

Europe is getting serious on CCU: time to walk the talk

CO₂ Value Europe

CO₂ Value Europe is the EU Association representing the Carbon Capture and Utilisation (CCU) community in Europe and working for the recognition of CCU as an essential pathway to reach EU climate goals in 2030, 2040 and 2050. CCU refers to established and innovative industrial processes that aim at capturing carbon – either from industrial point sources or directly from the air – and transforming it into value-added products such as synthetic fuels, chemicals and building materials.

The 2040 climate target and the Industrial Carbon Management Strategy (ICMS)

The European Commission released on 6 February two crucial documents for the climate future of the EU: the [Communication on the 2040 climate target](#) and the [Industrial Carbon Management Communication](#). The 2040 climate target says that “*all zero and low carbon energy solutions (including renewables, nuclear, energy efficiency, storage, CCS, CCU, carbon removals, geothermal and hydro-energy (...)) are necessary to decarbonise the energy system by 2040*” and adds that “*the development of CO₂ value-chains through carbon capture and use (CCU), nature-friendly biobased materials, mechanical and chemical recycling can all boost the development of non-fossil feedstock to substitute fossil fuels in carbon-based products.*”. The ICMS emphasises that “*capturing CO₂ and recycling it to produce advanced synthetic fuels, chemicals, polymers or minerals is another important and innovative aspect of an industrial carbon management value chain*”. It also highlights that “*up to a third of the captured CO₂ could be used [in 2040]*” – ~93Mt, and up to 200Mt in 2050, meaning about 45% of a total 450Mt of carbon captured.

At CO₂ Value Europe, the concept of carbon circularity is our DNA. Our goal is to demonstrate that CCU will be an absolute must to help ‘defossilise’ production for sectors that are hard to electrify – and despite crucial progress made over the last two years, CCU, as a concept, has remained a blind spot for the EU policy towards the climate transition. Therefore, having such a clear & explicit recognition by the European Commission of the absolute need to deploy CCU is a *major* step forward. But this is only the beginning of the journey of having CCU consistently supported by EU policies.

The 2040 target and the ICMS are now compasses pointing Europe in the right direction. But we need to set this movement in motion with the right incentives. Some of it has been progressing swiftly, on CCU fuels and mineralisation. But other aspects are lacking: e.g. under current EU rules, using oil to produce chemicals is treated as equal to using captured carbon to create that same chemical. It cannot be that policies aiming to move away from a fossil economy do not reward the use of alternatives to fossil resources: we need rules on accounting, products, and production to disincentivise the use of virgin fossil carbon and reward the use of captured carbon. The ICMS makes reference to the objective of 20% non-fossil carbon in chemicals and plastics set in the Sustainable Carbon Cycles Communication in 2021, but, three years later, this objective is only repeated and has not been implemented in legislation. And further bottlenecks including the temporal limits in the use of unavoidable process emissions still exist and become a hurdle in the final investment decision of many CCU projects in the EU.

We look forward to contributing to the work of EU institutions to reach a 90% reduction of GHG emissions in Europe by 2040 and deploying CCU technologies at scale, in particular through the [results from our quantitative assessment](#) of CCU’s contribution to climate objectives.

Tudy Bernier
Policy Director
CO₂ Value Europe
+32 472.11.90.36
tudy.bernier@co2value.eu

Franklin Streichenberger
Senior Policy Manager
CO₂ Value Europe
+32 470.67.03.74
franklin.streichenberger@co2value.eu