Roadmap to decarbonization

Ferrovial's Climate Strategy, integrated into the Horizon 24 Strategic Plan, is aligned with the Sustainable Development Goals. In order to meet the objectives of the Paris Agreement and the 2030 Agenda, the company has a decarbonization roadmap and includes ambitious emission reduction targets.

Ferrovial is developing new business lines aimed at achieving the decarbonization of the economy and providing solutions to adapt to the effects of climate change.

CLIMATE STRATEGY

The company has a decarbonization plan, Deep Decarbonization Path (excluding services activity), which establishes the roadmap for achieving the 2030 emissions reduction target and is structured along four main lines:

- Target of 100% consumption of electricity from renewable sources by 2025.
- Achieving 33% of emission reduction from fleet vehicles by 2030.
- 20% reduction in emissions through energy efficiency in asphalt plants.
- 10% reduction in emissions associated with construction machinery through the implementation of energy efficiency measures.

Ferrovial was the first company in its sector worldwide to establish and have its emissions reduction targets endorsed by the Science Based Targets initiative (SBTi). The company has set the following targets:



- Reduce Scope 1&2 emissions in absolute terms by 35.3% in 2030 (base year 2009)¹.
- Reduce Scope 1&2 emissions in relative terms (tCO₂e/M€) by 42.9% in 2030 (base year 2009)
- Reduce Scope 3 emissions in absolute terms (excluding capital goods and purchased goods & services categories) by 20% in 2030 (base year 2012).

Ferrovial actively participates in the public projects developed by SBTi, contributing technical knowledge of its sector. The climate strategy and the greenhouse gas emissions reduction plan are put to a consultative vote at the annual General Shareholders' Meeting.



1 The Deep Decarbonization Path, Ferrovial's strategic plan sets a target of 35.3% Scope 1&2 emissions reduction in absolute terms, more ambitious than the 32% that the SBTi initiative had approved.

SCOPE 1&2 ABSOLUTE EMISSION REDUCTION TARGETS

Carbon Footprint

Since 2009, the company calculates and reports the carbon footprint for 100% of its activities under the operational control approach as an organizational boundary. The calculation methodology is mainly based on GHG Protocol (WRI&WBCSD), while maintaining compliance with ISO 14064–1. The emissions reported are as follows:

Scope 1²: those from sources owned or controlled by the company. They come mainly from the combustion of fuels in stationary equipment (boilers, furnaces, turbines, etc.) to produce electricity, heat or steam; fuel consumption in fleet vehicles owned or controlled by the company; diffuse emissions, those not associated with a specific source, such as biogas emissions from landfills; and channeled emissions, GHG emissions generated through a source, excluding those from fuel combustion. **Scope 2**³: emissions generated as a result of the consumption of electricity purchased from other companies that produce or control it. The GHG Protocol Scope 2 Guidance standard has been followed and the emissions reported are based on the market-based method, which reflects the effort being made by the company to use and purchase renewable electricity. However, emissions are also calculated on a location-based basis (see more information in the GRI Annex).

Scope 3⁴: indirect emissions occurring in the value chain. Ferrovial calculates all Scope 3 emissions following the guidelines set out in the Corporate Value Chain (Scope 3) Accounting and Reporting Standard published by the GHG Protocol Initiative, the WRI and the WBCSD. Categories 9, 10, 13 and 14 of this protocol do not apply to Ferrovial. More information in the GRI Indicators Annex, page 174.

Ferrovial's absolute and relative emissions during the last three years were as follows:

Absolutes emissions Scope 1 and Scope 2	2009 (base-year)	2020	2021	2022
Corporation	375	151	166	53
Toll Roads	6,593	2,586	2,353	2,918
Airports	1,296	1,296	1,296	1,296
Construction	163,232	192,541	169,735	144,998
Energy Infrastructure and Mobility	41	13	13	14
Services	252,999	239,387	225,824	232,062
Total Scope 1	424,536	435,975	399,387	381,341
Corporation	521	365	373	319
Toll Roads	20,006	1,936	1,745	1,631
Airports	7,624	7,624	7,624	7,624
Construction	88,143	29,641	20,692	22,845
Energy Infrastructure and Mobility	4	0	0	0
Services	14,291	85	102	626
Total Scope 1&2	130,588	39,651	30,536	33,045
TOTAL Scope 1+2	555,124	475,626	429,923	414,385

The emissions reflected in the table correspond to the company's carbon footprint, without including offsets.

SCOPE 3 EMISSIONS (tCO²eq)



2 Emission factor sources: GHG Protocol. DEFRA is being used for UK operations by country requirement and EPER methodology for diffuse emissions at landfills.

