

According to Data Presented by Red Eléctrica Today

Aragon's renewable energy production increased by 19% in 2023 and now accounts for 82% of total generation

Installed renewable capacity increased by 9.3% in 2023 and already represents 77.2% of the generation pool

Aragon ranks as the second Spanish autonomous community in terms of wind power in service, totalling 5,246 MW

Zaragoza, 21 March 2024

Renewable production in Aragon increased by 18.9% in 2023 compared to the previous year, constituting 81.8% of the total. This means that the autonomous community is second in Spain in terms of the renewable energy production quota. This surge in renewables was made possible by the increase in solar photovoltaic generation (35.1% higher than in 2022), as well as wind power (up by 17.7%), and hydropower (up by 4.1%).

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. They were presented at an event held today.

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 set by the National Integrated Energy and Climate Plan (PNIEC)."

According to reports by Red Eléctrica, Aragon produced a total of 22,235 GWh in 2023, a 9% increase compared to its contribution in 2022. Wind power takes the lead among the top positions in Aragon's energy generation structure, accounting for 54% of the total, followed by solar photovoltaic power (17.4%), hydropower (10.3%), combined cycle (9%), and cogeneration (7%).

Thus, in 2023, the region boasted the highest wind power share in its energy generation mix among all autonomous communities, and it ranked second in terms of electricity generated from wind power (12,004 GWh).

Installed renewable power increased by 9.3% in 2023 with the commissioning of 762 new MW of renewable energy in Aragon, 551 of which were from photovoltaic power and 211 were wind power. All in all, Aragon ranks as the second Spanish region in terms of the installed wind power (5,246.3 MW). This technology already accounts for 45% of the regional pool. It is followed by photovoltaic solar power (20.6%), combined cycle (16.1%), hydropower (11.5%), cogeneration (4.4%), pumped storage (1.9%), and non-renewable waste (0.4%). In conclusion, Aragonese power at the end of the year amounted to 11,646 MW, 77.2% of which came from renewable sources.

Meanwhile, in 2023, electricity demand in Aragon reached 9,679 GWh, accounting for 4% of the total in Spain.

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 energy 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 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%. This is thanks not only to the additional photovoltaic MW mentioned, but also to the inclusion 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 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 across ENTSO-E countries, electricity consumption 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.