

# Ferrovial Climate Strategy 2019



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ferrovial



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Alignment with the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) and CDSB (Climate Disclosure Standards Board)

This report includes information on the governance, strategy, risk management and opportunities, objectives, metrics and development relating to climate change following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and Climate Disclosure Standards Board (CDSB).

The greenhouse gas (GHG) emissions given in this report have been verified under limited assurance by PwC, in accordance with ISAE standard 3410, Assurance Engagements on Greenhouse Gas Statements. This review also verified that the internal “Calculation and Reporting of the Carbon Footprint” procedure, approved by Ferrovial management, has been prepared in accordance with the international standard ISO 14064-1.

# INTRODUCTION

Climate change is the greatest environmental challenge facing society today, for which **immediate action** is essential, both with individual and collective actions from the public and private sectors. This urgent need in the face of the climate emergency was of great relevance during the last COP25 held in Madrid, a climate summit in which Ferrovial participated to highlight industry's role in applying innovative technologies for the decarbonization of the economy.

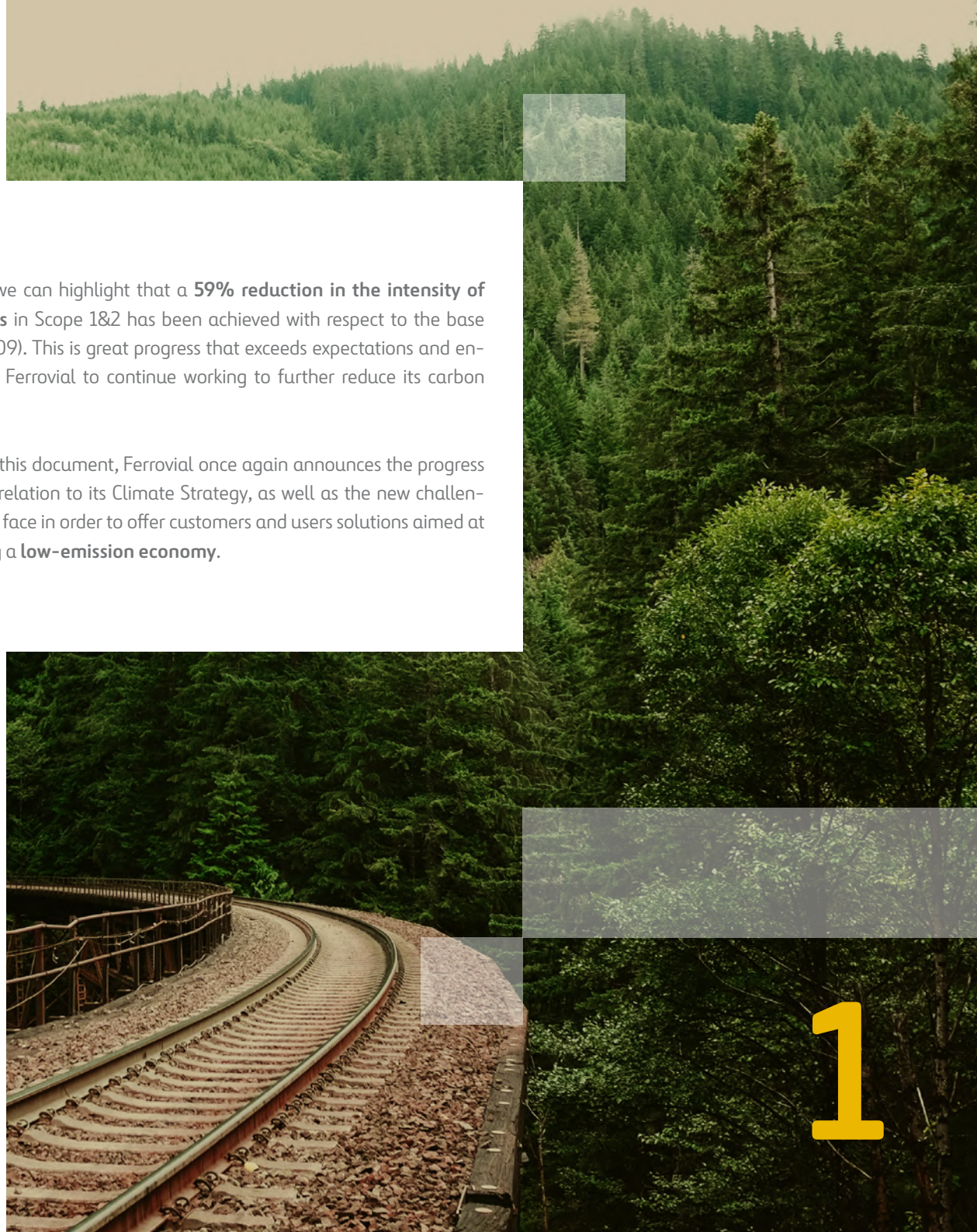
The company began its journey in the fight against climate change more than a decade ago through its **Climate Strategy**, moving towards the decarbonization of its activity. To make this a reality, the company is a pioneer in setting ambitious emission reduction targets endorsed by the **SBTi initiative** (Science Based Targets Initiative).

Ferrovial strives to meet these objectives by developing actions that are aligned with the recommendations of the **Task Force on Climate-Related Financial Disclosures (TCFD)** and are therefore based on the results of detailed analysis and quantification of both risks and opportunities arising from climate change. In addition, these actions are linked to the global targets defined to achieve Sustainable Development Goal (SDG) 13 for the Climate established by the United Nations.

Moreover, the Strategy is complemented by measures to compensate for those emissions that could not be avoided, as well as actions to adapt to the already evident effects of climate change. In this way, the company increases its **resilience** to new environmental conditions, both in the development of its activity and in its infrastructures.

In 2019 we can highlight that a **59% reduction in the intensity of emissions** in Scope 1&2 has been achieved with respect to the base year (2009). This is great progress that exceeds expectations and encourages Ferrovial to continue working to further reduce its carbon footprint.

Through this document, Ferrovial once again announces the progress made in relation to its Climate Strategy, as well as the new challenges it will face in order to offer customers and users solutions aimed at achieving a **low-emission economy**.





# FERROVIAL AT A GLANCE

A company with a vision to improve the future by developing and operating sustainable infrastructure and cities.

Ferrovial is a global benchmark in the **infrastructure and services sector**, an area in which it develops solutions marked by innovation and sustainability, covering all phases of the life cycle.





### MOTORWAYS

Promotion, investment and operation of sustainable infrastructures in increasingly congested urban environments.

- Cintra



### CONSTRUCTION

Development of unique infrastructures in the fields of civil and industrial works, building and water management

- Ferrovial Agromán
- Budimex
- Webber
- Cadagua



### SERVICES

Efficient provision of urban and environmental services and maintenance of infrastructure and facilities.

- Amey
- Ferrovial services
- Broadspectrum



### AIRPORTS

Ferrovial is an investor, without operational control, in the British airports of Heathrow, Southampton, Glasgow and Aberdeen. Additionally, it operates electricity transmission lines in Chile.

- Transchile

# Our objectives



## 01.



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Emissions reduction targets by 2030 as approved by the science-based targets initiative

- Scope 1&2: 32% less in absolute terms and 42.9% less in terms of intensity compared to 2009
- Scope 3: 20% less compared to 2012.



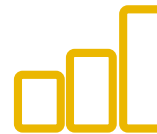
## 02.

Towards neutrality in 2050



## 03.

100% renewable electricity by 2025



## 04. TCFD

TASK FORCE ON  
CLIMATE-RELATED  
FINANCIAL  
DISCLOSURES

Management of short, medium and long term risks and opportunities associated with climate change

# Main milestones

## 2019 Greenhouse gas emissions (Scope 1&2&3)\*

In absolute terms, by source type



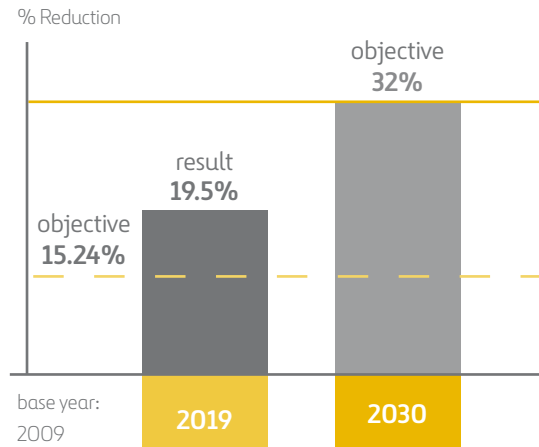
<b>791,974</b> Scope 1 (tCO <sub>2</sub> e)			
292,555 Stationary	271,220 Mobile	228,071 Diffuse	
<b>69,326</b> Scope 2 (tCO <sub>2</sub> e)			
<b>2,498,075</b> Scope 3 (tCO <sub>2</sub> e)			
569,388 Investments	692,499 Use of sold product	426,605 Purchased goods and services	809,584 Others

\*Data verified according to ISAE 3410

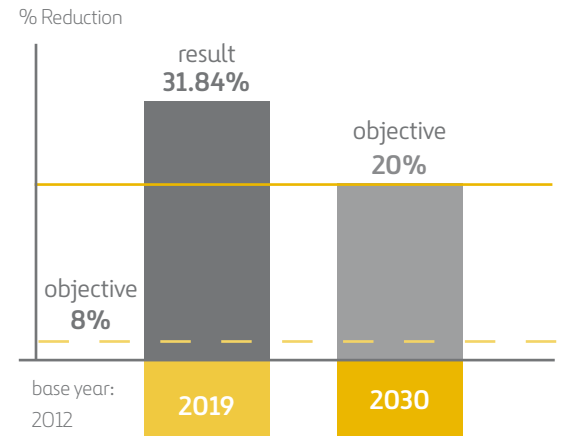
## We are complying with our roadmap

### Emission reduction towards 2050 neutrality

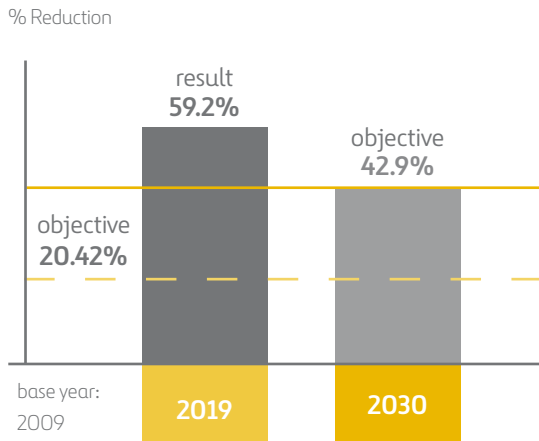
#### Scope 1&2. Absolute terms



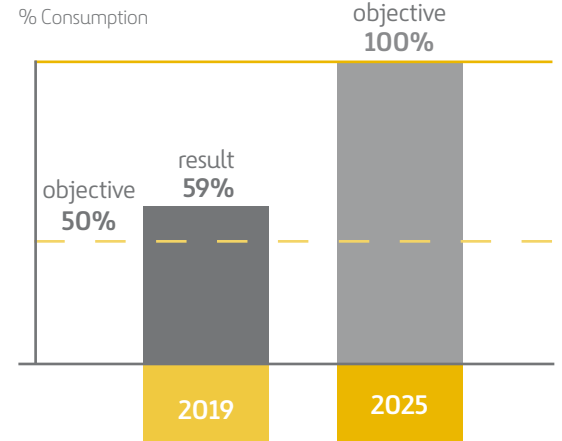
#### Scope 3



#### Scope 1&2. Intensity



### Renewable electricity



 **Managing risks and opportunities associated with climate change**

Ferrovial was the first company in its sector worldwide to establish and have its STBi emissions reduction targets endorsed, and one of the first to implement TCFD recommendations.

Aligned with

# SDGs

**6** CLEAN WATER AND SANITATION



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**11** SUSTAINABLE CITIES AND COMMUNITIES





Ferrovial has been recognized as a **leading company for its climate strategy**, being awarded once again by the Carbon Disclosure Project (CDP) and included in the Leadership Climate A list category, where it has been listed since 2010. It has also remained in the DJSI index for 18 consecutive years, having achieved the highest score in the sector in the environmental dimension. In addition, it has been included in the FTSE4Good index Series for the past 16 years and has been a member of VIGEO since 2018, while retaining an AA rating from MSCI. This same year, the Ministry for Ecological Transition recognized its commitment in the fight against climate change with the double "I Calculate and I Reduce" stamp.