3 Emission factor sources: electricity supplier. When the supplier's emission factors are not available, following GHG Protocol recommendations, the country's energy mix factors according to the International Energy Agency are used.

4 Emission factor sources: GHG Protocol, DEFRA, CEDA, International Energy Agency.



RELATIVE EMISSIONS

Relative emissions Scope 1+2 (tCO2 eq/M€)	2009 (base-year)	2020	2021	2022
Relative emissions (tCO2 eq/M€)	162.36	72.01	67.48	42.91

Performance 2022:

The Deep Decarbonization Path sets out the company's decarbonization guidelines. As part of this program, Ferrovial is committed to the implementation of energy efficiency measures and the purchase of electricity from renewable sources, to the detriment of fossil fuel consumption.

In 2022, Scope 1&2 emissions have been reduced by 25.35% in absolute terms and 73.57% in intensity compared to the base year. The reductions achieved were well above the targets set for the year, which means that we are meeting the roadmap established by the company. This year, 70% of the electricity consumed was of renewable origin.

Offset

Ferrovial, in its commitment to decarbonization, contemplates voluntary compensation of 100% of direct emissions not reduced by 2050 through nature-based projects and mitigation beyond the value chain.

The Ministry for Ecological Transition and the Demographic Challenge has awarded Ferrovial the highest recognition achieved for its work for "Calculate", "Reduce" and "Compensate". This was thanks to the Compensa project, carried out in Torremocha de Jarama (Madrid), which seeks to recover the vegetation of an agricultural area lacking trees, converting it into a CO_2 absorption forest. With its development, an area of 7.7 hectares has been reforested in the last three years with a total of more than 4,000 trees that will absorb about 2,000 tons of CO $_{\rm 2}$ over the next 50 years.

Likewise, through the Electricity Generation project, based on Wind Energy in Gujarat (India), up to 10% of the emissions emitted will be progressively offset over the next four years.

By 2022, 4% of emissions have been offset as part of the reduction commitment.

Risks and opportunities related to climate change

Ferrovial incorporates the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) in its process of identifying, analyzing and managing risks and opportunities related to climate change, as well as in its Integrated Annual Report.

The company periodically performs an assessment and quantification of risks and opportunities in all its businesses and geographies in different time horizons: short term (2025), medium term (2030) and long term (2050). The methodology includes transition scenarios, focused on the degree of implementation of climate change policies, presented annually by the International Energy Agency in the World Energy Outlook, as well as physical scenarios that include various GHG emissions concentration cases and their physical impacts on the climate, analyzed by experts from the Intergovernmental Panel on Climate Change (IPCC).

	Climate scenarios	Climate risks
Transition risks	 Transition scenarios: Stated Policies Scenario (STEPS). Announced Pledges Scenario (APS). NetZero by 2050 Scenario (NZE). 	 Increase in the cost of energy, both fossil fuels and electricity, and other raw materials specific to each activity. Change in customer behavior users' transportation modes. Imposition of carbon price mechanisms that could tax emissions produced by the development of the activity. New regulations limiting the use of certain modes of transportation, which would have a significant impact on the use of the infrastructure operated by the company. Increased investor concern about the company's environmental performance and impact.
Physical risks	Physical scenarios:RCP 4.5RCP 8.5	 Temperature: variation in types and patterns, extreme waves and forest fires. Water: variations in precipitation types and patterns, floods, heavy rainfall. Wind: cyclone, hurricane and storms. Solid mass: landslides.



In the risk analysis performed, the methodology used takes into account the duration of the contract and the company's role in it. This means that in those projects in which Ferrovial only participates in the construction phase of the infrastructure, the risks and, therefore, their financial impact are lower than in those in which it is involved throughout the useful life of the infrastructure.

The risks identified may have an impact related to increased operational costs, increased investment, reduced profits, loss of share value or damage to infrastructure, and their magnitude will depend on the climate scenario analyzed, its location, type of project and time horizon. In response to these impacts, the group has implemented a battery of mitigation and adaptation measures.

Mitigation measures

- Development and implementation of the Deep Decarbonization Path, internal emissions reduction plan.
- Shadow Carbon Pricing: design and application of internal carbon pricing mechanisms for new investments.

- Consideration of raw material and energy price increases in contract negotiations.
- Search for innovative technological solutions to reduce energy consumption and emissions.
- Study and collaboration with key stakeholders for the development of projects that favor the transition to a low-carbon economy.

