

# **ENVIRONMENTAL MANAGEMENT REPORT**

**GHG EMISSIONS, WATER, BIODIVERSITY AND AIR EMISSIONS**



## SUMMARY

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## 1. METHODOLOGICAL NOTE

### 1.1 SCOPE OF THE DOCUMENT

This Environmental Management Report (hereinafter the "Report") covers environmental management aspects, including GHG emissions, water, biodiversity, and air emission management, from 01 January 2024 until 31 December 2024. It aims to meet the needs and interests of various stakeholders by

offering supplementary information on sustainability topics, complementing the disclosure provided in the 2024 Annual Report.

This report has been prepared on a voluntary basis using a selection of the GRI Sustainability Reporting Standards published by the GRI - Global Reporting Initiative (hereinafter referred to as the "GRI Standards"), as indicated in the "GRI Content Index".

The GHG emissions and water analysis consid-

ers the operations and activities of Ferrari Group (Ferrari N.V. and its subsidiaries) while the analysis of biodiversity was conducted for the plants located in Italy (Maranello, Modena and Mugello) and the analysis of air emissions exclusively for the production plants in Maranello and Modena.

Definitions and calculation methodologies of the environmental KPIs covered in this report are disclosed below.

## 2. ENVIRONMENTAL KPIS

### 2.1 GHG EMISSIONS

In our decarbonization strategy, we focus on our direct emissions as well as on our indirect upstream and downstream Scope 3 GHG emissions. In the following paragraph are present the summary tables of our 2024 GHG emissions values, broken down by each Scope, together with the methodologies applied for their calculation.

We calculate our carbon footprint considering the GHG emissions related to all Group activities over our entire value chain, based on the GHG Protocol and the ISO 14064-1:2018 methodologies and verified by a third-party.

Scope 1 & 2 emissions (except fugitive and industrial processes) are calculated using the Energy-based method, with primary data serving as the basis for consumption data. Fugitive and industrial process emissions are calculated using the Activity-based method, also relying on primary data.

In order to define which Scope 3 categories are significant for the Company, we carried out a significance analysis according to the indications of the ISO 14064-1:2018. Hereafter the Scope 3 categories reported:

- a. Category 3.1, Upstream transportation and distribution (similar to category 4 of the GHG Protocol):
  - Transportation and distribution of products purchased between its tier 1 suppliers and its own operations (in vehicles and fa-

- cilities not owned or controlled by Ferrari);
- Transportation and distribution services purchased, including inbound logistics, and transportation and distribution between its own facilities (in vehicles and facilities not owned or controlled by Ferrari);
- b. Category 3.2, Downstream transportation and distribution (similar to category 9 of the GHG Protocol):
  - Transportation and distribution of products sold between its operations and the end consumer, including retail and storage (in vehicles and facilities not owned or controlled by Ferrari);
- c. Category 3.3, Employee commuting (category 7 of the GHG Protocol): Transportation of employees between their homes and their worksites.
- d. Category 3.4, Business travel (category 6 of the GHG Protocol): Transportation of employees for business-related activities (in vehicles not owned or operated by Ferrari);
- e. Category 4.1, Purchased goods (part of category 1 and category 3 of the GHG Protocol): Extraction and production of goods and fuels purchased or acquired;
- f. Category 4.2, Capital goods (category 2 of the GHG Protocol): Extraction and production of capital goods purchased or acquired;
- g. Category 4.5, Use of services (part of category 1 of the GHG Protocol): Production of services purchased or acquired;
- h. Category 5.1, Use stage of products (category

- 11 of the GHG Protocol): End use of goods and services sold;
- i. Category 6.1, Franchises (category 14 of the GHG Protocol): The Scope 1 and Scope 2 emissions of franchisees, Ferrari reports its dealers and workshops in this category.

