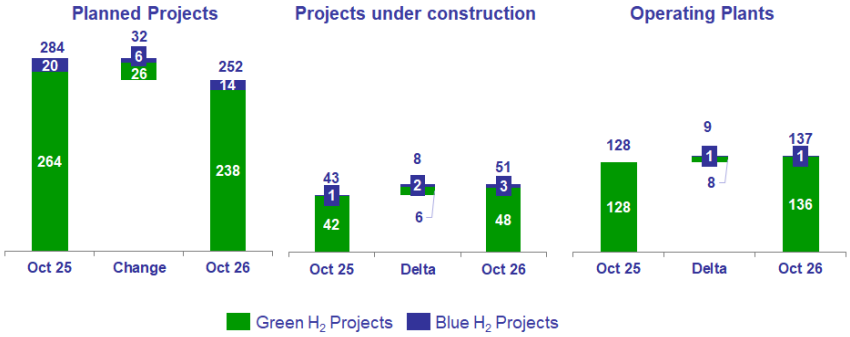
H_2 MARKET RADAR

17.11.2026

KEY FACTS

- In Northwest Europe, 136 electrolysis plants with a capacity of 533 MW_{el} are now in operation. A further 303 projects are in the planning stages or are already under construction.
- The overall market continues to be characterized by project cancellations and a significantly lower number of new announcements compared to the optimistic phase four years ago.
- The commissioning of the first CO_2 storage sites in the North Sea enables the production of blue hydrogen. In the Netherlands, a Yara facility commenced operations in September. The facility is expected to capture 0.8 M tons of CO_2 annually and store it in the North Sea.
- Spain has set ambitious targets for installed electrolysis capacity by 2030. A recent analysis shows that this target is unlikely to be met. Nevertheless, the region remains a key hub for potential hydrogen imports to Northwestern Europe via the planned H2Med pipeline.

Development of H_2 projects in Northwest Europe (BE, GER, DK, NL, NOR, UK)



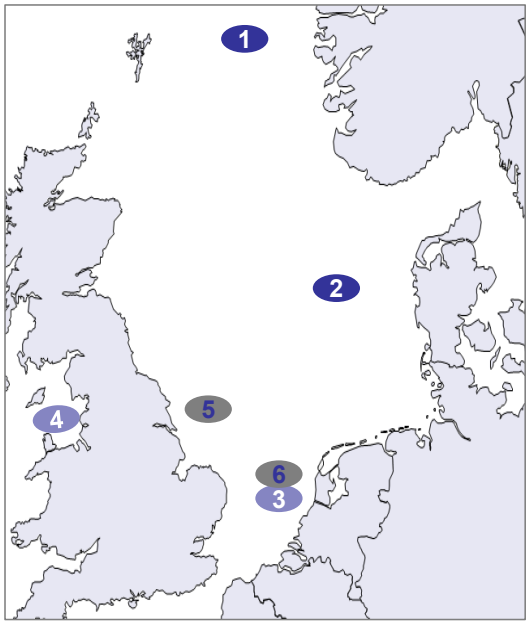
Source: Team Consult Hydrogen Database

1 GWel electrolysis = 63.000 tonnes of hydrogen (70% efficiency, 3,500 h/a, 39 kWh/kg GCV

- There are currently 136 green hydrogen production facilities with a capacity of 533 MW_{el} in operation. Since October 2025 nine facilities have been commissioned.
- The facilities currently under construction will increase green hydrogen production capacity by an additional 1.6 GW_{el} by 2028.
- Green hydrogen production projects continue to dominate activity in terms of project announcements and implementations.

Blue hydrogen and CO_2 storage

CO_2 storage projects in the North Sea (selection)



1. Northern Lights
2. Greensand
3. Porthos
4. HyNet North West
5. Northern Endurance
6. Aramis

Operational **Under construction** **Planning stage**

Source: BGR, Team Consult analysis

Note: The map shows a selection of current projects and plans in the North Sea

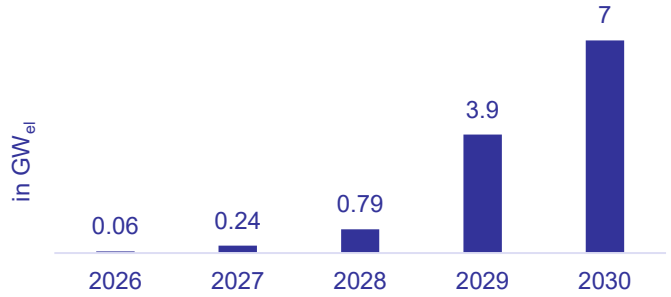
- Currently, two commercial CO_2 storage projects (Northern Lights in Norway, 0.4 M t/a and Greensand in Denmark, 1.5 M t/a) have begun operations in the North Sea. Additional projects are in the planning or implementation phases, such as the Porthos project in the Netherlands, which will have a capacity of 2.5 M t/a starting in 2027.
- The expansion of CO_2 storage infrastructure in the North Sea is increasingly enabling the implementation of projects for the production of blue hydrogen through the capture and storage of the resulting CO_2. In the absence of an offshore pipeline infrastructure, transport to the storage site is carried out by ship.
- In the field of low-carbon hydrogen (blue hydrogen) production, in addition to project cancellations (Germany, UK), projects by Yara, Air Liquide, and Air Products in the Netherlands (Rotterdam and Sluiskil) are currently being implemented. All three projects use storage infrastructure in the North Sea to store the resulting CO_2.
- Yara's facility in Sluiskil started operations in September. An existing production unit there was retrofitted with carbon capture technology. This unit is expected to prevent the emission of 0.8 M tons of CO_2 emissions annually*. The liquefied CO_2 is transported by ship and permanently stored in the Northern Lights project in Norway.

