

Iberdrola seeks start-ups to get the most out of data centre energy

- Schneider Electric and Microsoft are participating in the challenge and will analyse the proposals jointly with the energy company.

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Iberdrola aims to squeeze the most out of energy efficiency in data centres. Through its PERSEO *start-up* programme and in collaboration with Schneider Electric and Microsoft, Iberdrola has launched a challenge that will reward companies that propose innovative solutions to make data centres more energy efficient.

Data centres are key to the digitalisation and automation of smart grids - they host servers to provide cloud services to run algorithms and process large amounts of data - and consume an increasing amount of energy, some of which can be reusable.

Data centre energy consumption has recently soared to 200 terawatt hours (TWh) per year. The aim of this challenge is to devise ways to recover some of this energy.

The key to more efficient use of data centres is their cooling. Currently, a significant part of the energy used by these facilities is dissipated to the atmosphere in the form of heat. This energy in the form of heat could be reused, but this poses two technological challenges: the low temperature of the waste heat and the difficulty and cost of transporting it to the end user to, for example, provide district heating.

Iberdrola, in collaboration with Schneider Electric and Microsoft, proposes several different formulas to get the most out of data centres in terms of energy: recovering heat for residential, commercial or industrial purposes, cooperating between different energy consuming systems (e.g., thermal and electrical) and with demand response capabilities, and even to offer flexibility and balancing services to grid operators.

The prize will consist of signing a collaboration and testing agreement with PERSEO, which will assume the costs of these activities and provide the winner with the necessary technical support, as well as a real environment and data to test the solution, giving access to equipment, teams, infrastructures, high-tech sites and co-working areas.

In addition, Iberdrola could offer the participant the opportunity to scale up the solution, adopting it through commercial agreements or even investing in the participating company. The registration period for the challenge began on 9 May and will end on 1 June, and the winner will be announced during this last month.

15 years innovating with start-ups

Since its creation in 2008, PERSEO has invested more than €100 million in start-ups that develop innovative technologies and business models, focusing on those that improve the sustainability of the energy sector through further electrification and decarbonisation of the economy.

The programme has focused its activities on analysing business opportunities and technological collaboration with start-ups and emerging companies around the world, analysing 300 companies

each year and creating an ecosystem of almost 7,000 entrepreneurial companies. This investment instrument currently holds a portfolio of eight companies.

Through PERSEO, Iberdrola carries out more than 25 real tests of technologies per year, which serve as a first step towards establishing a commercial relationship or partnership with start-ups. In addition, in the last two years the group has launched a total of fourteen challenges in which 700 start-ups have participated.

Beyond the financial contribution, PERSEO's support to these companies has been key in defining their product and business, offering them its knowledge and access to Iberdrola's market. On the other hand, the work carried out with the start-ups has served our company as a technological antenna to find out where our sector is heading.