

Treatment of CCS and CCU under Horizon Europe

The European Zero Emissions Technology and Innovation Platform (ZEP) is concerned that the separation of Carbon Capture and Storage (CCS) and Carbon Capture and Use (CCU) under the Commission's proposal for Horizon Europe will create unnecessary barriers to developing these technologies.

In the current proposal CCS falls under the "energy" cluster of the Commission's Horizon Europe proposal; CCU meanwhile is within the "industry" cluster. This seems an illogical separation as CCU and CCS will both need to be available to industry and to the energy sector. This is further reflected in the ITRE Committee's report on the Regulation which refers to "Industrial CO₂ valorisation... via CO₂ capture and utilisation" without mention of storage.

This split does not reflect the reality of how industrial areas are likely to decarbonise. It is likely CO₂ will be captured with some sent for use while the majority is permanently stored. To meet its goal of becoming a zero-carbon port by 2050, the Port of Rotterdam PORTHOS project envisions an ecosystem comprising CO₂ transport and storage, CO₂ use, hydrogen production, power production and energy efficiency. ZEP has long advocated for the development of such CO₂ hubs to enable cost-effective development of regional shared CO₂ infrastructure.

CCU can provide an important value stream for CO₂ and therefore incentivise industry to develop CO₂ capture. However, the global existing market for CO₂ today is about 80Mt; even with the development of new products, the potential of CCU to contribute to emissions reduction is small. Furthermore, the CO₂ in products will eventually be released back to atmosphere, either relatively quickly as in the case of fuels, or over a longer term in case of building products. Therefore, CCU is not an alternative to CCS but can be complementary in some circumstances.

ZEP Recommendation: Include CCS and CCU within both the Industry and Energy of Horizon Europe to enable both to be progressed together.