The emissions reported for 2024 have been calculated according to the requirements of ISO 14064-1:2018. This standard allows for judgment calls resulting in a range of possible outcomes. Therefore, no comparison of the disclosed data is possible with other studies unless methodology and data assumptions are exactly the same. The GWP 100 of the “Sixth Assessment Report” published by the IPCC has been used. The gases included in the calculation of the GHG emissions are: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs and other refrigerant gases, whereas PFC, SF<sub>6</sub> and NF<sub>3</sub> emissions are not considered. The methodology has been updated compared to the one applied in 2021, with the 2024 methodology the 2021 GHG emissions are distributed differently among the ISO 14064 categories, leading to an increase from 751 ktCO<sub>2</sub>eq to 977 ktCO<sub>2</sub>eq of the total GHG emissions. Biogenic emissions are included in the calculation of our GHG emissions, in accordance with the relevant reporting standards.

Direct greenhouse gas emissions, measured in tons of CO<sub>2</sub>eq, were calculated using emission factors indicated in “Ecoinvent 3.9.1” database. It should also be noted that, for the purposes of emissions accounting, we consider the Enzo Ferrari Museum in Modena as under our operational control.

Unit of measurement: tCO <sub>2</sub> eq	2024 Operational control only	2024 Financial control	2024
Total Scope 1	102	65,236	65,338
Share of Scope 1 covered by ETS	—%	81%	81%

The total Scope 2 GHG emissions for 2024 are calculated using both the location-based and mar-

ket-based methods. Market-based indirect greenhouse gas emissions, measured in tons of CO<sub>2</sub>eq,

were calculated using the Residual Mix emission factors indicated in “2023 European Residual Mix-

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es, V.1.0”, published by AIB, and “Emissions Factors 2024”, published by International Energy Agency (IEA). The Group purchases Guarantee of Origin (GO)

certificates in order to reduce the impact of CO<sub>2</sub>eq emissions in the atmosphere. Location-based indirect greenhouse gas emissions, measured in tons

of CO<sub>2</sub>eq, were calculated using the emission factor indicated in “Emissions Factors 2024”, published by International Energy Agency (IEA).

Unit of measurement: tCO <sub>2</sub> eq	2024 Operational control only	2024 Financial control	2024
Total Scope 2 (location-based method)	196	27,895	28,091
Total Scope 2 (market-based method)	—	598	598

As shown in the tables below, the majority of the Scope 1 and Scope 2 emissions occurs in Italy, primarily at our production plants in Maranello and Modena.

Unit of measurement: tCO <sub>2</sub> eq Scope 1	2024
Italy	64,332
Rest of the world	1,006
Total Scope 1 emissions	65,338

Unit of measurement: tCO <sub>2</sub> eq Scope 2 Location based	2024
Italy	27,567
Rest of the world	524
Total Scope 2 location-based emissions	28,091

Unit of measurement: tCO <sub>2</sub> eq Scope 2 Market based	2024
Italy	68
Rest of the world	530
Total Scope 2 Market-based emissions	598

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Scope 3 GHG emissions are reported broken down into the respective categories in accordance with

the ISO 14064 standard.

Unit of measurement: tCO <sub>2eq</sub>	2024 Operational control only	2024 Financial control	2024
Cat 3.1 - Upstream transport and logistics	—	20,592	20,592
Cat 3.2 - Downstream transport and logistics	—	11,357	11,357
Cat 3.3 - Employee Commuting	—	3,618	3,618
Cat 3.4 - Business Travel	—	8,194	8,194
Cat 4.1 - Purchased Goods	—	375,905	375,905
Cat 4.2 - Capital Goods	—	81,885	81,885
Cat 4.5 - Use of Services	—	100,505	100,505
Cat 5.1 - Use stage of products	—	338,256	338,256
Cat 6.1 - Franchises	—	26,870	26,870
<b>Total Scope 3</b>	—	<b>967,182</b>	<b>967,182</b>

Based on the methodology applied in 2024, the table below shows the details for each GHG emissions category. The methodology allows for judgment calls resulting in a range of possible outcomes and is subject to annual reviews to improve the cal-

culational of the Company's GHG emissions, resulting in some cases in incomparability between one year and another. The following table provides detailed explanations regarding the inclusion or exclusion of each Scope 3 category, based on its relevance to

Ferrari, the methodologies and emission factors applied, as well as any assumptions made and additional comments, to ensure clarity in the reporting of our Scope 3 GHG emissions.

