Press release
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Iberdrola presents, at the 11th Digital Summit, more than 150 use cases of AI

- *With this event, which each year features top-level speakers, the company promotes digital culture, highlights its key projects and inspires all its employees to continue growing in R&D&I*

Iberdrola's corporate campus in San Agustín del Guadalix, Madrid was the setting for the company's 11th Digital Summit, an event which, over the years, has established itself as a unique space to exchange knowledge and experiences in digitalisation and innovation. With the Digital Summit, the company promotes the digital culture, gives visibility to its key projects in this area and inspires all its employees to continue growing in R&D&I.

The theme chosen for this year's event was 'AI Momentum'. This year's conference focused on a disruptive and topical subject: artificial intelligence (AI). To address it, Iberdrola invited top-level speakers from both the electricity sector and other areas and companies, such as Esade, EY, Accenture, Ecoembes, DXC Technology, Caixabank, Enatic, Holcim and Ohla. These experts gave their vision on the use of AI, while addressing key issues in how this technology is applied, such as ethics, regulation, innovation and new trends.

Iberdrola has been using AI for more than 10 years to make predictions, optimise processes and detect patterns applicable to its daily operations. In fact, the company has several use cases in Spain. Renewable energies and electricity grids are some of the areas in which it is applying this technology.

AI provides solutions for clean energy, too. It does so to maximise the use of wind and sun to produce electricity, with applications ranging from the design phase of an installation, predicting the optimal location of a wind turbine, to operation and maintenance, with the use of algorithms that anticipate issues before they occur thanks to the advanced analysis of millions of data points, or the prediction of wind or solar production for each hour of the day and in each plate and wind turbine of Iberdrola's plants around the world.

It is also used to protect birdlife by means of systems capable of detecting birds within five kilometres of the wind farm and stopping the corresponding wind turbines to avoid any risk.

With regard to electricity grids, Iberdrola puts AI applications at the service of its customers through an algorithm capable of providing an accurate estimate of the time they won't have electricity in the event of an incident. This technology also allows its teams to plan which grids or transformation centres will need partial replacements the following year, thanks to the use of 100 variables that predict possible issues based on six years of historical data.

Iberdrola is also exploring AI to optimise the location of backup batteries to help remedy possible grid incidents and to identify, with satellites associated with the technology, the volume of vegetation that needs to be cleared, as well as to estimate that vegetation's growth and assess whether work has been carried out correctly.

Responsible AI

Iberdrola, in short, seeks to strengthen its position as a benchmark in the integration of AI into the energy sector by implementing solutions that transform its processes to drive operational excellence, improve customer and employee experience and transition towards a cleaner and more accessible energy model for all. However, it wants to achieve this by developing and implementing responsible AI technologies that respect its policies and ethical principles.

Last September, the company announced its adherence to the commitments of the European Commission's AI Pact, an initiative that promotes its ethical and responsible application. Even so, the company has been progressively adopting proactive measures, ahead of the deadlines established in the EU AI Act.

Iberdrola has had a corporate AI policy in line with the new regulation and approved by the board for a year now, including the registration of AI models and solutions with their risk assessments and the alignment of its practices with a common global framework. In addition, two years ago it launched a Global AI Centre, which plays a key role in ensuring secure technology platforms, implementing measures to guarantee responsible AI and fostering innovation.

In February of this year, Iberdrola became the first company to certify its Artificial Intelligence Management System (SGIA) with AENOR, becoming the first business to achieve this accreditation in accordance with the international standard ISO/IEC 42001. This recognition highlights the correct implementation and use of artificial intelligence at Iberdrola Clientes and Iberdrola Energía España, companies that are part of Iberdrola, underlining its commitment to innovation, efficiency and ethics.

Acknowledgements

This year the company wanted to recognise the work of digitalisation, which was key during the cold drop. Thanks to the Spectrum control system, the grid assets could be managed with high levels of automation and operability, improving the quality of supply, reducing the risk of accidents in facilities, as well as the emissions of our fleet by allowing remote grid operation. During the cold drop, these control systems and the associated telecommunications systems enabled the operation and monitoring teams to work in perfect coordination. The Spectrum Control System handled a huge volume of data associated with the simultaneous events during the disaster without disruption, proving its robustness and allowing the control centre to do its job.

Digitisation has also been key to getting service back online and safe operations in a record time of 20 hours. This achievement not only demonstrates the efficiency of the technologies, but also the team’s commitment and dedication to overcoming challenges and maintaining excellence in our operations.