

Cefic Statement on the Delegated Act Art. 27 (3) RED II

The chemical industry is a frontrunner in the EU hydrogen economy, and low-carbon and renewable hydrogen represent a critical pathway to reducing GHG emissions in our sector. As a matter of fact, Cefic is the facilitating organisation of the Roundtable on Clean Hydrogen in Industrial Applications of the European Clean Hydrogen Alliance. In this body, the chemical industry has already presented a significant number of projects aimed at producing renewable and low-carbon hydrogen and deploying its potential for GHG reduction in our industry.

The present delegated act sets important framework conditions for the production of renewable hydrogen that will notably affect their future supply. In that, the delegated act will directly impact also the achievability of renewable fuel of non-biological origin (RFNBO) sub-targets as they have been proposed for industry and transport in the RED III recast put forth by the EU Commission.

While the definition of RFNBOs has been expanded in the EU Commission's RED III recast proposal from transport specific to covering all sectors, the associated production criteria remain unchanged. Meanwhile, there is a huge difference in consumption patterns between industry and transport sector, as well as differences in the exposure to international competition. These differences will need to be considered in the design of the respective production criteria.

Against this background and as one of the largest producers & consumers of industrial hydrogen, Cefic wants to ensure that the framework condition in the present delegated act are fit-for-purpose, provide investors with much needed regulatory predictability, and facilitate the scale-up of RFNBOs, rather than artificially constraining their supply.

To that end, we would like to make the following recommendations:

1. On Temporal Correlations:

- The temporal correlation for the production/ consumption of renewable electricity should be proven based on monthly averages.
- Should this correlation be deemed to be made more granular, it should be subject to a
 corresponding impact assessment, the availability of renewable electricity & storage
 capacity, as well as adequate technical possibilities to comply with the target.

2. On Geographic Boundaries:

- Facilitate the scale-up of RFNBOs and the efficient supply of renewable electricity production through a robust framework for physical and virtual PPAs & GOs, by expanding the geographic correlation to the EU level
- Lower the threshold for fully considering RFNBOs as renewable in a given bidding zone to 70% to strike a balance between incentivising the further build-up of renewable electricity capacity and kick-starting the renewable hydrogen market.

3. Additionality Certification for Electricity:

- Include GOs as instruments to certify the renewable status of an electron along-side PPAs
- Consider how to ensure consistency in the accounting of the renewable nature of the electricity, in particular when instruments such as Power Purchasing Agreements (PPAs) and Guarantees of Origin (GOs) are used in parallel or in conjunction with average grid factors.

June 2022



The regulatory regime needs to match the EU's renewable hydrogen ambitions

- We understand the idea that renewable fuels of non-biological origin (RFNBO) should lead to the
 deployment of additional renewable energy. However, the additionality criteria as currently
 defined present a considerable challenge to their scale-up and hydrogen projects in industry.
- The present production criteria will also critically determine the achievability of the ambitious targets proposed in the REPowerEU communication, or the renewable hydrogen targets proposed under the RED III. Here, we regret that the proposed delegated acts have not been accompanied by an impact assessments to ascertain possible knock-on effects.
- Given the short time horizon to meet the RFNBO target in industry (art. 22a), investments are expected in electrolysers installed at industrial sites for on-site hydrogen production. Industrial processes require access to a stable and constant flow of renewable hydrogen, provided around the clock, with an investment horizon of 15-20 years¹.
- In contrast, the production of renewable electricity is subject to high variations, does not necessarily take place in proximity to industrial sites.
- We support establishing a transitionary period for applying the additionality criteria of the present delegated act to scale up the nascent hydrogen market. Due to the inherent uncertainty associated with forecasts for a not-yet-existing market, we suggest to phase out that transitionary period only after a cost-benefit analysis. That analysis should consider also the availability of necessary supply infrastructure & renewable electricity to achieve the aforementioned renewable hydrogen ambition and technical feasibility of greater granularity in the application of the additionality criteria.
- We welcome the consideration of imports to achieve the renewable hydrogen targets, provided
 a sufficiently robust certification system is put in place. Here, we invite the European Commission
 to consider how to establish reliable monitoring, reporting & verification systems for additionality
 criteria in third countries, which may operate in vastly different electricity markets.
- Moreover, investments in renewable hydrogen require a stable regulatory environment. In this
 respect, many provisions require the ex-post evaluation of renewable electricity production
 volumes and electricity market dynamics. This provides little investment certainty to industrial
 hydrogen consumers, as such requirements are not in their control and are subject to sudden
 variations overtime.

