



According to year-end forecasts

Wind power becomes the main source of electricity generation in Spain in 2021

- Renewables will achieve their best ever record, producing 46.6% of all electricity in Spain in 2021, 9.9% more than last year.
- Solar photovoltaic is the technology that has increased its production the most compared to 2020 increasing by 37.7% and registering its highest annual production and share in the Spanish generation mix (8.1% of the total).
- Red Eléctrica de España today presented the forecast for 2021 for the main electricity system indicators in a year in which the total national demand is estimated at around 257,100 GWh, a figure 2.8% higher than that registered in 2020.

Madrid, 16 December 2021

Wind power is already the main source of electricity generation in Spain. Forecasts estimate that wind power could end the year producing 23.3% of total generation in our country, being the leading technology in the national generation mix for the first time since 2013. The energy produced using this technology will exceed 60,600 GWh, with an estimated increase of 10.5% on last year. This can be seen from the data presented today by Red Eléctrica de España in its year-end forecast, which summarises the main data regarding the electricity system based on forecasts as at 14 December. Wind is one of the technologies whose production is expected to increase the most with respect to 2020, although the technology that has increased its production the most has been solar photovoltaic, which registered an increase of 37.7% and set an all-time annual high in production (more than 21,000 GWh) and had an 8.1% share in the country's total generation mix.

Estimates foresee that renewable energy technologies will close the year representing 46.6% of overall electricity generation nationwide - more than 121,500 GWh, 9.9% more than in 2020 - which means it would register its highest share in the generation mix since records began. This year's share of green production is 2.6 percentage points higher than the previous all-time high registered in 2020.

For the Chairwoman of Red Eléctrica, Beatriz Corredor, "these forecasts show that Spain is making good progress in its green transition process, which is the only way to achieve a more sustainable electricity system. We must continue working to reach 2030 with our homework done and Red Eléctrica will be there, as in 2021, maximising the integration of renewables and guaranteeing all citizens an electricity supply with the highest standards of quality."

In total, according to REE estimates, electricity production would exceed 260,800 GWh and would be 3.8% higher than last year. After wind power, nuclear ranks in second place, accounting for 20.6% of the overall generation mix. Combined cycle is in third place in the generation mix with 17.6%; hydroelectric power would have a share of 11.3% of total national production, followed by cogeneration (10%) and solar photovoltaic (8.1%).



On the other hand, forecasts suggest that coal, with an approximate production of just 4,900 GWh and a 1.9% share of the mix, could record its lowest contribution to the mix since records began.

Nevertheless, greenhouse gas emissions are similar to those in 2020 (more than 36 million tCO₂ eq.). The share of production from technologies which produce zero CO₂ equivalent emissions is estimated to reach 68.1% of the total, the highest since records began.

Renewables account for 55.6% of the power generation fleet

In 2021, the record figures for renewable energies have been possible thanks to their increased weight in the Spanish power generation fleet. Specifically, and with figures available to date, which could change between now and the end of the year, this year renewable power capacity has increased by more than 2,800 new green MW, mainly wind and solar photovoltaic, thus accounting for 55.6% of the overall total installed power capacity. Particularly noteworthy is the increase in solar photovoltaic, which showed a 19.8% growth in installed capacity in 2021 - with nearly 2,300 new MW - making it the technology with the greatest increase. Since 2018, the MW of solar photovoltaic has almost tripled. Wind power, meanwhile, has seen an increase of 1.9%, exceeding 500 new MW, thus reaffirming its leading position in generation capacity.

In 2021, the presence of polluting technologies continued to decrease, mainly coal, which reduced its power capacity by more than 800 MW this year. Between now and the end of the year, a variation in this figure is expected due to the permanent decommissioning of the Litoral thermal power station in Almería.

In total, as at the time of this press release, the Spain's installed power capacity already totals more than 112,800 MW, 1.8% higher than that registered in 2020.

Electricity demand recovers after the impact of COVID-19

In 2021, electricity demand in the Spanish electricity system is estimated to reach more than 257,100 GWh, a value 2.8% higher than in 2020. Factoring in the influence of seasonal and working patterns, the increase in national electricity demand would be 2.7% higher than that registered last year. Electricity consumption is thus gradually recovering after the impact of the pandemic. Compared with a period prior to COVID-19 (2019) and after having factored in the influence of seasonal and working patterns, national electricity demand would show a fall of 2.9%.

With the information available at the time of this press release, the maximum instantaneous power demand in the peninsular electricity system was recorded on 8 January 2021 at 2:05 pm, reaching a consumption level of 42,225 MW, a figure 4.5% higher than that registered in 2020, which stood at 40,423 MW.

Continuing with the trend of the last six years in international physical energy exchanges, the peninsular electricity system is expected to close 2021 with an estimated import balance of more than 500 GWh. This figure, which results from the difference between the import of approximately 17,700 GWh and the export of more than 17,200 GWh recorded this year, is 84.5% lower than the balance registered in 2020, which exceeded 3,200 GWh. This decrease is due to the increase in 2021 of exports in cross-border exchanges, mainly with Portugal.