

## According to Data Presented by Red Eléctrica Today

# La Rioja generated 46% of its electricity from renewable sources in 2023

**34.9% of production came from wind power, the fifth highest quota in the entire country**

**The region's installed capacity amounts to 1,409 MW, 43% of which is already renewable**

Logroño, 21 March 2024.

45.8% of the electricity generated in La Rioja during 2023 came from renewable sources, with wind power being the renewable technology with the highest proportion in the region's energy generation structure, at 34.9%. This quota of wind power generation made this region the fifth in Spain with the highest wind power production in its 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, La Rioja produced a total of 2,183 GWh in 2023. Combined cycle was the leading technology in the regional electricity mix with 51.4%, followed by the aforementioned wind power, and in third place, solar photovoltaic power, with a contribution of 6.7%. Behind them, hydropower recorded 3.8%; cogeneration 2.8%, and the rest of renewables sources 0.5%.

In 2023, installed capacity in La Rioja underwent a slight variation: wind power grew by 2% and solar photovoltaic power by 1.7%. The total generation pool closed the year at 1,409 MW, with combined cycle playing a prominent role (55.7%), followed by wind power (31.8%), solar photovoltaic power (7.2%), hydropower (3.7%), cogeneration (1.3%), and the rest of renewables, accounting for 0.3% of Rioja's installed capacity. The renewable share in the region's installed capacity at the end of 2023 accounted for 43%.

Meanwhile, electricity demand in La Rioja in 2023 reached 1,533 GWh, accounting for 0.6% of Spain's 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 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 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 CO<sub>2</sub> equivalent emissions (greenhouse gases): 32,045,711 tCO<sub>2</sub> 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.