

# IBERCAJA BANCO OPERATIONAL CARBON FOOTPRINT REPORT 2022

July 2023



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## 1. INTRODUCTION

Ibercaja is firmly committed to protecting the environment and combating climate change, taking into account its environmental impact and promoting, through its activities, the transformation towards a sustainable economy.

Climate change is a reality and its effects on economic and social stability are already noticeable: its mitigation requires the commitment of all to achieve progress towards a carbon-free economy.

Guided by its “Corporate Purpose: “Helping people to build the story of their lives, because it will be our story”, Ibercaja worked to ensure that its financial performance serves as a lever for sustainable and inclusive development and acquires commitments aligned with the fight against climate change.

**Hence, in 2019 Ibercaja adhered to the recommendations** issued by the Task Force on Climate-Related Financial Disclosures (TCFD) set up by the Financial Stability Board. With this adhesion, the Bank aims to advance in the disclosure, in a clear, consistent and standardised manner, of the risks and opportunities of climate change on its business and its implications and integration into the Bank's strategy. The information summarises how Ibercaja is becoming engaged in responding to the challenges arising from climate change, following the recommendations of the TCFD in the analysis, in the implementation of measures and in the development of reporting.

In 2021, the Bank became one of the founding partners of the **Net Zero Banking Alliance** (NZBA). This organisation is led by the banking sector, convened by the UN and co-launched by the United Nations Environment Programme Finance Initiative (UNEP Finance Initiative) and the Financial Services Task Force of the Sustainable Markets Initiative, to lead the transition towards a low-carbon global economy and meet the objectives of the Paris Agreement.

In line with this commitment, in 2022, the Bank joined the **Partnership for Carbon Accounting in the Financial Industry** (PCAF) to work towards its commitment to achieve emission neutrality of its loan book and investment portfolios by 2050 or earlier. PCAF is the international benchmark to facilitate the financial industry's alignment with the Paris Agreement and to convey transparency in the calculation of greenhouse gas (GHG) emissions.

In compliance with NZBA, in October 2022, Ibercaja published its 2030 decarbonisation targets for three emission-intensive sectors, “Electricity generation”, “Iron and steel production” and “Residential real estate”. These sectors were identified by assessing their contribution to global warming by volume of GHG

emissions, the weight on the Bank's loan portfolio and the availability, quality and granularity of data as far as possible on the prioritised sectors.

The Bank is also committed to measuring and publishing its carbon footprint. This report contains the calculation of its Scope 1, 2 and partially Scope 3 emissions for the period from 01/01/2022 to 31/12/2022.

## 2. METHODOLOGY AND LIMIT SETTING.

The Bank is committed to measuring and publishing its carbon footprint. This calculation helps the organisation to identify its main sources of greenhouse gas emissions, to calculate emissions, and above all to develop strategies that contribute to reducing both consumption and emissions associated with the activity.

Ibercaja has had its carbon footprint registered in the Registry of the Climate Change Office of the Ministry for Ecological Transition and Demographic Challenge since 2016. The Ministry has awarded the organisation the “Reduzco” (I reduce) seal since 2019 in recognition of the decreasing trend in emissions as a result of compliance with the commitments that have been set.

This report contains the calculation of its Scope 1, 2 and partially Scope 3 emissions for the period from 01/01/2022 to 31/12/2022 and also contains the calculation criteria used, the methodology, the emission sources and the change in the carbon footprint in the 2016-2022 period.

Emission sources are considered to be all those that arise from the activities that the organisation controls. In this way, indirect emissions correspond to the consumption of electrical energy and indirect emissions come from transport, specifically from work-related journeys and internal document distribution services.

In terms of methodology, the formula for calculating emissions in all cases is as follows:

**Carbon footprint= Activity data x Emission factor**

In which:

Activity data: parameter defining the degree of activity (litres in the case of diesel, kWh in the case of electricity, km in the case of employee travel, etc.).

Emission factor: amount of greenhouse gases emitted per unit of the “activity data” parameter.

The emission factors used to calculate Scopes 1 and 2 are those provided by the Ministry for Ecological Transition and Demographic Challenge (MITERD), based on

official sources. For the calculation of Scope 3 emissions, the emission factors of the Defra - Greenhouse Gas Protocol have been used.

In determining the organisation's limits, the approach considered takes into account emissions from those sources that are under the operational control of the organisation and that therefore provide complete and accessible information.

The scope of the calculation is made at the level of the entire Ibercaja Banco S.A. organisation without including other Group companies (Ibercaja Vida, Insurance and Reinsurance Company, Ibercaja Mediación de Seguros, Ibercaja Gestión, Ibercaja Pensión, Ibercaja Leasing and Financing) and includes all the branches of the national network, functional administrative centres and the headquarters building located in Plaza Basilio Paraíso, in Zaragoza.

In the operational limits the organisation identifies the emissions associated with the operations included within the areas defined in the organisational limit.

The emitting sources included in the calculation according to scopes are detailed below:

### **SCOPE 1: Direct emissions**

- Burning fossil fuels (natural gas and oil) for the thermal needs of buildings.
- Leaks from refrigeration and air-conditioning equipment operating with refrigerants composed of fluorinated gases.
- Operation of vehicles owned or controlled by the organisation.

### **SCOPE 2: Indirect emissions**

- Emissions associated with electricity consumption.

### **SCOPE 3: Other indirect emissions**

Scope 3 indirect emissions are those that result from the Bank's activities but occur at sources that are not owned and controlled by the Bank. Ibercaja performs the partial calculation of these. In turn, within the framework of its environmental management system implemented since 2007, the Bank is making progress in the determination to include in the calculation those sources on which it focuses and resources to minimise the environmental impact and, therefore, its carbon footprint.

In 2022, the following emission sources have been partially calculated:

- Emissions associated with employees travelling by car for work purposes.

