

To the attention of:

Director General Ditte Juul Jørgensen
Director General Mauro Petriccione
Director General Henrik Hololei
Director General Kerstin Jorna

Brussels, 21. September 2021

A balanced approach to accounting renewable energy electricity for hydrogen production

Dear Mrs Juul Jørgensen,
Dear Mr Petriccione,
Dear Mr Hololei,
Dear Mrs Jorna,

The recast of the Renewable Energy Directive (hereinafter referred to as “REDII”) offers the opportunity for the uptake of Renewable Fuels of Non-Biological Origin (RFNBO), e.g. sustainable renewable hydrogen and hydrogen-based products to achieve climate targets in the transport and industrial sectors at the same time. The market ramp-up of renewable hydrogen could create over 5 million new jobs by 2050¹ – a much needed development to revitalise the European economy after the COVID-19 pandemic. The Commission recognised these opportunities and, with its EU Hydrogen Strategy², it aims to create 40 GW of electrolysis capacity within the EU by 2030.

The transport sector will be a crucial uptake market for renewable hydrogen as the willingness to pay is particularly high. At the same time, the newly published “Fit-for-55 package”³ is extending, through the REDII revision, the use of RFNBOs in the industry; it is introducing, through the ReFuelEU Aviation, a separate quota for synthetic aviation fuels; it is considering, through the FuelEU Maritime, the use of RFNBOs in the maritime sector. Hence, the implementation of the Delegated Act (DA) of article 27 of REDII, which sets the rules for the access of RFNBO producers to renewable electricity, will be of key importance for both industry and transport.

While we fully agree that increased demand for renewable energy should be met with additional renewable energy generation capacity, this responsibility should not be placed only on specific energy consumers (e.g. RFNBO producers) but should be assumed at systemic level at the scale of Member States.

The requirement to prove “additionality”, placed solely on the responsibility of RFNBO producers, is the single highest regulatory barrier holding back renewable hydrogen deployment in Europe. Moreover, the criteria imposed by the REDII create major competitive imbalances and discrimination not only affecting hydrogen production, but also renewable energy producers. Countries with already high shares of Renewable Energy Sources (RES) (early movers) and consequently less potential to build new capacity (compared to other countries) are also placed at a competitive disadvantage. Furthermore, the additionality requirement, places RFNBO at a severe competitive disadvantage against any substitutes, both fossil fuels as well as other renewable alternatives (such as biofuels).

¹ https://www.fch.europa.eu/sites/default/files/Hydrogen%20Roadmap%20Europe_Report.pdf

² <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0301>

³ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en

The signatories of this letter advocate for a balanced approach that reflects the unique role of RFNBOs in helping deliver an integrated, resilient, sustainable, and fully decarbonised energy system.

Recommendations for the development of the criteria of the delegated legal act on RED II Art. 27:

Additionality

- Guarantees of origin (GO) and Power Purchase Agreements (PPA) are already in use today and are sufficient to demonstrate the renewable character of the purchased electricity, as well as the fact that the RFNBO producers are *“adding to the renewable deployment or to the financing of renewable energy”*⁴. PPA are unsubsidised agreements, where the fuel producer pays the renewable energy provider for the renewable energy used. PPA enable renewable energy assets to exist and to function on the basis of a predictable business case and are therefore by default adding to the financing of renewable energy.
- Consider the electricity provided by previously supported (subsidised) RES plants as “additional” following the expiry of the subsidy period to guarantee maximum utilisation of such plants, otherwise, such plants risk being discontinued once support expires.
- Consider that RES asset development and, in particular, its commissioning date is impossible to synchronise with RFNBO asset development due to different development cycles. The obligation for synchronisation (commissioning date for RES asset to be max. 12 months prior to the commissioning date of the RFNBO asset) forces RFNBO asset developers to take on the responsibility (and risk) of the commissioning date of their energy supplier. This leads to unrealistically complicated business models and is a large barrier to RFNBO project development. At least until a sufficient RFNBO capacity is reached (e.g. 40 GW), this obligation should not be applied and RFNBO assets should be able to access any RES installation (provided they prove renewable character alongside a PPA with a RES producer) and ramp-up quickly.
- Allow RFNBO assets to use excess electricity from existing RES installations. This avoids renewable electricity curtailment from existing RES-E installations.
- Any obligations / requirements placed on RFNBO producers to prove additionality and temporal correlation (beyond the requirement of proving renewable character) should have a **phase-in period** which can be linked to the deployment of at least 40 GW of electrolysis capacity in the EU, as called by the EU Hydrogen Strategy. This will enable the ramping up of renewable hydrogen production and give investor certainty to early movers.
- During the phase-in period, conduct a thorough market assessment of the RFNBO market uptake against the 2024 and 2030 targets outlined in the Hydrogen Strategy; as well as an analysis into the feasibility and impact of proposed measures on RFNBO deployment before applying them.