** For every tonne of CO_2, approximately 0.1 tonnes of hydrogen are produced.*

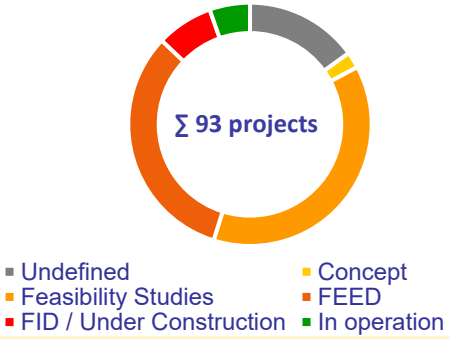
The Iberian Peninsula – A Hydrogen Hub for Europe?

- The Iberian Peninsula is a region with ideal conditions for producing green hydrogen from renewable energy sources. Spain aims to become a hub for green hydrogen production and has set itself the ambitious goal of installing 12 GW_{el} of electrolysis capacity by 2030. However, recent data from the Spanish Hydrogen Association indicates that this goal is no longer achievable.
- In its latest annual report, the association now projects an installed capacity of 7 GW_{el} in 2030, a decrease of 5 GW_{el} compared to the previous year. The reason for the cancellations of many projects include regulatory uncertainty, problems with grid connection, difficulties in securing long-term off-take agreements, and financing issues. A look at the status of the projects shows that the vast majority are still in early stages

Cumulative electrolysis capacity to 2030



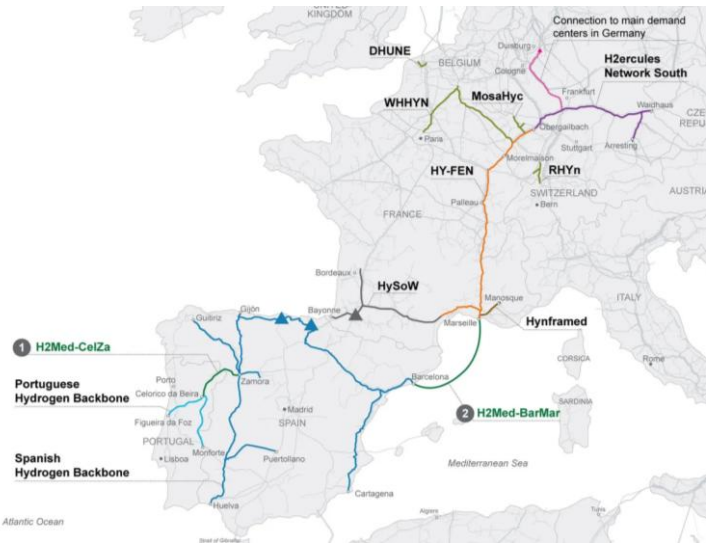
Status of spanish hydrogen projects



Source: Spanish Hydrogen Association, Team Consult analysis

- Despite the existing hurdles, final investment decisions have been made in recent months for several major projects, such as the Onuba project in Huelva (300 MW_{el}) by Moeve and projects by Repsol and Petronor, each with a capacity of 100 MW_{el}. These projects require a connection to the planned Spanish hydrogen transport network, which is also intended to supply the H2Med pipeline for exports to Northwestern Europe.
- Portugal, too, has the potential to make a significant contribution to Europe's hydrogen supply. The Portuguese hydrogen strategy sets a goal of installing 3 GW_{el} of electrolysis capacity by 2030.

Spotlight: H_2Med



Source: Enagás

- To make hydrogen from the Iberian Peninsula available to other European markets, Enagás, NaTran, OGE, REN and Teréga are planning the H_2Med project. The project aims to build a pipeline to transport 2 million tonnes of green hydrogen per year to future consumption centres in northwestern Europe (France, Germany).
- The project is divided into two main components: CelZa, which connects Portugal and Spain, and the BarMar offshore pipeline from Spain to France. A connection to the German hydrogen core grid planned via the Hy-FEN project in France.
- The project is supported by its status as a PCI (Project of Common Interest) by the EU. The investment costs currently total 2.85 bn. Euros, and the project is scheduled to become operational in 2032. However, a final investment decision for the entire project has not yet been made.

- The BarMar subproject entered the FEED (Front-End Engineering and Design) phase in July, marking an important milestone. Upon completion of this phase, the project aims to take a Final Investment Decision in 2028.
- At the same time, the first four segments of Spain's hydrogen core network are now in a fast-track permitting process. This is a key requisite for the further progress of projects with FID and, as in the case of the 500 MW_{el} Catalina project by CPI and Enagás, for enabling an investment decision to be made soon.

Imprint

Editor: Team Consult G.P.E. GmbH, Robert-Koch-Platz 4, 10115 Berlin

Contact details: +49.30.400 556 0, info@teamconsult.net

Legal disclaimer & copyright: The H_2 Market Radar was produced with utmost care. Team Consult cannot assume any liability for the completeness, accuracy and up-to-date nature of the data used. All content is protected by copyright.