- Emissions associated with the kilometres travelled by the pouch courier service while on their rounds.

For the preparation of the Carbon Footprint Report for 2022, the occupancy rates of certain properties have been reviewed. This revision has entailed making certain adjustments to these occupancy percentages that have an impact on the final consumption data. In order to allow for comparability of data, the adjustment has been made retrospectively.

### **3. DATA COLLECTION, CRITERIA AND RESULTS OF THE CARBON FOOTPRINT CALCULATION FOR 2022**

Once the emission sources have been identified and the activity data collected, the carbon footprint is calculated.

#### **3.1. SCOPE 1 EMISSIONS RESULTS**

Scope 1 emissions are distributed as follows:

- Fossil fuel consumption in stationary installations.
- Fossil fuel consumption for travelling in vehicles.
- Leakage emissions - fluorinated gases.

\*The sources from which the following emission factors have been derived can be found in section 3 of this report.

### Fossil fuel consumption in stationary installations

Table 1. Calculation of the emissions associated with the consumption of fossil fuels in stationary installations

Fuel type	Building	Activity Data	Emissions (t CO <sub>2</sub> e)	Total emissions (t CO <sub>2</sub> e)	Data source
Oil B (l) (generator sets at Headquarters)	Headquarters	2,000.0	5.40	367.77	Oil refuelling bills, tanks supply points
Oil B (l) (branch office heating)	Branch Network	39,415.0	107.25		
Oil C (l) (heating other offices)	Branch Network	25,994.0	70.73		
*Natural Gas (kWh <sub>HCV</sub> )	Branch Network	1,010,628.0	184.39		Bills from the supplier

(\*) The emission factor for Natural Gas is expressed in kgCO<sub>2</sub>/kWh<sub>HCV</sub>

The procedure for collecting data on energy consumption from natural gas and oil is based on bills from suppliers. The figure for oil in the branch network is associated with the consumption of fossil fuels to cover thermal needs. At the headquarters, fuel consumption is associated with the unloading and filling the oil tank to supply the emergency generator sets.

The natural gas calculation takes into account the percentage of banking activity occupancy of seven buildings (5539 DT Extremadura y Sur-Badajoz, 4891 Burgos Reyes Católicos, 8968 Zaragoza Centro CPD, 4853 Burgos San Pedro de la Fuente, 4826 Medina de Pomar, 4822 Lerma and 3852 Teruel Ramón y Cajal). During 2023, in order to improve the accuracy of the data, these percentages have been revised and the recalculation of previous years has been carried out. This review will be reflected in section 6 of this report: Change in emissions 2016-2022.

#### Fossil fuel consumption for vehicle travel.

The fuel consumption data of own vehicles, controlled by the organisation, are collected from the kilometres travelled data.

The emission factors (expressed in gCO<sub>2</sub>/km) are obtained from the vehicle data sheet and, for diesel-fuelled vehicles, by entering the data: car model and type of fuel consumed in the IDAE website application: <http://coches.idae.es/>.

The source of the activity data is the distance travelled by each of them (km). The total number of vehicles is 24.

Table 2. Calculation of the emissions associated with fleet vehicle fossil fuel consumption

Fuel type	Activity Data: Km vehicle fleet	Partial emissions (t CO <sub>2</sub> )	Total emissions* (t CO <sub>2</sub> e)	Data source
DIESEL (1)	36,154	4.23	72.92	Vehicle kilometres travelled
DIESEL (2)	2,421	0.46		Vehicle kilometres travelled
COROLLA HYBRID ECO Label	454,870	48.67		Vehicle kilometres travelled
TOYOTA CAMRY ECO Label	176,713	17.85		Vehicle kilometres travelled
Plug-in HYBRID ZERO label	37,147	1.71		Vehicle kilometres travelled

(\*) complete combustion is assumed

### Leakage emissions - fluorinated gases

Emissions from the leakage of these gases are derived from the amount of gas leaked into the atmosphere and its GWP (Global Warming Potential).

Table 3: Calculation of emissions associated with leakage of fluorinated gases

BUILDING	GAS OR PREPARED	Activity Data: annual refill (kg)	Emissions (t CO <sub>2</sub> e)	Total emissions (t CO <sub>2</sub> e)
BRANCH NETWORK	R453A	40.00	65.44	543.73
	R407C	111.34	180.84	
	R410A	102.30	196.77	
	HFC32	1.00	0.68	
	R427A	25.00	50.60	
CS	HFC134a	38.00	49.40	

Annual recharging of air conditioning equipment: amount of refrigerant gas produced when a leak has occurred. The data is recorded on the leakage check sheets carried out by the authorised maintenance companies. Evidence of the information contained therein is supported by bills and maintenance reports.



Table 4: Summary calculation scope 1 emissions

SCOPE	EMITTING SOURCE	SCOPE 1 EMISSIONS
		t CO <sub>2</sub> e
1	Fuel consumption in stationary installations	367.77
	Leakage of fluorinated gases	543.73
	Fuel consumption of own vehicles	72.92
<b>TOTAL</b>		<b>984.42</b>

### 3.2. SCOPE 2 EMISSIONS RESULTS

Scope 2 emissions are distributed as follows:

#### Electricity

Table 5: Calculation of emissions associated with electricity consumption

Type of electricity contracted	Building	Activity Data: consumption (kWh)	Total emissions (t CO <sub>2</sub> e)	Data source
Renewable origin with Guarantee of Origin* contract with ENDESA	Branch network	22,553,079**	0.00	Data compiled by the electricity manager, based on bills from the supplier. CNMC CUPS redemption data
	Headquarters	7,596,571		

(\*) Electricity consumed at Headquarters and Branch network from renewable sources with Guarantee of Origin certificate.

The electricity consumption data collection procedure is carried out on the basis of the supplier's consumption bills.