Scope 3	Category	Included	Methodology			
			Source	Method <sup>1</sup>	Emission factors	Assumptions
<b>Category 3.1</b>	Upstream transportation and distribution	Yes	Delivery inbound documents, Supplier specific data	Supplier specific method, Distance based method	Ecoinvent, Supplier specific	December 2024 estimated based on the Jan-Nov actual data. Calculation is based on distance between Tier 1 supplier and Ferrari.
<b>Category 3.2</b>	Downstream transportation and distribution	Yes	Delivery outbound documents, Supplier specific data	Supplier specific method, Distance based method	Supplier specific, Ecoinvent <sup>2</sup>	December 2024 estimated based on the Jan-Nov actual data. Calculation is based on distance between Ferrari and the dealer.

1 As defined in the GHG protocol: supplier-specific method uses primary data from the supplier; distance based method uses the mass, distance, and mode of each shipment, then applies the appropriate mass-distance emission factor for the vehicle used ; activity data uses specific emission factors together with available activity data (mass, energy consumption, etc); average data method uses industrial average emission factors together with available activity data; spend base method uses the economic value of a good or a service together with a secondary data emission factor.

2 The GHG emissions of this category were calculated using the emission factors of the Ecoinvent database (v3.9.1) through the SimaPro tool.

3 The GHG emissions of this category were calculated using the emission factors indicated in "ghg-conversion-factors-2024- full\_set\_for\_advanced\_users; v1.0", published by the Department for Environment Food & Rural Affairs (DEFRA) of the UK government.

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<b>Category 3.3</b>	Employee commuting	Yes	Internal database, Internal survey	Distance based method	DEFRA	Foreign employees are estimated based on the average value of Italian employees. November and December 2024 estimated based on the Jan-Oct actual data. Calculation is based on the distance between the home address and the working site.
<b>Category 3.4</b>	Business travel	Yes	Supplier data extraction, Scuderia Ferrari logistic plans, LMH logistic plans	Supplier specific method, Distance based method, Average data method	Ecoinvent, Supplier specific, DEFRA <sup>3</sup>	Foreign employees travels are included in category 4.5 (Use of services). For Sports Cars, calculation is based mainly on the actual distance travelled combined with the mode of transport; for Racing, calculation is based on logistic plans
<b>Category 4.1</b>	Purchased goods	Yes	Warehouse inbound documents, Supplier specific data, Invoices (fuel and energy)	Supplier specific method, Hybrid method, Average data method, Activity data method	Ecoinvent, Supplier specific,	Raw materials processing and manufacturing is included only for more relevant components. Includes Fuel and Energy activities as per ISO 14064:2018 December 2024 estimated based on the Jan-Nov actual data. Calculation is mainly based on the composition of products associated with the correct emission factor.
<b>Category 4.2</b>	Capital Goods	Yes	Verified data included in Financial Reports	Spend based method	EEIO <sup>4</sup>	December 2024 estimated based on the Jan-Nov actual data. Calculation is based on the capex asset category associated with the related spending emission factor.
<b>Category 4.3</b>	Disposal of solid and liquid waste	No: not material (< 5% of category 4)	—	—	—	—
<b>Category 4.4</b>	Use of assets	No: not material (<5% of category 4)	—	—	—	—
<b>Category 4.5</b>	Use of services	Yes	Supplier specific data, Verified data included in Financial Reports (Services)	Supplier specific method, Spend based method	Supplier specific, EEIO	December 2024 estimated based on the Jan-Nov actual data. Calculation is based on the chart of accounts associated with the related spending emission factor.
<b>Category 5.1</b>	Use stage of products	Yes	Official homologation process	Average data method	IEA, Ecoinvent, Homologation <sup>5</sup>	Direct and indirect use phase emissions (Well to Wheel approach). Calculation is based on the total life cycle distance of each model multiplied by homologated European data (Tank-to-wheel) and the upstream emission factor (Well-to-tank).
<b>Category 5.2</b>	Downstream leased assets	No: not relevant for Ferrari and not material (<5% of category 5)	—	—	—	—
<b>Category 5.3</b>	End-of-Life stage of products	No: Ferrari cars are collectible and not disposed of. Not material (<5% of category 5)	—	—	—	—
<b>Category 5.4</b>	Investments	No: not material (< 5% of category 5)	—	—	—	—
<b>Category 6.1</b>	Franchises	Yes	Internal data collection	Activity data method	Ecoinvent, IEA <sup>6</sup>	Full year estimated based on Oct 23 - Sept 24 data. Calculation is based on the actual energy consumption data of the dealers and workshops.