We appreciate that the eventual regulatory regime needs to be sufficiently robust to avoid the double counting of renewable electricity or emitted carbon. However, artificially applying prohibitive criteria for geographical and temporal correlation of electricity & fuel production would discourage investments for the use of RFNBOs in industry and risks making impossible the achievement of the ambitious targets proposed in the REPowerEU communication, or the renewable hydrogen targets

_

¹ At present, the 'European Hydrogen Backbone' aims to establish hydrogen supply corridors only by 2030 – 3 years after the transitionary period is set to end in the initial Commission proposal.

June 2022



proposed under the RED III. Achieving these ambitions instead necessitates the scale-up of the nascent renewable hydrogen market through an enabling regulatory framework that avoids imposing undue administrative burdens.

To that end, we would like to put forward the following specific recommendations:

1. Temporal Correlation (Art. 4, § 2, point c)

- The granularity of the temporal correlation should be reflective of the available supply of renewable electricity, storage capacity, and the technical feasibility of demonstrating granular temporal correlations via digitised certification instruments (see also chapter 3).
- We welcome the proposal that before 2027, temporal correlation should be based on monthly averages to aid in the scale-up of this nascent market². However, the abrupt change in the regulatory framework starting in 2027, moving from monthly to hourly correlation, is particularly detrimental for investment certainty.
- More generally, the reason for a proposing a change in the temporal correlation as of 2027 is unclear. The change seems to be driven by assumptions on future market and infrastructure developments that are far from certain.
- Should this correlation be revised, it should only happen once a cost-benefit analysis demonstrates clear benefits. Moreover, it should be based on evidence regarding sufficient renewable electricity & storage availability and that digitisation allows for more granular temporal boundaries. Any changes to the proposed monthly correlation should be anticipated by a corresponding impact assessment. Setting a fixed date for more stringent correlation in a not-yet-existing market would be premature and could stifle necessary investments.

Cefic recommendation:

- The temporal correlation for the production/ consumption of renewable electricity should be proven based on monthly averages.
- Should this correlation be deemed to be made more granular, it should be subject to a
 corresponding impact assessment, the availability of renewable electricity & storage
 capacity, as well as adequate technical possibilities to comply with the target.

2. Geographic Boundaries (Art. 4, § 2, point d)

- The potential for renewable electricity generation is unevenly distributed across the EU. Enabling
 access to renewable electricity across countries and bidding zones is a critical prerequisite for the
 production of RFNBOs, particularly for industrial use, as explained above.
- Hence, a robust framework for PPAs & GOs, providing all necessary compliance information, should ensure the renewable status of the electricity consumed
- In the absence of grid-congestion at the point of application (in the respective bidding zone of the installation generating renewable electricity/ renewable hydrogen), we suggest expanding the geographic correlation from the bidding zone to the EU-level.

² Monthly correlations have been found to maximise RFNBO production, whilst still retaining the element of temporal correlation. See <u>this study</u> by Eurochlor (2022) for more information.

June 2022



- This framework would incentivise investments in renewable power generation in those areas with the highest load-factors, and consequently reduce system costs for the EU (hydrogen) economy.
- In case of grid-congestion at the point of application, a temporarily more granular geographic correlation could be permissible. The responsibility of relieving or removing congestion issues in the foreseen operations remains with the Transmission System Operator (TSO).
- As with the proposed temporal correlation, any changes to the initial geographic correlation at EU level should be anticipated by a corresponding impact assessment.
- Limiting the threshold for fully considering RFNBOs in given a bidding zone as renewable to a 90% renewable share in the electricity mix means only a handful of Member States will be able to apply this provision over the next years³.
 - Based on the present penetration of renewables, 70% would be a more workable threshold that would sufficiently incentivise further renewable electricity deployment, whilst also providing a boost to the nascent renewable hydrogen market in Member States with existing high renewable shares.

Cefic recommendation:

- Facilitate the scale-up of RFNBOs and the efficient supply of renewable electricity production through a robust framework for PPAs & GOs, by expanding the geographic correlation to the EU level, in the absence of grid-congestion at the point of application.
- Lower the threshold for fully considering RFNBOs as renewable in a given bidding zone to 70% to strike a balance between incentivising the further build-up of renewable electricity capacity and kick-starting the renewable hydrogen market.
- 3. Certification for Electricity (Art. 4, § 2; Art. 7; Art. 8)
- We recognise the importance to avoid the double counting of renewable electricity or emitted carbon through appropriate certification mechanisms.
- In the interest of balancing long- and short-term match-making and hedging to de-risk investments, particularly for smaller consumers, we suggest to consider how Guarantees of Origin (GOs) can provide the necessary information on the renewable status of a given electron, alongside Power-Purchasing Agreements (PPAs).
- We invite the European Commission to consider how to ensure consistency in the accounting of the renewable nature of the electricity, in particular when instruments such as Power Purchasing Agreements (PPAs) and Guarantees of Origin (GOs) are used in parallel or in conjunction with average grid factors.
- We appreciate the need to avoid double compensations or market distortions through state aid interventions. Still, public support can be an important accelerant for the nascent hydrogen market and facilitate the associated steep increase in renewable electricity deployment.
 - Here, we welcome the transitionary period foreseen for installations receiving aid for being considered 'additional.'

4

³ CREA/EMBER (2022): Renewables ambition is rising across the EU

June 2022



- These considerations extend also to the transitionary period foreseen for the additionality of renewable electricity sources, whose scale-up currently faces notable constraints due to supply-chain disruptions and long permitting procedures.
- As with other criteria, we would caution that setting a pre-determined phase-out date for the transitionary period of a not-yet-existing market may be premature and increase the cost of both renewable electricity and renewable hydrogen.
- Hence, we suggest to make the phase-out of the transitionary period for conditional to a cost-benefit analysis, as well as the sufficient availability of renewable electricity & storage availability.
- To ensure equity between domestic production & imported volumes, we call on the European Commission to ensure that the additionality criteria defined in this delegated act (and by extension the temporal and geographic correlation) are equally applied to domestic and imported RFNBOs.

Cefic recommendation:

- Include GOs as eligible instruments to certify the renewable status of a given electron alongside PPAs
- The phase-out of the transitionary period for the additionality of renewable electricity, as well as for installations receiving investment aid should be conditional upon a cost-benefit analysis, taking into account the sufficient availability of renewable electricity, grid infrastructure, and storage capacity.
- Consider how to ensure consistency in the accounting of the renewable nature of the electricity, in particular when instruments such as Power Purchasing Agreements (PPAs) and Guarantees of Origin (GOs) are used in parallel or in conjunction with average grid factors.
- We invite the European Commission to consider how to establish reliable monitoring, reporting & verification systems for electricity certification in third countries to ensure a level playing field between domestic production and imported volumes.

For more information please contact: Nicola Rega, Energy Director, Cefic, +32485403412, nre@cefic.be

Nicolai Romanowski, Energy Manager, Cefic +32496266052, nro@cefic.be

About Cefic

Cefic, the European Chemical Industry Council, founded

in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for 15% of world chemicals production.