Adaptation measures

- ADAPTARE: development of a methodology and tool for the identification and analysis of physical climate risks that considers the climate projections foreseen by the IPCC in the short, medium and long term in the projects.
- Definition and implementation of an adaptation program that includes specific measures for each project, from design to operation.
- Contracting of insurance coverage for physical damage to infrastructures.

Main opportunities related to climate change						
Mobility	Water	Energy	Infrastructure			
 Innovative solutions to mitigate emissions associated with mobility that consider connectivity between infrastructures, vehicles and users, vehicle sharing and the electrification of transportation, reducing congestion and pollution in cities. Managed lanes: mobility service offered in congested urban corridors. The dynamic fare structure alleviates traffic and reduces relative emissions. AIVIA: consortium led by Ferrovial whose objective is to develop, test and implement technological solutions for safer, more comfortable and interconnected sustainable digital corridors through technologies such as 5G or Artificial Intelligence, improving traffic congestion and reducing relative emissions. Vertipuertos: design, construction and operation of the infrastructures required by eVTOL vehicles. Zity: zero-emission carsharing that reduces traffic and induces less private vehicle ownership. 	 Cadagua helps to solve the effects of climate change on water resources, orienting its business to the design, construction, operation and maintenance of water treatment facilities, favoring the availability of the resource in the natural environment and for human consumption. Wastewater treatment plants (WWTP): purification at both industrial and urban facilities to ensure the supply of drinking water, protect the environment and prevent pollution. Drinking water treatment plants (DWTP): water purification through various processes that treat surface water or groundwater to obtain water. Seawater desalination plants: desalination is a solution to supply challenges, especially in water-stressed areas. 	 Comprehensive solutions for the development, construction and management of energy infrastructures, as well as energy management services. Energy efficiency services for constant savings and continuous improvement of facilities, reducing energy consumption and emissions. Construction and maintenance of renewable energy infrastructures: highly technical engineering, construction, installation and electrical maintenance services for the renewable energy sectors. PPA development and exploitation: Power Purchase Agreement (PPA) projects for long-term clean energy generation. Power transmission lines: integrated solutions for the development and management of power transmission networks. Building renovation: transformation of buildings incorporating construction solutions to reduce energy demand and facilitate the use of renewable energies. 	Ferrovial provides new opportunities for the development of sustainable and resilient infrastructures that offer solutions to adapt to climate change. ADAPTARE The organization, in collaboration with an expert from the IPCC (Intergovernmental Panel on Climate Change), has developed a methodology to identify, analyze and assess the physical risks related to climate change and propose adaptation measures to mitigate the impacts they can cause on infrastructures. This methodology is applied to the different types of projects that the company develops and operates around the world. The analysis is carried out in the short, medium and long term under different climate scenarios. It takes into account the risk framework defined by the IPCC, as well as the adaptation criteria set out in the EU Taxonomy Regulation ADAPTARE automates this methodology and facilitates the analysis and interpretation for project managers and developers.			

Shadow Carbon Pricing

The company applies a methodology to economically quantify the potential climate risk of its most relevant investments in the Shadow Carbon Pricing modality with the aim of considering this impact in new investments. The tool considers the direct and indirect emissions of each project in its entirety, applying variable prices per ton of carbon for different time horizons, geographies and types of infrastructure. In 2022, carbon prices have been updated and geographies have been expanded.



Australia – Brazil – Canada – Chile – Germany – Ireland Mexico – Middle East – Peru – Poland – Portugal – Spain United Kingdom – USA – India – Turkiye – Colombia – Colombia



BIODIVERSITY

Ferrovial recognizes the key role played by biodiversity in the provision of services that support the economy and social welfare. For this reason, it has a recently approved Biodiversity Policy, integrated into the management system that governs the organizational and operational processes of all its contracts. This policy articulates the organization's principles on:

- Conservation and protection of species and natural ecosystems.
- Application of hierarchy criteria to mitigate negative impacts.
- Responsible use of natural resources.
- Combating deforestation.
- Application of nature-based solutions.
- Integration of natural capital in risk management.

The company has various mechanisms in place to facilitate compliance with these principles: some are mandatory (environmental impact statements and other legal requirements) and others are voluntary (environmental management system in accordance with the ISO 14001 standard and the internal tool for calculating the natural capital debt called INCA, whose methodology is aligned with the Natural Capital Protocol standard).

Additionally, in order to promote these principles among its collaborators and beyond its value chain, the organization participates in working groups on this matter with the Ministry for Ecological Transition and the Demographic Challenge (Fundación Biodiversidad) and other groups in Europe (Green Growth Group) promoting initiatives for the protection and conservation of biodiversity and ecosystems. It has also participated in the public consultation on the development of the GHG Protocol Land sector and removals guidance standard.