<sup>4</sup> The GHG emissions of this category were calculated using the Extended Environmental Input-Output (EEIO) factors indicated in "Consumption based accounting tool: 2022", published by Eurostat.

<sup>5</sup> The GHG emissions of this category were calculated using the emission factors of the WLTP homologation in the European Union.

<sup>6</sup> The GHG emissions of this category were calculated using the "Emission factors 2024", published by the International Energy Agency (IEA).

In the table below the biogenic emissions are reported:

Unit of measurement: tCO <sub>2eq</sub>	2024
Scope 1 Biogenic emissions	4
Scope 2 Biogenic emissions	—
Scope 3 Biogenic emissions	219
<b>Total Biogenic emissions</b>	<b>223</b>

For further detailed information on our governance, strategy, metrics and targets please refer to the 2024 Annual Report – Sustainability Statement – E1 Climate change – Our GHG Emissions.

**2.2 WATER**

We fully recognize the importance of responsible water management, both in the workplace and throughout our production processes. While our facilities in Maranello and Modena are not located in areas of high or extremely high overall water risk, we have nonetheless implemented a series of initiatives aimed at reducing water consumption in our manufacturing activities and at raising awareness among our employees about the critical importance of water resources.

We manage the topic of water through various frameworks and policies. These include our Environmental Practice, which incorporates water management in our own operations and processes, our Integrated quality, safety and environment policy and the adherence to the ISO 14001 certification standards for our plants in Maranello and Modena. During 2024, the ISO 14001 certificate was reviewed and water management in particular was audited. Moreover, the water balance report is submitted annually to the local water service operator and to ARPAE (Agenzia regionale per la prevenzione, l'ambiente e l'energia dell'Emilia-Romagna) as required by applicable regulations.

At a general level, all the water sourced comes

from municipal water supplies and wells: as of today, no water bodies are directly affected by the withdrawal of water. All the wastewater of our plants is always monitored and channeled in the public sewage system and not directly into water bodies. Where there is no possibility of reuse, wastewater is treated in accordance with Legislative Decree 152/06 and all applicable laws and regulations before being released into the sewage system. More specifically, the water used in some of the industrial processes (such as washing solutions or paint washing), before its discharge in the public sewer system, is treated by an industrial water treatment plant where it undergoes the necessary chemical, physical, and biological treatments.

Since 2020, our Maranello plant has been recovering condensate water from air conditioning systems in all new buildings. This water, along with rainwater, is collected in a dedicated tank for later reuse in toilets and irrigation. Moreover, the new e-building, inaugurated in 2024, is equipped with infrastructure to reuse both condensate and rainwater for toilets and irrigation.

In continuity with 2023, in the Maranello plant additional water meters were integrated into the energy monitoring software. This implementation helps us map the allocation of water consumption and identify opportunities to improve water efficiency.

