



Energy transition-decarbonisation Green hydrogen

PRESS RELEASE: Presentation of the Canary Islands Renewable Hydrogen Cluster-Hub Initiative

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Enagás and DISA promote the creation of a green hydrogen hub in the Canary Islands

- A score of public and private entities back this project that is committed to renewable hydrogen to contribute to decarbonisation
- The Cluster-Hub presents this project to the Government of the Canary Islands, which would involve an investment of 100 million euros in its initial phase

Enagás and the DISA Group have joined forces to promote the production, distribution and commercialisation of green hydrogen through the "Canary Islands Renewable Hydrogen Cluster-Hub" project, with the aim of contributing to the progressive decarbonisation of the Canary Islands. The project brings together 20 institutions around this common goal, including companies and public bodies, leading private companies in their sector, technology centres and academic institutions.

The project promoters have shared the advantages of this initiative with the Minister of Public Works, Transport and Housing, Sebastián Franquis, the Minister of Ecological Transition, Fight against Climate Change and Territorial Planning, José Manuel Valbuena, and the Deputy Minister of the Presidency, Antonio Olivera, in a meeting held at the Presidency of the Government of the Canary Islands.

The initial stage of the project requires an investment of 100 million euros, which could reach 1 billion in 2030, associated with the level of growth in the consumption of green hydrogen as a clean energy alternative. This initiative aspires to obtain public cofinancing, through the European Next Generation funds.

Cluster Members

In the field of land transport, the three main public passenger transport companies of the islands -Global, Titsa and Guaguas Municipales Las Palmas- are taking part, as well as Toyota Canarias and the Domingo Alonso Group for the development of the hydrogen-powered vehicle fleet for individuals and companies.

In the maritime sector, the Port Authority of Santa Cruz de Tenerife and the Port Authority of Las Palmas have signed up to this initiative, as well as the companies Astican, Boluda and Navantia.





In the tourism sector, the two provincial employers' associations Ashotel and Federación de Empresarios de Hostelería y Turismo de Las Palmas support the initiative, which has also been joined by the Satocan Group.

All this with the collaboration of the Canary Islands Technology Institute, the University of Las Palmas de Gran Canaria, the University of La Laguna and the National University of Ireland, Galway.

The initiative aims to continue to draw the support of more companies and public and private entities to make the most of and promote the growth of the use of hydrogen for decarbonisation in the Canary Islands.

During the first phase of implementation and start-up, the project is set to create some 200 new jobs.

The infrastructure proposed for this initial phase would have a capacity to produce about 1,000 tonnes of green hydrogen per year, whose final use would reduce CO₂ emissions by 10,400 tonnes, an amount equivalent to the absorption capacity of a forest with an extension similar to that of 600 football pitches.

Green hydrogen

Hydrogen is the most abundant molecule in the universe, and on the planet it is found mixed with other elements such as water. It is an energy vector that reduces greenhouse gas emissions and favours the decarbonisation of a wide range of sectors.

For hydrogen to be green it needs to be produced from 100% renewable energy sources, such as solar or wind power, which will be used to separate water into hydrogen and oxygen. In the project, designed for the Canary Islands by DISA and Enagás, the water used comes from the sea and is also subjected to a desalination process using renewable energy.

The project foresees the production of green hydrogen in two plants, located on each of the capital islands.

Green hydrogen uses and applications

The commercialisation of green hydrogen, foreseen in this initiative, is integral and transversal to several sectors of activity, as it will allow progress in the decarbonisation of energy, industry, mobility and the services sector. In the field of transport, the project envisages investments in logistics systems and the opening of around 30 hydrogen stations in the Canary Islands by 2030, for direct supply to vehicles. Six of them are expected to be inaugurated in the first phase of implementation.





Digitalisation

The project has been designed applying the criteria that define the new concept of sustainable industry, known as Industry 4.0, towards which the European Union wishes to advance throughout the community. The aim is to increase the guarantees that ensure sustainable traceability of the entire production process, from the origin of the raw materials, through each stage of transformation and exchange, to the final use for which the customer intends the product, in this case, renewable hydrogen. For this, the Cluster-Hub will use, from its creation, digital tools, such as IoT and Blockchain, in order to create a system of Certificates and Guarantees of Origin (CGDO) of the hydrogen produced.