(\*\*) Due to the irregular invoicing of Endesa, the study of electricity consumption in offices has been carried out in the period between October 2021 and September 2022.

Table 6: Summary calculation scope 1+2 emissions

SCOPE	EMITTING SOURCE	SCOPE 1+2 EMISSIONS
		t CO <sub>2</sub> e
1	Fuel consumption in buildings	367.77
	Leakage of fluorinated gases	543.73
	Fuel consumption of own vehicles	72.92
2	Electricity consumption	0.00
<b>TOTAL</b>		<b>984.42</b>

### 3.3. SCOPE 3 EMISSIONS RESULTS

Scope 3 emissions are distributed as follows:

- Emissions associated with employees travelling for work purposes.
- Emissions associated with the in-house pouch courier service.

#### Employees travelling for work purposes

Table 7: Calculation of emissions associated with employee travelling for work purposes

Type of journey	Activity Data: Vehicle kilometres travelled	Total emissions (t CO <sub>2</sub> e)	Data source
Motor vehicle	4,503,149.00	768.55	Accounting data expenses by kilometres travelled

The data is obtained through the corporate travel expense management tool whereby employees enter their mileage in the corporate travel and expense tracking app.

#### In-house pouch courier service

Table 8: Calculation of emissions associated with ground travel courier service

Type of journey	Activity Data: Vehicle kilometres travelled	Total emissions (t CO <sub>2</sub> e)	Data source
Motor vehicle	130,898.00	30.24	Data collected on the number of customers sharing the pouch distribution route in the various territorial areas.

#### PARAMETERS ASSESSED:

The number of pouches per area of operation has been assessed by taking an average distance applicable to the whole area, estimating a single trip per office and 2.243 days per week. In 2022, the methodology for obtaining the emissions data has been revised in order to improve the accuracy of the data and those caused by flights to the Canary and Balearic Islands have been disregarded as they are very small quantities that do not affect the final result. Land transport to Algeciras and Barcelona from Zaragoza has been taken into account. The values of previous years have also been updated. These changes will be reflected in the change in emissions section of this report.

Table 9: Summary calculation scope 3 emissions

SCOPE	EMITTING SOURCE	SCOPE 3 EMISSIONS
		t CO <sub>2</sub> e
3	Employees travelling for work purposes	768.55
	In-house pouch courier service.	30.24
<b>TOTAL</b>		<b>798.79</b>

Ibercaja Banco's calculated scope 3 carbon footprint was **798.79 t CO<sub>2</sub>e**.

### 3.4. TOTAL CARBON FOOTPRINT RESULT

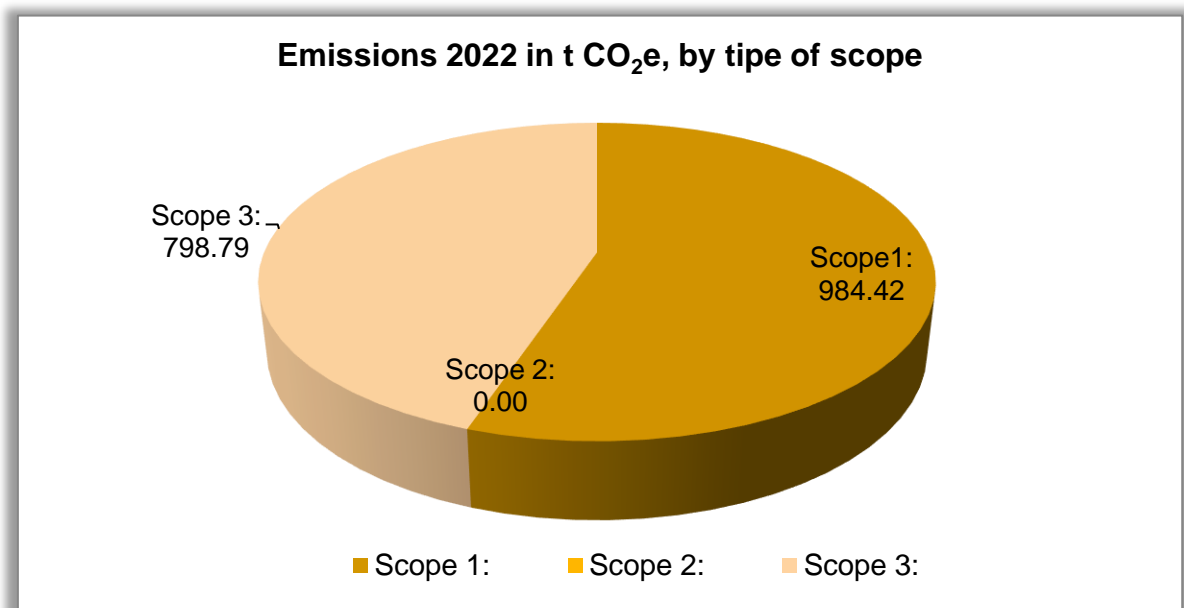
The result of Ibercaja's carbon footprint calculation in 2022 was **1,783.21 tonnes of CO<sub>2</sub>e**, of which **984.42 were direct emissions** (scope 1), constituting 55.20% of the calculated total. Scope 2 emissions associated with electricity consumption are zero due to the purchase of green energy supplied by ENDESA from 2020.

Table 10: Summary total emission calculation scopes 1, 2 and 3

SCOPES	TOTAL EMISSIONS (tCO <sub>2</sub> e)
SCOPE 1 (tCO <sub>2</sub> e)	<b>984.42</b>
SCOPE 2 (tCO <sub>2</sub> e)	<b>0.00</b>
SCOPE 3 (tCO <sub>2</sub> e)	<b>798.79</b>
<b>TOTAL EMISSIONS</b>	<b>1,783.21 tCO<sub>2</sub>e</b>

The graph below shows the distribution of emissions by scope, in absolute value.

