

## According to data from the 'The Spanish Electricity System. Preliminary Report 2021' **Catalonia, leader in zero-carbon electricity generation in 2021**

- The production of 76% of the generation mix in Catalonia was obtained using technologies that produce zero CO<sub>2</sub> equivalent emissions.
- Renewable energy generation in the region stands at 6,762 GWh, a 17% share of the region's generation mix.
- In 2021, demand in Catalonia grew 1.6% compared to 2020.

Barcelona, 18 March 2022

In 2021, Catalonia was once again the region that generated the most electricity using zero-carbon energy technologies. In total, it recorded a production of 30,147 GWh, 76% of the generation mix in Catalonia. This data is included in the 'Spanish Electricity System. Preliminary Report 2021', a document that Red Eléctrica de España publishes annually that includes the main power generation indicators in the Spanish energy sector and which was presented at an event held today.

For the Chairwoman of Red Eléctrica, Beatriz Corredor, "the energy transition is today more necessary than ever. It is the only way to achieve energy sovereignty in Europe and is an indisputable lever for the recovery that lies ahead. We have been working on this path for years and the figures for 2021 are an unmistakable sign that we are taking firm steps forward in this transition and doing so at a good pace. Furthermore, an essential instrument for driving this transition will be the 2021-2026 Electricity Grid Planning, which will be approved shortly and will allow us to comply with the path set by Spain's National Energy and Climate Plan (NECP)".

In total, 39,855 GWh were generated in Catalonia, 17% of which came from renewable sources, with hydro (8.5% of the total) being the renewable energy source in Catalonia with the most GWh in 2021. Nuclear was the leading source of generation in the region in 2021, accounting for 58.7%, and was followed by combined cycle (12.1%) and cogeneration (11.4%). These last two technologies decreased their production by 8.2% and 10.8% respectively compared to their 2020 values.

In terms of installed power capacity in the region, at the end of 2021, renewable energy technologies accounted for 30.3%, with combined cycle and nuclear, 31.9% and 25.6% respectively, being the main technologies in the region's installed power capacity structure, with hydro (16.2%) and wind (10.7%) coming in 3<sup>rd</sup> and 4<sup>th</sup> position. Thus, as at 31 December 2021, the power generation fleet in Catalonia totalled 11,859 MW and represented 10.5% of the national installed power capacity.

According to the 'Spanish Electricity System. Preliminary Report 2021', last year demand in Catalonia rose by 1.6% compared to the previous year, reaching 44,751 GWh. This consumption represented 17.5% of total electricity consumption in Spain in 2021.

### **The energy transition, unstoppable in Spain**

At a national level, the figures for 2021 once again demonstrate Spain's strong commitment to renewables. In total, green energies produced 121,305 GWh, almost 10% (9.7%) more than in 2020 and reached a record share of almost 47% (46.7%) in the total generation mix nationwide.



In this regard, noteworthy is wind power generation which was the leading technology in 2021 with a share of 23.3% of the total generation mix nationwide. Thus, thanks to the wind, electricity produced using this technology generated 10.2% more than in the previous year. The increase experienced by solar photovoltaic energy has also been very significant. After increasing its installed power capacity by 28.8% through the addition of more than 3,300 MW, it increased its electricity production in 2021 by 36.7%.

After wind energy, the next technology that contributed the most to the generation mix was nuclear, which, although having generated 3.1% less than in 2020, still reached a share of 20.8%. Nuclear was followed by combined cycle (17.1%), hydro (11.4%) and solar photovoltaic (8%). Of note is that coal-fired generation continued its decline and reached a share in the mix of just 1.9%.

This greater presence of renewables in the generation mix in 2021 has contributed to reducing CO<sub>2</sub> eq. emissions associated with electricity production, which registered an all-time low in 2021.

The share of renewable technologies in the national power generation fleet also continues to grow. At year-end 2021, taking into account the addition of 4,000 MW of new green energy capacity, renewable technologies represented 56.6% of the total national production capacity (112,846 MW). Wind energy, which was the technology with the largest installed power capacity in Spain, is followed by combined cycle (23.3% share of the total mix nationwide), hydro (15.1%) and solar photovoltaic (13.3%).

For its part, electrical energy demand has continued to make progress in its recovery after the impact of the pandemic. At year-end 2021, annual demand stood at 256,387 GWh, a figure that is 2.5% higher than in 2020. After having factored in the influence of seasonal and working patterns, the figures regarding consumption remain basically the same.