

ENTSOG and ENNOH published their joint report on de-risking options for EU hydrogen infrastructure

Brussels, 21 May – ENNOH and ENTSOG have published a joint report outlining practical options to de-risk investment in Europe's future hydrogen infrastructure, highlighting the critical role hydrogen will play in supporting Europe's energy transition and industrial decarbonisation.

The report responds to a mandate from the Copenhagen Energy Infrastructure Forum 2025 and was presented today, during a dedicated hydrogen session at the Copenhagen Energy Infrastructure Forum 2026. Prepared with the support of Frontier Economics and facilitated by the Copenhagen School of Energy Infrastructure, the report provides a comprehensive assessment of financing conditions for cross-border hydrogen infrastructure and identifies concrete solutions to address investment barriers during the market ramp-up phase.

As Europe moves towards a hydrogen-based energy system, infrastructure will need to be developed ahead of a fully mature market. This creates a significant financing challenge, as revenues from early capacity bookings are unlikely to be sufficient to meet investor expectations. **The report therefore focuses on mechanisms capable of bridging this gap and enabling timely investment in strategic hydrogen networks across Europe.**

The study assesses eight different de-risking and financing mechanisms, evaluating whether each of them addresses the issue of cross-border anticipatory investment.

Building on this analysis, ENNOH and ENTSOG put forward two concrete EU-level proposals aimed at supporting investment certainty and accelerating infrastructure deployment. The first combines Inter-temporal Cost Allocation (ICA) with an EU guarantee mechanism, while the second combines long-term capacity bookings with an EU guarantee. Both proposals are designed to reduce investor risk during the early development phase while supporting long-term market growth and cross-border integration.

Abel Enríquez, ENNOH Director, stated: *"This report marks an important step in identifying practical ways to de-risk cross-border hydrogen infrastructure investments. It assesses how existing regulatory and financing tools could be combined with an additional EU-level de-risking mechanism to be developed, including the role of an EU guarantee. ENNOH stands ready to continue working to further assess and refine this concept".*

The report also draws on practical experience from ongoing hydrogen infrastructure developments in Germany, the Netherlands and Denmark, illustrating how different approaches are already being tested across Europe. Its findings are grounded in an extensive stakeholder engagement process, including workshops, expert discussions and a public consultation conducted in spring 2026.

In addition to comparing financing mechanisms, the report examines how hydrogen infrastructure development differs fundamentally from the historical development of the natural gas network, underlining the need for anticipatory investment and new regulatory approaches. It also outlines the governance, legal framework and operational considerations required for implementing EU-level support mechanisms.

Piotr Kuś, ENTSOG General Director, commented: *“Our analysis indicates that, by combining targeted de-risking tools within clearly defined EU framework, project promoters can unlock needed funding for development of hydrogen networks. Alongside the efficient repurposing of existing assets, this will accelerate the development of an integrated energy system supported by robust networks for electrons and molecules.”*

The report concludes with four core findings and identifies three key conditions necessary to operationalise the proposed solutions successfully. Together, these recommendations aim to provide policymakers, regulators and market participants with a clear pathway to enable the timely and coordinated development of Europe’s future hydrogen infrastructure.

The final joint report on “De-Risking Options for EU Hydrogen Infrastructure” is available on the ENNOH and ENTSOG websites, [here](#) and [here](#).

Editorial notes

- > [The European Network of Network Operators for Hydrogen \(ENNOH\)](#) currently gathers 37 members from 26 Member States. ENNOH is mandated by Regulation (EU) 2024/1789 to bring together hydrogen transmission network operators (HTNOs) from across Europe to promote the internal hydrogen market, facilitate cross-border trade, and coordinate the secure, efficient, and technical development of the European hydrogen transmission network. Its core tasks include developing network codes, producing a hydrogen Ten-Year Network Development Plan, and fostering cooperation and transparency among stakeholders. For more information, visit [ennoh.eu](#) or contact info@ennoh.eu.
- > [The European Network of Transmission System Operators for Gas \(ENTSOG\)](#) was founded in line with 2009 playing a key role in facilitating integration of European gas markets, ensuring technical interoperability and providing security of supply by gas infrastructure planning. Within the scope of Regulation (EU) 2024/1789 and other relevant legislation, ENTSOG is contributing to net-zero decarbonisation by 2050 by the integration of renewable and low carbon gases via future-proof gas transmission pipelines, in line with the EU energy and climate goals. More information on ENTSOG can be found on our [website](#) – or contact info@entsog.eu.