Figure 1. Distribution of emissions by scope, in absolute terms



## 4. EMISSION FACTORS 2022

### SCOPES 1+2

Emission factors correspond to Calculator Version V28 published by the Ministry with revision date 14/06/2023. Available at [Calculators \(miteco.gob.es\)](https://calculators.miteco.gob.es)

### SCOPE 1

**Table direct emission factors, fossil fuels in stationary installations scope 1**

Fuel	kg CO <sub>2</sub> /unit	g CH <sub>4</sub> /unit	g NO <sub>2</sub> /unit	Source
<b>Diesel C (I)</b>	2.705	0.365	0.022	<b>OECC.</b> Emission factors Carbon footprint registration, offsets and carbon dioxide absorption projects.
<b>Diesel B (I)*</b>	2.670	0.022	0.115	
<b>Diesel B (I)**</b>	2.705	0.365	0.022	
<b>Natural Gas</b>	0.182	0.016	0.000	

\*Supply of machinery (generators) in the Headquarters building

\*\*Supply in offices, fixed installations (boilers)

**Table of direct emission factors for fluorinated gases, scope 1**

Gas	PCA (Kg CO <sub>2</sub> e/kg gas)	Source
<b>R-453A</b>	1,636	<b>OECC.</b> Emission factors Carbon footprint registration, offsets and carbon dioxide absorption projects
<b>R-407C</b>	1,624	
<b>R-410A</b>	1,924	
<b>HCFC 32</b>	677	
<b>R-427A</b>	2,024	
<b>HFC134a</b>	1,300	

**Table of fossil fuel emission factors for own vehicle travel, Scope 1**

Fuel	kg CO <sub>2</sub> /unit	g CH <sub>4</sub> /unit	g NO <sub>2</sub> /unit	Source
<b>Diesel vehicle 1</b>	0.117	-	-	* Emission factors taken from the IDAE website and vehicle data sheet.
<b>Diesel vehicle 2</b>	0.190	-	-	
<b>Plug-in Hybrid Vehicle</b>	0.046	-	-	Vehicle data sheet
<b>Hybrid Vehicle ECO label 1</b>	0.107	-	-	Vehicle data sheet
<b>Hybrid Vehicle ECO label 2</b>	0.101	-	-	Vehicle data sheet

\* Diesel vehicle emission factors were extracted from the IDAE website in 2016.

## SCOPE 2

Fuel	Kg CO <sub>2</sub> e	Source
<b>ENDESA's electricity consumption 2022</b>	0.00	Contract for the supply of electricity from renewable energy sources

## SCOPE 3

### Table of indirect emission factors for courier service while on their rounds

Source: UK Government GHG Conversion Factors for Company Reporting. Full set: Business Travel air, Delivery vehicles Guidance. Version 2.0 2022 [Greenhouse gas reporting: conversion factors 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/greenhouse-gas-reporting-conversion-factors-2022)

#### Delivery vehicles Guidance:

Activity	Haul	Class	Kg CO <sub>2</sub> e per unit
<b>Managed Vans</b>	-	Average (up to 3.5 tonnes)	0.23099

### Table of indirect emission factors for employee trips

Source: UK Government GHG Conversion Factors for Company Reporting. Full set: Managed assets-vehicles, activity managed cars (by size) Guidance. Version 2.0 2022.

#### Managed assets-vehicles, Guidance:

- Activity: Managed cars
- Type: Average car
- Kg CO<sub>2</sub>e /km: 0.17067

## 5. CARBON NEUTRALITY - SCOPES 1 and 2

Ibercaja offsets part of its carbon footprint, that corresponding to the calculation of its direct emissions, through absorption projects. During 2023, 100% of the direct CO<sub>2</sub> emissions produced in 2022 that could not be avoided, i.e. 984.42 t CO<sub>2</sub>e. This action is part of the Bank's objective of zero net emissions linked to its activity.

By 2023, part of the carbon footprint has been offset through the Santa Maria Forest Project in the Brazilian Amazon, which has a twofold objective: firstly, to conserve the rainforest and maintain carbon stocks, and secondly, to contribute to social programmes to improve local living conditions.

This Project is validated by one of the most prestigious standards of the Voluntary Carbon Market, VCS-Verified Carbon Standard and is a UN REDD+ project.

Also, in 2023 Ibercaja will offset its partial carbon footprint by acquiring for the first-time tonnes of CO<sub>2</sub> from a carbon dioxide project registered in the OECC Registry.

Through this model of offsetting its emissions, Ibercaja not only helps to mitigate and adapt to climate change, but also contributes to the generation of social benefits for local communities and to the protection, conservation and improvement of biodiversity.

Furthermore, the total Scope 2 emissions associated with electricity consumption have been neutralised through the **purchase of 100% green energy**, from renewable energies, thus offsetting Scope 1 and 2 emissions.

Ibercaja has been emission neutral since 2020. Through purchasing green energy and offsetting emissions, Ibercaja guarantees its commitment to the fight against climate change by neutralising all Scope 1 and 2 emissions from its activity that could not be avoided.

## 6. CHANGE IN EMISSIONS 2016-2022

Ibercaja has established 2016-2030 as the comparative period. In order to contribute to the mitigation of climate change, the company has designed a GHG emissions reduction plan that affects its entire network of branches and central services for the 2016-2030 period. This plan includes measures that have already been implemented and are being continued, as well as measures with a medium-term focus.

