

Renewable hydrogen production in Sines advances through the GreenH2Atlantic project

A consortium of 13 companies and research partners was selected by the European Commission as part of the Green Deal to develop a green hydrogen production at 100 MW scale in Sines, Portugal.

Under the name GreenH2Atlantic, the renewable hydrogen production project in Sines will be developed by a consortium composed by 13 entities, including companies such as EDP, Galp, ENGIE, Bondalti, Martifer, Vestas Systems A/S, McPhy and Efacec, and academic and research partners such as ISQ, INESC-TEC, DLR and CEA, in addition to a public-private cluster, Axelera.

GreenH2Atlantic was one of the three projects selected by the Horizon 2020 – Green Deal Call to demonstrate the viability of green hydrogen production on an unprecedented scale. The €30 million grant will help finance the construction of the hydrogen plant, located in the coal-fired power plant area in Sines. The construction should start in 2023 and operation is expected to begin in 2025, subject to securing the necessary authorisations by the authorities.

The 100 MW electrolyser will be composed of innovative, scalable and fast-cycling 8 MW modules to overcome bottlenecks such as efficiency, size, lifetime and flexibility. Other innovative features include the interface system composed of an advanced management system which is required to enable the project's direct connection to a local hybrid renewable power plant (solar and wind).

Green hydrogen is expected to become one of the pillars of economic growth, for it is a decisive energy vector in the decarbonization process for the main sectors of the economy. This project will enable the transition of a former coal-fired power plant into an innovative renewable hydrogen production hub, in alignment with Europe's decarbonization and energy transition strategies.

With the creation of a 'hydrogen valley' centered in Sines, GreenH2Atlantic will significantly contribute to the sustainability goals of the region and Portugal, providing an important contribution to the European energy roadmap.

Follow the project on our website : www.greenh2atlantic.com

The different partners :



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