

## **ZEP response to the EU ETS consultation**

## Revision of the EU ETS will need to be aligned with climate neutrality by 2050 and deliver on the increased 2030 ambitions

The upcoming revision of the EU ETS directive presents the opportunity to raise the ambitions of the EU ETS, aligning them to the objective of climate neutrality by 2050 and to the new, increased 2030 greenhouse gas (GHG) emissions reduction target as soon as the negotiations will be finalised. As noted in previous responses<sup>1</sup>, ZEP believes in the importance of the 2030 target putting the EU on a cost-efficient pathway towards net-zero by 2050.

The revision of the EU ETS directive will bear several consequences for CCS and CCU projects. As geological storage sites are not evenly distributed among member states, the large-scale deployment of cross-border, European CO<sub>2</sub> transport and storage infrastructure is crucial to reach the European Union's objective of net-zero GHG emissions by 2050. This infrastructure will enable clean, competitive energy and industrial sectors, early large-scale clean hydrogen and, not least, the delivery of significant volumes of carbon emission removals (CDR). Today, there are no incentives to support the uptake of CDR, which will be needed to achieve climate neutrality by 2050 and should be appropriately incentivised. To ensure an effective implementation of the directive, ZEP would like to make the following remarks:

- The transfer of captured CO<sub>2</sub> to a storage site by ship, truck, train or pipeline should be included in the Monitoring and Reporting Regulation Article 49 (a) (ii) or (iii). This calls for alignment between all pieces of legislation connected to the EU ETS, including the TEN-E regulation. ZEP notes that the European Taxonomy for Sustainable Finance allows CO<sub>2</sub> transportation by all modalities – pipeline, ship, barge, truck, and train. Harmonisation and consistency will be needed.
- Some applications of CCU, where CO<sub>2</sub> is captured and stored in a manner intended to be permanent, should be included in a revised EU ETS, e.g. for mineralisation and utilisation of CO<sub>2</sub> for products with a lifetime of at least 100 years.

Upcoming CCS projects – including those in the fourth PCI list – rely on  $CO_2$  shipping to connect capture and storage sites. Without the possibility to transport  $CO_2$  by ship and other modalities, these projects would be put at risk of not becoming operational. This scenario must be avoided at all costs, as CCS and  $CO_2$  infrastructure are prime options for the decarbonisation of energy-intensive industries, where electrification is too costly or not feasible. This outcome is also particularly important to enable early, large-scale production of low-carbon hydrogen from reformed natural gas with CCS.

## Incentivising Carbon Dioxide Removals

Reaching climate neutrality by 2050 will only be possible if mitigation efforts are supplemented with the active removal of  $CO_2$  from the atmosphere<sup>2</sup>. The development of Europe-wide  $CO_2$  transport and storage infrastructure is needed to deliver CDR at the scale that will be required for Europe to achieve climate neutrality.

<sup>1</sup> ZEP response to 2030 Climate Target Plan, Available at <u>https://zeroemissionsplatform.eu/zep-response-to-2030-climate-target-plan/</u>, 2020 <sup>2</sup> ZEP report, <u>Europe needs robust accounting for carbon dioxide removals</u>, 2020



An enabling policy framework and incentives to support timely large-scale deployment of all parts along the CCUS value chain are needed to support the ongoing development of European  $CO_2$  infrastructure and to reach the climate objectives. Such incentives include – but are not limited to – a revised and robust EU ETS directive, which would ensure a functioning and relevant carbon price.

Currently, there are no incentives to capture and permanently store biogenic  $CO_2$  emissions, despite the clear climate benefit of doing so. This is effectively hampering the necessary development and diverting investments in the different parts of the CCS value chain from the industry and energy sectors.

- The European Commission should incentivise carbon dioxide removals (CDR) which can be delivered at a large-scale by the deployment of CCS and CO<sub>2</sub> infrastructure in addition to efforts aimed at climate change mitigation.
- Capture of biogenic CO<sub>2</sub> from industrial or energy installations as a means to realise CDR must be acknowledged.
- CDRs need to be verified through robust life-cycle analysis. Captured CO<sub>2</sub> must be kept away from the atmosphere and stored in a manner that is intended to be permanent.
- The European Commission is tasked with the development of certificates for CDR to be proposed in 2023. ZEP will follow the development and offers its assistance throughout the designing phase. it is crucial that the certification system is designed in a robust and transparent way and that they can be traded.

In a CCS and CCU context, Bio-CCS and Waste-to-Energy with CCS will play an important role for the decarbonisation of energy-intensive industries and the management of residual waste in cities, providing a real and sustainable alternative when recycling and reuse has already taken place<sup>3</sup>.

This revision presents the opportunity to address existing inconsistencies among different pieces of legislation, such as the EU ETS and the REDII directive, regarding the treatment of the sustainability of biomass. It is important that the framework for sustainable biomass is consistent across European legislation.

It should also be mentioned that offsets do not promote primary decarbonisation. The main focus of EU's climate efforts should be on climate change mitigation and cutting emissions. ZEP recalls the discussions around the European Taxonomy for Sustainable Finance, taking the view of hard-sectoral balances.

## About the Zero Emissions Platform

The Zero Emissions Platform (ZEP) is a European Technology and Innovation Platform (ETIP) under the Commission's Strategic Energy Technology Plan (SET-Plan) and acts as the EU's technical adviser on the deployment of Carbon Capture and Storage (CCS), and Carbon Capture and Utilisation (CCU) under Horizon2020 R&I programme (grant agreement 826051).

ZEP supports the European Union's commitment to reach climate neutrality by 2050, defined as net-zero greenhouse gas (GHG) emissions by 2050. To this end, carbon capture and

ZEP report, Europe needs robust accounting for carbon dioxide removals, 2020



storage (CCS) and carbon capture and utilisation (CCU) technologies play a crucial role. These technologies represent a readily available, cost-efficient pathway for the decarbonisation of industrial and energy sectors in the European Union.

Transparency register: 69382094718-43