# GOVERNANCE

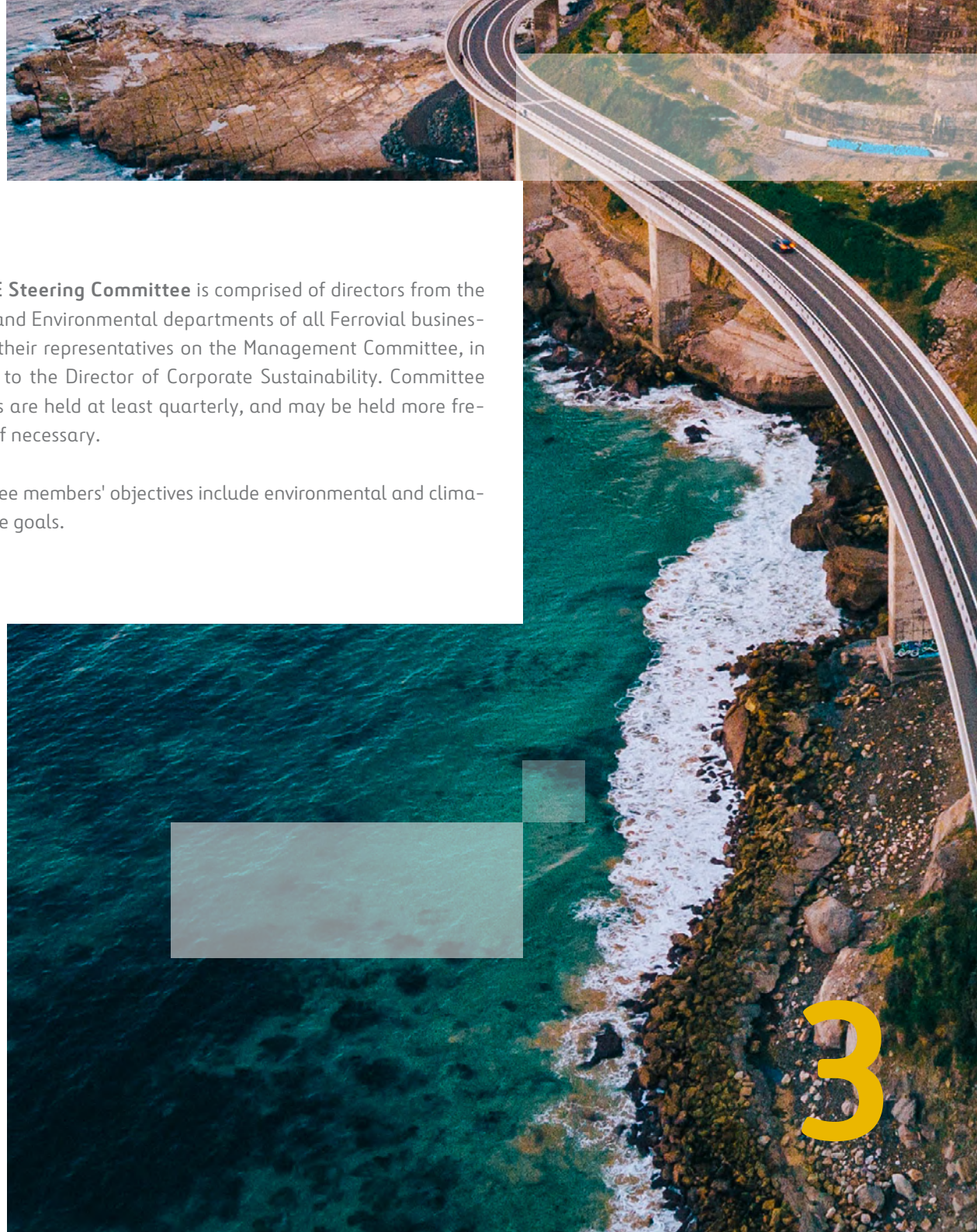
Ferrovia's **climate change strategy** is part of the company's corporate policy and is therefore discussed regularly in the meetings of the Management Committee and the Board of Directors.

In this aspect, the figure of the **Managing Director takes** on significant relevance by including the monitoring and implementation of initiatives related to climate change within his biweekly agenda. These are dealt with by the Sustainability Department, which coordinates and manages this matter throughout the company.

Thus, the **Sustainability Department** leads and presides over the Q&E Steering Committee, which is the body that articulates corporate strategy throughout the businesses that make up the company. This is where discussions, decisions, requirements and results related to projects, initiatives and practices on climate change are mainly discussed, as well as the implementation of the Quality and Environment policy throughout the company. In addition, decisions and actions derive from the application of the Corporate Responsibility policy that is determined by the Board of Directors. The decision-making process takes into account aspects such as new emerging legislation related to climate change, technical needs to respond to new legislative challenges and trends in the countries where Ferrovia operates, as well as recommendations from government agencies and organizations, the commitment to reduce emissions, implementation of mitigation measures, risks and opportunities, and evolution of environmental indicators, among others.

The **Q&E Steering Committee** is comprised of directors from the Quality and Environmental departments of all Ferrovia businesses and their representatives on the Management Committee, in addition to the Director of Corporate Sustainability. Committee meetings are held at least quarterly, and may be held more frequently if necessary.

Committee members' objectives include environmental and climate change goals.





# STRATEGY

Ferrovial is one of the leading global infrastructure operators and service managers for cities.

The company's business model focuses on the development of **innovative, efficient and sustainable infrastructures**, covering the entire life cycle (design, financing, construction, operation, maintenance and restoration), with the aim of providing value to its stakeholders.





Following the premises of fighting climate change and providing value to the company's stakeholders, Ferrovial's climate strategy has two lines of action aimed at achieving the **decarbonization of the economy and combating** the effects of climate change:

 <p>Management and reduction of our own and third party's carbon footprint</p>	 <p>Development of new business lines that will provide more efficient and sustainable technical solutions</p>
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Numerous initiatives have been implemented to achieve emission reduction results:

- **Energy efficiency** criteria have gradually been incorporated into **purchases and subcontracting of services** such as the purchase of electricity with a renewable certificate of origin, renewal of the fleet with more energy-efficient and electric vehicles, or the use of alternative fuels instead of fossil fuels. During 2019, 59% of the electricity consumed was certified as being of renewable origin.
- Incorporation of energy **efficiency measures in buildings and processes**.
- Commitment to **innovation** aimed at technological developments that help to avoid emissions.

- Application of the "**Carbon Pricing**" tool allows us to analyse the impact of new investments and to be able to direct the activities' portfolio towards those that are more sustainable.

In addition, this year work has been done on the "**Deep Decarbonization Path**" plan to achieve a reduction in emissions in the area of construction and infrastructure by 2030.

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100% Electricity from renewable sources (2025)

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33% Fleet renewal at zero emissions

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20% Energy efficiency in asphalt plants

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10% Energy efficiency in construction machinery

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Ferrovial actively participates in numerous working groups to promote the **decarbonization of the economy**.

# RISK AND OPPORTUNITY MANAGEMENT

Ferrovial was one of the first companies to implement and follow TCFD (Task Force on Climate-Related Financial Disclosures) recommendations.

It has carried out an analysis and quantification of the **risks and opportunities related to climate** change in all business areas and regions. To this end, three different scenarios have been considered depending on the degree of implementation of climate change policies.





## TCFD | Task Force on Climate-Related Financial Disclosures

Ferrovial has analysed its risks and opportunities based on the following three climate scenarios:

- **Current Policies Scenario (CPS).** It takes into account the impact of those policies and measures that are now firmly established. This scenario would result in a global temperature increase of +3 to 4°C by 2100.
- **The New Policies Scenario (NPS).** It incorporates not only the announcement of the proposed policies and measures, but also the effects of their implementation. This scenario would result in a global temperature increase of +2 to 3°C by 2100.
- **Sustainable Development Scenario (SDS).** This scenario is consistent with the necessary direction of decarbonization of the economy to reach the Paris Agreement. It includes a peak in emissions that will be reached as soon as possible followed by a decline. It takes into account a temperature increase of 2°C or less above pre-industrial levels.

After review, it is concluded that the **short, medium and long-term risks** for Ferrovial are:

### Physical risks

Physical damage to infrastructure and temporary stoppage of activity, decreased productivity in extreme weather conditions, increased risk premium or delayed delivery of services and products are some of the risks identified.

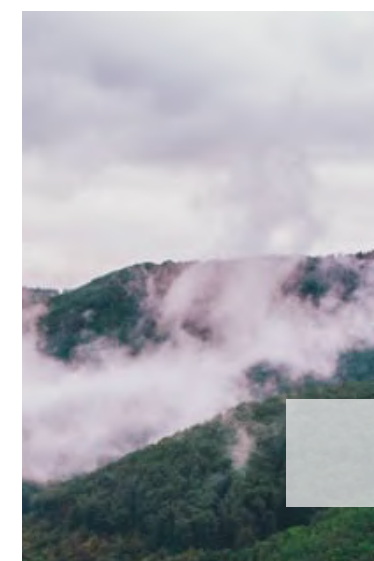
### Transition risks

Increase in the cost of operations due to the increase in the price of raw materials, increase in taxes on fossil fuels, payment for emissions produced or incorporation of some activity within the emissions rights market. Issues such as policy restrictions on emissions, imposition of carbon taxes, water restrictions, land use restrictions or incentives, and changes in supply and demand of services or disruption of operations are considered.

The probability of the occurrence of physical risks and financial impact is higher in the CPS scenario and decreases as it moves towards the more sustainable SDS. However, the evolution of transition risks is reversed. Thus, associated with the risks are measures to manage and reduce them, so the contracting of risk insurance is part of these measures.

To carry out an annual review of these, climate risks have been incorporated into the risk matrix of the FRM (Ferrovial Risk Management) corporate risk management system.

In terms of **opportunities**, the global trend towards a low-emission economy is directing investment and financing towards businesses that will help combat climate change and meet the objectives of the Paris Agreement. The commitments adopted by the company generate new opportunities in terms of sustainable infrastructures, mobility of people, energy efficiency, water management, integrated management of cities, and use of renewable energies instead of



fossil fuels and conservation of biodiversity. These are indispensable elements for facing the environmental commitment to reduce our own emissions and those of our customers and users of products and services, without forgetting to adapt to the effects of climate change.

In this sense, Ferrovial becomes a **strategic partner** in achieving the goals of emissions mitigation and adaptation to the effects of climate change, providing solutions through its "low carbon" business models.

## Sustainable Business Models

The Paris Agreement aims to decarbonize the economy, reaching neutrality by mid-century, and to adapt infrastructure to the effects of climate change. This challenge has to be met at the same time as unprecedented **population growth** is expected. Cities, responsible for 60% of global emissions, will host a large part of this population. In 2050, there will be more people living in cities than in the whole planet at the beginning of the century, and they will demand services for which management is a big challenge.

This context presents great opportunities for the company, since it impacts the way infrastructure and cities will be designed, built and operated.

For years, Ferrovial has been working along these lines, providing solutions in fields such as sustainable mobility, the circular economy, promoting the use of energy from renewable sources as opposed to

oil products, energy efficiency, improving the quality and optimizing the use of water as a resource, biodiversity and the adaptation of infrastructures.

## Sustainable Mobility

The concentration of the population in cities and the consequent congestion in access to them will require innovative solutions, including the modernisation and development of new infrastructure. These solutions must take into account future needs, such as those related to increased connectivity between infrastructure, vehicles and users, vehicle sharing and transport electrification.

### Carbon Neutral Mobility

In Spain, the car sharing service Zity has been built up and has increased its fleet of 100% electric vehicles recharged with **renewable energy** and **zero emissions** in the city of Madrid to 658. This business activity that improves the mobility and sustainability of cities will be taken to other European cities.

### Urban Mobility Pricing

Cintra actively participates in initiatives to reduce pollution and congestion in urban areas in a sustainable manner. Ferrovial is developing a **strategy of incentives** in prices to encourage the use of more energy-efficient vehicles, car-sharing and reduced congestion. Thus, citizens will have more mobility options while reducing emissions and pollution to create **more liveable cities**.



## Low Carbon Infrastructure

In the United States, Cintra has been operating the NTE highway for years. It is based on barrier-free tolls and dynamic toll rates, guaranteeing the speed and safety of drivers, as well as improving air quality in the corridor. This alternative adds a solution to the traffic congestion on existing roads.

Another example is Highway 407 ETR, in which Ferrovial is an investor. This is a **fully electronic**, barrier-free **toll road** that prevents congestion and traffic jams for over 400,000 users every day in Toronto (Canada). The optimum driving speed on this motorway compared to that prevailing on other roads with barriers and conventional roads avoids an average of 108 million kg CO<sub>2</sub>e annually thanks to the reduction in fuel consumption by users. To this environmental benefit should be added other social ones such as the accumulation of 30.4 million hours/year saved in transport by its users.

