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France Hydrogène's position
on the rules governing the production of renewable hydrogen (RED III)

The European Union has spent months drawing up the rules and conditions which will govern the production of renewable hydrogen. The European Commission's delay in publishing the delegated acts provided for under articles 27 (3) and 28 (5) of the Renewable Energy Directive (RED II), and the European Parliament's vote on 14th September on the revision of the directive (RED III), have created **uncertainty and regulatory flux which are harmful to the entire European hydrogen sector**. This is a situation which cannot continue any longer.

With the opening of formal trilogue meetings between the European Parliament, the Council of the European Union and the European Commission, France Hydrogène has identified **seven proposals which it believes could help resolve** the debate over striking the right balance in terms of the regulations that should govern the production of renewable hydrogen and the relevant criteria to be applied:

1. **Regulatory certainty as soon as possible**. Compromises must be reached as quickly as possible between the different stakeholders, resulting in regulations that are stable and transparent in the eyes of the European hydrogen sector. **Regulatory flux places Europe's leadership in this field at jeopardy, with funding decisions having to be delayed** because of the difficulty of designing hydrogen electrolysis projects in the EU.
2. **Retain the additionality principle, with specific exemptions.** The principle of additionality should be reinstated to ensure hydrogen produced through electrolysis does not jeopardize Member States' drive towards decarbonization. However, **exemptions should be granted to projects which were operational before 2030**. During this period, responsibility to comply with the additionality principle should be **transferred from individual hydrogen producers to Member States**, which would be compelled to ensure that they possess additional sources of renewable energy capacity equal to the amount of electricity needed to meet their renewable hydrogen production targets. During this early, 'take-off' phase in the European hydrogen market, hydrogen producers should be able to **draw on existing renewable energy sources, particularly hydropower**. The time required to gain planning permission and other approvals is a real obstacle to the rapid expansion of new renewable energy capacity. In France, it takes 4 to 5 years for solar projects to come online, 5 to 7 years for on-shore wind schemes and 10 years for off-shore wind projects, compared to 2 to 3 years for electrolysis plants. This grace period should make it possible to hit the RePowerEU plan's domestic production target of 10 million tonnes of hydrogen by 2030.
3. **Exemptions for all zero carbon electricity sources**. The version of the Delegated Act submitted for consultation in May 2022 provided for a sort of 'bonus' to countries where **renewable energy accounted for over 90%** of electricity consumed. **This threshold represents the setting of a high bar for decarbonization and should be conserved**. However, it interferes with Member States' right to make various choices about their energy supply as guaranteed by EU Treaties. Countries like France and Sweden already possess **an electricity generation mix which is more than 90% fossil fuel-free thanks to a combination of renewables and nuclear power**. They should be able to benefit from some kind of bonus, which could revolve around a threshold linked to the life cycle greenhouse gas emissions created by the network in question.
4. **Abolish the criteria banning financial aid for renewable energy installations. Revoking the criteria banning investment aid or operating aid for solar and wind power projects would respect** the European Parliament's vote on the matter. By applying such a criteria, the European Union would deprive itself of the ability to exploit virtually any renewable energy sources, whether now or in the future, in most Member States, including France.
5. **An appropriate temporal correlation between the hydrogen production unit (electrolyzer) and the installation or installations generating renewable electricity destined for this unit and**

governed by a PPA. This is a key controversial element, **since an overly generous temporal correlation may equate to greenwashing**, especially if combined with a generous geographical correlation. Under this system, an electrolyzer in Hamburg could consume 55 MWh of electricity from the German grid at 400-500g CO^2e/kWh at the end of December but be treated as if it has consumed 55 MWh of 'zero carbon' solar electricity generated in the south of France three months earlier. The result would be hydrogen produced via electrolysis in Germany with a carbon intensity figure of 20kg CO^2e/kgH^2, double that of hydrogen produced by the steam reforming of natural gas (11kg CO^2e/kgH^2). These are long-established criticisms regarding guarantees of origin of electricity and 'green offers'. In France, these guarantees of origin were valid for 12 months. The duration of their validity was reduced to 1 month in 2021. The Commission's proposal provided for **a requirement for renewable hydrogen and the renewable electricity used to produce this hydrogen to be produced during the same calendar month until 2030, after this, it must be produced within the same calendar hour, a position which seems like a reasonable compromise between facilitating the launch of new hydrogen production projects and continuing to set the bar high in relation to decarbonization goals**.

6. **The same rules for both domestic hydrogen production and hydrogen imports**. The rules and criteria adopted for domestic renewable hydrogen production must **also apply to imports of hydrogen and its derivatives (ammonia, methanol, e-fuels).** Without this, rules and regulations would give rise to **competitive distortion** and open the door to **greenwashing in third countries**. For example: BloombergNEF has already raised doubts about Sinopec's 260 MW hydrogen electrolyzer project in Kuqa in the province of Xinjiang. The source of slightly over half of the electricity required by this plant (361 MW) has been identified as coming from solar electricity. However, there are fears that the remaining electricity will be supplied by Chinese coal-fired power stations.
7. **Recognition of the role of low-carbon hydrogen to be enshrined in EU legislation.** Following the RePower EU plan, **the role of low-carbon hydrogen, especially that produced using nuclear power, must finally be recognized in order for the EU to achieve its decarbonization targets.** The targets for the use of Renewable Fuels of non-Biological Origin (RFNBOs) in industrial fuel use (50% in 2030 and 70% in 2035) and in the transport sector (5.7% in 2030), currently concern only renewable hydrogen. They must not contravene the principle that Member States can freely choose between different energy sources (art.194 TFUE). One way or another, the door needs to be opened to low-carbon hydrogen. Only a **clearly set out strategy based around a wide variety of renewable and low-carbon electricity sources** will be capable of guaranteeing the generation of 550 TWh of electricity required to achieve the EU's 10 million tonne production target by 2030. In the United States, an ambitious drive to support the production of 'clean hydrogen' through a tax credit worth up to 3 $ per kg is applicable to all kinds of renewable or low-carbon hydrogen, with a bonus payable to those producing the lowest life cycle greenhouse gas emissions.