

To:  
Commissioner for Energy, Kadri Simson  
Ambassadors to the European Union  
Members of the European Parliament

*Brussels, 3<sup>rd</sup> November 2023*

**Subject: Gas package – Call for the creation of the European Network of Network Operators for Hydrogen (ENNOH)**

Dear Commissioner,  
Dear Ambassadors,  
Dear Members of the European Parliament,

The signatories of this letter, representing the renewable energy sector and civil society, call for:

- The creation of an independent European Network of Network Operators for Hydrogen (ENNOH) for the buildout of dedicated hydrogen infrastructure with:
- Oversight from an independent body such as the European Scientific Advisory Board on Climate Change (ESABCC) and/or the Agency for the Cooperation of Energy Regulators (ACER), and
- Integrated coordination with both ENTSO-E and ENTSOG and in consultation with renewable energy producers and end users.

This will:

1. **Lower the cost** of renewable hydrogen. According to ACER, ENTSOG's ten-year planning for hydrogen infrastructure would cost €110bn, potentially leading to higher hydrogen prices for off-takers, governments and society. With the cost of renewable hydrogen being the biggest obstacle to its fast uptake, keeping grid development adequate and cost-effective must be a priority.
2. **Prioritise renewable hydrogen for hard-to-electrify sectors** through proper stakeholder consultation, especially renewable energy producers and industrial end users, when planning for hydrogen grids. Hydrogen will not replace natural gas one for one, presents different physical properties and level of maturity and thus requires different assumptions for hydrogen grid planning, as pointed out by ACER. The main driver for developing hydrogen infrastructure projects should be to connect hydrogen supply centers with actual demand hubs, which come from sectors that are hard to electrify and require pure hydrogen (fertiliser, chemical or steel productions, e-fuels for aviation and shipping).
3. **Avoid stranded assets and ensure proportionate hydrogen grid development by coordinating with ENTSO-E to better reflect areas where electricity is or is not a viable solution.** Within the European Clean Hydrogen Alliance (ECH2A), 53% of production projects have been delayed in the last two years, and only 14% have reached Final Investment Decision (FID). At the same time, the European Hydrogen Backbone initiative, led by natural gas Transmission System Operators (TSO), increased their EU-wide projected pipeline

length by 17% and their length of repurposed pipelines by 25% within one year. This could lead to excessive repurposing of gas infrastructure or the construction of over-sized hydrogen-ready gas pipelines in comparison with actual hydrogen volume flows.

It is indispensable to foster synergies and interplay with the electricity sector. The Commission estimates that around 500-550 TWh of renewable electricity will be needed to produce 10Mt of renewable hydrogen by 2030. To put this number into perspective, 489 TWh of wind energy was generated in Europe in 2022. When scaling the hydrogen economy, we need to take into account the key role of electrolyzers and their interplay with the electricity sector. This requires an integrated planning between electricity, hydrogen and gas networks and coordinated grid operation.

Empowering an impartial authority to orchestrate the rapid ascent of renewable hydrogen is the key to build cost-effective, purpose-driven, and adequate hydrogen infrastructure expansion that meets the needs of hard-to-electrify sectors in a fully transparent and integrated way, without conflict of interests.

Thank you for your careful consideration and we remain at your disposal for any clarification on these recommendations.

Co-signatories:

