EDP launches green hydrogen research unit

Energy firm will also study the potential of energy storage

19 February 2021 Energy Storage [Image: EDPR]

The EDP Group has launched two units that will study the potential of green hydrogen and energy storage systems.

The H2 Business Unit (H2BU) will be the new branch of the group for the development of green hydrogen projects, while the dedicated storage unit, created in EDPR NA, is expected to reach a storage capacity of 1GW in five years.

The green hydrogen market represents one of EDP's growth axes, the result not only of the decarbonisation objectives, but also of the cost reduction that has occurred, and it is expected to become competitive throughout this decade.

With the creation of the new business unit, EDP intends to strengthen the integration of green hydrogen in the group's portfolio in a strategic and transversal way and to promote investment in renewable energies.

H2BU will be led by Ana Quelhas, until now director of energy planning of the EDP Group.

H2BU will focus its efforts on developing green hydrogen opportunities in promising sectors such as the steel, chemical, refinery and cement industries, as well as long-haul heavy transportation.

Priority markets will be the US and Europe and renewable energy network and existing assets will be used.

To reinforce its crucial role in the energy transition, EDP Renováveis (EDPR) has created a new business unit dedicated to the development of energy storage technologies.

This unit, which will be associated with EDPR's activity in the US, will focus on the analysis of storage technology, and is a further step in EDP's commitment to innovation in the generation of clean energy.

The creation of this unit materializes the plan that EDP has underway in the United States, which is called "Re-charge" and aims to achieve 1GW in energy storage projects by 2026.

EDP chief executive Miguel Stilwell de Andrade said: "The creation of these business units reinforces EDP's leadership in the energy transition.

"The increasing penetration of renewable energies increasingly requires integration with storage systems, such as batteries, to provide the necessary flexibility to the electrical system and thus promote the growth of renewable energies.

"Furthermore, the combination of renewable energies in the generation of electricity with the electrification of consumption will be the most profitable way to decarbonize most of the final energy uses.

"But, if we want to meet the carbon neutrality objectives, we will need to use other energy vectors, such as green hydrogen, to respond to sectors where electricity is not a technically viable or economically attractive option."

EDP Group has several initiatives underway that have served to gain knowledge and test the potential of both green hydrogen and energy storage.

In the case of hydrogen, EDP has a pilot project at the Ribatejo plant, an alliance with H2Sines and a collaboration with the Alenquer City Council, among other entities.

At an international level, EDP is developing the Behyond project, a collaboration between Portugal and Norway to study the feasibility of offshore hydrogen production, and is also participating in the creation of a European hydrogen market with the European Clean Hydrogen Alliance.