## Wondo, service integration

Wondo is Ferrovial's new start-up dedicated to providing citizens with access to the main **urban mobility services** in Madrid. The application allows the user to select, compare and plan the best routes through the city, find nearby motorcycles, bikes and car-shares and book shared taxis. The mobile platform brings together the different types of urban mobility services by combining car-sharing, motorcycle-sharing, BiciMAD, electric scooters and ride-sharing taxis with bus companies offering private transport within the Autonomous Community of Madrid, as well as all public transport (bus, subway and commuter train information). In short, Wondo offers the possibility of comfortable, efficient and sustainable transport.

## Innovation and mobility

Cintra is working on different projects related to autonomous vehicles in various areas. The company is analysing the technology needed to allow **connected and self-driving cars** to circulate on its motorways. The impact on traffic during the transition period from conventional to autonomous vehicles is being studied, and the impact that the development of other modes of transport, such as high-occupancy vehicles, car sharing services or other new passenger transport services has on the motorway business is being analysed.

The following **mobility projects** deserve special mention:

- **Mobility of the future**  
Strategic analysis with MIT on the mobility of the future based on the development of factors such as private vehicle ownership, mobility patterns or the energy mix.
- **Autonomous Bus**  
Prototype of an autonomous bus with Artificial Intelligence for the transport of passengers from the car park to the airport terminal.
- **C-ROADS**  
Application of Cooperative Intelligent Transport Systems for Vehicles (V2V) and Vehicle-to-Infrastructure (V2I) on roads.
- **Transforming Transport**  
Generation of advanced quantitative models to improve traffic management and reduce congestion on motorways.
- **NLP**  
Natural language processing and analysis tools (NLP) in legal documents for categorization and comparison.



Cintra | Managed Lanes, a solution to achieve "Low carbon" infrastructures

## Circular Economy

The **circular economy** is seen as an important element as a new economic model in the fight against climate change. It promotes mainly a reduction of the use of non-renewable natural resources, reusing waste as raw materials, recycling, the incorporation of eco-design criteria and the public awareness. Ferrovia is working to incorporate these principles into its internal processes and the products and services it offers to its customers.

With these premises, the company has started up a **new recycling plant** in Spain with the capacity to process 50,000 tons of PET plastic waste per year, transforming it into raw material for industry. The plant incorporates the latest technologies, thus minimizing energy consumption and facilitating the reuse of water. The quality of PET obtained in the plant has been approved for use in food packaging by the European Food Safety Authority. This project contributes to the European Commission's packaging recovery targets for the European Strategy for Plastics in a Circular Economy which aims to achieve 25% recycled material in the production of plastic packaging by 2025.

In the United Kingdom, the **energy recovery plants** in North Yorkshire and Milton Keynes, which are currently operating at full capacity, are part of a facilities park operated by the company with an installed power of 66 MW, equivalent to the energy consumed by more than 80,000 homes.

Other examples are the "Zero Waste to Landfill" project, which reduces waste sent to landfill to zero; the use of biomethane as a renewable fuel; the development of long-life pavements through the improvement of bitumen and asphalt binders; obtaining recycled fibres from construction material waste through the HorBran Project, which promotes the use of recycled materials in construction, or obtaining plastic biopolymers of renewable origin from waste water treatment plant sludge in the framework of the B-PLAS DEMO project.

The most noteworthy **innovation** initiatives worked on in this area are "LAG bags reutilisation", which incorporates a QR code on bags for liquids, aerosols and gels, encouraging their reuse and the reduction of the use of plastics, and "Dugud", a mobile app to reward citizens who deposit organic waste in waste containers thus encouraging recycling.



PET plastic flake recycling plant



A second life for plastics

## Energy efficiency

Ferrovial, as an energy services company (ESCO), works under the concession model, providing constant savings and continuous improvement of customer facilities throughout the duration of the agreement. The scope of these model contracts and services is very broad and covers **energy efficiency** in buildings, in public lighting and in industries. Ferrovial Services manages over 1 million lighting points, four times the number of lights in New York City, and the set of contracts that generate annual energy savings equivalent to 2% of the overall target of the Spanish National Energy Efficiency Plan.

Ferrovial-Agromán seeks to improve the energy efficiency of the buildings it constructs and restores in both the design and construction phases. It applies **bioclimatic design criteria**, as well as innovative techniques and materials to offer innovative and tailored solutions to customers. Aspects such as the physical location and orientation of the building to allow for cross ventilation; air conditioning with underfloor heating and the use of low-enthalpy geothermal energy for heating; systems for reusing greywater from sinks and showers; the use of recycled concrete throughout the structure, advocating sustainable materials by taking advantage of inert waste and avoiding the extraction of new aggregates from quarries or watercourses; separate system of sanitation networks, in addition to the collection and reuse of rainwater by means of a cistern; planting of low-water-demand vegetables; pre-installation of recharging points for electric cars in the garages and use of LED lights and low-consumption bulbs.

A clear example is the Fraternidad-Muprespa Habana hospital (Spain). The different measures implemented in its construction allow

an economic saving in energy expenditure of 43% compared to a similar building. This hospital has earned the **LEED Platinum certification**, the most demanding international sustainability standard for buildings awarded by the U.S. Green Building Council.

## Water

Aware that water has been identified as one of the three most important challenges worldwide by the World Economic Forum, Ferrovial, through its subsidiary Cadagua, a leading company in the water treatment sector, is helping to offset the effects that climate change will have on water resources.

In order to quantify the impact that the company causes, a **methodology** has been developed taking into account aspects such as the water source, the country's water stress and the quality of water and waste.

The methodology is made up of three indexes:

- **Business Water Index (BWI)**

The Business Water Index (BWI) is defined as the water footprint related to water consumption and discharge carried out in the activities of each of Ferrovial's businesses.

- **Water Treatment Index (WTI)**

The Water Treatment Index (WTI) is defined as the impact on Ferrovial's water footprint of water treatment processes in the Cadagua treatment plants and the landfill leachate-treatment plants belonging to Ferrovial Services and Amey.



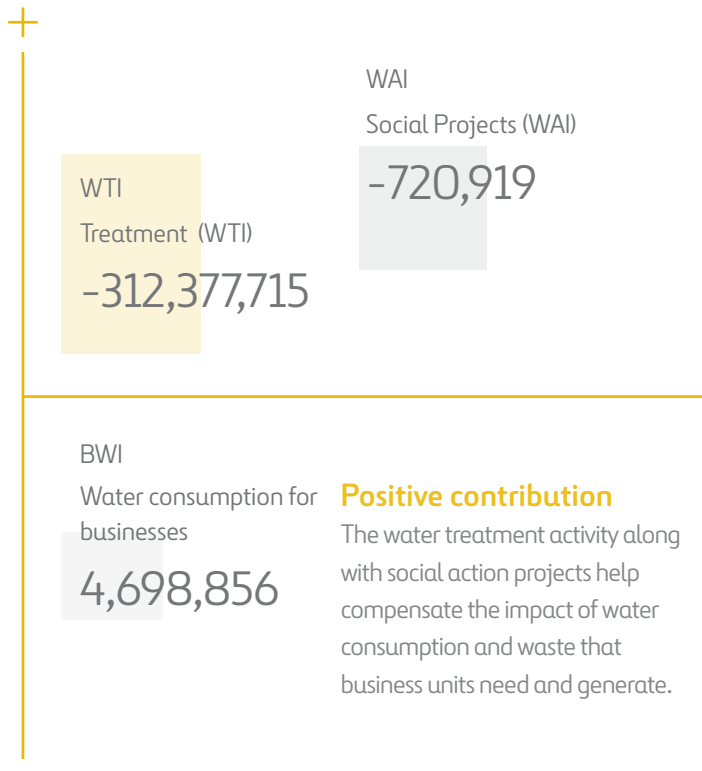
-20%  
by 2030

BWI reduction target



• **Water Access Index (WAI)**

The Water Access Index (WAI) is defined as the impact on Ferrovial's water footprint of projects that supply water to communities located in developing countries that are carried out as part of the Social Action projects in which the company participates.



**Positive contribution**

The water treatment activity along with social action projects help compensate the impact of water consumption and waste that business units need and generate.

Ferrovial has been selected as a finalist in the **European Environmental Awards** (a biennial event organized by the European Commission), for its water footprint management tool.

# Shadow Carbon pricing

Ferrovial has developed a tool to quantify the climate risk of its most relevant investments in the form of "shadow pricing" in order to accelerate decarbonized business models.

This tool considers variable prices for a ton of carbon for different time horizons, regions and project types, thus quantifying the potential economic risk in the projects for which the tool is used.

**Time horizon**

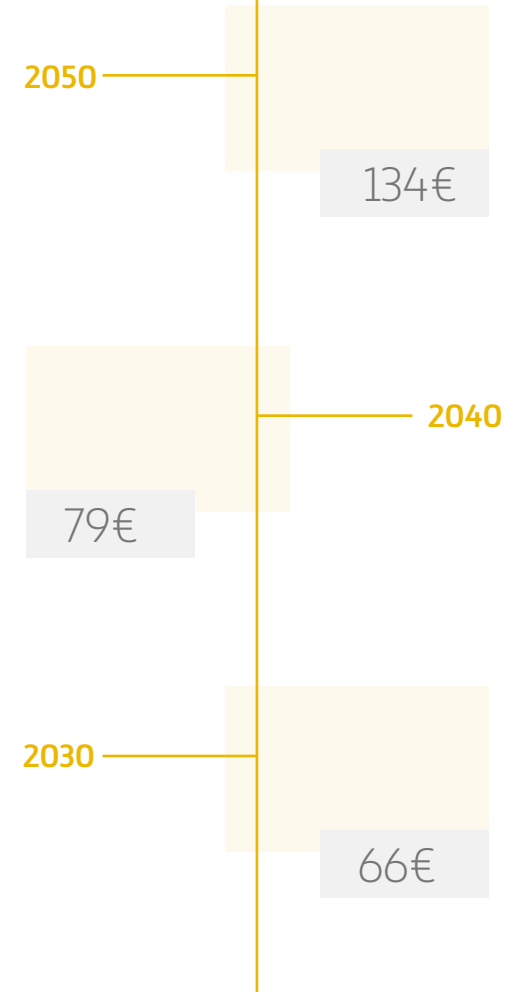
2020	2030	2040	2050
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**Geographies**

Australia | Brazil | Canada | Chile | Germany | Ireland | Mexico | Middle East | Peru | Poland | Portugal | Spain | United Kingdom | USA (general) | USA (California)

**Project Type**

- Airports
- Motorways
- Waste management
- Water Management
- Energy assets (natural gas)

