

ENERGY INFRASTRUCTURE AND MOBILITY

Commitment to the sustainable economy

Last year Ferrovial decided to explore sustainable business opportunities, creating the Energy Infrastructure and Mobility division. In this second period, it is already developing projects in both areas, while managing circular economy activities in the United Kingdom and services in Chile and Spain. It represents a firm commitment to the transition economy.

Ferrovial is not limited to the management and development of its traditional businesses; it is always interested in the search for ways to respond to new social needs. Projects and opportunities that provide differential value based on the company's experience and background, and that respond to the changing habits of urban society. Energy, mobility and the circular economy are evidence of this commitment and this effort.

ACTIVITIES

Chile and Spain are the two main markets for Energy Infrastructure. Ferrovial has one transmission line already operational in Chile, which was acquired in 2016, and another under construction, the Centella project. In Spain, it has a 50 MWp photovoltaic plant under construction, located in Seville, as well as a portfolio of generation projects in their early stages of development exceeding 2-3 GW.

Zity is the main asset in Mobility. It is an electric carsharing company, already operating in Madrid, Paris, Lyon and Milan. The fleet consists of 1,500 vehicles, recharged with 100% renewable energy. Ferrovial has a 50% stake in this project developed jointly with Renault.

In Mobility, the minority stake in Inspiration Mobility is another project for the future. This North American company invests in the electric vehicle sector, both in cars and associated charging infrastructures.

The Circular Economy remains another important area of the division's activity. It has four municipal solid waste (MSW) treatment centers, located in Yorkshire, Milton Keynes, Cambridge and Isle of Wight. Each of them is associated with a concession contract with different local authorities. Together they have a capacity to treat some 800,000 tons per year. This business comes from its former Services division, as do those in Chile and Spain. In the Andean country, its activity continues to focus on providing services to large-scale copper mining, such as maintenance, hoisting or management of the electrical loop. In Spain, it retains a 24.7% stake in Serveo, a company focused on providing auxiliary services to public and private clients.

Monitoring, Analysis and Control Center

During 2022 Ferrovial Energy Infrastructures and Mobility and the innovation teams of the Sustainability and Energy Center of Excellence have launched the Monitoring and Control Center, which encompasses the operation and maintenance (O&M) activities related to electricity generation assets and transmission lines.

The Control Center will be called CMAC (Monitoring, Analysis and Control Center) and will concentrate the functions of real-time operation, parameter analysis and incident notification of Ferrovial's existing and future energy assets, enabling the monitoring of the electricity systems of the markets in which the company operates. In addition to generation facilities, it will also monitor the operation of other electrical assets such as transmission lines.

The integration of generation and transmission assets in the CMAC has multiple benefits, among others:

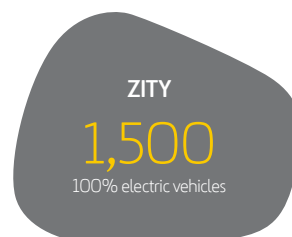
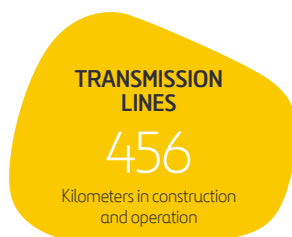
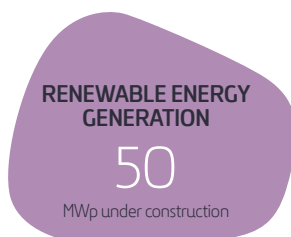
- Tracking the real-time performance of the assets, ensuring their integrity.

- Improve their availability and efficiency and, consequently, their profitability.

- Guarantee safe and optimal operation, reducing risks and O&M costs thanks to remote assistance and resource optimization.

- Early detection of incidents, optimizing maintenance interventions.

- Improve the technical specifications of new assets and propose future applications of AI and machine learning techniques based on the analysis of current operating parameters.





Transchile power transmission line, Chile.

STRATEGY

Ferrovial is positioned as a preferred industrial partner, providing value in the development, financing, construction, operation and rotation of assets. Based on its experience, it plans to take advantage of business opportunities while maintaining a balance between risk and profit. The division is an active part of the company's ESG strategy, focused on the fight against climate change and the decarbonization of the economy, always in line with the Horizon 24 Strategic Plan.

In a sector subject to constant change, the company intends to use, together with its own resources, its participation in industrial ecosystems, developing and investing in technologies that enable growth in profitable businesses. The activity will focus on Ferrovial's preferred geographies, especially the United States, Spain, Chile and Poland.

