

According to Data Presented by Red Eléctrica Today

Electricity generation from renewable sources increased by 6% in the Region of Murcia in 2023 and now accounts for a third of its production

Solar photovoltaic production increased by 8.6%, increasing its quota in the regional mix to 26.4%

Murcia, 21 March 2024

Electricity generation from renewables in the Region of Murcia increased by 6.1% in 2023, allowing the autonomous community to end the year with a renewable quota of 32.7% in the regional electricity mix.

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, the excellent performance of renewable energy in Murcia in 2023 was primarily driven by solar photovoltaic power, which produced 8.6% more than the previous year and accounted for 26.4% of the electricity mix.

Despite experiencing a 38.4% decrease in its energy production, combined cycle continued to lead the region's generation structure this year by producing the highest amount of GWh, accounting for 55.2% of the total. Following combined cycle, were photovoltaic power, cogeneration (12.1%), wind power (4.6%), hydropower (0.9%), solar thermal (0.4%), and other renewable sources, which represented 0.3%.

As for installed capacity, the regional generation pool ended the year with 5,469 MW, a 3.1% increase compared to 2022. This increase was mainly due to a 11.5% rise in solar photovoltaic power, the second technology in terms of installed power (representing 28.7%), only surpassed by combined cycle (which accounts for 59.7%).

Electricity demand in this autonomous community stood at 8,872 GWh in 2023, 2% lower than the previous year. This trend is in line with the 2.3% decrease recorded in the country as a whole.

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 over 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 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, 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.

