

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

More than half of Extremadura's power generation fleet is already solar photovoltaic

80.8% of Extremadura's installed power capacity is dominated by renewable technologies.

One out of every four GWh of solar photovoltaic energy generated in Spain is produced in this region

Merida, 23 March 2023

Extremadura closed 2022 with a total of 1,480 new MW of solar photovoltaic technology, 38.3% more than it had in 2021, making it the only region in Spain with more than half (50.5%) of its installed power capacity based on this technology.

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 TSO (Transmission 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 reports presented by Red Eléctrica today, 80.8% of Extremadura's power generation fleet is renewable, with hydro, 21.5% of the installed capacity, being the second with the greatest weight in its generation structure, only surpassed by solar photovoltaic. Nuclear, with 19.1%, is in third place.

In terms of electricity production, Extremadura has consolidated its leadership as the region that contributes the most solar photovoltaic energy to the national electricity system with a total of 6,952 GWh. In general terms, one out of every four GWh produced with solar photovoltaic panels nationwide comes from Extremadura. This technology, whose production grew by 40.8% in 2022 compared to 2021, reached the second position in the regional generation mix, with a share of 26.5% of the total, only surpassed by nuclear

with 61% and followed by solar thermal (6%), hydro (4.7%) and the rest of technologies, which represented a share of 1.7%.

Thus, a total of 26,247 GWh were generated in Extremadura in 2022, up 6.3% compared to the previous year, representing 9.5% of national production. Of all the energy generated in the region, 38.7% is obtained using renewable sources.

Extremadura was also the leader in electricity production obtained using zero-carbon energy technologies, which accounted for 99.8% of its total generation structure.

The region's electricity demand in 2022 stood at 4,860 GWh, down 3.9% year-on-year, and accounted for 1.9% of the total in Spain.

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.