CARBON CAPTURE, UTILISATION AND STORAGE

Recommendations for an Industrial Carbon Management Strategy in the EU

The world is in a climate emergency. Another record-breaking hot summer underlines that all available technologies must be deployed as a response. Carbon capture, utilisation and storage (CCUS) will play a significant role in limiting the global temperature increase to 1.5 degrees in line with the Paris Agreement.

Reducing emissions by storing CO2 permanently underground will be essential. At the same time, CO2 must be recognised as an important feedstock for decarbonising hard-to-abate sectors such as shipping, aviation, and the industrial sector.

To unlock the full climate potential of CCUS technologies, political and regulatory measures should aim at promoting both utilisation and storage. The following 10 recommendations will support the creation of a single market for CO2, which is fundamental for a thriving European CCUS industry that will play a crucial role in reaching climate neutrality in Europe by 2050.



1 Secure CO₂ Availability for Utilisation & Storage

Both CCU and CCS technologies can only fulfil their full potential if sufficient CO_2 is available. Access to CO_2 can be boosted by:

- 1. Setting EU targets for carbon capture towards 2050.
- 2. Requiring carbon capture on new biofuel, biomass and waste-to-energy plants to ensure availability of biogenic CO₂.
- 3. Phasing in requirements of installing carbon capture on existing biofuel, biomass and waste-to-energy plants.

2

Establish an EU-wide CO₂ Infrastructure

Infrastructure enabling the trade and import of CO_2 is vital to kick-start large scale CCUS in the EU. The first steps towards an EU wide CO_2 infrastructure must be taken by:

- 4. Analysing infrastructure needs connecting key point sources across borders.
- 5. Allowing multimodal transportation to accommodate different CCUS technologies and project locations.
- 6. Developing a European certification system for CO₂ sources with uniform standards for composition, purity and pressure.

3 Support both CCU and CCS with a Technology Neutral Approach

Support schemes favouring CCS may distort the market and increase end-user prices of CCU products disproportionately, ultimately delaying the transition of hard-to-abate sectors. Thus, technology neutrality should be applied by:

- 7. Applying an open competition approach by letting the market conditions and CO₂ price determine whether CO₂ is stored or utilised.
- 8. Granting support across the CCUS value chain in national and European support schemes.

4

Promote utilisation of biogenic CO₂

Climate benefits associated with CCU products depend on the use of sustainable biogenic or atmospheric CO₂. Utilisation of biogenic CO₂ can be promoted by:

- Regulating a prioritised use of biogenic and atmospheric CO₂ in hard-to-abate sectors that depend on carbon feedstock, i.e. through higher and binding targets for uptake of e-fuels in aviation and shipping.
- Setting out an EU definition of biogenic CO₂ to ensure sustainable deployment of CCU that displaces the emission of fossil CO₂ into the atmosphere.