# Incentivizing Carbon Dioxide Removal Technologies

Brainstorm Agenda

**Date**: September 24, 2019 **Time:** 9:30 - 12:30 **Location**: ERCST offices, Rue Archimède 61, 1000, Brussels

Carbon Dioxide Removal Technologies (CDRTs) are expected to play an increasingly important role, both up to and after 2050. At the international level the IPCC highlights how they could be necessary: the IPCC notes that CDR deployment over the  $21_{st}$  century is substantial in most pathways considered  $1,5^{\circ}$ C-consistent.

At the European level, the European Commission has called for carbon neutrality by 2050 in the 'A Clean Planet for all' communication, which presents eight possible long-term strategy scenarios. Two of these scenarios are considered in line with 1,5°C. In that communication, the EC notes that some emissions will need to be compensated with CDRTs, even in their most ambitious scenarios. The 1,5TECH scenario relies heavily on bioenergy and carbon capture and storage (BECCS) and technologies that will capture CO2 directly from the air, while the 1,5LIFE scenario favours the reuse of CO2, by using it to produce synthetics fuels and plastics, rather than underground long-term geological storage.

In order to move ahead with CDRTs, they need to be incentivized (not least financially) through a framework. The focus of ERCST will be on how to incentivize CDRTs, both at the local level (EU) and cross-border (Article 6 of the Paris Agreement).

Both at the international and EU level there is a clear future reliance on CDRTs, but there are still considerable issues with CDRTs. As yet many still remain unproven, especially at the level they would need to be deployed to match expectations. The environmental sustainability in the longer term is also not always guaranteed. Therefore, this workstream will not promote specific CDRTs, but rather focus on the enabling framework that is necessary to deploy these technologies at scale, if they are proven to be sustainable.

This brainstorm session is part of a longer-term engagement and the first in a series on this topic. A second and public meeting is foreseen for the **25th of November in Brussels**.

# 9:15 **Registration and coffee**

- 9:30 Welcome
  - A. Marcu, Director, ERCST

## 9:40 **Presentation of ERCST: background on mechanisms to incentivize CDRTs**

ERCST will start the session with a short presentation, covering:

- the current state of play on CDRTs,
- their envisaged role in key strategies and forward-looking scenarios, and
- elements of potential mechanisms and frameworks to incentivize CDRTs effectively. while ensuring their long-term sustainability.

This presentation will be followed by a round of initial remarks from selected stakeholders, focusing on the following questions:

- Which options are there for a framework to incentive CDRTs? For example, within the EU, the mechanisms for enabling CDRTs could be embedded in the EU ETS, the Common Agricultural Policy, and/or a common framework. What would work better?
- How can emission reductions through CDRTs be made available for international trading under Article 6 of the Paris Agreement?
- How would the point of emission be defined in both EU ETS and Article 6?
- Is CCS for enhanced oil recovery or coal plants with CCS be considered CDRTs?
- How does CCU fit into the issue of CDRTs, especially considering the ECs reliance on synthetic fuels and materials in its long-term strategy scenarios?
- Should there be a role for energy in the CCS discussion, or should it focus on currently non-abatable industrial emissions?
- How could REDD+, and experiences learned from it, fit into this picture?
  - R. Van der Meer, Heidelberg Cement
  - S. Van den Plas, Carbon Market Watch
  - A. Vihavainen, Puro
  - H. Felder, Stora Enso
  - P. Zakkour, Kapsarc
  - T. Haugland, Carbon Limits
  - O. Geden, German Institute for International and Security Affairs (SWP)
  - S. Yeh, Chalmers University of Technology

### Reaction by the European Commission

• C. Holzleitner, DG Clima.

After the initial remarks from selected stakeholders the discussions will be opened up to all stakeholders present.

### 12:20 Way forward and end of the meeting

• A. Marcu, Director, ERCST