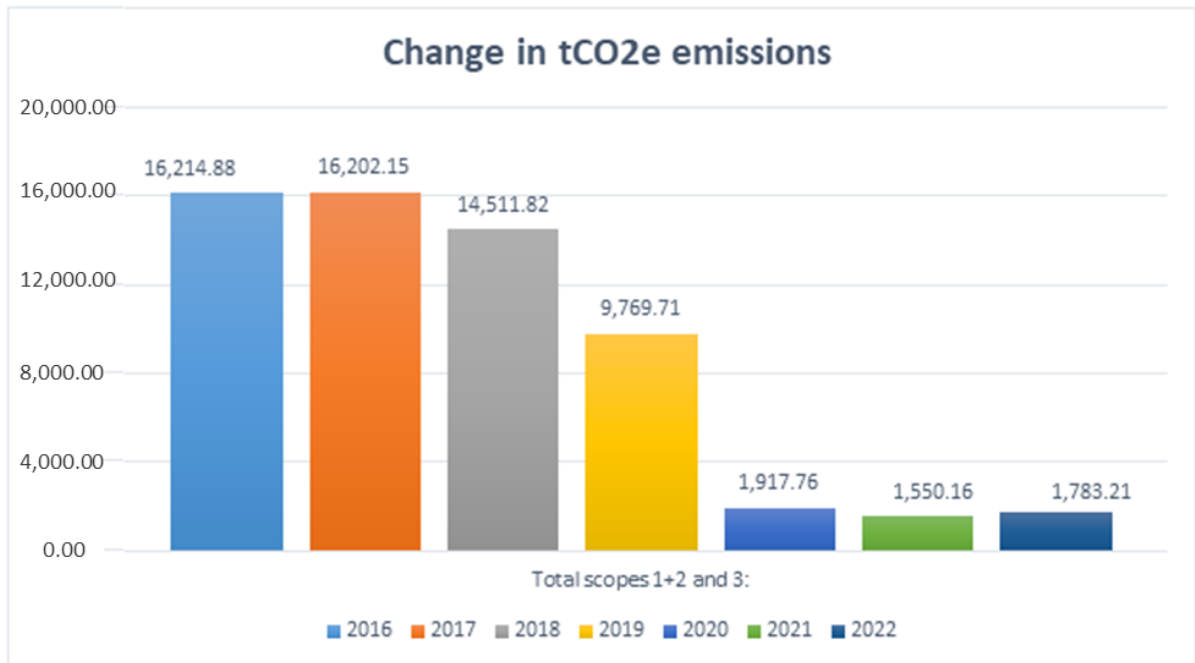
This document reports on the main actions carried out in the 2022 financial year and takes stock of the results.

The following table shows the **change in emissions between 2016-2022**, in absolute values. During 2023, the occupancy rates of certain properties have been revised. This revision has led to adjustments in the consumption and emissions data associated with Natural Gas (Scope 1). Thus, in order to add comparability and unify the criteria, the exercise of recalculating the consumption of Natural Gas has been carried out and the associated emissions have been obtained using the calculators corresponding to each year. The procedure for calculating emissions caused by the courier service while on their rounds to the Balearic and Canary Islands has also been revised. This revision has resulted in adjustments to the mileage and emissions data to take account of peninsular land transport.

The results are reflected in the table and graphs below.

Scopes 1, 2 and 3	<b>2016</b>	2017	2018	2019	2020	2021	<b>2022</b>	Change (%)
tCO <sub>2</sub> e emissions	<b>16,214.9</b>	16,202.1	14,511.8	9,769.7	1,917.8	1,550.2	<b>1,783.2</b>	<b>-89%</b>

Figure 2. Change in total emissions results 2016-2022 period



In absolute terms, **the emissions generated during 2022 have been reduced by 89% compared to the reference year, 2016**. These have been increased by 15% compared to 2021.

In 2022, as a consequence of increased commercial activity and use of owned vehicles, emissions from fuel consumption have increased. Furthermore, and on an

ad hoc basis, repairs have been carried out on older and larger air-conditioning equipment, which has led to an increase in emissions associated with fluorinated gas leaks.

Electricity consumption has no associated emissions since 2020 due to the purchase of green energy, with a Guarantee of Origin Certificate, achieving a 100% reduction in indirect Scope 2 emissions compared to 2016.

In relation to actions related to energy efficiency, priority is given **to design criteria based on energy efficiency and sustainability** involving the implementation of equipment with better performance and high energy efficiency. Specifically, the replacement due to breakage or replacement of air conditioning equipment in branch offices is carried out prioritising the **criterion of maximum possible energy efficiency** based on the characteristics of the premises. All of them use heat pump units, some of which use aerothermal energy, which is renewable energy in accordance with EU Directive 2009/28/EC.

With regard to LED lighting systems, in all refurbishments and maintenance work carried out in branch offices, when the installation allows it, the criterion of replacing the existing lighting with LED systems is maintained. In addition, the illuminated signs are fitted with energy-saving LED lighting systems.

In 2023, it is planned to gradually replace the existing lighting with LED systems. With automatic detection, on five floors of the Headquarters Building. This action will reduce electricity consumption by up to 60% per floor and 20% of the total.

Another of the measures envisaged in the Plan is the reduction of emissions due to employees travelling for work purposes, by replacing face-to-face meetings with videoconference meetings. The implementation of this action was reinforced in 2020, due to the telework imposed by the situation resulting from the pandemic. In 2022, online meetings through corporate teams have been enhanced.

Moreover, compared to 2021, emissions associated with the **pouch courier service have been reduced by 3%**. Following on from this, the process of optimising the frequency of routes continues and has gone from an average of 3 days a week in 2016 to 2.244 days in 2022, which represents a reduction of 25%. Compared to the base year (2016) **the total associated emissions have been reduced by 94%**.

#### 6.1. CHANGE IN SCOPE 1 EMISSIONS, 2016-2022

The change in direct emissions from Scope 1 emission sources is detailed below.

