South Corridor



General description

- The SoutH₂ Corridor is a 3,300 km dedicated hydrogen pipeline corridor led by the TSOs Snam, TAG, GCA and bayernets. This important corridor connects North Africa, Italy, Austria and Germany, and enables the supply of low-cost renewable hydrogen produced in the South to key European clusters of demand. On 28 November 2023 the project entered the 6th list of Projects of Common Interest (PCI) published by the EU Commission.
- The development of the SoutH₂ Corridor, which is part of the European Hydrogen Backbone, will guarantee security of supply and is crucial for the development of an interconnected and diversified hydrogen market. The corridor could deliver more than 40% of the REPowerEU import target. The initiative is centred around the utilisation of existing repurposed midstream infrastructure, that enables cost effective transportation of hydrogen (>70%). Security of supply will also be increased thanks to the connection to the storage facilities along the route.
- The corridor has gained endorsement from institutions as well as strong support from companies across the entire value chain along the whole route. Renewable hydrogen would be largely produced in North Africa, for which the partners have collected signed letters of support from producers for 2,5 Mtpa. It would then flow north, serving the hard-to-abate demand clusters of Italy (e.g. Augusta, Taranto and northern Italy), Austria (e.g. Styria, Vienna and Linz) and Germany (e.g. Burghausen and Ingolstadt).

- The SoutH₂ Corridor, which is expected to be fully operational by 2030, consists of the following individual PCI project candidates:
- Italian H₂ Backbone promoted by Snam Rete Gas
- H₂ Readiness of the TAG pipeline system promoted by Trans Austria Gasleitung GmbH
- H₂ Backbone WAG + Penta-West promoted by Gas Connect Austria GmbH
- HyPipe Bavaria The Hydrogen Hub promoted by bayernets GmbH

Benefits

- Significant transport capacity for hydrogen while utilising mainly existing infrastructure
- Repurposed natural gas pipelines are the most effective, competitive and sustainable transport method
- Providing Central Europe with significant amount of affordable energy by unlocking very low-cost green hydrogen with a vast potential
- Serving the largest hydrogen demand clusters in central Europe
- Enables CO₂ savings in all countries along the entire route
- Important contribution to achieving European and national climate goals
- Foster security of supply with hydrogen through connections to storages along the entire route
- Diversification of import routes



North Italy

H₂ Backbone WAG + Penta-West

This project enables bidirectional cross-border hydrogen transport possibilities between Slovakia and Austria as well as between Austria and Germany and allows for taking over hydrogen ariving via the TAG-hydrogen pipeline systems in the Baumgarten node to the extent of 150 GWh/day.



HyPipe Bavaria -The Hydrogen Hub

The project will be laying the foundation for the indispensable Bavarian hydrogen network, to be completed by 2030. Implementing the Bavarian hydrogen network is an essential prerequisite for establishing import routes from Southern and Eastern Europe for the German hydrogen market.



H₂ Readiness of the TAG pipeline system

The TAG GmbH project enables the transport of hydrogen through one of three existing pipelines from the Italian-Austrian border to the Austrian-Slovakian border, where the future connection to the H₂-WAG pipeline is also located. The repurpose of one existing pipeline and the construction of the necessary compressor capacities will enable the bidirectional transport of H2. At the same time, the H₂ pipeline serves as the basis for the Austrian distribution grid.







Augusta



Italian H₂ Backbone

The Italian H₂ Backbone is composed of around 2300 km of pipelines (73 % repurposed and 27% new built) and several hundred MW of compressor stations, expected to become dedicated hydrogen assets by 2030. With an import capacity of 448 GWh/day from North Africa, this project is a major European renewable hydrogen import artery, serving Italian demand clusters and with a capacity to export 168 GWh/day to Austria and beyond.

- Demand Centre (region)
- Demand Centre (town)
- Potential Storage
- Production Centre

SoutH2Corridor



More information and further links about the individual projects, the TSOs, supporting partners and contact informations can be found on our joint website:

www.south2corridor.net