

According to Data Presented by Red Eléctrica Today

Renewable generation grew by 28% in the Balearic Islands in 2023

In 2023, an additional 104 MW were added to the islands' installed photovoltaic capacity, representing a 45.3% year-on-year increase in production capacity

The commissioning of the new interconnection between Ibiza and Formentera in June strengthens the Balearic Islands' electricity system. All islands are now connected via 132 kV circuits, allowing Formentera to be exclusively powered by the link and local renewables

Palma, 21 March 2024

The Balearic Islands have consolidated the advancement in renewable energy generation in 2023. Production of these technologies as part the archipelago's mix increased by 28% compared to 2022, meaning that renewable electricity production from Balearic sources accounted for 11.4% of the total in 2023.

These are some of the findings derived from the [Spanish Electricity System Report 2023](#) and the [Renewable Energy Report 2023](#), documents created by Red Eléctrica that compile last year's main industry figures for our country.

According to Beatriz Corredor, president of Redeia (Red Eléctrica's parent company), "the figures for 2023 prove that Spain has consolidated its renewable leadership. This has been made possible by efforts in system operation and our extraordinary transmission grid, which have allowed our country to safely reach a share of 50% renewables in the mix. The grid is and will continue to be ready to meet the objectives of the National Integrated Energy and Climate Plan (PNIEC)."

With the commissioning of the new link between Ibiza and Formentera last June, full interconnection between all the islands has been achieved through 132 kV links. This improvement makes the system more resilient, reinforcing guaranteed electricity supply for each of the islands and, in turn, reducing the use of fossil fuels.

In fact, since June, the new link between the Pityusic islands has allowed for no local fossil fuel generation to be used on the island of Formentera at any time, with 100% coverage provided by the interconnection and local renewable photovoltaic production.

In 2023, solar photovoltaic generation in the Balearic Islands increased by 42.9% compared to the previous year, reaching a total production of 385,062 MWh. However, the Balearic energy generation structure continues to be led by combined cycle, for which production has decreased by 22.9% and accounts for 67.2% of the mix. Additionally, there was still some coal production, with production representing just 1.3% of the total.

In addition to the electricity generated in the Balearic Islands, the electrical interconnection with the Spanish mainland contributed an average of 23.8% of the total electricity to the archipelago in 2023, representing a 13.8 per cent increase compared to the preceding year. August 5th was the peak of the year in terms of meeting Balearic demand with mainland energy generation, with a quota of 34.9%.

During 2023, an additional 104 MW of solar photovoltaic power was commissioned in the region, representing a 45.3% increase in production capacity for this technology, which already had 333 MW installed. Thus, renewables already account for 16.9% of the installed power structure in the Balearic Islands, with photovoltaic power generation taking up the largest proportion (14.9%).

In this manner, the increasing amount of renewable energies has made it possible to record days where the percentage of renewable coverage has been significant, with the highest historical peak recorded at 12:20 PM on 5th November, with 44.3% of demand covered by renewables.

Demand in the Balearic Islands has decreased by 0.7%, to 5,998,789 MWh. After adjusting for employment activity and temperatures, demand in the Balearic Islands was 1.4% lower

The Year 2023 in Spain: Renewables Break Records

In Spain in 2023, installed solar photovoltaic power increased by 28%, bringing an additional 5,594 MW to the Spanish generation pool, the highest figure since records began. As a result, this technology now has 25,549 MW in service, representing 20.3% of the Spanish generation pool. This year-on-year increase means that our nation is the second among ENTSO-E countries in terms of the highest installed solar power output (both thermal and photovoltaic).

Spain ended 2023 with more than 125.6 GW in terms of total installed capacity, with renewables constituting 61.3% of this total. Thus, in 2023, the renewable production pool grew by 8.8%, thanks not only to the additional photovoltaic MW mentioned, but also thanks to the addition of 661 MW of wind power and 4 MW from other renewable sources. In Spain's national ranking, wind power is still the technology that accounts for the largest proportion, 24.5% of power generated, followed by combined cycle (20.9%), photovoltaic power (20.3%), and hydropower (13.6%), which increased its contribution by 41.1% compared to the previous year, given that 2022 was exceptionally dry.

According to the documents unveiled today, 2023 will also be remembered as the year when all historical renewable generation records were shattered, as over half of the electricity mix (50.3%) came from natural resources

such as wind, sun, or water.

In 2023, Spain produced 15.1% more renewable energy than the preceding year, totalling 134,321 GWh. Two technologies were the main contributors to this historic milestone: wind power, leading the mix with 23.5% of the total, and photovoltaic power, which produced 33.8% more than in 2022.

As a direct consequence of the rise in renewable energy production, 2023 also witnessed the lowest CO₂ equivalent emissions (greenhouse gases): 32,045,711 tCO₂ equivalent, nearly 28% less than the previous year.

In its Spanish Electricity System Report 2023, Red Eléctrica also analyses other metrics such as developments in demand, which in 2023 were 1.9% lower than in 2022 after adjusting for employment activity and temperatures. In gross terms, electrical demand in 2023 stood at 244,665 GWh, marking a 2.3% decrease, while electricity consumption across the ENTSO-E countries experienced a 3.3% decrease compared to 2022.

Additionally, the transmission grid availability index in the Spanish mainland system reached 97.62%, closely mirroring the values recorded in the electricity systems of the Balearic and Canary Islands, which stood at 97.84% and 98.93%, respectively.