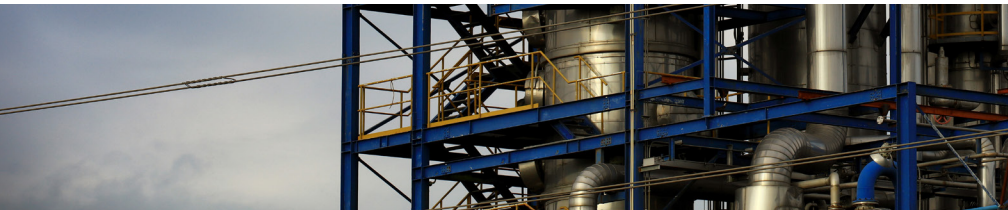
BELLONA EUROPA

CONSULTATION RESPONSE

February 2023

Identification of Hydrogen infrastructure needs for the TEN-E priority corridors



BELLONA EUROPA

IDENTIFICATION OF HYDROGEN INFRASTRUCTURE NEEDS FOR THE TEN-E PRIORITY CORRIDORS

PCI/PMI 2022-2023 EXERCISE

CONSULTATION RESPONSE BY BELLONA EUROPA AND BELLONA DEUTSCHLAND

Bellona welcomes the opportunity to provide feedback on the criteria for selecting Projects of Common Interest (PCI) and Projects of Mutual Interest (PMI) for hydrogen infrastructure within the TEN-E framework.

Overall, the proposed criteria appear to be suitable for identifying the infrastructure needs of a currently nascent hydrogen economy. Nevertheless, it is crucial that hydrogen be assessed based on realistic models that assume maximum direct electrification, that decarbonised and unabated hydrogen production be treated separately, and that sustainability criteria be based on rigorous climate and environmental standards. Therefore, Bellona urges the Commission to include the following three recommendations in the further development of the criteria.

1. REALISTIC HYDROGEN DEMAND ESTIMATES SHOULD BE USED AS BASELINE FOR NEEDS ASSESSMENT

When building on input from the ENTSO-G TYNDP process, the process to identify PCI and PMI for hydrogen and electrolysers to assess hydrogen infrastructure needs, it is **paramount to base the assessment off the hydrogen demand in scenarios with the highest electrification rate, that maximise efficiency of the overall energy system and therefore result in lower hydrogen demand and higher emission reductions per tWh**. This would ensure that the allocation of public funding enables the most efficient use of energy and resources to reduce emissions.

2. DECARBONISED HYDROGEN AND HYDROGEN PRODUCED FROM UNABATED FOSSIL FUELS SHOULD BE TREATED SEPARATELY

Regarding point 2.1. on *"Improvement of market integration"* the inclusion of current hydrogen production from unabated fossil gas in the estimates of total national production is at odds with the overall climate targets of the European Union. The ultimate purpose of a European hydrogen and electrolyser infrastructure ought to be to aid in the build-up of a sustainable hydrogen economy in which all hydrogen production supports the energy transition. Putting the current 'grey' hydrogen production on par with that of electrolytic and low-carbon hydrogen in the 'needs identification' exercise, suggests that there is no need to eventually substitute 'grey' hydrogen with clean hydrogen. Therefore, **current national production of clean hydrogen should be considered separately in Step 1 to determine the gap between demand and supply.**

3. SUSTAINABILITY CRITERIA MUST BE INCLUDED IN THE PCI/PMI ASSESSMENT METHODOLOGY AND BE RIGOROUS

Currently, no sustainability criteria are included in the methodology. However, they will be developed in the next phase of the PCI/PMI process form March to May 2023. **Rigorous sustainability criteria are essential to ensure that hydrogen contributes to the decarbonisation of our economy without hindering climate action or slowing down the decarbonisation of other sectors.** Sustainability criteria must be established with the following principles in mind:

- The location of infrastructure projects should be carefully chosen based on where electricity demand for electrolysers competes the least with alternative uses for electricity and where the principle of additionality can be maintained.
- Infrastructure planning should be targeted at supplying clean hydrogen to strategic industrial clusters with hard-to-abate sectors.
- Infrastructure connected to production sites of fossil gas-based hydrogen with subsequent Carbon Capture and Storage must only be financed in locations with independently monitored low upstream methane leakage rates resulting from natural gas extraction and transport.
- Projects that involve the transportation of a blend of hydrogen and natural gas at any point during installation or operation should not be eligible to qualify as PCI/PMI.
- Only projects providing a credible and close-meshed monitoring system to prevent hydrogen leakages ought to be considered for PCI/PMI status.

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Bellona is an independent, non-profit organisation that meets environmental and climate challenges head-on. We are result-oriented and have a comprehensive and cross-sectoral approach to assess the economics, climate impacts and technical feasibility of necessary climate solutions. To do this, we work with civil society, academia, governments and polluting industries.