

Eurogas position paper – RED II DA RFNBO electricity requirements including additionality

May 2022

Introduction and issue

Eurogas recognises the need to ensure that renewable electricity capacities increase to respond to the growing European electricity demand. It is crucial to ensure that the renewable character of electricity and RFNBO is properly demonstrated. Any of these requirements must not unnecessarily hinder deployment of hydrogen production capacities. The goal is to provide enough flexibility to maximise the electrolysers' load while avoiding increased overall emissions from the power sector due to increased marginal power generation from fossil fuels.

Nevertheless, the rules must not unduly stifle the development of a nascent industry. Most of the different requirements proposed would significantly impact the cost of renewable hydrogen production¹, would lead to heavy administrative burden and major operational hinderance. Moreover, the technical feasibility of some requirements remains questionable. Finally, applying such a restrictive only to hydrogen production and not to other renewable electricity uses is discriminatory, and would be questionable vis-à-vis other renewable electricity consumers.

Eurogas recommendations

1. Additionality

The EC intends to require a maximum time period between the renewable electricity and H₂ installations coming online.

Eurogas recommends not setting any time period, as the timeline for the development of these installations is incompatible with durations of 12 or 24 months.

If such a parameter is to be set, the EC should consider a temporary exemption for installations built before 2030. Thereafter, the EC would consider implementing this requirement provided that the H₂ market is sufficiently developed, based on the Hydrogen Strategy ambition to reach 40GW of renewable hydrogen electrolysers by this date.

Considering the lifetime of these assets, the transition from the exemption period shall be carefully addressed. Imposition of a strict regulatory regime in only few years' time would actively discourage investments decisions. After this exemption period, a transition toward the full implementation of the additionality requirement could be considered, by applying the requirement only to a share of the electricity used by electrolysers. This possibility could be conditioned by a financial contribution to the Union renewable energy financing mechanism resulting in support to an equivalent amount of additional renewable electricity.

Once the additionality requirement is in place, renewable hydrogen producers that demonstrated compliance should not have to demonstrate it again e.g. for each PPA renewal or when extending their production capacity (equivalent to a share of the original capacity), provided that the decision on this extension is taken during a time period equivalent to the additionality requirement itself.

Finally, Eurogas questions the need to define an additionality requirement for renewable electricity supplied through direct connection to the electrolyser: at least, the exemption/transitional measures for grid electricity should apply.

¹ RED II Green Power Criteria - Impact on costs and availability of green hydrogen in Germany - Frontiers Economics for RWE (July 2021)

2. Exclusion of supported installations

As part of the additionality requirement, the EC intends to exclude installations that receive support in form of operating aid or investment aid, excluding support received by installations before the repowering.

Eurogas welcomes the EC intention to not exclude installations that received support before repowering. Nevertheless, Eurogas believes installations that receive support should not be automatically excluded. Such automatic exclusion would *de facto* ban a large portion of the renewable electricity capacities which in the past and in the future have and will receive aid². In addition, this exclusion would even prevent the granting of subsidies to additional renewable electricity capacity for RFNBO production itself. Instead of excluding these installations, Eurogas believes that the guiding principle should be to avoid cross-subsidisation between electricity and hydrogen, which could be decided based on the architecture of the support schemes. As long as it is ensured that the cost of the support measures is not passed on to the electricity consumers, there is no risk of cross-subsidisation.

3. Renewable character proof

The EC intends to rely on multiple power purchase agreements (PPAs) to demonstrate the renewable character of the electricity being consumed.

Eurogas welcomes the possibility to use multiple PPAs. Nevertheless, in order to maximise the load of the electrolyser, when the PPA is not producing, it should be possible to rely on grid electricity and cancel the equivalent amount of GO. In addition, Eurogas believes that it should be possible to establish a PPA between aggregators and consumers.

Finally, the interaction of this requirement with the fourth subparagraph of RED II Article 27.3, namely the possibility to use the average renewable electricity share of the MS grid (as measured 2 years before) should be clarified. It should be established that these approaches are complementary i.e. the provisions of the fourth subparagraph of RED II Article 27.3 applying when the PPA is not producing. It would provide more flexibility to renewable hydrogen producers and increase the load factor of the electrolysers.

4. Temporal correlation

The EC's intention is to set up a strict time correlation requirement between the renewable electricity generation and hydrogen production of 15 min/1h potentially with a longer period (up to 1 day) during a transition period.

Eurogas believes that the durations proposed to achieve temporal balancing are too short: this would require to further increase the granularity of current tools/certificates. Overall, it would be overly burdensome and would increase the costs of operation/capital¹. It would also hamper the planning and operations of the electrolyser, while offering limited benefits. In addition, a shorter duration entails that the hydrogen being produced could as rapidly change from renewable to non-renewable. This impact should be carefully assessed, in particular for (industrial) consumers which do not have the ability to quickly modulate their consumption.

A monthly temporal correlation between electricity production and use would enable better utilisation of electrolysers, increased hydrogen production and lower the cost of green hydrogen¹. In the same spirit, a longer time period should also be considered in the reporting of information by renewable hydrogen producers.

² Status Review of Renewable Support Schemes in Europe for 2018 and 2019, CEER, 2018

5. Geographical correlation

The EC intends to introduce a requirement for the renewable electricity capacity to be located in the same bidding zone, an offshore adjacent bidding zone or in another bidding zone (if the electricity prices in the affected bidding zones in the relevant time period were equal on the day-ahead market for the one-hour period).

Eurogas outlines that it will be difficult for some regions/countries to have access to sufficient new renewable electricity sources: geographical correlation requirements should therefore be defined in a workable way.

Eurogas believes that the absence of a systematic congestion of the electricity grid to be checked by NRA should suffice. In any case, it is unlikely that one absolute metric could be defined to address this topic: it would be better handled on a case-by-case basis through permitting process.

Eurogas outlines that the proposed options to meet this geographical requirement are not suitable for Member States where the electricity market is divided in different market zones and where hydrogen production and industrial demand would be located in two different national bidding zones. Such situation could arise for example in Italy, where industrial demand would be in the northern part of Italy, whereas RES production would be in the southern part of Italy. Similar situation could arise in Sweden. To not discriminate these Member States, the possibility to consider that the installation generating renewable electricity under the PPA is located in different bidding zones within the same Member State should be added.

Eurogas emphasizes that the requirement for the electricity price to be equal between affected bidding zones for a one-hour period does not represent a suitable criterion: in addition of entailing a dynamically changing renewable status for the hydrogen being produced (see 4.), congestion indicated by day-ahead price differentials may not actually materialise within day. If that approach is nevertheless pursued, it should be noted that absolute equivalence of the prices is unlikely, a specific margin of tolerance should be implemented. Additionally, the time period considered in this requirement should match the one defined for the temporal correlation i.e. 1 month.