

Context

The recently published Innovation Fund call¹ stipulates that environmentally safe carbon capture and utilisation (CCU) is part of the technologies that can substantially contribute to mitigating climate. It also stipulates that CCU can be funded if the capture of CO₂ occurs within one of the activities under the ETS directive, or if the utilisation of CO₂ results in products substituting carbon intensive ones from the ETS sectors, even if carbon is captured outside the activities of Annex I.

Such projects require large-scale industrial cooperation to develop the necessary business case in order for such projects to emerge and scale-up. The “WestKüste100” project in Germany is a positive example of such cross-industry cooperation that combines large-scale carbon capture in a cement plant with other technologies to enable the hydrogen economy at a territorial scale and the effective decarbonisation of several subsectors.

EU ETS Monitoring and reporting regulation / Article 49

The EU ETS Monitoring and reporting Regulation² (MRR) lays down rules for the monitoring and reporting of greenhouse gas (GHG) emissions and activity data pursuant to the EU ETS Directive 2003/87/EC. Article 49 deals with CO₂ that is captured in an ETS installation and transferred out of the installation.

Article 49 stipulates that CO₂ can be subtracted from EU ETS emissions (i.e. not emitted from the installation), if the captured CO₂ is transferred out of the installation for geological storage or to produce precipitated calcium carbonate. No provisions are made for the CO₂ that is captured (thus not emitted by the installation) and transferred out of the installation for use as an industrial feedstock and / or in products substituting more carbon intensive ones (e.g. to produce synthetic fuels and materials).

The CO₂ captured under CCU schemes is not emitted by the installation that captures it, regardless of its final use (exactly as is the case when CO₂ is captured for geological storage or the production of calcium carbonate). Not subtracting the CO₂ that is captured (thus not emitted) would be in contradiction with the principle of direct emissions that underpins the good functioning of the EU ETS. The CO₂ captured from an installation is not released in the atmosphere and therefore does not constitute a direct emission as per art. 3(b) of the EU ETS Directive. The reasoning held by the Court of Justice in the Schaefer Kalk case (case C-460/15) also holds for uses where the emission occurs later and with a different operator, such as is the case for e-fuels for example. Contrary to the situation of permanent storage or mineralization, the release at a later stage implies an economic allocation. Following the Court’s reasoning, there is no doubt that a CCU installation captures CO₂ without releasing it in the atmosphere and that the accounting for the emission therefore needs to take place where and when the CO₂ is effectively released into the atmosphere at a later stage.

As CCU forms a desirable and high-potential route for industrial decarbonisation and the creation of efficient carbon cycles, it must be enabled by the regulatory framework. As currently written, the MRR does not provide the necessary incentive for CCU schemes. The business case for large-scale CCU projects relies on the ability of the plant that captures the CO₂ to deduct it from its emissions, regardless of the downstream use of the carbon (incl. for permanent geological storage, for the production of precipitated calcium carbonate as well as other uses). The investments and operational costs of such capture technology are born at the industrial site capturing the CO₂, which in turn must be able to deduct the captured CO₂ from its emissions as it is not emitted to the atmosphere.

CCU technologies are an essential pillar in our transition towards a carbon neutral economy and must be enabled by the regulatory framework. In this context, the MRR that is currently under review and will lay

¹ Innovation Fund Large-scale Projects, InnovFund-LSC-2020-two-stage, Version 1.0, 3 July 2020

² COMMISSION IMPLEMENTING REGULATION (EU) 2018/2066 of 19 December 2018

down the GHG monitoring and reporting rules for the 2021-2030 period must therefore include carbon capture and use in its Article 49 to leave no uncertainties. It must enable installations that capture CO₂ (i.e. not emitting it) to subtract it from their emissions under the EU ETS, whether used for permanent geological storage, for the production of precipitated calcium carbonate, or used in products substituting more carbon intensive ones.

Proposed Amendment to the MRR

Draft MRR	Proposed amendment
Article 3	
<p>(54) 'CO₂ capture' means the activity of capturing from gas streams CO₂ that would otherwise be emitted, for the purposes of transport, utilisation or geological storage in a storage site permitted under Directive 2009/31/EC;</p>	<p>New: (64): 'CO₂ utilisation' means the use of CO₂ for e.g. the production of energy carriers (e-fuels), chemicals and carbon-based materials [, as well as the use as a technological fluid.]</p> <p>(65) e-fuels include gaseous or liquid fuels produced from water, renewable electricity and captured CO₂.</p>
Article 49 - Transferred CO₂	
<p>1. The operator shall subtract from the emissions of the installation any amount of CO₂ originating from fossil carbon in activities covered by Annex I to Directive 2003/87/EC that is not emitted from the installation, but:</p> <p>(a) transferred out of the installation to any of the following:</p> <p>(i) a capture installation for the purpose of transport and long-term geological storage in a storage site permitted under Directive 2009/31/EC;</p> <p>(ii) a transport network with the purpose of long-term geological storage in a storage site permitted under Directive 2009/31/EC;</p> <p>(iii) a storage site permitted under Directive 2009/31/EC for the purpose of long-term geological storage;</p> <p>(b) transferred out of the installation and used to produce precipitated calcium carbonate, in which the used CO₂ is chemically bound.</p>	<p>1. The operator shall subtract from the emissions of the installation any amount of CO₂ originating from fossil carbon in activities covered by Annex I to Directive 2003/87/EC that is not emitted from the installation, but:</p> <p>(a) transferred out of the installation to any of the following:</p> <p>(i) a capture installation for the purpose of transport and long-term geological storage in a storage site permitted under Directive 2009/31/EC;</p> <p>(ii) a transport network with the purpose of long-term geological storage in a storage site permitted under Directive 2009/31/EC;</p> <p>(iii) a storage site permitted under Directive 2009/31/EC for the purpose of long-term geological storage;</p> <p>(b) transferred out of the installation and used to produce precipitated calcium carbonate, in which the used CO₂ is chemically bound.</p> <p>(C) transferred out of the installation for uses in products substituting more carbon intensive ones, incl. in sectors listed in Annex I to Directive 2003/87/EC.</p>

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