POTENTIAL BUSINESS DEVELOPMENTS

The future of energy infrastructure and mobility depends largely on five rapidly evolving trends:

- The need and willingness to have a greater degree of energy autonomy at the regional, national and supranational levels.
- National, regional and local regulation on economic incentives or disincentives to CO₂ production, use of public spaces, regulation of planning and rights to energy assets, etc.
- Social changes driven by growing awareness of climate change and the trend towards individual preferences for more personalized services. This phenomenon has been accelerated by the COVID-19 pandemic.
- Variations in asset costs due to technological advancement that have been altered by rising inflation, shortages of certain components and logistical stresses.
- New products, services and business models driven by technological and process innovation.

Despite the uncertainty of the evolution of these five points, there is a certainty of further electrification and a different concept of personal mobility, especially in cities.

ENERGY INFRASTRUCTURE AND MOBILITY

Yellow Energy

Decarbonizing the economy, tackling climate change and addressing the energy transition are key to sustainability and society. Ferrovial wants to contribute by committing to renewable energy. To this end, it has created the Energy Infrastructure business unit, within FEIM, and the Energy Solutions division, within FCo, to address the promotion and construction of new projects. Its approach will cover the complete cycle: promotion, financing, construction and operation. Horizon 24 sets the standard.

ferrovial

PROJECTS

GENERATION TRANSMISSION AND DISTRIBUTION ENERGY EFFICIENCY

ferrovial energy infrastructure

- Promotion of greenfield projects with a focus on approach to technological independence.
- Development of renewable generation, storage and storage and transmission infrastructures.

Berrocal



Solar photovoltaic plant of 50 MWp.

GENERATION

Transchile



220 kV double-circuit transmission line. 204 km long.

TRANSMISSION AND DISTRIBUTION

Centella



220 kV double-circuit transmission line. 256 km in length. New disconnecting substation.

TRANSMISSION AND DISTRIBUTION

Tap Mauro



Two 220 kV double circuit transmission lines. 3 km long each.

TRANSMISSION AND DISTRIBUTION

ferrovial energy solutions

- Engineering and construction of generation, transmission and distribution plants, as well as energy efficiency services.
- Turnkey projects.
- Complete energy cycle, acting in Renewable Energy Generation, Transmission and Distribution, and Energy Efficiency.

Ferrovial



Turnkey project, EPC. Solar Photovoltaic Plant El Berrocal. 50 MWp.

GENERATION



X-Elio

Turnkey project, EPC. Liberty Photovoltaic P.ant. 70 MWp. Texas.

GENERATION

Canal Isabel II



Turnkey project, EPC. Floating Solar Photovoltaic Plant 1.7 MWp.

GENERATION

Repsol / Iberólica



Turnkey construction of a 33/220 kV booster substation. Atacama wind farm.

TRANSMISSION AND DISTRIBUTION

Iberólica



Turnkey construction of a 33/220 kV substation. Elena Solar Photovoltaic Plant.

TRANSMISSION AND DISTRIBUTION



Enel

Turnkey construction of a 30/132 kV booster substation. Photovoltaic Solar Plant La Revuelta.

TRANSMISSION AND DISTRIBUTION

PRADAMAP



Turnkey construction of a 30/220 kV booster substation. Pinta y Guindalera wind farm.

TRANSMISSION AND DISTRIBUTION

Enel



Turnkey construction of a 30/132 kV booster substation. Photovoltaic Solar Plant Aljarafé.

TRANSMISSION AND DISTRIBUTION

Iberdrola



Turnkey construction of a 30/132 kV booster substation. Buniel wind farm.

TRANSMISSION AND DISTRIBUTION

Seville Conference and Exhibition Centre



Building energy management.

ENERGY EFFICIENCY

Madrid City Council



Maintenance of street lighting.

ENERGY EFFICIENCY

DH Ecoenergías



Construction of the network and thermal power plant of the District Heating of Ávila.

ENERGY EFFICIENCY

Torrejón de Ardoz City Council



Energy management of public lighting and municipal buildings.

ENERGY EFFICIENCY

Madrid Health Service



Energy management of the Príncipe de Asturias Hospital.

ENERGY EFFICIENCY

Vitoria City Council



Energy management heating and cooling of municipal buildings.

ENERGY EFFICIENCY