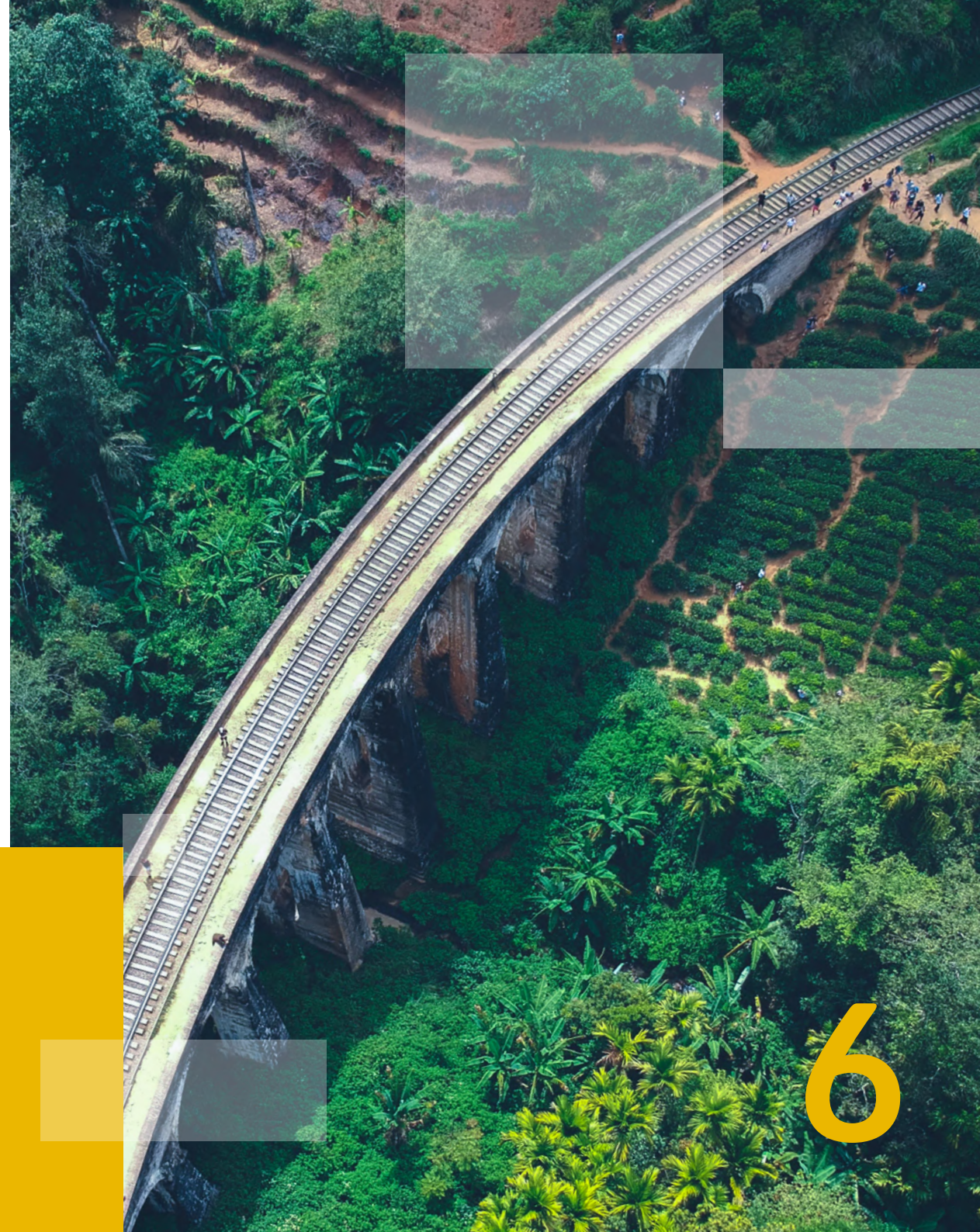


The approximate average of the price of carbon in the future

# METRICS, GOALS AND EVOLUTION

**The evolution of greenhouse gas emissions reflects how Ferrovial is meeting its reduction targets.**

The data for 2019 adds to the historical data on the evolution of emissions in recent years showing a downward trend, indicating that the company is meeting its established roadmap for reducing emissions from Scope 1&2&3 and achieving its reduction targets by 2030.





# Greenhouse gas emissions

## Scope 1&2. Absolute terms (tCO<sub>2</sub>eq)

Company	2009	2017	2018	2019	2019Vs2009	2019Vs2018
<b>CONSTRUCTION</b>	<b>251,375</b>	<b>264,407</b>	<b>246,101</b>	<b>228,127</b>	<b>-9.25%</b>	<b>-7.30%</b>
Budimex	47,665	72,162	95,540	80,326	68.52%	-15.92%
Cadagua	63,221	15,098	11,737	7,319	-88.42%	-37.65%
Ferrovial Agroman	74,934	134,266	92,049	95,861	27.93%	4.14%
Webber	65,555	42,882	46,775	44,622	-31.93%	-4.60%
<b>CORPORATION</b>	<b>896</b>	<b>680</b>	<b>605</b>	<b>579</b>	<b>-35.42%</b>	<b>-4.39%</b>
Ferrovial Corporation	896	680	605	579	-35.42%	-4.39%
<b>INFRASTRUCTURE</b>	<b>15,684</b>	<b>10,091</b>	<b>9,860</b>	<b>9,616</b>	<b>-38.69%</b>	<b>-2.47%</b>
Cintra	15,684	10,091	9,860*	9,616	-38.69%	-2.47%
<b>SERVICES</b>	<b>802,232</b>	<b>697,960</b>	<b>651,917</b>	<b>622,960</b>	<b>-22.35%</b>	<b>-4.44%</b>
Amey	267,290	217,944	219,240	235,778	-11.79%	7.54%
Broadspectrum	125,961	125,279*	84,665*	63,505	-49.58%	-24.99%
Ferrovial Services	408,982	354,737	348,013*	323,677	-20.86%	-6.99%
<b>AIRPORTS</b>	<b>45</b>	<b>45</b>	<b>31</b>	<b>18</b>	<b>-60.64%</b>	<b>-41.94%</b>
Transchile	45	45	31	18	-60.64%	-41.94%
<b>Total</b>	<b>1,070,232</b>	<b>973,183</b>	<b>908,514</b>	<b>861,300</b>	<b>-19.52%</b>	<b>-5.20%</b>

\*The data has been restated due to recalculation due to adjustment in the perimeter considered.

Scope 1 (tCO<sub>2</sub>eq)

Company	2009	2017	2018	2019	2019Vs2009	2019Vs2018
<b>CONSTRUCTION</b>	<b>163,232</b>	<b>208,764</b>	<b>199,682</b>	<b>192,231</b>	<b>17.77%</b>	<b>-3.73%</b>
Budimex	27,744	55,008	77,094	64,373	132.02%	-16.50%
Cadagua	18,669	1,010	599	606	-96.75%	1.15%
Ferrovial Agroman	61,287	116,525	81,326	85,681	39.80%	5.36%
Webber	55,532	36,221	40,664	41,572	-25.14%	2.23%
<b>CORPORATION</b>	<b>375</b>	<b>298</b>	<b>260</b>	<b>219</b>	<b>-41.62%</b>	<b>-15.65%</b>
Ferrovial Corporation	375	298	260	219	-41.62%	-15.65%
<b>INFRASTRUCTURE</b>	<b>3,145</b>	<b>2,171</b>	<b>2,220</b>	<b>2,053</b>	<b>-34.71%</b>	<b>-7.51%</b>
Cintra	3,145	2,171	2,220	2,053	-34.71%	-7.51%
<b>SERVICES</b>	<b>744,947</b>	<b>649,976</b>	<b>614,892</b>	<b>597,453</b>	<b>-19.80%</b>	<b>-2.84%</b>
Amey	252,999	215,380	216,716	233,669	-7.64%	7.82%
Broadspectrum	98,015	98,294	62,539	42,177	-56.97%	-32.56%
Ferrovial Services	393,932	336,302	335,637*	321,607	-18.36%	-4.18%
<b>AIRPORTS</b>	<b>41</b>	<b>41</b>	<b>30</b>	<b>17</b>	<b>-58.16%</b>	<b>-43.26%</b>
Transchile	41	41	30	17	-58.16%	-43.26%
<b>Total</b>	<b>911,740</b>	<b>861,251</b>	<b>817,084</b>	<b>791,974</b>	<b>-13.14%</b>	<b>-3.07%</b>

\*The data has been restated due to recalculation due to adjustment in the perimeter considered.

## Scope 2 (tCO<sub>2</sub>eq)

Company	2009	2017	2018	2019	2019Vs2009	2019Vs2018
<b>CONSTRUCTION</b>	<b>88,143</b>	<b>55,643</b>	<b>46,419</b>	<b>35,896</b>	<b>-59.28%</b>	<b>-22.67%</b>
Budimex	19,921	17,154	18,446	15,953	-19.92%	-13.51%
Cadagua	44,552	14,087	11,138	6,713	-84.93%	-39.73%
Ferrovial Agroman	13,647	17,741	10,723	10,180	-25.41%	-5.07%
Webber	10,023	6,661	6,112	3,050	-69.57%	-50.09%
<b>CORPORATION</b>	<b>521</b>	<b>382</b>	<b>345</b>	<b>360</b>	<b>-30.95%</b>	<b>4.08%</b>
Ferrovial Corporation	521	382	345	360	-30.95%	4.08%
<b>INFRASTRUCTURE</b>	<b>12,538</b>	<b>7,920</b>	<b>7,640</b>	<b>7,563</b>	<b>-39.68%</b>	<b>-1.00%</b>
Cintra	12,538	7,920	7,640*	7,563	-39.68%	-1.00%
<b>SERVICES</b>	<b>57,286</b>	<b>47,984</b>	<b>37,025</b>	<b>25,507</b>	<b>-55.47%</b>	<b>-31.11%</b>
Amey	14,291	2,563	2,524	2,108	-85.25%	-16.47%
Broadspectrum	27,946	26,986*	22,126*	21,328	-23.68%	-3.60%
Ferrovial Services	15,049	18,435	12,376	2,070	-86.24%	-83.27%
<b>AIRPORTS</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>-85.93%</b>	<b>94.85%</b>
Transchile	4	4	0	1	-85.93%	94.85%
<b>Total</b>	<b>158,492</b>	<b>111,932</b>	<b>91,430</b>	<b>69,326</b>	<b>-56.26%</b>	<b>-24.18%</b>

\*The data has been restated due to recalculation due to adjustment in the perimeter considered.

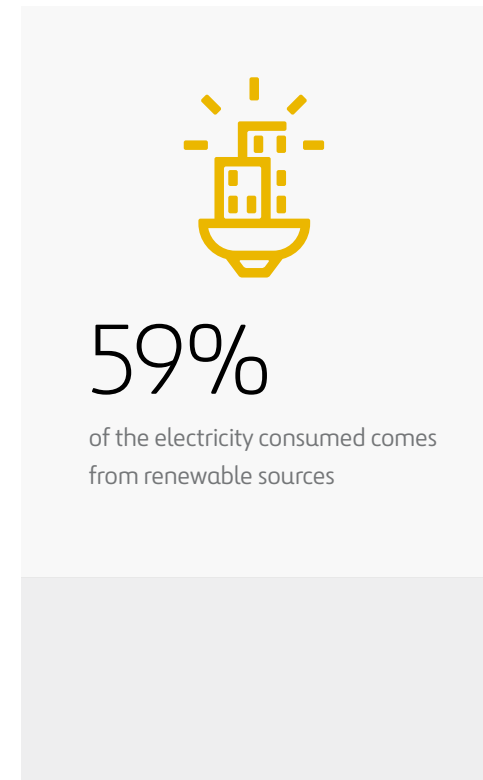
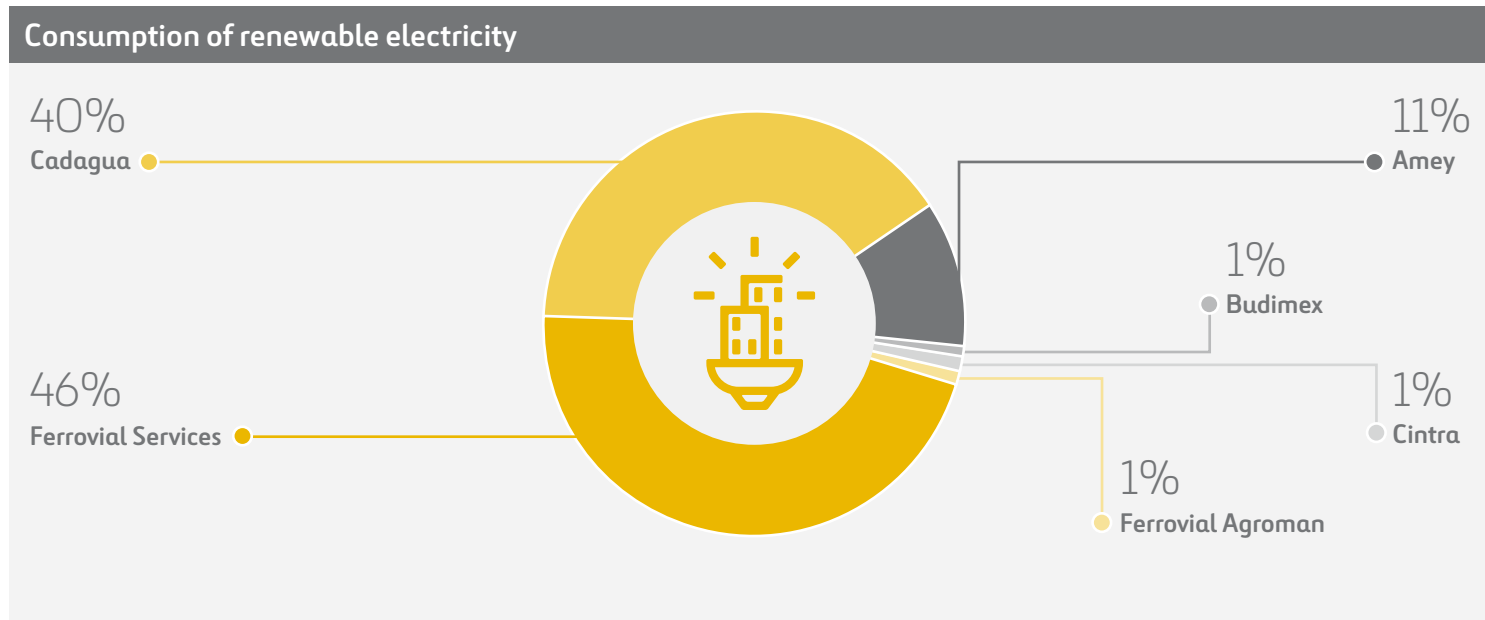


