

ZEP RESPONSE TO CONSULTATION ON CARBON BORDER ADJUSTMENT MECHANISM

The Zero Emissions Platform (ZEP) is a European Technology and Innovation Platform (ETIP) under the Commission's Strategic Energy Technologies 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 (grant agreement 826051).

Achieving climate neutrality will prove to be an unprecedented challenge for the European Union.

As the European Climate Law states, reaching the objective of climate neutrality within the European Union by 2050 will require efforts from all economic sectors in the Union. For energy-intensive industries such as cement, lime and steel – key industrial chains for the European economy, the pathway towards net-zero greenhouse gas (GHG) emissions by 2050 will be technically and economically challenging and the risk of carbon leakage is a serious factor that has to be taken into account.

For these sectors, pathways including CCS represents the lowest-cost route to decarbonisation whilst maintaining industrial activity¹ and preserving existing jobs. CCS can capture and store emissions produced during industrial processes, and it also plays an important role in the manufacturing of clean hydrogen which can be used to fuel energy-intensive industries, transport and households. Thus, a range of technological, policy and regulatory measures will need to be put in place for the European Union to meet its climate objectives.

The development of shared CO₂ transport and storage infrastructure is a no-regret investment opportunity to pave the way for a climate-proof European economy, safeguarding jobs, industrial competitiveness and welfare and its timely development is critical for a cost-efficient decarbonisation of the European economy. The large-scale deployment of technologies such as CCS and CCU will need to be supported through an adequate policy and regulatory framework, addressing the shortcomings of the existing legislation.

A carbon border adjustment mechanism – important to achieve a level playing field and decrease the risk of carbon leakage.

In absence of a global price for carbon and until countries align on climate ambitions, a carbon border adjustment mechanism will be needed in the European Union to achieve a level playing field between the EU and the rest of the world. Such a carbon border adjustment mechanism (CBAM) could decrease the risk of carbon leakage in key industrial value chains and support their cost-efficient decarbonisation pathway. A CBAM should provide both: a strong incentive for industrial decarbonisation and a fair level-playing field, where the best competitor wins the market.

¹ Zero Emissions Platform, "[Climate Solutions for EU industry](#)", 2017

A CBAM should be designed to comply with the EU's trade agreements, as well as World Trade Organisation (WTO) rules, and in a manner which works seamlessly with the climate legislation that it aims to adjust for. In order to be an impactful measure, such mechanism should apply on a sectorial basis and it should be designed taking into account the specific character of each economic sector. It is also vital that accurate carbon accounting is ensured.

The current EU Emissions Trading System (ETS) has not yet been aligned with the target of net-zero GHG emissions by 2050. When revised, it will be crucial to ensure a functioning cap and trade system that delivers an adequate carbon price. In parallel, the Effort Sharing Regulation (ESR) must be adjusted to the same level of ambition, so that the same conditions are applied to all actors and society as a whole.

To incentivise investments in research and innovation, pilots and demonstration projects, there is a need for an effective carbon price which support and develops European industrial and technological leadership on low-carbon technologies such as CCS and CCU.

To summarise, a carbon border adjustment mechanism may ultimately be needed to achieve a low-carbon European industrial sector, supporting the European Union's pathway towards net-zero by 2050.

A revised European Emissions Trading System

The EU ETS is a cornerstone in the EU's policy to tackle climate change by reducing greenhouse gas (GHG) emissions in a cost-effective way. For the EU ETS to deliver climate change mitigation while enabling the deployment at scale of low-carbon technologies and making it economically feasible for companies to invest in the whole value chain of CCS, it is crucial that the upcoming revision of the directive broadens its current scope.

For CCS and CCU projects, the following provisions shall be considered when revising the directive:

- Cross-border CO₂ transportation for permanent storage shall be enabled by all modes of transportation – pipelines, ships, trucks, barges, trains.
- The capture of CO₂ from biogenic sources at industrial and power plants shall be accounted for in the EU ETS.
- Carbon dioxide removals (upon the condition of accurate carbon accounting) should be incentivised. CCS (including CO₂ infrastructure) is a real enabler for large-scale removals of CO₂ from the atmosphere, ensuring that CO₂ is stored in a permanent manner.