

Extract description:

GRTgaz welcomes the opportunity to join the market consultation launched by FNB on the scenario framework for Hydrogen and green gas projects.

Convinced that the planning for gas and hydrogen requires a combined and comprehensive approach, GRTgaz and Teréga have also launched a market consultation in June 2021 to gather market needs for Hydrogen in France. The results of this consultation will be reflected in the 2021 edition of the 10-year investment plan in order to provide visibility to stakeholders.

GRTgaz is also involved with OGE in several concrete initiatives geared toward the development of hydrogen ecosystems and value chains across western Europe such as the "European Hydrogene Backbone" Initiative, and the "HYDEAL Ambition" initiative

On a larger scale, GRTgaz investigates hydrogen routes, as it is shown in the European Hydrogen Backbone publication.

As of today, the main French hydrogen network development scenario assumes an interconnexion in Obergailbach, based on the repurposing of an existing gas pipeline, with a commissioning around 2040. This connexion would enable around 700 000t/y (28 TWh/an) of hydrogen exports to Germany, coming possibly from different production areas (South of France, Spain, Atlantic façade, North Sea Coast...).

However, in the case of a fast increase of a renewable or low-carbon hydrogen demand in Germany, and with a strong European, German, and French political support, an accelerated network development scenario could emerge with higher volumes transported exceeding the scenario considered in the HYDEAL initiative, with more than 1,4 Mt/y – 55 TWh/y during the 2030s

Several routes may be considered to exports hydrogen volumes to Germany :

- a hydrogen transmission network via pipeline from Fos-Marseille to the Grand-Est Region (the HY-FEN project)
- a North-West to North-East route could be developed to supply Germany with hydrogen produced next to the North Sea

GRTgaz also launched the MosaHYc project (Moselle Sarre HYdrogen Conversion), which is a cross-border project aiming to foster the development of a Hydrogen Valley at the heart of the Greater Region, by converting existing pipelines in Saar (Germany) and Mosel (France) to the transport of hydrogen. The objective of MosaHYc is to decrease the carbon footprint of heavy industries (e.g., steel, chemicals, etc.) and mobility in Saarland (Germany), Lorraine (France) and Luxembourg. Developed by GRTgaz, Creos Deutschland and Encevo, the project will leverage the existing natural gas network already connecting France, Germany and the border of Luxembourg to transport pure hydrogen. The 90-kilometre long network will stretch between Völklingen, Carling, Bouzonville, and Perl for a maximum capacity of 20,000 m³/h (60 MW). Aiming to be operational by 2025, this pioneering network marks the first step in the development of the European Hydrogen Backbone and could be the first German French hydrogen interconnexion