## Comparative emissions Scope 2 (tCO<sub>2</sub>eq)

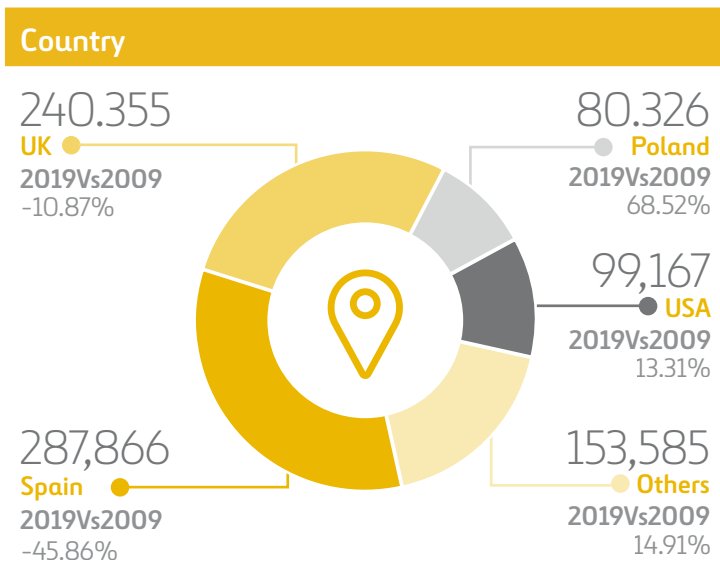
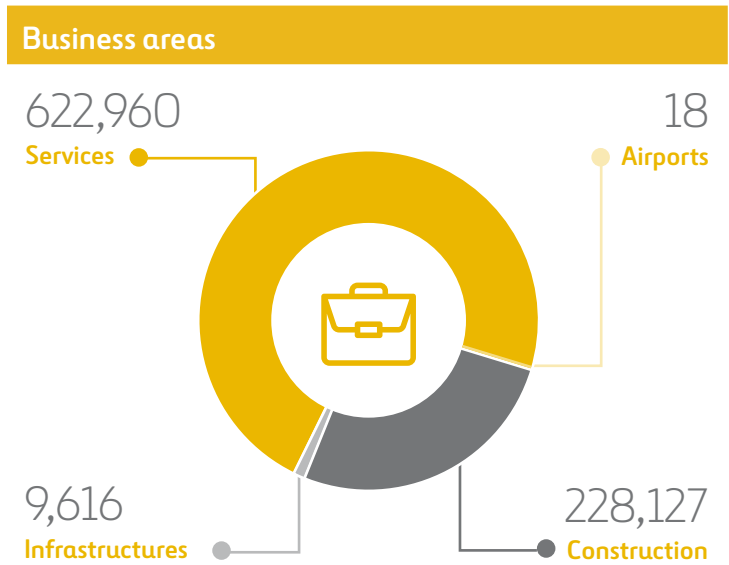
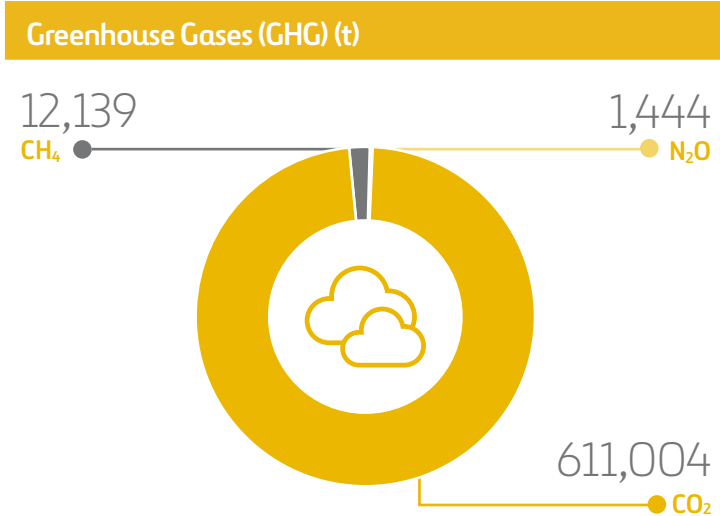
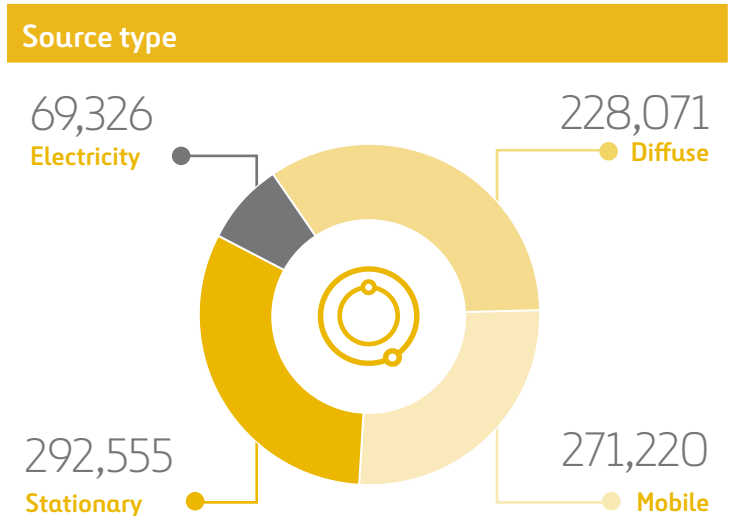
	2009	2017	2018	2019
Market based*	158,492	111,932	91,430	69,326
Local based	160,577	165,941	151,622	134,663

\*Market based. is the method used to calculate Scope 2 emissions. It takes into account the supplier's electricity mix and the conversion factor for electricity from renewable sources with a certificate of origin is zero.

## Scope 1&2 analysis (t eq) in 2019



Distribution of the 861,300 tCO<sub>2</sub>eq of Scope 1&2 by:



## Scope 1&2. Intensity (tCO<sub>2</sub>eq/€ million)

	2009	2017	2018	2019	2019Vs2009	2019Vs2018
CONSTRUCTION	46.22	55.48	47.59	43.20	-6.5%	-9%
CORPORATION	10.43	128.69	175.56	46.87	349.3%	-73%
INFRASTRUCTURE	60.26	22.94	17.36	15.61	-74.1%	-10%
SERVICES	230.75	82.11	98.36	87.74	-62.0%	-11%
AIRPORTS	6.29	6.29	4.69	2.60	-58.7%	-45%
<b>Total</b>	<b>162.36</b>	<b>69.62</b>	<b>74.13</b>	<b>66.18</b>	<b>-59.2%</b>	<b>-11%</b>

## Scope 1&2. Energy consumption (GJ)

### Fuels used in stationary and mobile sources (GJ)

	2009	2017	2018	2019	Evolution 2019VS2009	Evolution 2019vs2018
DIESEL	5,485,811	6,058,020	5,167,428	4,532,451	-17%	-12%
FUEL	344,405	78,994	98,703	157,533	-54%	60%
PETROL	698,774	472,599	289,117	586,315	-16%	103%
NATURAL GAS	872,477	3,039,568	260,542	304,364	-65%	17%
COAL	0	390,225	570,558	361,701		-37%
KEROSENE	15,412	21,189	20,221	24,938	62%	23%
PROPANE	17,229	18,467	27,732	22,793	32%	-18%
LPG	11,792	11,540	6,600	6,856	-42%	4%
<b>Total</b>	<b>7,445,899</b>	<b>10,090,602</b>	<b>6,440,901</b>	<b>5,996,951</b>	<b>-19%</b>	<b>-7%</b>



## Consumption of electricity from non-renewable sources (GJ)

	2009	2017	2018	2019	Evolution 2019Vs2009	Evolution 2019Vs2018
CONSTRUCTION	761,769	421,327	342,664	270,943	-64%	-21%
CORPORATION	5,359	4,501	4,073	4,239	-21%	4%
INFRASTRUCTURE	117,415	66,489	61,702	61,360	-48%	-1%
SERVICES	438,741	379,427*	315,478*	188,480	-57%	-40%
AIRPORTS	30	30	2	4	-86%	95%
<b>Total</b>	<b>1,323,314</b>	<b>871,774</b>	<b>723,920</b>	<b>525,027</b>	<b>-60%</b>	<b>-27%</b>

## Consumption of electricity from renewable sources (GJ)

	2009	2017	2018	2019	Evolution 2019Vs2009	Evolution 2019Vs2018
CONSTRUCTION	599	447,483	449,183	323,981	53942%	-28%
INFRASTRUCTURE	0	4,049	4,009	4,058		1%
SERVICES	25,772	154,964*	227,537*	438,589	1602%	93%
AIRPORTS	0	0	0	0		
CORPORATION	0	0	0	0		
<b>Total</b>	<b>26,371</b>	<b>606,496</b>	<b>680,730</b>	<b>766,627</b>	<b>2807%</b>	<b>13%</b>

\*The data has been restated due to recalculation due to adjustment in the perimeter considered.

## Scope 3 . Absolute terms (tCO<sub>2</sub>eq)

	2012	2017	2018	2019	2019Vs2012	2019Vs2018
Investments*	805,044	566,069	569,388	569,388	-29.27%	0.00%
Purchased goods and services	743,192	461,150	489,189	426,605	-42.60%	-12.79%
Use of sold product	641,031	555,585	587,563	692,499	8.03%	17.86%
Capital Goods	569,407	288,004	314,611	118,081	-79.26%	-62.47%
Upstream transportation and distribution	461,487	407,580	434,112	376,832	-18.34%	-13.19%
Waste generated in operations **	191,948	150,777	140,808	141,389	-26.34%	0.41%
Fuel and energy related activities	191,927	219,335	178,902	136,217	-29.03%	-23.86%
End of life treatment of sold products	52,703	39,245	37,456	28,070	-46.74%	-25.06%
Business travel	6,606	8,181	8,334	7,232	9.48%	-13.21%
Upstream leased	1,405	0	0	0		
Employee commuting	792	3,221	1,821	1,763	122.66%	-3.15%
<b>Total</b>	<b>3,665,541</b>	<b>2,699,147</b>	<b>2,762,183</b>	<b>2,498,075</b>	<b>-31.85%</b>	<b>-9.56%</b>

\* Consumption and emissions collected in this category are based on information externally verified by airports. As of the date of publication of this report, the verification corresponding to 2019 is not available, therefore the data for 2018 have been considered.

Likewise, the data for 2018 has been updated after the results of the audit.

\*\* The 2017 and 2018 data have been restated due to a change in the calculation methodology.

## “Biogenic CO<sub>2</sub>” emissions (tCO<sub>2</sub>eq)

	2009	2017	2018	2019	2019Vs2009	2019Vs2018
CONSTRUCTION	768	50,717	51,935	54,678	7018%	8%
SERVICES	729,776	733,487	736,842	733,912	1%	0%
<b>Total</b>	<b>730,544</b>	<b>784,205</b>	<b>788,777</b>	<b>788,590</b>	<b>7.95%</b>	<b>0.56%</b>

# Evolution of GHG emissions

The company is complying with the Scope 1&2&3 Emissions Reduction Roadmap to meet the 2030 reduction targets approved and endorsed by the Science Based Targets initiative (SBTi).



The aim is to reduce emissions in Scope 1&2 in absolute terms by 32% and in terms of intensity by 42.9% compared to 2009, which is the base year. In addition, Ferrovial is committed to reducing Scope 3 emissions (indirect emissions, excluding capital goods, purchased goods and services) by 20% by 2030, using 2012 as the reference year.



Reduction targets achieved

Scope 1&2&3



## Scope 1&2 evolution (tCO<sub>2</sub>eq)

Emission source	2009	2017	2018	2019	2019Vs2009	2019Vs2018
Diffuse	271,450	215,695	222,580	228,071	-16%	2%
Stationary	257,928	312,558	287,157	292,555	13%	2%
Fugitive	185	8	136	128	-31%	-6%
Electricity	158,492	111,932	91,430	69,326	-56%	-24%
Mobiles	382,178	332,990	307,211	271,220	-29%	-12%
<b>Total</b>	<b>1,070,232</b>	<b>973,183</b>	<b>908,514</b>	<b>861,300</b>	<b>-19.5%</b>	<b>-5.2%</b>

Diffuse emissions from waste treatment plants, electricity consumption and mobile phones have been reduced considerably. Special mention should be made of the great impetus given to the purchase of electricity from renewable sources and the incorporation of more

efficient and electric vehicles. The increase in stationary emissions is the result of the opening of two incineration plants in the United Kingdom and an increase in work carried out with Ferrovial-Agromán's own resources.

