

According to Data Presented by Red Eléctrica Today

Renewable installed power increased by 11.4% in Navarre in 2023, now accounting for nearly 60% of the region's generation pool

54.2% of the electricity produced in the region in 2023 came from renewable sources

Pamplona, 21 March 2024

Navarre commissioned a total of 206 additional renewable MW during 2023, 202 MW of which came from wind power. These new additions resulted in an 11.4% increase in the region's renewable installed power. Thus, as of 31 December 2023, the Chartered Community's generation pool boasted 3,378 MW, 59.5% of which were renewable.

These are some of the findings derived from the [Spanish Electricity System Report 2023](#) and the [Renewable Energy Report 2023](#), documents 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)."

According to reports by Red Eléctrica, wind power is the leading technology in Navarre's installed power structure, with a 46.1% share at the end of 2023. It was followed by combined cycle (36.2%), hydropower (7%), solar photovoltaic power (5.1%), cogeneration (4.3%), and the rest of renewables, which accounted for 1.3% of the total.

Thanks to this surge in renewables, the electricity generated in Navarre from these technologies accounted for 54.2% of the total in 2023, an 8.8 percentage point increase compared to 2022. Specifically, wind power, with 2,934 GWh generated in 2023, was the leading source of the territory's electricity mix and accounted for 41.2%.

Following wind power, the Autonomous Community's generation mix consists of combined cycle, with a 35.8% share, cogeneration (9.9%), hydropower (5.5%), solar photovoltaic power (4.2%), and the rest of renewables, with 3.4% of the total.

As for demand, Navarre recorded an electricity consumption of 4,665 GWh, representing 1.9% of the Spanish total.

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 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 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 new photovoltaic MW mentioned, but also 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, 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 presented 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.