

Strengthening the grid for new industrial and residential demand in the Community of Madrid

The Network Development Plan with a 2026 horizon has been approved to drive a greener future for Spain

- The Network Development Plan 2021-2026 is a key instrument for developing the electricity infrastructure needed to continue guaranteeing the security of supply in addition to promoting the energy transition process nationwide to ensure that renewable energy will account for 67% of the national electricity generation mix by 2026.
- The drafting of the Plan has followed a rigorous Strategic Environmental Assessment procedure to ensure it is sustainable and environmentally friendly.
- The projects included in the Plan will contribute to achieving significant efficiencies and savings for the system as a whole, more than 1.6 billion euros per year. In addition, the investments will help boost Spain's recovery from the crisis.
- In Madrid, the Plan will strengthen the security of supply and enable new industrial and residential demand to be met, contributing to the economic and social development of the region of Madrid.

Madrid, 22 March 2022

The Network Development Plan 2021-2026, which is binding for Red Eléctrica, has been given the green light after having been approved today by the Spanish Government following its presentation in the Spanish Congress of Deputies. With an investment of 6,964 million euros, this new Plan is a strategic instrument through which the necessary infrastructure will be developed so that Spain may continue to enjoy an electricity supply with high levels of quality and will allow further progress to be made in the decarbonisation of its energy model and in its fight against climate change.

In this regard, the actions included within the Plan will size and prepare the transmission grid in the coming years to be able to connect and integrate a higher share of renewable energy generation in line with the pace set by Spain's National Energy and Climate Plan (NECP) and make it available to consumers. Thanks to the development of this infrastructure, it is estimated that in 2026 renewable energy will reach a share of 67% in the national electricity generation mix and will enable CO₂ eq emissions to be reduced by 66% compared to those recorded in 2019 (the year before the pandemic), provided that the NECP forecasts and the full implementation of this Plan are met. Similarly, the projects included in the Plan, will contribute to achieving significant efficiencies and savings for the system as a whole, more than 1.6 billion euros per year. In addition, the investments will help boost Spain's recovery from the COVID-19 crisis.

The planning process followed a rigorous Strategic Environmental Assessment procedure to ensure it is sustainable and environmentally friendly. It should be noted that the Plan took into account the environmental and territorial conditioning factors and has prioritised these aspects in the final design. Furthermore, the Network Development Plan 2021-2026 includes making greater use of the existing transmission grid, thus avoiding those areas that are most environmentally sensitive and reducing those actions that may have an impact on the territory.



In fact, only 13% of all renewable generation expected to be connected by 2026 will require new transmission substations.

The Network Development Plan 2021-2026 for the community of Madrid will undertake actions that will strengthen the electricity supply in the region as well as enable new residential and industrial demand to be met, thus favouring its economic and social development. The new infrastructure will enable the arrival of new energy flows from areas of the Peninsula with abundant renewable resources, which will help cover demand and promote the evolution of the energy mix towards a more sustainable one. Furthermore, with this new Plan, Madrid again will consolidate its position as a connection hub of many of the new railway axes, thus helping to complete the national railway backbone infrastructure on the Spanish mainland.

Strengthening of supply and increasing support for new consumption and industrial demand

Among the most important projects in this new Plan is the set of infrastructure designed to support Madrid's electricity distribution network, which will bolster security of supply in the face of future growth in demand, especially in the northeast area of the capital. The actions foreseen include the construction of the new 220 kilovolt Fuente Hito (in Alcobendas) and Begoña substations, as well as their corresponding connection lines, and the enlargement - through the incorporation of new feeder bays - of some of the existing 220 kV substations in the region (Ciudad Deportiva, Boadilla, Loeches, Valdemoro II, Galapagar and Pinto).

Moreover, with the aim of supporting the electricity distribution network, in the case of the local Corredor del Henares network, the Plan includes the commissioning of new infrastructure, including the 220 kV Cisneros, Complutum and Anchuelo substations, which will improve security of supply and help meet new demands arising from growth in the area. Other important projects already underway include the new San Fernando substation that will have two voltage levels (400 and 220 kV), the new double-circuit San Fernando- Puente de San Fernando line and the increase in power capacity of the double-circuit 400 kV Almaraz-Villaviciosa line. In addition, work is already underway to add forty new 400 kV and 220 kV substation feeder bays to facilitate the connection of renewable generation.

The Plan also foresees actions for specific lines and substations in order to increase the security of supply regarding demand in the metropolitan area of Madrid and to eliminate weak points and constraints that currently exist in the region's transmission grid.

On the other hand, the projects included in the Plan will enable the demand from new industrial developments to be met. To this end, the 220 kV Cisneros substation will be enlarged with new feeder bays that will enable the connection of a large industrial manufacturer of new technologies that will demand significant volumes of electricity. The 220 kV Nueva Meco substation and the new double-circuit line between the latter and the existing 220 kV Meco substation will also be built.

Supplying electricity for the Madrid-Albacete-Alicante-Valencia railway axis

Pursuant to the targets set out in Spain's National Energy and Climate Plan (NECP) and with the aim of contributing to the electrification of public and freight transport and to the decarbonisation of society, the Plan includes the construction of the new 400 kV Torrejón de Velasco to help power the high-speed railway line between Madrid and Valencia.



This project will be complemented with the installation of control elements that will help support specific system operation needs and reduce certain technical constraints, increase security of supply and enable a greater share of renewables in the generation mix.

A Plan conceived by all for society as a whole

This Network Development Plan is the result of the responsible and collective efforts of all stakeholders. The public administrations and the different agents of civil society have participated in its preparation, working together with a common goal: to build, together, a useful and valuable transmission grid for everyone. For the first time, the consultation process has been open to all citizens, companies and public administrations, whose high level of participation has demonstrated the enormous interest of society as a whole in the energy transition process.

- **More information at** <https://www.planificacionelectrica.es/>