The table shows the breakdown of Scope 1 emissions in the 2016-2022 period:

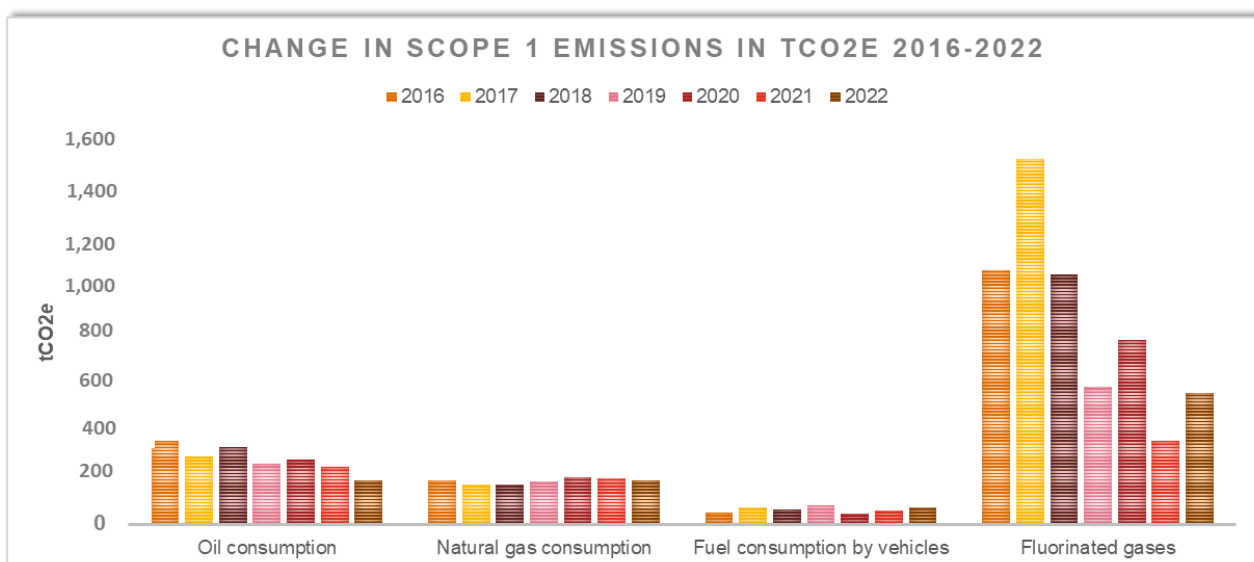


Emission sources/ tCO <sub>2</sub> e emissions	2016	2017	2018	2019	2020	2021	2022	Change% 2021 compared to 2016	Change% 2022 compared to 2016
Oil consumption	345.3	282.5	321.07	250.9	269.20	236.92	183.38	-31%	-47%
Natural gas consumption	181.10	164.13	163.60	176.73	193.89	189.71	184.39	5%	2%
Fuel consumption by vehicles	48.4	70.73	61.53	77.63	44.98	58.31	72.92	20%	51%
Fluorinated gases	1,053.1	1,515.79	1,034.9	570.39	763.77	346.99	543.73	-67%	-48%
<b>Total scope 1 emissions</b>	<b>1,627.91</b>	<b>2,033.15</b>	<b>1,581.10</b>	<b>1,075.65</b>	<b>1,271.59</b>	<b>831.94</b>	<b>984.42</b>	<b>-49%</b>	<b>-40%</b>

From the data shown in the table, it can be concluded that the reduction of direct Scope 1 emissions in 2022 compared to the base year 2016 is **40%**.

- ✓ With the aim of reducing the emissions associated with the fuel consumption of the vehicles that form part of the Ibercaja Network, over the last two years, all the vehicles in the fleet have been gradually replaced by **sustainable vehicles** with **ECO and ZERO labels**. Only two diesel vehicles owned by the Entity have been maintained.

Figure 3. Comparison of scope 1 direct emissions results by source 2016-2022



## 6.2. CHANGE IN SCOPE 2 EMISSIONS, 2016-2022

The change in indirect emissions from Scope 2 emission sources is detailed below.

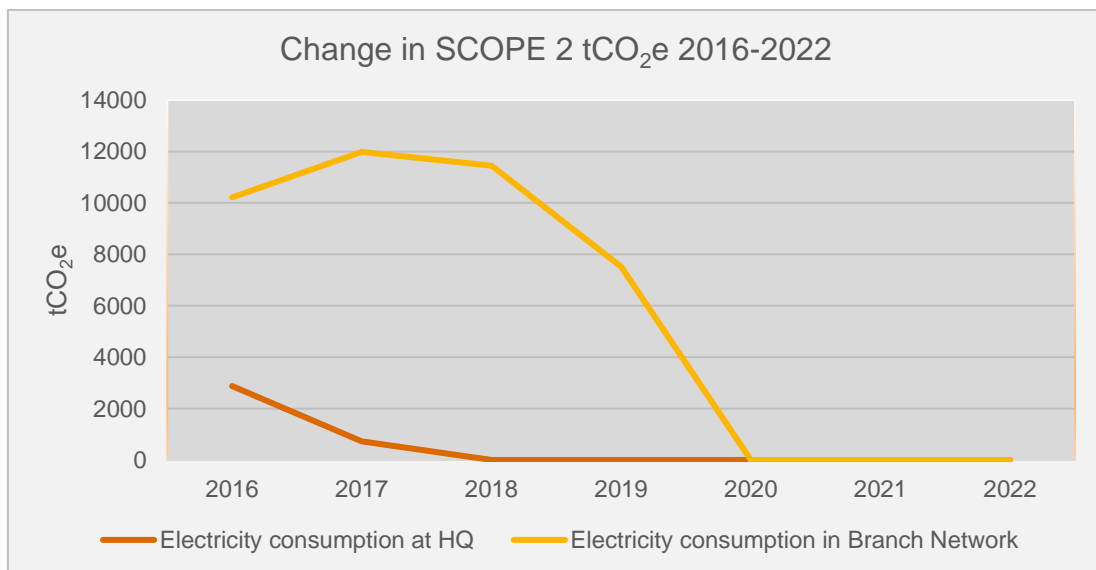
The table shows the breakdown of Scope 2 emissions in the 2016-2022 period:

