Subject: Hydrogen Europe proposals on the upcoming Low Carbon Fuels Delegated Act

Brussels, 30 July 2024

Dear Commissioner Simson,

We would like to first welcome the European Commission's ambition to quickly define the methodology for determining what constitutes low carbon hydrogen. The Delegated Act represents an essential piece of the emerging hydrogen economy, and timely adoption of the methodology is necessary. Low carbon hydrogen will play a significant role in scaling up the hydrogen market, as it will be required while renewable hydrogen is not available in big enough quantities. Along with RFNBOs, renewable carbon fuels and biohydrogen, it can help quickly replace fossil hydrogen and other unabated fossil fuels across the economy. It will be necessary to make the hydrogen market more liquid and guarantee energy supply for some applications such as steel and fertilizers, especially in the market ramp up phase.

In summary, in parallel to the crucial scale-up of domestically produced and imported RFNBOs, mandated by renewable targets in the EU legislation such as the Renewable Energy Directive (RED), low carbon hydrogen can help accelerate the hydrogen market's build up beyond these existing targets.

For all these reasons, the quick adoption of a coherent and efficient low carbon hydrogen methodology is essential for the hydrogen value chain, and we are today calling on the Commission to consider the following points in the upcoming Delegated Act:

- **Ensuring the speedy adoption of simple rules:** The Low Carbon Hydrogen Delegated Act represents one of the last missing pieces of the European legislative framework for hydrogen, and timely adoption is essential for the roll out of the hydrogen economy.
- **Guaranteeing consistency between the RFNBO and Low Carbon Delegated Acts**: The same greenhouse gas (GHG) reference of 94 gCO2/MJ for calculating the 70% threshold in both transport and industry applications should be kept, as should the same rules for allocation of GHG emissions to hydrogen and other co-products. When the Low Carbon Hydrogen Delegated Act deviates from the methodology under the RFNBOs DAs, this should be considered as grounds for the revision of the existing rules under the RFNBOs DA.
- **Creating a distinct regulatory framework for using dispatchable low-carbon electricity that will reflect the characteristics of dispatchable sources and enable low carbon hydrogen producers to sign PPAs with low-carbon electricity sources (e.g. electricity produced from nuclear sources, waste incineration plants).** This would ensure the utilisation of low carbon sources is maximised, while recognising that dispatchable low-carbon electricity supply is much more elastic that renewable one.
- **Safeguarding clear and unambiguous rules for establishing emissions from the use of waste heat**. While the full carbon intensity of waste heat should be accounted for, waste heat used for high temperature electrolysis should not contribute to the energy character of the final fuel (i.e. the character of produced hydrogen should be defined by electricity inputs). Not all waste heat recovery is systematically substituted

by natural-gas based combustion – as other means can also be used to replace the heat, with much lower emission factors (e.g. heat pump, boiler with renewable gas). The methodology should provide incentives for redirected heat to be replaced with low-carbon alternatives.

- **Increased accuracy and flexibility of natural gas upstream emissions accounting by using project specific values.** In low carbon hydrogen production pathways, gas related emissions would represent a large share and, hence, the value of the default upstream emission factor for natural gas could be a deal breaker in terms of qualifying or not as low carbon hydrogen (whether it is above or below the 70% threshold of GHG savings with respect to the fossil benchmark). Also, and more importantly, it would disincentivise the project promoters from seeking to use gas sources with the lowest possible carbon intensity (e.g. local gas sources or natural gas from efficient transporters/supply sources).
- **Tailoring the allocation of emissions to by-product hydrogen following a similar approach as for the RFNBOs and RCFs:** for existing installations a substitution approach should be adopted: for new installations the emissions should be allocated based on relative energy content (in case hydrogen is co-produced with other fuels) or based on economic value in other cases. This approach is coherent with the existing rules for redirected inputs used to produce recycled carbon fuels, while also providing sufficient incentives for current use of by-product hydrogen to be replaced with low-carbon alternatives. For new installations, where no counterfactual scenario exists, avoiding the use of theoretical 'next–best economic alternative' as basis of GHG calculation will reduce risk for investors.
- **Equal recognition of all carbon removal solutions:** to make sure that other means of permanent and long-lasting CO2 and carbon binding technologies (besides CCS) are given the possibility of being deduced from the carbon footprint of a fuel, bringing the approach in line with the new Certification Framework for Carbon Removals.
- **A scientific approach to introducing a methodology dealing with hydrogen leakage:** based on careful evidence-based and fact-checking processes to be carried out in close collaboration with the industry, preceded by a definition of what constitutes hydrogen leakage and an extensive testing campaign.

These points have been described in more detail in Hydrogen Europe's paper published in early June.

We very much hope that you will consider our proposals in the Delegated Act and remain at your disposal should you wish to continue the discussion.

Kind regards,

Jorgo Chatzimarkakis

CEO

Hydrogen Europe Secretariat, Avenue Marnix 23, BE-1000 Brussels
Tel: +32 2 540 87 75 I Email: secretariat@hydrogeneurope.eu I Website: www.hydrogeneurope.eu