

Cellnex successfully tests new renewable energy sources at its sites

- **The company has conducted a pilot programme to integrate the innovative aluminium-air battery technology as a backup power system at its sites.**
 - **Aluminium batteries provide renewable energy sources and generate no environmental pollution or waste for disposal.**
-

Barcelona, 28 November 2022. Cellnex, in collaboration with the [Phinergy](#) company, has successfully completed the pilot programme to test and validate the use of aluminium-air batteries as backup power at its sites. The project was carried out at Ossa de Montiel, located near the Lagunas de Ruidera Park in the province of Albacete (Spain), and consisted in replacing a diesel generator set with these innovative aluminium-air batteries.

This innovative technology developed by Phinergy leverages the fact that renewable energy from hydroelectric power plants is stored in blocks of aluminium, a metal that is very abundant in nature and easy to transport and handle. Subsequently, to generate energy, the aluminium is combined with oxygen from ambient air, using state-of-the-art air electrodes, in a totally silent process that generates no emissions or pollution. Once the energy stored in the aluminium has been used, the end result is an aluminium oxide, which can be processed again to convert it into aluminium, thus closing the cycle without generating any type of polluting waste.

The aluminium-air battery module used in the pilot project delivers 4kW, enough to power a medium-sized telecommunications infrastructure, with a ~20 hours capacity. The testing phase validated use cases in which the battery functions as uninterrupted power supply during cuts of between 20 minutes and 10 hours. In all cases the aluminium battery automatically came into operation providing adequate backup to the main power system. In addition, the remote management and control system provided real-time information on the status of the battery, energy consumed and remaining available capacity.

Once the pilot project was completed and in view of the results, the aluminium battery system was kept on site, with the aim of being the normal backup power system and evaluate the potential to incorporate it into the technological solutions that Cellnex uses at its sites. In this way, the Company continues to make progress in fulfilling its ESG commitments to use renewable energy sources at its facilities.

A wide range of applications and uses

The use of aluminium-air batteries as backup power at a telecommunications site is just one of the many possible applications of this technology. Given the ease of transport and installation, it is possible to use these batteries with zero environmental impact in rural locations, areas of difficult access, offshore sites and generally wherever a conventional power line is technically or economically unfeasible. Even electric vehicles will be able to benefit from this technology, with packs that will allow them to extend their autonomy when chargers are not readily available.

About Cellnex Telecom

The use of green and renewable energies is fundamental to Cellnex's strategy, contributing to sustainable energy growth, reducing the carbon footprint and minimising the environmental impact of its telecommunications infrastructures. Cellnex Telecom is the independent wireless telecommunications and broadcasting infrastructures operator that enables operators to access Europe's most extensive network of advanced telecommunications infrastructures on a shared-use basis, helping to reduce access barriers for new operators and to improve services in the most remote areas.

Cellnex manages a portfolio of more than 138,000 sites –including forecast roll-outs up to 2030– in Spain, Italy, the Netherlands, France, Switzerland, the United Kingdom, Ireland, Portugal, Austria, Denmark, Sweden and Poland. Cellnex's business is structured in four major areas: telecommunications infrastructure services; audiovisual broadcasting networks; security and emergency service networks, and solutions for smart urban infrastructure and services management (Smart cities and the "Internet of Things" (IoT)).

The company is listed on the continuous market of the Spanish stock exchange and is part of the selective IBEX 35 and EuroStoxx 100 indices. It is also present in the main sustainability indices, such as Carbon Disclosure Project (CDP), Sustainalytics, FTSE4Good and MSCI. Cellnex's reference shareholders include Edizione, GIC, TCI, Blackrock, CPP Investments, CriteriaCaixa and Norges Bank.

For more information: <https://www.cellnex.com>