

## The joint venture between bp and Iberdrola España starts construction work on Spain's largest green hydrogen plant

- *This plant could create up to 500 new jobs during construction and approximately 25 Spanish companies will be involved*
- *First a plot of land next to the BP refinery in Castellón will be adapted, then civil engineering works will begin and then the main equipment, including the electrolyzers, will arrive and be assembled*

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The joint venture between bp and Iberdrola España has announced the start of construction work on Spain's largest [green hydrogen](#) project with 25 MW. This plant could create up to 500 jobs during its construction and approximately 25 Spanish companies will be involved in the work.

The first phase consists of earthworks and the development of an approximately 20,000 m<sup>2</sup> plot of land next to the bp refinery in Castellón. The civil works will begin in the second quarter of the year.

The next milestone of the project will be the reception and installation of the first main equipment, including the [electrolyzers](#), which is expected to take place in the second half of 2025. This equipment allows the production of green hydrogen through a chemical process (electrolysis) capable of separating the hydrogen and oxygen molecules of which water is composed using electricity from renewable sources.

Carolina Mesa, bp's vice president of hydrogen for Spain and new markets, said, "The start of construction of the largest green hydrogen plant in Spain is great news, because it allows us to see tangible progress in an important industrial decarbonisation project. The bp refinery in Castellón consolidates itself as a model for the transformation of refineries into integrated energy hubs".

Jorge Palomar Herrero, Director of Hydrogen Development at Iberdrola said, "This project is already enabling the real development of the hydrogen value chain in our country with key equipment manufactured in Spain and contracting more than 25 local companies. The project also brings in 200 GWh/year of renewable energy from Iberdrola's wind and photovoltaic plants in Spain and meets all EU requirements to ensure that the hydrogen produced is green hydrogen".

The announcement strengthens bp and Iberdrola's leadership in the hydrogen sector, an energy vector that has the potential to play a significant role in the [decarbonisation of industry](#). In addition, Iberdrola and bp continue to advance their partnership to accelerate electric mobility and lead high-power public charging in Spain and Portugal.

### Spain's largest green hydrogen plant

The project has an investment of more than €70 M and is being developed jointly by bp and Iberdrola España through Castellón Green Hydrogen S.L., a company equally owned by both companies. The plant is expected to be operational in the second half of 2026.

The 25 MW electrolyser will be powered by [renewable electricity](#) through a power purchase agreement (PPA) supplied by Iberdrola from photovoltaic and wind farms.

The production of 2,800 tonnes of green hydrogen a year is expected to replace part of the grey hydrogen currently used by the refinery in its processes and is expected to prevent the emission of approximately 23,000 tonnes of CO<sub>2</sub> a year, or the same amount as 5,000 cars produce in the same period.

In later phases of the project, the green hydrogen produced could also be used in key industries that are difficult to decarbonise in the Valencian Community, like ceramics, to replace the natural gas used in their processes, in chemical industries and in heavy transport.

This initiative, with the participation of the Instituto Tecnológico de la Energía (ITE), has obtained funding equivalent to €15 M from the Innovative Value Chain and Renewable Hydrogen Knowledge support programmes within the Spanish Recovery, Transformation and Resilience Plan, with funds allocated by the European Union's NextGenerationEU.

### **Confidence in Spanish companies**

The companies recently awarded the manufacture and supply of the transformer to the Spanish company Imefy. Based in Toledo, the La Mancha-based company will manufacture, supply and supervise assembly and commissioning of the three-phase power transformer, with 37 megavolt amperes (MVA) of power and 66/30 kilovolts (kV) of transformation ratio. It will be supplied in the first quarter of 2026.

This award demonstrates the confidence of bp and Iberdrola, through the company created for the Castellón Green Hydrogen project, in Spanish companies in the development of the renewable hydrogen value chain, strengthening industry in the region and creating industrial and innovation opportunities in a growing market, acting as a lever for development.