

**CO<sub>2</sub> Value Europe**  
**Response to REDII Inception impact assessment**

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CO<sub>2</sub> Value Europe (CVE) is the European association dedicated to Carbon Capture and Utilisation (CCU) and is representing over 65 members from different sectors along the CCU value chain.

E-fuels generated from CO<sub>2</sub> and renewable energy are essential to de-fossilize the transport sector and a wide range of European industries and thereby achieve the goals of the European Green Deal and Paris Agreement. Within the REDII, e-fuels are recognized as renewable liquid and gaseous transport fuels of non-biological origin (RFNBO).

As liquid and gaseous energy carriers, these CO<sub>2</sub> based fuels provide an immediate solution to reduce or even reaching net zero CO<sub>2</sub> emissions in a variety of fields, including road transport, shipping and aviation. Indeed, every unit of e-fuels displaces one unit of fossil fuel. Moreover, in the transportation sector, CCU-derived fuels can immediately contribute to reduce net CO<sub>2</sub> emissions because they can be used in existing combustion engines and do not require any change to the existing fuel distribution infrastructure, unlike other solutions

The needed CO<sub>2</sub> capture and conversion technologies have predominantly been developed in Europe and have steadily matured over the last few years. Now, the RED II should offer a comprehensive regulatory framework that could bring these essential technologies to market and unfold their vast CO<sub>2</sub> reduction potential. CVE believes following key points will be crucial in defining a regulatory framework for e-fuels:

- *An increase in the goal of 32% share of renewable energies in the EU's final energy consumption is necessary and aligned with EU goals for 55% emission reductions by 2030 and climate neutrality by 2050.*
- *To accelerate the reduction of CO<sub>2</sub> emissions in all forms of transport across Europe, it is crucial to establish a level playing field between all low or zero emissions energy carriers including e-fuels, (advanced) biofuels and electricity.*
- *A level playing field in the transport sector can be supported when appropriate sub-targets and multipliers apply consistently also to H<sub>2</sub> and subsequent transformations of H<sub>2</sub> to CCU fuels across all transport sectors.*
- *E-fuels which emit CO<sub>2</sub> during use can have the same impact on Well-to-Wheel (WTW) emissions as 'zero emission vehicles' (ZEV) powered by electricity or hydrogen. Therefore, the same legislative support should be given to e-fuels which can power hard-to-electrify transport, as is given to direct use of electricity and hydrogen.*
- *Current Tank-to-Wheel (TTW) emission standards which apply to automakers, favor ZEV and are biased against vehicles which operate on high blends or pure alternative energy carriers which generate TTW emissions. The RED II should support emission standards which reflect the CO<sub>2</sub> abatement from utilization of alternative energy carriers.*
- *Specific targets of renewable energy consumption should be extended to further sectors, apart from transport. Indeed, renewable hydrogen and CCU products like e-methanol or e-methane can be very important for the chemical, process and other industries.*

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- *Every unit of e-fuels displaces one unit of fossil fuel. Therefore, RED II allows all industrial emission sources of CO<sub>2</sub> which otherwise would be released to ambient air as feedstock for e-fuels. Any confusion about the 'color of CO<sub>2</sub>' should be avoided in the directive and delegated acts.*
- *RED II must define in a clear and robust way how e-fuel plants can take renewable electricity from the grid, while considering industrial realities. Guarantees of Origin are the best instrument to document the renewable origin of electricity and the directive should support the use of such instruments. At the same time, the REDII revision should synchronize with the current process of developing the Delegated Acts for renewable electricity use under REDII. Until this is done, operators should be granted a flexibility period during which they can develop their projects to deploy e-fuels and achieve emission reductions without unrealistic constraints on renewable energy supply.*
- *Existing fuel specifications for gasoline limit the use of alternative energy carriers due to limitations on blending percentages and oxygen content. As tests have shown that new blends can be safely adopted, the Commission should ease the adoption of alternative fuels which are compatible with existing car fleets as well as the introduction of high blends or pure alternative fuels for new generations of vehicles.*