The decarbonisation of the electricity supply is already incentivised on the supply side through instruments such as the EU Emissions Trading Scheme and national support schemes. In fact, **additionality is most effectively addressed at a market-driven system level** and could be part of national regulation. For example, Germany has already included over 1.5 GW of electrolyser capacity in its RES-E targets for 2030 in the corresponding tender volumes.

This allows Member States to include, in their National Energy and Climate Plans, the development of electricity demand from electrolysers and to implement relevant national measures to ensure a sufficient supply of electricity from renewable sources. The current proposed revision of the REDII

⁴ [Definition of additionality, as laid down in preamble 90 of Directive 2018/2001 \(RED II\)](#)

indeed recognises the need to address additionality at the Member State level by prompting Member States to design frameworks enabling the deployment of renewable energy generation while taking into account the additional renewable electricity required to meet the demand for the production of RFNBO⁵.

Geographical correlation

- Geographical correlation should be demonstrated by locating the production of RFNBOs and the renewable power plant(s) within the same or adjacent country. Whenever relevant and necessary, this could be restricted to an individual bidding zone.
- Member States should be able to take additional measures to avoid grid congestion at national level and to allow and incentivise electricity imports from neighbouring bidding zones within the available interconnection capacities.

Temporal correlation

- Temporal correlation between the renewable electricity and the RFNBO production should be demonstrated at a monthly basis based on existing GO systems. The European Commission should explore a finer granularity after the phase-in period.

Phase-in period

We would like to remind that the DA requirements were developed for the transport sector and long before the discussion on the EU Hydrogen Strategy and the more ambitious climate objectives agreed through the European Green Deal. The DA must take into account the changed framework conditions:

- RFNBO are expected to contribute to various economic sectors (industry, transport, buildings) and their increased application scope asks for a supportive framework for their deployment.
- In the next few years, renewable hydrogen production costs are expected to remain non-competitive against fossil-based solutions due to the initial high investment costs. To overcome these challenges and to reduce costs, simplified requirements should be defined for the initial market ramp-up. At the same time, clear signals to market players about future market requirements should be communicated. However, installations that are commissioned during the phase-in period should be subject to the phase-in rules for their entire lifetime. This will enable investor clarity and certainty and aid the concretisation of renewable hydrogen projects.
- Due to the uncertainty about the actual market development, we suggest a phase-in period for proving additionality and temporal correlation linked with an installed RFNBO capacity (e.g. 40 GW), based on a thorough market assessment of the market uptake compared to the 2024 and 2030 targets outlined in the EU Hydrogen Strategy.
- RFNBO developers will need to submit plans to access national and European support schemes that would enable a rapid deployment of RFNBO. The cost evaluation is an integral part of such plans, and it is largely dependent on the operational profile of the electrolysers that in turn depends on the regime of accessing renewable electricity. Therefore, regulatory certainty is crucial.

⁵ COM (2021) 557, Article 1, §2, c)

Unlock the hydrogen potential

The DA represents an opportunity to remove any unjustified constraints and uncertainties concerning the use of renewable electricity for RFNBO production. We, the signatories of this letter, are fully committed to net-carbon-neutrality in Europe and at a Global level, to delivering the milestones of the European Hydrogen Strategy and to rolling out a sustainable, circular and robust European hydrogen economy. Therefore, we are looking forward to working together with the European Commission in developing a DA that will be fit for purpose: provide regulatory certainty and incentivise renewable hydrogen and RFNBO development.

This letter was also sent to respective Head of Cabinets and relevant Cabinet Members as well as to respective Head of Units and Policy officials in Directorate-Generals for Climate Action (DG CLIMA), Mobility and Transport (DG MOVE), Energy (DG ENERGY) and Internal Market, Industry, Entrepreneurship and SMEs (DG GROW).



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