“The reductions achieved were higher than the targets set for the year, exceeding the objective of 15.24% in absolute terms (tCO<sub>2</sub>eq) and 20.42% in intensity (tCO<sub>2</sub>eq/€ million)”



19.5%

Reduction of emissions in absolute terms

59%

Reduction of emissions in terms of intensity



## Motorways

In 2019, emissions in absolute terms from the motorway sector fell by 38.69% compared to the base year and by 2.47% compared to the previous year. In terms of intensity, the reductions are almost **75%** with respect to the base year. This evolution reflects the **disconnection of growth from emissions**.

These good figures are the result of implementing energy efficiency measures in lighting, the purchase of renewable electricity and, most importantly, the implementation of new motorways that are less energy intensive.

Electricity consumption for motorway lighting is the main source of consumption. This is why energy efficiency in lighting and the purchase of renewable energy is so important. The NTE and LBJ motorways located in the United States have made a commitment to self-consumption by installing **photovoltaic panels** to supply consumption needs of the buildings.

## Services (Ferrovial Services, Amey and Broadspectrum)

In 2019, emissions in absolute terms from the services area fell by 22.35% compared to the base year and by 4.44% compared to the previous year. In terms of intensity, the reductions are even higher, reaching **62%** with respect to the base year, which reflects, as is the case in the motorways sector, a great **disconnect between growth and emissions**.

This evolution is the result of the implementation of energy efficiency measures, the increase in the fleet of electric or alternative vehicles, the purchase of electricity from renewable sources, the increase in the capture of diffuse emissions in landfills and the reduction of waste destined for landfills.

It is worth noting the great commitment that Amey and Ferrovial Services Spain has toward the purchase of **electricity from renewable sources**, which has reached figures of 75% and 94%, respectively, of the total consumed.

26% of the group's emissions come from **diffuse emissions** only (biogas) associated with landfills belonging to the company and have a high impact on the overall carbon footprint, since CH<sub>4</sub> emissions have a higher warming potential than CO<sub>2</sub> emissions. Thanks to the use of technology and improvements in the processes of capturing biogas this year, emissions from landfills have been reduced by 16% compared to the base year. The increase with respect to the previous year is due to a decrease in the capture of biogas valued in Amey.

With regard to waste management, a commitment is made to the **circular economy** both in terms of the recovery of waste as a source of new raw materials and in the use of energy from biogas produced in landfills. The latest technologies are used to generate clean energy through the captured biogas and minimize the environmental impact. In this way, the company's work becomes a commitment to the environment and to the challenges and needs of the locations it serves.



## Construction

(Ferrovial-Agromán, Budimex, Webber, Cadagua)

In the construction area, emissions in absolute terms decreased by 9.25% with respect to the base year and by 7.3% with respect to the previous year. The **9.25%** reduction in emissions, in terms of intensity, reflects a slight disconnect between emissions and turnover.

In the construction sector, the energy demand is strongly linked to the type of work and the execution of the work with own or subcontracted means. This explains the disparity in energy demand from one year to the next.

The reduction of emissions with respect to the previous year at Budimex is associated with a decrease in asphalt production. However, the increase in asphalt activity together with an increase in construction using our own resources has led to an increase in emissions at Ferrovial-Agromán. However, both companies are progressively incorporating **renewable electricity** into their energy purchases.

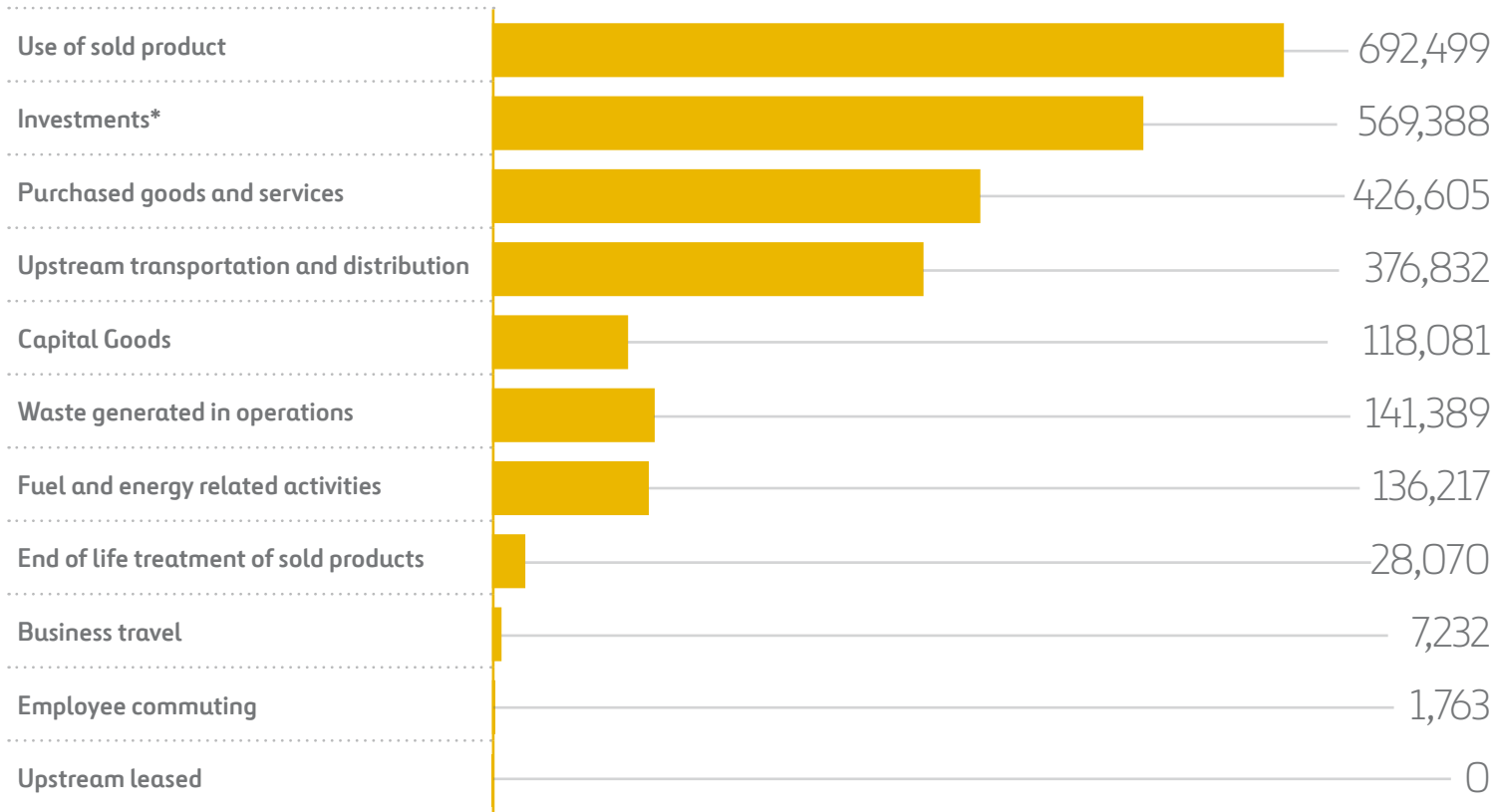
The implementation of energy efficiency measures, the consumption of 80% of electricity from renewable sources and the closing of highly energy-intensive contracts has led to an **88.41% reduction** in emissions from Cadagua, a water treatment company.

“Recently, the "Deep Decarbonization Path" at 2030 was approved, which establishes the lines of action to reduce emissions in this sector”





## Scope 3 Evolution (tCO<sub>2</sub>eq)



Grand Total **2,498,075**

“It can be said that the evolution of scope 3 emissions is excellent. In absolute terms, they decreased by 31.85% compared to the base year (2012) and 9.56% compared to the previous year”

The company is complying with the roadmap established to reduce Scope 3 emissions in order to meet the 2030 reduction targets approved and endorsed by the Science Based Targets (SBTi)

initiative to reduce Scope 3 emissions in absolute terms by 20% by 2030, using 2012 as a reference year.

### ● Investments

The Heathrow, Southampton, Glasgow and Aberdeen airports, in which Ferrovial is an investor, are firmly committed to operating in the most **sustainable** way possible, promoting economic and social development and implementing initiatives to minimize environmental impact. Energy efficiency and mobility measures have led to a reduction in emissions over recent years, reaching a **reduction of 29.27%** over the base year.

Heathrow, the main airport, has managed to become the first in the world to achieve the highest level of the **Carbon Trust accreditation** for its involvement in reducing emissions from its supply chain. It has recently become a carbon **neutral airport** following an investment of over £100 million.

In addition, it has committed to being a "**zero carbon**" airport by mid-2030 and is working on a plan called "**Target Net-Zero**" to decarbonize the airport and flights, as well as helping the industry to achieve this goal by 2050. To this end, it is working with airlines, industry partners and government organizations to further advance the development of sustainable alternative fuels and support the development of technologies to reduce emissions from flights.

It **has already reduced its operating emissions by more than 90%**, all its terminals operate with energy from 100% renewable sources and currently 96% of its vehicle fleet is electric or hybrid.

In turn, the rest of the airports as a whole have also reduced their operational emissions by more than 90%. Glasgow is the first in the UK to introduce a fleet of **100% electric buses** operating between the terminal and the long distance car park.

**Heathrow**  
Cuádruple certificación  
del estándar Carbon Trust



### ● Purchased goods & services

A 42.6% reduction in emissions by reducing the relevant materials purchased.

### ● Use of sold products

The increase in emissions in this category is associated with an increase in motorway traffic. We believe that electrification in transport, connectivity between infrastructures, vehicles and users, innovation in traffic operation and management and, in general, new models of mobility will help to reduce congestion and lower the emissions of vehicles circulating in these infrastructures. Thus, the introduction of incentives in toll rates can favour the use of less polluting vehicles and a higher vehicle occupation thus reducing transport emissions.

### ● Capital Goods

A reduction in emissions of almost 80% with respect to the base year due to lower investment in equipment, machinery and office supplies.



**Heathrow award**  
**4 Carbon Trust**  
**accreditations**



- **Upstream transportation & distribution**

Decrease associated with the purchase of some goods and services.

- **Waste generated in operations**

In order to reduce this impact, work is being done on the incorporation of the principles of the circular economy in all its processes, products and services by cutting down on the use of non-renewable natural resources, the reuse of waste as raw materials, recycling, the incorporation of eco-design criteria and public awareness.

- **Fuel and energy related activities**

The implementation of energy efficiency measures has led to a decrease in energy consumption, and the increase in the purchase of electricity from renewable sources has helped to reduce emissions in this category by 29.03%.

- **End of life treatment of sold products**

A reduction in emissions by reducing the volume of materials used in the construction of infrastructure

