HYGRID project “Flexible Hybrid separation system for H_2 recovery from NG Grids”

NORTEGAS participates as a partner in the HYGRID project. This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking under grant agreement No 700355. This Joint Undertaking receives support from the European Union’s Horizon 2020 research and innovation programme and Hydrogen Europe and N.ERGHY

The key objective of the HyGrid project is the design, scale-up and demonstration at industrially relevant conditions a novel membrane-based hybrid technology for the direct separation of hydrogen from natural gas grids.

The focus of the project will be on the hydrogen separation through a combination of membranes, electrochemical separation and temperature swing adsorption to be able to decrease the total cost of hydrogen recovery. The project targets a pure hydrogen separation system with power and cost of < 5 kWh/kgH_2 and < 1.5 $€/kgH_2$. A pilot designed for 25 kg/day of hydrogen will be built and tested.

To achieve the objective, HYGRID will be developed by a consortium integrated by the University of Eindhoven, Hygear, Hyet from the Netherlands, Quantis from Switzerland, SAES from Italy and Nortegas and Tecnalia Research & Innovation Foundation from Spain.