In November 2024, the “Zero Liquid Discharge” project became fully operational at the Maranello plant. It is designed to reintroduce water coming

from production activities, including painting, foundry operations, and mechanical washing, back into the production process. This initiative aims to intercept the discharge before it enters the sewage system, treating 60% of the wastewater through reverse osmosis. Further treatment will ensure that the reused water meets the necessary standards for the reintroduction into the production cycle. Dedicated meters have been installed to monitor the system's performance, specifically tracking the recovery of water and the discharge of wastewater.

This initiative is expected to reduce annually water consumption by over 3% within the Maranello plant. The target was defined based on the project scope, aiming to lower the demand for freshwater intake.

The Mugello Circuit is self-sufficient in terms of water resources. In particular, the Circuit has the ownership of the wells through which water is taken from the aquifer. After usage, the water is stored in tanks and treated by an external company so that it can be used again. Our Mugello activities have not so far affected the total water present in the aquifer.

Water consumption is defined as the difference between water withdrawal and water discharges. The majority of this consumption occurs at our manufacturing facility in Maranello. In 2024, total consumption was 313.3 megaliters (ML) of which the consumption from water stressed areas was 0 megaliters.

**Water Withdrawal, Discharge and Consumption<sup>7</sup>**

Water withdrawal [ML]	All area	of which areas at water risk, including areas of high water stress <sup>8</sup>
Underground water	494.9	47.8
Third parties	348.5	3
Total <sup>9</sup>	843.4	50.8

  

Water discharge [ML]	All area	of which areas at water risk, including areas of high water stress <sup>8</sup>
Third parties	530.1	50.8
Freshwater (≤1.000 mg/l total dissolved solids)	47.8	47.8
Other water (>1.000 mg/l total dissolved solids)	482.3	3
Total	530.1	50.8

  

	All area	of which areas at water risk, including areas of high water stress <sup>8</sup>
Water consumption [ML]	313.3	0

The quantity of water withdrawn and water discharged are constantly monitored through mechanical and electronic meters installed along the internal water infrastructure. These values are collected automatically or through readings by specialized personnel and consolidated on a monthly basis for the purpose of monitoring and analyzing trends. In 2024, there were no incidents of non-compliance with discharge limits.

**2.3 Biodiversity**

At Ferrari, we aim to help safeguard local biodiversity in areas potentially affected by our production activities, in line with our broader Environmental Practice.

In 2024, we conducted a proximity analysis to assess the presence of protected natural areas within a 10 kilometre radius of our sites. To conduct this analysis, we use the database provided by ISPRA (Istituto Superiore per la Protezione e la Ricerca Ambientale) along with the list of ZIC (Zona di Importanza Comunitaria), ZPS (Zona di Protezione Speciale) and ZSC (Zona Speciale di Conservazione), available on the website of the Italian Ministry of the Environment and Energy Security (MASE). The results confirmed that our facilities are not located in or near areas classified as sensitive for biodiversity conservation. This assessment followed the criteria outlined in Directive 2009/147/EC on the conservation of wild birds, the Council Directive 92/43/EEC on the conservation of natural

habitats and wild fauna and flora, and the national list of protected areas recognized under Italian law.

To the best of our knowledge, our manufacturing plants and racing circuits do not have a significant environmental impact on these protected areas. Nevertheless, we closely monitor our surrounding environment. For example, the Mugello racing circuit, located in an area of high natural and landscape value, was developed with a focus on environmental care. The main grandstand was built using eco-active materials designed to have zero impact on the surrounding area, helping to reduce both pollutants and bacteria.

Ferrari's analysis conducted to determine whether the company's sites are located close to biodiversity-sensitive areas is reported below:

7 Water stress analysis performed with 2024 Aqueduct Water Risk Atlas (World Resources Institute). 2024 data includes Ferrari Group facilities (subsidiaries account for less than 1%).

