutral fuels through ReFuelEU Aviation proposal;
- a supportive investment environment for open access CO2 transportation and storage infrastructure through TEN-E revision;
- recognition of innovative long-lasting products based on biochar amendments (like concrete or asphalt) as carbon sinks in relevant sustainable products frameworks.

### **Mobilise national instruments to remove financial barriers**

In comparison to the carbon farming section the Communication lacks details on the role of Member States efforts to develop permanent carbon removal capacity. The EU has a good track-record of delivering results with binding targets accompanied with national-level financial incentives. In addition to setting a binding ambitious target for technological removals, we recommend that Member States should be required to include planned pathways of deployment of technological removals, aligned with national biophysical limits and technology development potentials, alongside the projected levels of residual emissions in the upcoming update of National Energy and Climate Plans by 2023. These plans should include assessment of applicable instruments that can help remove financial barriers, such as:

- tax incentives or credits to reduce tax liability of companies that invest in capital intensive technologies such as DACS and BECCS. The approach could be modelled on the US 45Q (with exclusion of EOR activities);
- obligation schemes that require businesses to deploy or invest in a defined volume of permanent carbon removal or face a penalty;



- governmental service contracts for large-scale projects (BECCS, PyCCS / biochar, Waste-to-energy CCS, DACS,) which could be a highly effective way of incentivising FOAK projects and have the added benefit of enabling government to procure specific volumes of removals at a timescale which supports net-zero commitments;
- targeted grants and loans for decentralised (PyCCS / biochar) or smaller-scale (enhanced weathering) removal projects;
- public procurement incentives (for example dedicated schemes for construction materials with embedded air-captured CO<sub>2</sub>, applications of biochar in road and building construction).

We remain at your disposal in case of any questions you may have.

Sincerely,

Anna Dubowik

**Secretary General**

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