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Institutional visit to the new substation

Formentera now meets all its electricity demand through the new power link between the Pityusic Islands and local renewable sources

The interconnection —representing an investment of €96 million— is a milestone in the island's energy transition and strengthens Islas Baleares' overall power system. Now, all the islands are connected by at least one 132 kV link and linked to the mainland.

The battery systems, currently under construction in Ibiza and Menorca, will further optimise the use of the submarine interconnections. Simultaneously, the future Peninsula–Islas Baleares and Mallorca–Menorca links —both included in the proposed Grid Development Plan 2025–2030— will enhance supply security and quality.

Formentera, 27 October 2025

The Secretary of State for Energy, Joan Groizard; Islas Baleares' Minister for Enterprise, the Self-Employed and Energy, Alejandro Sáenz de San Pedro; and the Vice President of the Consell de Formentera, Verónica Castelló, visited the new 132 kV Formentera substation this morning. The visit, alongside Eduardo Maynau, Redeia's Regional Delegate in Islas Baleares, focused on the island's electrical connection point for the new submarine link between Ibiza and Formentera. This infrastructure has been in operation since June 2023. It now enables the supply of 100% of Formentera's electricity demand safely and securely, eliminating CO₂ emissions associated with fossil-fuel-based electricity generation on the island.

The new substation forms part of the 132 kV interconnection between Ibiza and Formentera, which was included by Spain's Ministry for the Ecological Transition and the Demographic Challenge (MITECO) in the current Electrical Plan. With a total investment of €96 million, it was built and commissioned by Red Eléctrica in June 2023, Redeia's subsidiary responsible for operating and managing Spain's national transmission grid.

Since the new Pityusic interconnection became operational, 95.86% of Formentera's electricity demand has been supplied through the link, with the remaining 4.14% covered by local photovoltaic generation. In addition to enabling the full coverage of Formentera's electricity demand under safe operating conditions, the new link has made it possible to decommission the Es Ca Marí power plant's diesel turbine. Furthermore, it has also eliminated the need for auxiliary backup units that were previously required to meet peak summer demand. Altogether, this has completely eliminated CO₂ emissions from electricity generation on Formentera.



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The interconnection represents a historic step for Formentera due to its role in the significant progress in the island's energy transition by ending CO₂ emissions from power generation. Moreover, thanks to this link between the Pityusic Islands, all Islas Baleares are now connected by at least one 132 kV link, while all are integrated into the Spanish and European grids via the existing Peninsula–Islas Baleares interconnection. This enhances the Balearic system's security, robustness, and renewable integration capacity through the interconnection system.

The future second interconnection between the Spanish mainland and the Islas Baleares –together with a new Mallorca–Menorca link and other transmission system upgrades included in the draft Grid Development Plan 2030 (currently undergoing public consultation)– will further strengthen the reliability and quality of electricity supply across the Pityusic Islands and the entire Balearic archipelago. Additionally, new infrastructures such as the battery systems under construction in Ibiza and Menorca will help maximise the use of the submarine links.

The existing Peninsula–Islas Baleares interconnection already delivers substantial benefits –saving the national electricity system around €100 million annually and reducing CO₂ emissions by 500,000 tonnes per year. Once the planned infrastructures under the new Development Plan are completed – particularly the second Peninsula–Islas Baleares link (currently undergoing a second public consultation with an updated onshore route)– these benefits are expected to more than double. This will result in additional annual cost savings of approximately €360 million and an extra annual emissions reduction of 689 kilotonnes of CO₂ in Islas Baleares.

The 132 kV Ibiza–Formentera interconnection infrastructure

The Pityusic interconnection required the expansion of the 132 kV Torrent sub-station in Santa Eulària des Riu (Ibiza) and the construction of the new 132 kV Formentera substation, visited by the authorities today. It also involved 5.2 km of underground cable on Ibiza, 4.8 km on Formentera, and 27.1 km of submarine cable.

The new 132 kV Formentera substation has been designed to blend into the surrounding landscape. It was built as a GIS (Gas-Insulated Substation) facility, a technology that minimises land use by housing electrical components in compact, gas-insulated modules. This is the substation where the submarine cable 'lands' –a three-pole alternating-current link composed of two 132 kV circuits, each with a transmission capacity of 53 MVA. The link incorporates fibre optics for real-time remote operation and management. With a breaker-and-a-half configuration, the substation offers greater reliability and operational flexibility. It is equipped with two 30 MVA outdoor transformers (132/30 kV), four 9 MVAr reactors at 132 kV each, and 12 breaker positions.