

Innovative technology solutions for sustainability

Abengoa receives the visit of a German delegation at its Grasshopper plant to produce energy from hydrogen

- The importance of this plant lies in the fact that it can operate in a dynamic, flexible, versatile, modular and cost-saving manner.
- The visit was promoted by the Ministry of the Presidency of the Andalusian Regional Government and the Andalusian Energy Agency, and was attended by the German Consul for Andalusia, Ceuta and Melilla and representatives of the German Embassy in Spain.

May 26th, 2022 - Abengoa, an international company that applies an international company that applies innovative technology solutions for sustainable development in the infrastructure, energy and water sectors, was visited by a German delegation from the Baden Württemberg region at the pilot plant for the production of energy from hydrogen, Grasshopper, which the company is developing in the Free Trade Zone of Seville (Spain).

The visit, promoted by the Ministry of the Presidency of the Andalusian Regional Government and the Andalusian Energy Agency, was also attended by the German Consul for Andalusia, Ceuta and Melilla and representatives of the German embassy in Spain. The visit to the Grasshopper project is part of a broad agenda of two days during which the German delegation has known the Andalusian references in hydrogen and mobility.

The delegation was received by Juan Pablo Lopez-Bravo, president of Abenewco, accompanied by the general director of the Water and Energy vertical, Angel Alday, among other executives.

The attendees were given a first-hand look at the pilot plant to produce energy through the use of hydrogen fuel cells of the Grasshopper project, in the construction of which Abengoa is participating. Once the start-up phase is completed, Grasshopper will be transferred to its destination, in Holland.

The main novelty of this plant is that it is the first in the market capable of operating in a dynamic, flexible, and versatile manner and with a significant cost reduction, being able to maintain its performance throughout its operating range. Its bidirectional communication with the electricity market allows it to offer capacity and receive requests through a platform designed for Smart grids, and its rapid response enables it to participate in the electricity reserve and grid balancing

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markets. In addition, Grasshopper is a modular plant, which makes it easy to transport and connect to the grid (this is known as plug and play).

International project and financing

In addition to Abengoa, other companies and institutions such as INEA - Informatizacija Energetika Avtomatizacija, Johnson Matthey Fuel Cells Limited (JMFC), Nedstack Fuel Cell Technology B.V., Politécnico di Milano (Polimi) and Zentrum für Brennstoffzellen Technik Gmbh (ZBT) are participating in the consortium of this project.

The Grasshopper project meets the objective of the European Green Pact, which aims, among other things, to eliminate net greenhouse gas emissions by 2050. Moreover, among the renewable energies that could supply a substantial part of the European energy mix by 2050, hydrogen could represent up to 20 %. Hydrogen is therefore a key point in the process of decarbonization of the energy sector and one of the best energy carriers for energy storage in the medium and long term, contributing to the development of a circular economy and a zero-emission society.

The successful completion of the Grasshopper project represents a key milestone for Abengoa, as it will open the doors to new developments in this field, while reaffirming the company's leading position worldwide in this sector.

This project has been funded by the Fuel Cells and Hydrogen 2 Joint Undertaking undersigned agreement number 779430. It is supported by the European Union's Horizon 2020 framework program for research and innovation and by the Hydrogen Europe and Hydrogen Europe Research associations.

More information here.







About Abengoa

Abengoa applies innovative technology solutions for sustainability in the infrastructure, energy and water sectors. (www.abengoa.com)

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About Grasshopper

The Grasshopper project aims to create a new generation of hydrogen fuel cell based power plants more cost effective and flexible in energy production, achieving an estimated CAPEX below 1500 EUR/kWe at an annual production rate of 25 MWhe. (http://www.grasshopperproject.eu/).

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