

Press release

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German experts on CO₂ utilization launch a petition for the full integration of renewable Carbon Capture and Utilization (rCCU) in the Renewable Energy Directive (RED)

The authors of the petition ask European decision makers involved in the revision of the Renewable Package to include six crucial mechanisms in the legislation

As the authors explain in the petition, CO₂ can be captured from biofuel and biogas production or various industrial processes, from flue gas from coal, natural gas or crude oil plants (purified & conditioned) or directly from the air (direct air capture). To utilize the Carbon Dioxide (CO₂), renewable energy for the chemical reduction of CO₂ is required. From CO₂ and H₂, a wide range of fuels and chemicals can be produced by catalytic processes such as methanisation, methanol synthesis (and further processes) or Fischer-Tropsch synthesis. CCU technologies also include biotechnology processes with bacterial systems, algae, cyanobacteria and synthetic biology for example. The different microorganisms process CO₂ using different sources of energy and produce a wide range of fuels and chemicals.

The authors argue that Carbon Capture & Utilization (CCU) technologies will play a crucial role in the future renewable energy system and for climate protection. CO₂ is not just another raw material, intermediate or waste; in terms of volume, it is the most important greenhouse gas. When being processed with renewable energy, CO₂ is an infinite resource for producing fuels and chemicals with a high potential for climate protection. When speaking about this combination of CCU with renewable energy as the only energy source to reduce CO₂, the term renewable CCU or rCCU has recently been coined.

Apart from offering an infinite solution to the ever growing hunger for resources of humankind, the most important role of rCCU is the ability to store renewable electricity over a long time without losses and to convert fluctuating renewable electricity into fuels (for transport and for reconversion into electricity) and chemicals. Therefore, rCCU is systemically important for the liberalized electricity market, since it offers the much-needed possibility to increase the flexibility of the grid and by this, to increase the share of renewables in the European electricity mix.

The petition calls on decision makers to acknowledge that the European Union cannot afford to miss or to delay the deployment of this new option to utilize and store renewable electricity, which is to extend the applications for renewable energy to renewable fuels and sustainable chemistry. The European Union should become the leader in rCCU, not only in research and development, but especially in applying and fully utilizing the potential.

The ongoing development of the 2030 Climate and Energy Framework and the reform of the Renewable Energy Directive (RED) is a unique opportunity to establish a regulatory framework in which rCCU is fully integrated. This opportunity should not be missed.

Therefore, the authors of the petition ask decision makers involved in the revision of the Renewable Package to include six crucial mechanisms in the legislation.

The relevance of the rCCU concept and its potential are not yet fully understood by most of the policy makers and stakeholders. The rCCU sector does not yet have a lobby, which is normal

for a new sector consisting only of pilot plants. These are the reasons why the authors want to give rCCU a strong voice.

The authors ask for support for this petition and for additional comments and ideas.

You can download the full text of the "Petition for Integration of renewable CCU in the RED" and support it with your signature here: www.co2-chemistry.eu/CCU-petition

The petition, additional ideas from the signatories and the feedback from the policy will be presented and discussed at the huge conference on CCU in December: 5th Conference on Carbon Dioxide as Feedstock for Fuels, Chemistry and Polymers, 6 - 7 December 2016, Maternushaus, Cologne, Germany (www.co2-chemistry.eu).

Responsible under press legislation (V.i.S.d.P.):

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