

## Iberdrola's Hub in Bilbao celebrates its first anniversary with more than 80 collaborating entities in the world centre for smart grids

- The GSGIH -Global Smart Grids Innovation Hub- consolidates its position with a multitude of collaborative projects to innovate the grids of the future with the use of drones, data cybersecurity and artificial intelligence at the forefront.
- Iberdrola invested more than €337 million in R&D&I in 2021, 15% more than the previous year, and part of the resources were allocated to projects related to smart grids.

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The Global Smart Grids Innovation Hub -GSGIH-, which Iberdrola has in Bilbao, celebrates its first anniversary with more than 80 collaborating companies and entities. One year after its inauguration, the electricity company's Hub has consolidated its position as a global centre for innovation in smart grids, developing solutions for grid digitalisation, integration of renewables, deployment of electric vehicles and energy storage systems.

The GSGIH is generating major strategic projects that will guide innovation in distribution networks. The launch of the ASTRA-CC project led by i-DE - with the participation of 20 leading companies, manufacturers, technology centres and universities in electronics and control in the country - involves the evolution of the traditional grid to one that includes direct current grids to optimise the electrification of the economy, integrating renewables, fast charging of electric vehicles and storage.

Another example of a strategic Hub project is the TrustGrid, which collaboratively generates innovative cyber security technologies to build long-term solutions and address business challenges. In this way, a new collaborative model will be established to design and develop common "secure by design" technologies that meet the needs of a more cyber-secure smart grid.

In addition, work is being carried out on a new phase in the digitalisation of the facilities, the 4.0 substation project based on the development of digital twins (Digital Twin). Based on an intelligent 3D model, generated from drone flights, the various elements of a substation can be sensorised by robots to remotely monitor possible anomalies and provide greater safety for the "connected" workers of the future. The next step is already being tested: drones already allow the installation of bird protection elements on overhead lines, avoiding work at heights.

Project activity is complemented by specific Challenges to find new ideas and innovative partners to address specific problems. This year, cameras equipped with artificial intelligence for the early detection of fires are being deployed in the electricity pylons.

In the same way, the challenges proposed by the Hub stimulate the development of possible solutions, thanks to the Start-Ups.

Iberdrola invested more than €337 million in R&D&I in 2021, 15% more than in 2020. Part of the resources have been directed to projects related to smart grids. It should be noted that, among the achievements of the GSGIH in this first year of operation, is the identification of R&D&I projects underway for a total estimated investment of €32 million in Iberdrola Redes España.

### The Hub's growth pole

This public-private collaboration space -with more than 1,000 m2 and located at Iberdrola's network headquarters in Larraskitu- is a pole of attraction for talent and the promotion of new technologies that will make the energy transition possible, maximising the use of renewables, fully integrating energy storage systems and optimising access to new uses of electricity, such as mobility and air conditioning. Moreover, it is also an international collaborative project, bringing together the potential of more than 200 professionals in the development of innovation projects to be developed in countries in Europe, America and the Middle East.

The Global Smart Grids Innovation Hub is connected to the Biscay Startup Bay strategy, as it will also become a scaleup location for startups in the energy sector that set up in the Biscay Tower.

Press release