Emission sources/ tCO <sub>2</sub> e emissions	2016	2017	2018	2019	2020	2021	2022	Change% 2021 compared to 2016	Change% 2022 compared to 2016
Electricity consumption Headquarters	2,874.79	724.62	0.00	0.00	0.00	0.00	0.00	-100%	-100%
Electricity consumption Branch network	10,215.35	11,980.58	11,440.80	7,512.36	0.00	0.00	0.00	-100%	-100%
<b>Total scope 2 emissions</b>	<b>13,090.14</b>	<b>12,705.20</b>	<b>11,440.80</b>	<b>7,512.36</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-100%</b>	<b>-100%</b>

Ibercaja has managed to reduce its carbon footprint associated with indirect Scope 2 emissions by 100% since 2020. This has been possible thanks to the following actions:

- ✓ The equivalent of the total electricity consumed in the entity has been achieved to come from **100% renewable energy sources**

Figure 4. Comparison of scope 2 indirect emissions results by source 2016-2022



### 6.3. CHANGE IN SCOPE 3 EMISSIONS, 2016-2022

The change in indirect emissions from Scope 3 emission sources is detailed below.

The following table and graphs show the **change in scope 3 emissions between 2016-2022**, in absolute values. In 2023, maintaining the continuous improvement approach as explained in section 3.3 Scope 3 emissions result, the recalculation of emissions caused by fuel consumption by couriers while on their rounds for the years 2016-2021 has been carried out. The results are reflected in the table and graphs below.

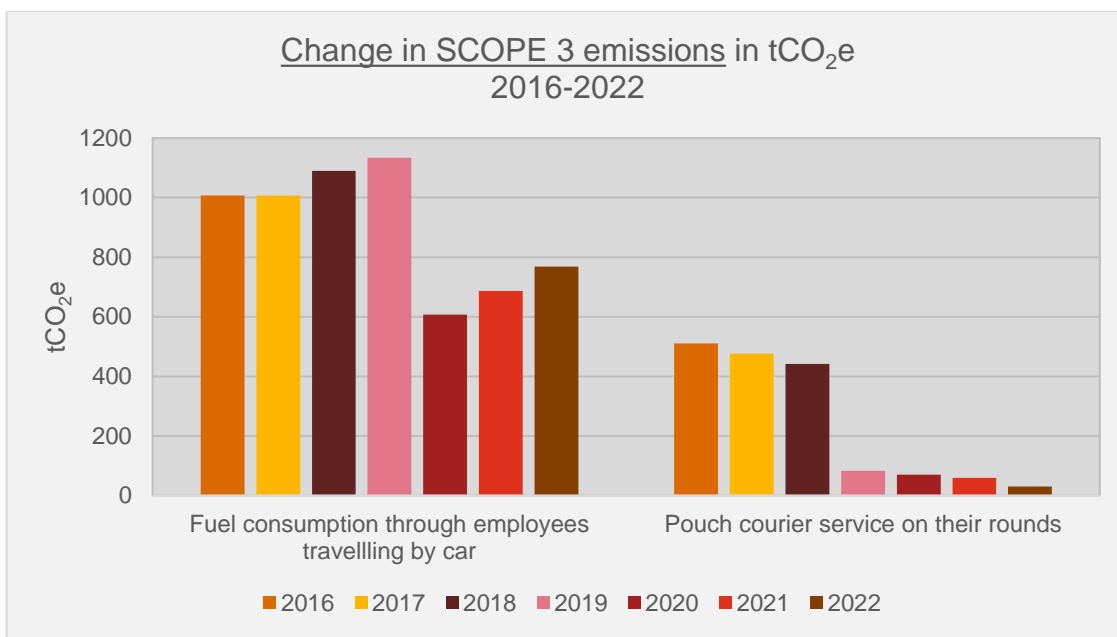
The table shows the breakdown of Scope 3 emissions in the 2016-2022 period:

Emission sources/ tCO <sub>2e</sub> emissions	2016	2017	2018	2019	2020	2021	2022	Change% 2021 compared to 2016	Change% 2022 compared to 2016
Fuel consumption through employees travelling by car	1,006.66	1,006.96	1,089.53	1,133.45	607.42	687.06	768.55	-32%	-24%
Fuel consumption by the pouch courier service while on their rounds	490.16	456.83	400.39	48.25	38.75	31.16	30.24	-94%	-94%
<b>Total scope 3 emissions</b>	<b>1,496.82</b>	<b>1,463.79</b>	<b>1,489.92</b>	<b>1,181.70</b>	<b>646.17</b>	<b>718.22</b>	<b>798.79</b>	<b>-52%</b>	<b>-47%</b>

The data reflect that there has been a **47% reduction in emissions from Scope 3 emission sources**, compared to the base year (2016).

- ✓ The routes and frequency of the pouches have been optimised.
- ✓ Virtual meetings and online training continue to be promoted.

Figure 5. Comparison of scope 3 indirect emissions results 2016-2022 periods



#### 6.4. CHANGE IN INTENSITY OF EMISSIONS 2016-2022

The activity index considered by the organisation to obtain the emissions ratio is the Retail Turnover.

With these updated figures, the following tables show the result in 91% change compared to the base year (2016).