8 2024 data refers to Mugello racing circuit, Ferrari International Cars Trading and Ferrari Middle East.

9 Total water withdrawal refers to freshwater (≤1,000 mg/L Total Dissolved Solids).

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Site	Geographic location	Type of operation	Position in relation to the protected area or the high biodiversity value area outside protected areas (km)	Size of operational site in km <sup>2</sup>	Protected biodiversity area	Size of biodiversity area km <sup>2</sup>	Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem)	Biodiversity value characterized by listing of protection status
Maranello	Emilia-Romagna	Manufacturing	7.60 km	0.46 km <sup>2</sup>	Faeto, Varana, Torrente Fossa	3.91 km <sup>2</sup>	Terrestrial & Freshwater	ZSC IT4040013
			9.70 km		San Valentino, Rio della Rocca	7.85 km <sup>2</sup>	Terrestrial & Freshwater	ZSC IT4030016
			10.60 km		Cassa di espansione del Fiume Panaro	2.76 km <sup>2</sup>	Terrestrial & Freshwater	ZSC/ZPS IT4040011
			3.01 km		Salse di Nirano	3.71 km <sup>2</sup>	Terrestrial & Freshwater	ZSC IT404007
Fiorano	Emilia-Romagna	Racing Circuit	7.04 km	0.37 km <sup>2</sup>	Faeto, Varana, Torrente Fossa	3.91 km <sup>2</sup>	Terrestrial & Freshwater	ZSC IT4040013
			9.03 km		San Valentino, Rio della Rocca	7.85 km <sup>2</sup>	Terrestrial & Freshwater	ZSC IT4030016
			2.23 km		Salse di Nirano	3.71 km <sup>2</sup>	Terrestrial & Freshwater	ZSC IT404007
Mugello	Tuscany	Racing Circuit	4.55 km	1.7 km <sup>2</sup>	Bosco ai Frati	1.71 km <sup>2</sup>	Terrestrial & Freshwater	SIC IT5140006
			6.30 km		Conca di Firenzuola	23.38 km <sup>2</sup>	Terrestrial & Freshwater	ZSC IT5140003
			4.14 km		Colla di Casaglia	61.11 km <sup>2</sup>	Terrestrial & Freshwater	ZSC IT5140004
Scaglietti	Emilia-Romagna	Manufacturing	10.61 km	0.03 km <sup>2</sup>	Casse di espansione del Secchia	4.76 km <sup>2</sup>	Terrestrial & Freshwater	ZSC/ZPS IT4030011
			4.72 km		Cassa di espansione del Fiume Panaro	2.76 km <sup>2</sup>	Terrestrial & Freshwater	ZSC/ZPS IT4040011

### 2.4 Air emission

In addition to greenhouse gases, air emissions primarily include volatile organic compounds (VOCs) generated during vehicle manufacturing, mainly at Maranello and Modena plants. Additionally, emissions of NO<sub>x</sub>, SO<sub>x</sub>, and dust are continuously monitored.

[tons]	2024
NO <sub>x</sub>	33.1
SO <sub>x</sub>	0.5
Volatile Organic Compounds (VOCs)	70.9
Dusts	4.2

### 3. GRI CONTENT INDEX

<b>Statement of use</b>	Ferrari N.V. has reported in accordance with the GRI Standards for the period 1st January 2024 to 31st December 2024
<b>GRI 1 used</b>	GRI 1: Foundation 2021

<b>GRI Standard</b>	<b>Disclosure</b>	<b>Page number</b>	<b>Note</b>
GRI 305: Emissions			
305-1	Direct (Scope 1) GHG emissions	4-5	
305-2	Energy indirect (Scope 2) GHG emissions	5	
305-3	Other indirect (Scope 3) GHG emissions	6-7	
305-7	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	10	
GRI 303: Water and Effluents			
303-3	Water withdrawal	9	
303-4	Water discharge	9	
303-5	Water consumption	9	
GRI 304: Biodiversity			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	10	