

November 8, 2021

**Re: Request for Comments: EU Emissions Trading System (ETS), proposal for a directive – COM (2021) 551**

Electrochaea GmbH (Electrochaea) appreciates the opportunity to submit the following comments to the European Commission consultation on the EU Emissions Trading System directive review (ETS). Our comments address questions in the proposal for a directive – COM (2021) 551, recital 40, page 32.

Electrochaea is a supplier of an industrial scale biomethanation technology that uses a biocatalyst to produce synthetic methane from carbon dioxide (CO<sub>2</sub>) and green hydrogen (H<sub>2</sub>). The product is a renewable fuel that is referred to as biomethane, renewable gas or e-methane.

Renewable fuels, such as e-methane, play a crucial role in the green economy, especially in hard to decarbonize sectors. Production of e-methane allows CO<sub>2</sub> from hard to decarbonize sectors or biological sources to be used to produce low-carbon options, such as renewable gas, to help reach the EU net-zero target by 2050.

Electrochaea welcomes the Commission review on the ETS directive and the revision on the incentives towards reaching the green transition. The EU energy and climate policies should ensure a long-term framework that allows businesses to capture CO<sub>2</sub> and use that CO<sub>2</sub> for the production of low-carbon solutions. These fuels should be classified as RFNBOs (renewable fuels of non-biological origin), since the energy in these fuels is derived from hydrogen produced with renewable electricity and water. Increasing the demand for e-methane can drive additional economic benefits for the European population.

Electrochaea has the following comments to the EU emission Trading System (ETS) directive review, proposal for a directive – COM (2021) 551.

## **I. Comments**

### **A. As stated in COM (2021) 551, recital 40, page 32, the original emitter of CO<sub>2</sub> should be responsible for accounting the captured CO<sub>2</sub>.**

On page 32, recital 40 it is stated, *“Where recycled carbon fuels and renewable liquid and gaseous fuels of non-biological origin are produced from captured carbon dioxide under an activity covered by this Directive, the emissions should be accounted under that activity.”* Electrochaea agrees that the original emitter of the CO<sub>2</sub> should account for the emissions and is also subject to surrendering its ETS allowances. Therefore, the Commission should clarify in the upcoming implementing act the requirements regarding e-fuels CO<sub>2</sub> accounting.

**B. Coherence is key: The link between ETS and REDIII directives indicates that captured CO2 used for renewable fuels production should be deemed carbon neutral.**

The link between the review of RED and ETS should be more clearly stated with respect to use of CO2 for production of renewable fuels. The CO2 used for the production of the fuel should be deemed “carbon neutral” for REDII/REDIII purposes, regardless of whether the renewable fuels are considered to be RFNBOs or RCFs under the Renewable Energy Directive.

In the ETS review proposal, it is indicated that the entity responsible of capturing the CO2 is responsible for the accounting of the emissions related to this CO2 and is thereby subject to surrendering ETS allowances for it. Therefore, under the ETS it should be stated clearly that the producer of CO2-based fuels should have access to use “carbon neutral” CO2 for which emissions have already been accounted for by the “original emitter”.

In the Commission’s proposal to review the Renewable Energy Directive review (RED III), the Commission inserts a new Article 29a on greenhouse gas emissions saving criteria. On pg. 46, it is stated: *“Energy from recycled carbon fuels may be counted towards the greenhouse gas emissions reduction target referred to in Article 25(1), first subparagraph, point (a), only if the greenhouse gas emissions savings from the use of those fuels are at least 70%.”* Since the delegated act specifying the method to calculate the greenhouse gas emissions saving from RFNBOs has not yet been published, it is not currently possible to determine if a given RFNBO will meet the criteria. The calculation of the greenhouse gas emission savings from RFNBOs which use hydrogen as a feedstock as well as carbon dioxide will also require explicit instructions for emissions saving calculations. We expect that emission savings of at least 70% are only possible if the carbon dioxide has already been accounted for under ETS, or if the CO2 is derived from a biological source. Some uncertainty can be removed if the Commission states in the upcoming delegated act on RFNBO, that when CO2 is used in the production of an RFNBO, and the original emitter has already accounted the CO2 under the ETS, that the CO2 emitted upon combustion is deemed “carbon neutral” for the purposes of REDIII.

To meet EU’s climate goals all available methods must be utilized. Electrochaea is concerned that the regulations situation described above may limit the available sources of carbon for the production of renewable fuels to carbon sources covered by ETS and biogenic carbon.

Thank you for the opportunity to provide our input about the role of renewable fuels in the zero-emission economy.

Sincerely,



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