- **Business travel**

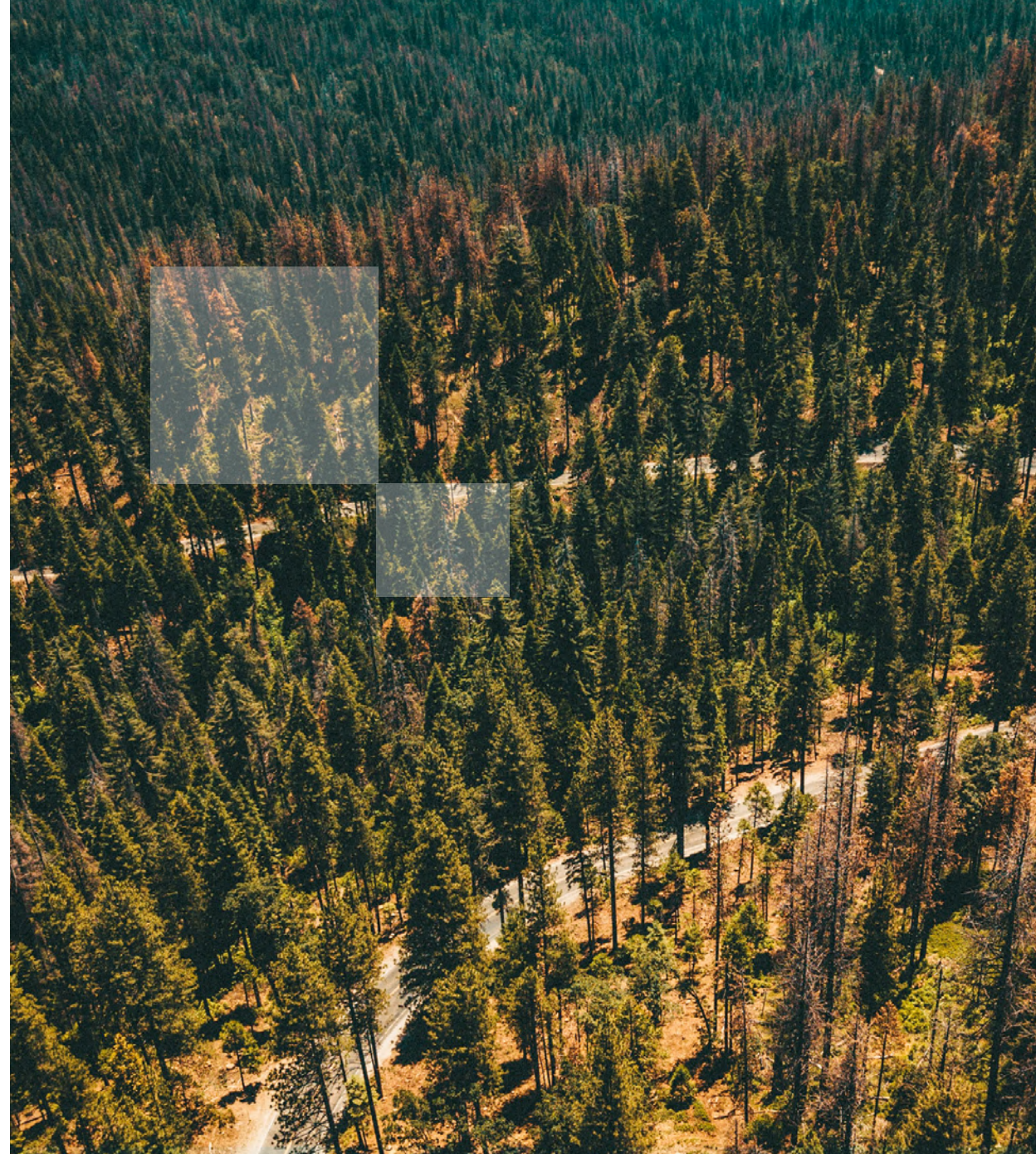
The internationalisation of the company and an increase in the number of employees leads to a slight increase in emissions.

- **Upstream leased**

Operational control over the electricity used by the company's customers has been lost.

- **Employee commuting**

An increase in the number of employees causes a slight increase in emissions.





# AVOIDED EMISSIONS

Since 2009 and thanks to internal plans, emissions from Scope 1&2 have been reduced by 1,572,271 tCO<sub>2</sub>eq. This is similar to the annual emissions of a city of 226,450 inhabitants.

The point where Ferrovial really has leverage is on the emissions associated with the products and services it offers.





## Emissions avoided by the purchase of vehicles powered by alternative fuels

The initiative to purchase vehicles powered by alternative fuels consists of improving the **energy efficiency** of these assets through improvements in purchase criteria, renting or leasing, efficient driving courses, use of cleaner fuels and alternatives with hybrid

engines, among others. Electric cars have also recently been incorporated into this series of improvements.

In 2019, 5,498 tCO<sub>2</sub>eq were avoided by using alternative vehicles.



87,346  
tCO<sub>2</sub>eq

avoided through consumption of  
electricity from renewable sources

## Emissions avoided by the purchase of electricity from renewable sources

	Electricity purchased from renewable sources (Mwh)				Avoided emissions (tCO <sub>2</sub> eq)			
	2009	2017	2018	2019	2009	2017	2018	2019
Budimex	0	6,737	6,261	2,929	0	5,092	4,732	2,214
Cadagua	0	106,872	85,368	53,328	0	22,882	26,068	16,493
Ferrovial Agroman	0	2,327	1,659	1,621	0	1,455	1,013	495
Cintra	0	1,125	1,114	1,127	0	343	340	344
Amey	7,159	21,140	17,264	24,330	4,543	11,437	4,887	6,219
Ferrovial Services	0	21,906	45,941	97,501	0	5,551	14,036	61,581
<b>Total</b>	<b>7,159</b>	<b>160,107</b>	<b>157,606</b>	<b>180,835</b>	<b>4,543</b>	<b>46,760</b>	<b>51,076</b>	<b>87,346</b>

59% of the total electricity consumed came from renewable sources, 85% of which was purchased and 15% for self-consumption.

## Emissions avoided in triage activity and biogas capture

		Emissions avoided in triage activity and biogas capture (tCO <sub>2</sub> eq)			
		2009	2017	2018	2019
Ferrovial Services	GHG emissions avoided by capturing biogas in landfills	520,075	685,900	775,838	748,142
	GHG emissions avoided by triage activity	189,981	550,817	501,751	725,950
Amey	GHG emissions avoided by capturing biogas in landfills		43,823	39,940	30,579
	GHG emissions avoided by triage activity		148,681	157,308	173,627
Cadagua	Emissions avoided by biogas capture in water treatment plants		432,248	420,360	422,724
<b>Total</b>		<b>710,056</b>	<b>1,861,470</b>	<b>1,895,197</b>	<b>2,101,022</b>

With regard to the management of waste through triage, priority is given to **recovery** rather than elimination, with the aim of reducing the volume of waste that is deposited in a landfill and therefore generates GHG emissions. When the final waste is deposited in the landfill, biogas emissions are produced by the decomposition of the waste. This biogas is captured by collecting networks to avoid direct methane (CH<sub>4</sub>) emissions into the atmosphere and to facilitate its use through energy production. This generation of electrical energy from biogas allows a traditional landfill site to be partially converted

into an energy recovery plant which, at the same time, avoids GHG emissions into the atmosphere that continuously originate from this type of installation (see following section).

The company's tendency is to constantly invest in technology both in the triage activity and in the capture of biogas, which has allowed it to reduce its emissions in recent years. **GHG emissions avoided** by the triage activity and biogas capture were **196%** higher than in the base year.



# 2,101,022

## tCO<sub>2</sub>eq

avoided through triage activity and biogas capture

## Emissions avoided from landfill power generation

	Power generated in landfills (GJ)				Emissions avoided from landfill power generation (tCO <sub>2</sub> eq)			
	2009	2017	2018	2019	2009	2017	2018	2019
<b>Ferrovial Services</b>								
Biogas recovery	308,959	354,039	329,473	187,688	30,020	27,256	25,000	16,116
Biogas valorisation	146,666	202,812	261,406	31,349	14,251	17,203	17,311	2,659
<b>Amey</b>								
Biogas recovery		36,064	34,740	19,583		4,803	4,627	2,644
Incineration plants			598,836	763,254			56,560	71,347
<b>Total</b>	<b>455,625</b>	<b>592,915</b>	<b>1,224,455</b>	<b>1,001,874</b>	<b>44,271</b>	<b>49,262</b>	<b>103,498</b>	<b>92,766</b>

The biogas collected from landfills, primarily methane, is used in **cogeneration plants** for the production of electricity and thermal energy.

In 2019, between the landfills and treatment plants belonging to Ferrovial Services and Amey, **1,001,874 GJ of energy** were generated. The capture process not only prevents the emission of GHGs into the atmosphere, but also generates energy from renewable sources. Thus, in 2019, 119% more energy was generated than in the base year.

As this energy comes from **renewable sources**, its consumption means a reduction in the purchase of electricity from the grid and, therefore, the emission of **92,766 tCO<sub>2</sub>eq** is avoided. This reduces dependence on fossil fuels and avoids methane emissions, which have a greater effect on global warming than CO<sub>2</sub>.

## Emissions avoided from power generation in water treatment plants

	Energy generated in water treatment plants (GJ)			
	2009	2017	2018	2019
Generation in WWTP	21,640	110,464	113,380	120,155
Generated in thermal drying	169,816	286,659	352,379	285,752
<b>Total</b>	<b>191,456</b>	<b>397,123</b>	<b>465,759</b>	<b>405,907</b>

	Emissions avoided from power generation in water treatment plants (tCO <sub>2</sub> eq)			
	2009	2017	2018	2019
Generation in WWTP	2,103	9,370	9,621	10,192
Generated in thermal drying	16,500	24,315	29,889	24,238
<b>Total</b>	<b>18,603</b>	<b>33,684</b>	<b>39,511</b>	<b>34,429</b>

In the processes of thermal drying of sludge in the waste water treatment plants managed by Cadagua, **cogeneration plants** have been implemented that produce thermal energy for drying the sludge and also produce electrical energy. This is another sustainable form of power generation that results in avoided emissions at these facilities.

At the same time, electricity is generated in the WWTP (Wastewater Treatment Plant) with the combustion of the biogas produced. Through these processes, the company generated a total of **405,907 GJ** in 2019 and avoided the emission of **34,429 tCO<sub>2</sub>eq**.



# NEUTRALITY AND OFFSETTING OF EMISSIONS

The company is committed to achieving emissions neutrality by mid-century by reducing emissions and offsetting those that cannot be avoided.

Voluntary carbon offset projects must be additional, permanent, rigorous, verifiable, unique and have an impact on communities and the environment.





The "Deep Decarbonization Path" plan establishes **compensation** in a progressive manner until it is complete, from 2020 to 2050. In recent years, the company has offset emissions from the use of corporate vehicles that are controlled by the company. This year, these emissions amounted to **219 tCO<sub>2</sub>eq** and were offset by the "**Malana**" project.

The project is located in northern India, where the energy dependence on coal is 56%. The objective of this project is to generate electricity through the **hydroelectric facility** that will displace the energy generated by the coal-fired power plants. Furthermore, its implementation will help to combat the phenomenon of accelerated thawing in the Himalayas.

This project is expected to achieve a reduction of 275,532 tCO<sub>2</sub>eq per year, create new jobs in the local population and contribute to the development of new technology in the country, as well as providing for the creation of a school, a road to make the area accessible and a local medical centre.



This project is aligned with the

SDG



**Verified Carbon Standard**

A VERRA STANDARD



# CONCLUSIONS



The **Climate Strategy** is **integrated** into the Corporate Strategy



Commitment to **reduce Scope 1&2&3 emissions**



**Reduction targets endorsed by SBTi** by 2030



**Meeting the established reduction targets**



**100% of the verified emissions** according to ISAE 3410



**100% renewable electricity** consumption by 2025



Commitment to **neutrality** by mid-century



The recommendations of the **Task Force on Climate Financial Disclosures** were not incorporated into the company's report



**Risks and Opportunities** related to Climate Change analysed and integrated into the corporate risk system



**Decarbonizing the economy** with Ferrovial products and services

# ANNEX: VERIFICATION REPORT



Free translation from the original in Spanish, in the event of a discrepancy, the Spanish language version prevails.

## Independent limited assurance report On Greenhouse Gas (GHG) statement

To the Management of Ferrovial Corporación S.A.:

### Scope of work

We have undertaken a limited assurance engagement of the GHG statement of Ferrovial Corporación, S.A. and its subsidiaries Budimex, Cadagua, Ferrovial Agromin, Webber, PLW, Cintra, Aney, Broadpectrum, Ferrovial Servicios and Transchile (hereinafter referred to as Ferrovial) for the financial year ended December 31, 2019, included in the Appendix of this report. This engagement was conducted by a team of sustainability and climate change assurance practitioners.

### Responsibility of Ferrovial's management

Ferrovial's management is responsible for the preparation of the 2019 GHG Statement in accordance with their internal procedure, "Calculation and Report of Carbon Footprint" of Ferrovial, which is described in the report "Ferrovial Climate Strategy 2019", available on the following website <https://www.ferrovial.com/en-us/sustainability/env/ironment/carbon-footprint/>. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of a GHG statement that is free from material misstatement, whether due to fraud or error.

GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

### Our responsibility

Our responsibility is to express a limited assurance conclusion on the GHG Statement based on the procedures we have performed and the evidence obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements 3410 (ISAE 3410), "Assurance Engagements on Greenhouse Gas Statements" issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC). That standard requires that we plan and perform this engagement to obtain limited assurance about whether Ferrovial's 2019 GHG Statement is free from material misstatement.

A limited assurance engagement undertaken in accordance with ISAE 3410 involves assessing the suitability in the circumstances of Ferrovial's use of applicable criteria as the basis for the preparation of the GHG statement, assessing the risks of material misstatement of the GHG statement whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the GHG statement. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

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The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Through inquiries and meetings with personnel of Ferrovial's various departments who have been involved in the preparation of the GHG Statement, obtained an understanding of Ferrovial's control environment and information systems relevant to emissions quantification and reporting, but did not evaluate the design of particular control activities, obtain evidence about their implementation or test their operating effectiveness.
- Evaluated whether Ferrovial's methods for developing estimates are appropriate and had been consistently applied. However, our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate Ferrovial's estimates.
- Verification, through analytical and substantive tests based on the selection of a sample, the information (activity data, calculations and information generated) used to determine Ferrovial's 2019 GHG Statement and the correct compilation of information based on the internal procedure.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained if we had performed a reasonable assurance.

### Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA), which includes independence and other ethical requirements founded on fundamental principles of integrity, objectivity, professional competence and diligence, confidentiality and professional behaviour.

The firm applies the International Standard on Quality Control 1 (ISQC 1) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.





**Limited Assurance Conclusion**

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention which may lead us to believe that Ferrovial's GHG Statement for the financial year ended December 31, 2019 is not prepared, in all material aspects, in accordance with the internal procedure "Calculation and Report of Carbon Footprint" of Ferrovial, which is described in the report "Ferrovial Climate Strategy 2019".

**Use and distribution**

Our report is only issued to the Management of Ferrovial Corporación S.A. in accordance with the terms and conditions of our engagement letter. We do not assume any liability to third parties other than Ferrovial's Management. This report has to be read jointly with the report "Ferrovial Climate Strategy 2019".

PricewaterhouseCoopers Auditores, S.L.

Pablo Bascones

10<sup>th</sup> July 2020



**Appendix**

**GREENHOUSE GAS (GHG) STATEMENT CORRESPONDING TO THE YEAR ENDED DECEMBER 31, 2019**

*Of Ferrovial Corporación, S.A. and its subsidiaries Budimex, Cadagua, Ferrovial Agromán, Webber, PLW, Cintra, Amey, Broadspectrum, Ferrovial Servicios and Transchile*

2019 GHG Statement	CO2-eq
<b>Scope 1</b>	<b>781,974</b>
• Construction	192,231
• Corporation	219
• Infrastructures	2,053
• Services	597,453
• Airports	17
<b>Scope 2</b>	<b>69,326</b>
• Construction	35,898
• Corporation	360
• Infrastructures	7,563
• Services	25,507
• Airports	1
<b>Scope 3</b>	<b>2,498,075</b>
1. Purchased goods & services	426,605
2. Capital goods	118,081
3. Activities related to fuel and energy not included in Scopes 1 and 2	136,217
4. Upstream transportation & distribution	376,832
5. Waste generated in operations	141,389
6. Business travel	7,232
7. Employee commuting	1,763
8. Upstream leased assets <sup>1</sup>	N/A
9. Downstream transportation & distribution <sup>1</sup>	N/A
10. Processing of sold products <sup>1</sup>	N/A
11. Use of sold products	692,499
12. End of life treatment of sold products	28,070
13. Downstream leased assets	0
14. Franchises <sup>1</sup>	N/A
15. Investments <sup>2</sup>	669,388
<b>Biogenic CO2</b>	<b>788,599</b>

<sup>1</sup> It is considered that these categories suggested by GHG Protocol in the standard "Corporate Value Chain (Scope 3) Accounting and Reporting Standard", do not apply to Ferrovial's activities.

<sup>2</sup> Only the emissions related to the investments in UK airports are considered for this category of investments in subsidiaries. At the date of publication of this report, data for 2019 is not available and therefore 2018 emissions have been considered.



Ferrovial's GHG Inventory 2019 has been calculated based on the following energy consumption:

Energy consumption in absolute value 2019	GJ
<b>Fuels used in stationary and mobile sources</b>	<b>5,996,951</b>
• Diesel	4,532,451
• Fuel	157,533
• Petrol	586,315
• Natural Gas	304,364
• Coal	361,701
• Kerosene	24,938
• Propane	22,793
• LPG	6,856
<b>Non-renewable electricity consumption</b>	<b>525,027</b>
• Services	188,480
• Construction	270,943
• Motorways	61,360
• Corporation	4,239
• Airports	4
<b>Renewable electricity consumption</b>	<b>766,627</b>
• Services	438,589
• Construction	323,961
• Motorways	4,058
• Corporation	0
• Airports	0

**Criterion of quantification**

Ferrovial's 2019 GHG Statement has been prepared in accordance with the internal procedure 'Calculation and Report of Carbon Footprint', which is described in the report 'Ferrovial Climate Strategy 2019'.

The report is available on the following website link <https://www.ferrovial.com/en/our-commitment/environment/carbon-footprint>.

**Scope**

The companies within the scope of this GHG Inventory are Ferrovial Corporación S.A. and its subsidiaries Budimex, Cadagua, Ferrovial Agromán, Webber, PLW, Cintra, Amey, Broadspectrum, Ferrovial Servicios and Transchile.

In addition, the categories of this Inventory are listed in the table "2019 GHG Statement" at the beginning of this Appendix.

# ANNEX: METHODOLOGY

Since 2009, Ferrovial has been measuring 100% of the greenhouse-gas emissions generated by its activities worldwide. The calculation methodology is mainly based on the GHG Protocol (WRI & WBCSD) as it is the most widely accepted on an international level, while complying with ISO14064-1. However, other methodologies have been used to take into account specific business aspects, e.g. the DEFRA and DECC methodologies for UK operations and the EPER methodology for estimating diffuse emissions from landfills.

The calculation considers operational control as an organizational boundary. Under this approach, a company accounts for emissions from those sources over which it has full authority to introduce and implement its operational policies, regardless of its shareholding in the company.

## Direct emissions (Scope 1)

Those from sources owned or controlled by the company. They mainly come from:

- **Combustion of fuels** in stationary equipment (boilers, furnaces, turbines...) to produce electricity, heat or steam. Combustion of fuels in vehicles owned or controlled by the company.
- **Diffuse emissions.** Those not associated with a particular emission source, such as biogas emissions from landfills.
- **Channelled emissions.** Greenhouse gas emissions generated through a source, excluding those from fuel combustion.
- **Fugitive emissions.** Coolants.

## Indirect emissions (Scope 2)

Generated as a result of the consumption of electricity purchased from other companies that produce or control it. The "GHG Protocol Scope 2 Guidance" published in January 2015 and the "Market based" method instead of the "Local based" method has been followed. "Market based" considers the supplier's energy mix and "Local based" takes into account the country's energy mix.

## Indirect emissions (Scope 3)

- 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. In parallel, a specific methodology for reporting and calculating Scope 3 emissions has been developed and included in a technical instruction. Ferrovial calculates 11 of the 15 categories included in the Corporate Value Chain (Scope 3) Accounting and Reporting Standard document. The categories that do not apply are:

- Downstream transportation and distribution. Ferrovial does not sell products that are transported or stored.
- Processing of sold products. Ferrovial does not have products that will be transformed or included in another process to obtain another product.
- Downstream leased assets. Ferrovial has no assets that it rents out to other companies.
- Franchises. Ferrovial does not act as a franchisor.

The calculation method on the categories that apply is listed below:

### Investments

It accounts for emissions related to investments in UK airports, considering the share of the following sources:

- Scope 1&2.
- The most significant Scope 3 items, which are: Air traffic movements, Employee Commuting and Passenger transport.

All airports do an independent external verification of their emissions. Once the data (consumption and emissions) has been verified, it is provided to Ferrovial to be included in its inventory.

### Purchased goods and services

This section includes emissions related to materials purchased by Ferrovial for use in products or services offered by the company. It includes emissions from the various life cycle stages: extraction, pre-processing and manufacturing. It excludes the use and transport phase. In this category, the most relevant materials from an environmental and purchasing volume point of view have been considered, such as paper, wood, water, concrete, asphalt and chipboard.

The methodology is to apply a Defra specific conversion factor to the quantity of these materials purchased.

### Use of sold products

Ferrovial calculates the emissions from the use of transport infrastructures by users managed by Cintra.

The methodology used depends on the location of the motorways:

- For European motorways, the calculation tool needs the following input data: Length, ADT, % of light and heavy vehicles and the maximum speed at which they are allowed to drive on the motorway.
- For American motorways, the calculation tool requires the following input data: Length, ADT, % of light and heavy vehicles and the maximum speed at which the motorway is permitted to be driven, the state, county and type of motorway.

### Capital Goods

This category includes all upstream (i.e. cradle to door) emissions from the production of capital goods purchased or acquired by the company during the year. The methodology involves applying a Defra-specific conversion factor to the amount invested in equipment, machinery, construction projects and office equipment and furniture.

### Upstream transportation and distribution

Includes emissions from transport and distribution of products reported in the Purchased good and services category. The GHG Protocol sheet is used for the calculation.

The information required to calculate this category is:

- Quantity of the most relevant products and materials from the environmental point of view.
- Origin of materials and quantity purchased in each country.
- Type of transport used.
- Distance.

### Waste generated in operations

The emissions in this section are related to the waste generated by the company's activity that has been reported during the year. A Defra conversion factor is applied to each of the quantities of these wastes. This section includes:

- Construction and demolition waste.
- Non-Hazardous Waste: Recyclable urban, wood, vegetable waste.
- Hazardous Waste.
- Excavated earth taken to landfill.

### Fuel and energy related activities (not included in scope 1 or 2)

This section considers the energy that is necessary to produce the fuels and electricity that the company consumes, as well as the losses of electricity in transmission and distribution.

To calculate emissions from purchased fuels (petrol, diesel, natural gas, propane, LPG...) and electricity, conversion factors are applied depending on Defra's "Well-to-tank" data source. As for the loss of electricity from transmission, the conversion factor applied is country-specific and comes from the International Energy Agency.

### End of life treatment of sold products

This category includes emissions from the disposal of waste generated at the end of the useful life of products sold by Ferrovial in the reporting year.

Ferrovial offers services and products. Services, which are labour, do not generate emissions associated with this category. As for the products sold, these correspond to the construction of infrastructure. In this case the most relevant materials from an environmental point of view and by volume that are included in the construction of infrastructures are wood, paper, barriers, asphalt and concrete. Therefore,

at the end of the useful life of the infrastructures, the waste to be managed corresponds to the same.

A Defra conversion factor is applied to these products to obtain the emissions from the disposal of waste generated at the end of the useful life of the infrastructure.

### Business travel

Emissions associated with business travel are included, whether by train, plane, taxi or vehicles used for travel.

For this category, data provided by the travel agency or from accounting is used, such as type of trip, route or expense. Conversion factors are applied to these data to obtain the emissions related to each type of transportation. The source of these varies from country to country.

### Upstream leased assets

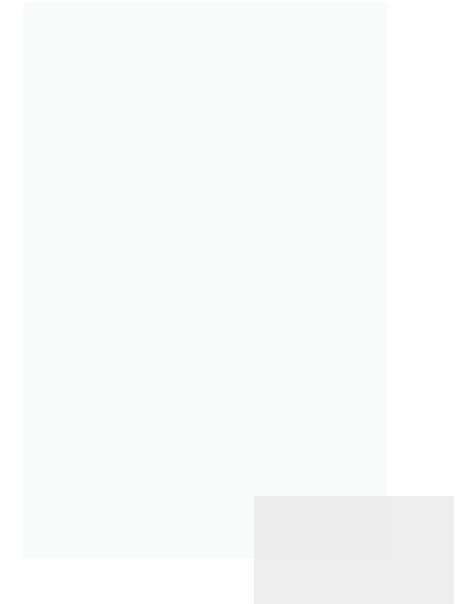
Includes emissions related to electricity consumption of those customers' buildings in which Amey carries out maintenance and cleaning. A Defra conversion factor is applied to these energy consumptions to obtain the related emissions.

### Employee commuting

This category includes emissions from employees travelling from their homes to their workplaces. In this section, Ferrovial calculates the emissions of employees in construction, services, infrastructure and the Ferrovial Group working in its central offices.

The information required is:

- Number of workers.
- Distance from employees' homes to the office.
- Type of transport used in case of not arriving at the offices on foot: car, motorcycle, subway, bus or train.





To obtain information on the type of transport used and distances, surveys were carried out. Conversion factors are applied to these data using the GHG Protocol sheet to obtain the emissions related to each type of transportation.

### “Biogenic CO<sub>2</sub>” emissions

According to the IPCC (Intergovernmental Panel on Climate Change) and the "Protocol for the quantification of greenhouse gas emissions from waste management activities" standard, CO<sub>2</sub> from the combustion of captured and channelled biogas that is burned in flares, in cogeneration processes or in boilers must be reported as zero. This is because this gas comes from the decomposition of products containing organic matter of animal or plant origin that was previously captured by living organisms and therefore belongs to a carbon neutral cycle. These emissions also include the incineration of organic matter in incineration plants.

In its "**Calculation and Reporting of the Carbon Footprint**" procedure, Ferrovial uses the year 2009 as its benchmark and recalculates its inventory whenever there is a structural change or new activities relevant to the company, a change in calculation methodology (emission factors, focus, etc.) or changes in annual consumption, in order to ensure the comparability of information across the years.





# ferrovial

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