

According to data from the 'The Spanish Electricity System Report 2022'

Catalonia is the region that produced the most energy using zero-carbon energy technologies

During 2022, Catalonia produced 29,904 GWh of emission-free energy, the highest amount nationwide.

Emission-free generation accounts for 72.3% of total production in Catalonia

Electricity consumption in Catalonia increased by 0.6% year-on-year, closing 2022 at 44,976 GWh, and represented 18% of the national total.

Barcelona, 23 March 2023

In 2022, Catalonia was once again the region where the greatest amount of energy using zero-carbon energy technologies was produced, closing the year at 29,904 GWh, representing 72.3% of its mix.

These facts are part of the data included in the 'Spanish Electricity System Report 2022' and in the 'Renewable Energy Report 2022', documents drafted by Red Eléctrica that set out the key indicators regarding the Company's performance as Spain's sole HV transmission agent and electricity system operator, and which have been presented at an event held today.

For Beatriz Corredor, Chairwoman of Redeia, Red Eléctrica's parent company, "the 2022 data showcases that Spain is one of the drivers of renewable energy in the European Union. Furthermore, everything points to the fact that thanks to the efforts made last year, 2023 will prove to be a great year for the green transition in which Spain is currently immersed".

According to the data reflected in these reports, electricity production in Catalonia grew by 4.4% in 2022 compared to the previous year and nuclear was the main generation technology in the region, accounting for 57.6% of the total, followed by combined cycle (19%), cogeneration (8.2%), hydro (6.4%) and wind (5.9%). 14.2% of the electricity generated in this region is renewable, a figure that has been considerably reduced by the influence of the drought in the region, which has cut hydroelectric power production by 36.5% in the last five years and by 20.9% in 2021.

Catalonia closed 2022 with hardly any variations in terms of its power generation fleet, which added 94 new MW of installed wind power capacity. By end of 2022, this technology reached 1,369 MW of capacity and represented 11.4% of the power generation capacity in Catalonia. Solar photovoltaic, meanwhile, commissioned close to 5 MW of new capacity in 2022, and currently, renewables account for 30.9% of the region's electricity production capacity.

Electricity demand in the region of Catalonia stood at 44,976 GWh in 2022, up 0.6% year-on-year. This figure accounted for 18% of national electricity consumption in 2022.

Spain, a driver of renewable energy in Europe

At a national level, the data included in both reports show that, in 2022, Spain continued to demonstrate its leadership in renewable energy in the European Union. It is second only to Germany in terms of installed renewable power capacity and also in terms of installed wind power capacity. In the case of solar power, Spain is the third country with the most capacity in service after Germany and the Netherlands.

In terms of electricity generation obtained from these technologies, Spain is the second European country that produces the most energy from wind and the sun after Germany.

This has been possible thanks to the increase in Spain's renewable power generation fleet. During the past year, renewable energy technologies added 5.9 new GW of capacity to the Spanish power generation fleet. Of these, 4.5 GW were solar photovoltaic and 1.4 GW were wind.

This new momentum has enabled wind to account for 22% of the generation mix and solar photovoltaic for 10%, with both technologies registering all-time annual highs regarding production. In total, renewables, as a whole, accounted for 42% of the total generation mix nationwide in 2022. The drop of nearly 40% in hydroelectric generation has prevented the overall share of renewables in the generation mix from surpassing previously existing all-time highs.

Thanks to this renewable energy potential, Spain was able to support its neighbouring EU countries. It should be noted that, for the first time since 2015, the year closed with an exporter exchange capacity balance that stood at nearly 20 TWh, which is the highest value ever recorded.

For its part, during 2022, the demand for electricity in Spain showed a decrease of 2.4% compared to the previous year, recording a total demand that stood at 250.4 TWh. After having factored in the effects of seasonal and working patterns, annual demand nationwide for 2022 registered a fall of 3.3% year-on-year.