EU strategy for CCS and CCU – ZEP input

The Zero Emissions Platform (ZEP) would like to congratulate the European Commission on the first edition of the CCUS Forum.

This initiative comes at a critical moment for Europe's transition to net zero emissions by 2050. With the legally-binding target of climate neutrality by 2050 and an increased emissions reduction target for 2030, carbon capture and storage (CCS) and carbon capture and utilisation (CCU) technologies must be part of the solution for European decarbonisation.

ZEP would like the Forum to become the basis for a much-needed European Union (EU) strategy for CCS and CCU that is aligned with net-zero GHG emissions by 2050 and integrates key policy considerations into a coherent and efficient framework.

How ZEP sees the strategy:

An EU strategy for CCS and CCU should outline the role of these technologies in the EU's vision for 2030 and 2050. It should propose targets, enabling policies, business models, and needed research and innovation (R&I) activities to achieve such targets, as well as allocate resources and address barriers to deployment.

An EU strategy for CCS and CCU should put in place a predictable and long-term framework for investors. This way the strategy will be an important tool for the European Commission to safeguard European industrial activity, enabling industry to contribute in the decarbonisation towards climate neutrality. Collaboration between EU member states, the Commission, and industry will be required to address any challenges or barriers that may arise.

- The strategy should take into account and outline cooperation with EU and neighbouring countries as part of a regional approach to developing new CCS and CCU value chains.
- The strategy should include a focus on capacity building at a national, regional, and local level, as well as activities aimed at raising awareness among national and regional administrations. There is a need for member state authorities to support project promoters in the implementation of CCS and CCU projects.
- The main focus of the strategy should be the successful development and large-scale deployment of cross-border, European CO_2 transport and storage infrastructure.
    - Policies such as the Trans-European Networks for Energy (TEN-E) regulation are key enablers for cross-border integration. Coordination between the development of CO_2 and hydrogen transport networks is also necessary. The Commission should consider the inclusion of CO_2 networks in the Ten-Year Network Development Plans (TYNDP) and assess the potential role of National Regulatory Authorities (NRAs) in enabling gas infrastructure companies to transport CO_2.

- The legal basis for CO_2 transport and storage infrastructure needs to be strengthened, including cross-border liability for CO2 storage. There is a need to look at planning and permitting of CO_2 transport, and to work on CO_2 storage liability arrangements between Member States and other governments).
- The development of regulatory frameworks will further promote CO_2 transport, including interoperability for CO_2 transport by ship (policy vs standards).

- Mapping CO_2 storage across Europe – looking at both onshore and offshore storage sites – is a priority to ensure that CO_2 is stored to the scale that is needed.
- Coherence in cross-border carbon accounting, making it easy to account for CCS and CCU projects, and robust carbon accounting covering all life-cycle emissions, should be a key element of the strategy.
- Funding opportunities/mechanisms for CCS and CCU projects should be clearly mapped out and coordinated between the EU member states also taking into account the EU level. Carbon contracts for difference (CCfD), announced as part of the revised EU Emissions Trading System (ETS) Directive, will be an important tool to support the deployment of low-carbon technologies, giving certainty and predictability to industrial stakeholders.
- The National Energy and Climate Plans (NECPs), as well as the industrial sectoral pathways that will be developed in the context of the Industrial Strategy, will be important tools to promote the development of CCS and CCU projects and to stress their role in cost-efficient industrial decarbonisation.
- A crucial role for the EU strategy is to foster public awareness and social acceptance of CCS and CCU projects by involving societal actors and promoting education. An EU strategy should also explain the benefits of CCS and CCU for a just transition.

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, CCS technologies represent readily available and cost-efficient pathways for the decarbonisation of industrial and energy sectors in the European Union. Some applications of CCU – where CO_2 is stored in a manner intended to be permanent – can also contribute to this goal.