

## According to Data Presented by Red Eléctrica Today

# 73% of electricity generation in the Valencian Community in 2023 was emission-free

**Renewable production increased by 13.7%, and now accounts for 19.4% of regional generation**

**Solar photovoltaic power increased its production capacity by 6% in 2023, and installed renewable power accounted for 28.8%**

**The demand for electricity reached 26,367 GWh, representing 10.8% of Spain's total**

Valencia, 21 March 2024

73.1% of electricity generation in the Valencian Community in 2023 came from technologies that do not emit CO<sub>2</sub> equivalent (greenhouse gases), a 7.2 per cent increase compared to the previous year. Nuclear power remains the primary source of generation in the region with a 44.7% share, while renewables grew by 13.7% and reached a quota of 19.4% of the total.

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 presented today by Red Eléctrica, wind and solar photovoltaic power have contributed to this increase in renewable energy in Valencia. Their generation has increased by 13.9% and 13.3%, respectively.

Following nuclear power, which leads Valencia's generation structure, was combined cycle with 18% of the total; wind power (12.8%), pumped storage (12.3%), cogeneration (5.5%), solar photovoltaic power (3.6%), hydropower (2.3%), and solar thermal, while the combination of renewable and non-renewable waste totalled 0.8%.

As for installed capacity during 2023, the regional generation pool only experienced significant variations in solar photovoltaic power, which increased by 6% compared to 2022, from 427 MW to 453 MW. On the other hand, cogeneration reduced its installed capacity by 1.7%. Thus, at the end of the year, the region's generation capacity stood at 8,339 MW, 28.8% of which came from renewable technologies.

In addition, electricity demand in the Valencian Community during 2023 stood at 26,367 GWh, 2.5% less than in the previous year, a decrease in line with Spain as a whole. Consumption in this autonomous community represented 10.8% of the country'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 power, 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 capacity, followed by combined cycle (20.9%), photovoltaic power (20.3%), and hydropower (13.6%), which increased its production 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, electricity 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.