

CCUS consultation

Green Power Denmark welcomes the opportunity to be part of the European legislative process with this response to the European Commission's call for public consultation on industrial carbon management under the European Green Deal.

All available technologies must be deployed to reach the EU goal of climate neutrality by 2050. We should deploy renewable energy capacity at large scale and directly electrify as much of our energy consumption as possible.

Carbon capture, utilisation and storage (CCUS) will also play a significant role in achieving climate neutrality. It will be essential to store CO₂ permanently underground using carbon capture and storage technologies (CCS), which can contribute to significant emissions reductions. But CO₂ is also an important feedstock in carbon capture and utilisation (CCU) technologies, which are crucial for the green transition of hard-to-abate sectors, e.g., avation, shipping, chemicals and high-temperature industry.

It is therefore of vital importance that the European Commission works to promote both utilisation and storage technologies on an equal footing in a new European CCUS Strategy and in future initiatives and legislation.

Carbon capture is an important technology for achieving climate neutrality, but it should never become a reason not to reduce the use of fossil fuels or incentivise investments in technologies and processes that rely on fossil fuels.

European targets for carbon capture

To create a single market for CO₂ benefiting both CCS and CCU, the European Commission should set sectoral EU targets for carbon capture by 2050, including short-term targets to act as clear milestones towards 2050.

EU certification system for CO₂ sources

The recently adopted delegated acts on RFNBO only allow the use of fossil CO_2 for the production of e-fuels to satisfy EU targets for a transitional period until 2036.

It is expected that biogenic CO₂ will become a scarce resource in the future for which CCUS players will have to compete, especially if the political and regulatory focus is directed towards underground storage only. At the same time, Direct Air Capture technologies are currently at a very early stage of maturity. To create the best possible conditions for the deployment of CCU, biogenic fractions of mixed CO₂ sources should be eligible to be used for CCU, provided that the biogenic origin can be documented and the fossil share is stored.

A certification system is central to a cost-effective deployment of a European CO_2 infrastructure and to ensure the free trade of CO_2 . Uniform standards for CO_2 in terms of composition, purity and pressure, as well as standards for the transport value chain ease connections between EU countries. A certification system will also facilitate the possible import of CO_2 from non-EU countries.

The rules for trading CO_2 removals certificates are of great importance for the pricing of CO_2 in the current immature market. Hence, it is important for the establishment of a single market for CO_2 that the current work on the EU carbon removal certification framework is accelerated, which will create greater clarity for the CCUS industry.

European CO₂ infrastructure

Establishing a European CO_2 infrastructure is essential to creating and supporting a competitive and profitable single market for CO_2 and to realise the full potential of CCUS in the EU. The European Commission must therefore prioritise the development of a regulatory framework for CO_2 infrastructure enabling the trade of CO_2 .

To kick-start large scale CCUS in the EU and ensure a certain degree of predictability for investments, it is crucial that the regulatory framework supports multimodal CO_2 transportation. Cross-border and domestic CCUS projects rely on different modalities for the transport of CO_2 such as pipelines, rail, ships, and trucks depending on the location of the CO_2 source and the CCUS technology used. This will require prudent regulation of tariffs and third-party access as well as common planning, milestone setting etc.

The establishment of European CO_2 infrastructure should go hand in hand with hydrogen infrastructure and the deployment of renewable energy. As an example, climate benefits from the use of CO_2 in green e-fuels such as e-methanol and e-kerosene depend heavily on the combination of biogenic CO_2 and green hydrogen produced by renewable energy. If the infrastructures are built in parallel, CCUS can contribute as much as possible to achieve the European climate goals.

The European Commission should analyse European infrastructure needs considering key point sources and possible infrastructure connections and publish the findings for the benefit of all CCUS actors across Member States.

Technology neutral approach to the support schemes of the entire CCUS value chain

European and national support schemes for CCUS technology should not favor either CCS or CCU. This also applies to the Net Zero Industry Act, where CCU should be recognized as a Strategic Net-Zero Technology alongside CCS.

The market conditions and the CO_2 price should determine whether CO_2 is stored using CCS or utilized using CCU. An open competition approach will give more equal access to biogenic CO_2 resources in particular, while favoring one technology will lead to an inappropriate distortion of the CO_2 market. If support schemes only subsidize CCS, prices on biogenic CO_2 will increase resulting in disproportionately high enduser prices on CCU-products such as e-fuels and chemicals with a great risk of delaying the green transition of the hard-to-abate sectors, e.g., avation, shipping chemicals and high-temperature industry.

Please contact us for any elaborations of the above mentioned.

Best regards

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