CIRCULAR ECONOMY

The circular economy aims to keep the value of products, materials and resources in the economy for as long as possible, optimizing the consumption of materials and minimizing waste generation. It is also a solution to a problem that directly impacts the deterioration of the environment and allows us to identify new business opportunities.

For this reason, during 2022 Ferrovial has launched its Circular Economy Plan, presented to the Board of Directors. Its main lines are:

- Promote the reuse and recycling of waste, prioritizing the minimization and recovery of waste. An annual target of 80% reuse of soils has been established, as well as 70% reuse of construction and demolition waste (CDW). In turn, the water treatment plants are committed to the valorization of sewage sludge with an annual target of 80% of the sludge generated for agricultural use, composting or thermal drying.
- Promote an efficient use of resources by applying circularity criteria, as well as the use of recycled materials, either by reusing or recycling materials in activities or by managing the supply chain to acquire materials with recycled content.
- Reducing the environmental impact of the company's activities. To this end, the company is working to adopt the principles of the circular economy in all processes, products and services.

EU Taxonomy

During 2022, in order to comply with the EU Taxonomy Regulation and respond to the alignment calculation requirement, more than 800 contracts encompassed in 28 taxonomic activities have been classified.

To this end, over the last 12 months Ferrovial has analyzed the technical criteria of the taxonomy at activity level, working in different groups according to the type of contract. As a result of these working groups, more than 500 people have been trained to analyze all contracts in force during the year.

Likewise, management systems have been adapted at contract level to meet taxonomy compliance and areas for improvement have been identified in order to meet taxonomy requirements from an early stage. In addition, the necessary tools have been incorporated into the accounting systems so that the systems can obtain the information related to taxonomy automatically.

As a result of the efforts made by the company, all stakeholders are offered reliable, traceable taxonomic information adapted to regulatory requirements. During this year, work has been carried out at sector level on the analysis of technical criteria in order to have a common language.



WATER FOOTPRINT

Water is one of the environmental resources that has suffered the greatest impact in recent years, with effects derived from climate change such as water stress, deterioration of water quality due to contamination, as well as a growing demand for drinking water.

Ferrovial's Water Policy recognizes water as a limited and irreplaceable natural resource and its access as a fundamental human right. In order to manage the resource positively, the focus is on its availability, quality and impact on ecosystems.

Ferrovial has developed a methodology for calculating its water footprint that quantifies the impact of the company's activities on this resource. It takes into account the following aspects:

 The source of water catchment, giving different weights depending on its origin.

WATER FOOTPRINT 2022 PERFORMANCE



Water consumption and its discharge in the company's activities

POSITIVE CONTRIBUTION

The water treatment activity together with the social action projects help to offset the impact of water consumption and discharges needed and generated by the business units.

Note: 2021 data were as follows: WTI: -244,464,703; WAI: -624,387; BWI: 2,103,657

- The country's water stress.
- The destination of discharges and their quality depending on the treatment they have received.

The methodology measures the impact of water consumption and discharges from the company's activities (Business Water Index – BWI). For this index, a target has been set to achieve a 20% reduction by 2030, compared to 2017. In 2022, a reduction of 29.7% was obtained compared to 2017 (–7.8% vs. 2021).

In addition, water treatment activities together with social action projects (projects aimed at improving access to water and sanitation in vulnerable communities) define two indexes that offset the negative impact: Water Treatment Index (WTI) and Water Access Index (WAI), respectively. To ensure this positive contribution, Ferrovial aims to offset 70 times the BWI annually (WTI + WAI > 70 BWI). In 2022, the BWI has been offset 125 times (117 times in 2021).

Ferrovial plays a key role in water management, contributing to solving the main challenges of water supply, quality, sanitation and pollution, especially in areas with water scarcity. The company is working on the implementation of more appropriate treatments to eliminate contaminants of emerging concern, as well as antibiotic-resistant bacteria. This management is an effective tool in the fight against climate change, as well as a sign of our commitment to society.

Progress in supply chain environmental management

Ferrovial shares information with its key suppliers through the environmental management system implemented in its activities in order to promote better management and performance of its supply chain. In this regard, in 2022, work has been carried out along two lines:

- Development of an internal purchasing guide containing environmental guidelines on material procurement specifications, aligned with the EU Taxonomy Regulation.

- Launching of a collaboration program with suppliers to learn about and improve their environmental management. In a first phase, this engagement campaign is focused on gathering information on the impact of its products in terms of carbon footprint and circular economy, as well as providing training material.