#### Activity index RETAIL BUSINESS VOLUME

Activity index data	2016	2017	2018	2019	2020	2021	2022
Balance €Mn	84,156	86,170	86,653	90,297	94,367	99,025	<b>98,253</b>

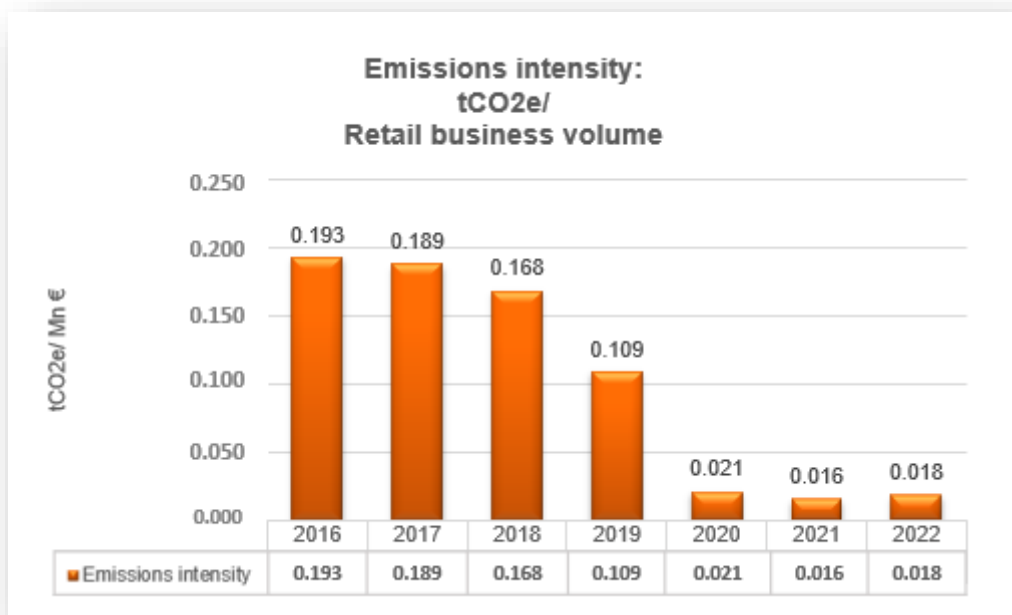
#### Change in emissions between 2016-2021

Scopes 1, 2, 3	2016	2017	2018	2019	2020	2021	2022
tCO <sub>2</sub> e emissions	16,214.9	16,202.1	14,511.8	9,769.7	1,917.8	1,550.2	<b>1,783.2</b>

**Emissions intensity by RETAIL BUSINESS VOLUME**

	2016	2017	2018	2019	2020	2021	2022	Change % 2021 compared to 2016	Change % 2022 compared to 2016
tCO <sub>2</sub> e/€Mn emissions ratio	0.193	0.189	0.168	0.109	0.021	0.016	<b>0.018</b>	-92%	<b>-91%</b>

Figure 6. Comparison of total emissions intensity results for the periods 2016-2022



**7. GLOSSARY**

**Carbon footprint:**

This environmental indicator aims to reflect “the total greenhouse gases (GHG) emitted as a direct or indirect effect of an individual, organisation, event or product”. Such environmental impact is measured by carrying out a GHG emissions inventory or a life cycle analysis according to the footprint typology, following recognised international standards, such as ISO 2007, ISO 14069, ISO 14067, PAS 2050 or GHG Protocol among others. The most exemplary carbon footprint is the waste being polluted and is also measured in mass of CO<sub>2</sub> equivalent. Once the size and footprint is known, it is possible to implement a public or private reduction or offset strategy.

**Climate change:**

Climate change refers to long-term changes in temperatures and weather patterns. These changes can be natural, due to variations in solar activity or large volcanic eruptions. But since the 19th century, human activities have been the main driver of climate change, mainly due to the burning of fossil fuels such as coal, oil and gas.

The burning of fossil fuels generates greenhouse gas emissions that act like a blanket around the earth, trapping the sun's heat and raising temperatures.

The main greenhouse gas emissions causing climate change are carbon dioxide and methane. These come from the use of petrol to drive a car or coal to heat a building, for example. Land and forest clearing can also release carbon dioxide. Agriculture and oil and gas activities are important sources of methane emissions. Energy, industry, transport, buildings, agriculture and land use are among the main emitters.

**Greenhouse effect:**

The greenhouse effect is a process in which the thermal radiation emitted by the planetary surface is absorbed by the greenhouse gases (GHG) atmospheric greenhouse gases and is radiated in all directions. Since part of this radiation is returned to the earth's surface and lower atmosphere, this results in an increase in the average surface temperature compared to what it would be in the absence of GHGs.

**Greenhouse gases:**

A greenhouse gas (GHG) is a gas that absorbs and emits radiation in the infrared range. This process is the root cause of the greenhouse effect. The main GHGs in the Earth's atmosphere are water vapour (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and ozone (O<sub>3</sub>). Without greenhouse gases, the average surface temperature of the Earth would be -18°C,3 instead of the current average of 15°C. In the solar system, the atmospheres of Venus, Mars and Titan also harbour greenhouse gases.

**Hydrofluorocarbons (HFCs),**

These are fluorinated greenhouse gases with a high global warming potential (GWP), between 150 and 22,800, whose use has increased significantly in recent years. This is because they have replaced ozone-depleting gases (Chlorofluorocarbons (CFCs) and Hydrofluorocarbons (HCFCs)) in their applications.

**Carbon equivalent:**

The CO<sub>2</sub> equivalent or Carbon Dioxide Equivalent (CO<sub>2</sub>eq) is a measure of the carbon footprint in tonnes. Carbon footprint is the name given to the total emission of greenhouse gases (carbon dioxide CO<sub>2</sub>, methane CH<sub>4</sub>, nitrous oxide N<sub>2</sub>O, among others)

**Climate change mitigation:**

The set of actions aimed at reducing the intensity of radiative forcing in order to reduce the potential effects of global warming. In general, mitigation involves reducing greenhouse gas concentrations, either by reducing their sources or by increasing the capacity of carbon sinks to absorb GHGs from the atmosphere.

**Emission factors:**

Emission factors (EFs) provide a valid estimate of the environmental impact of different materials, products, services and processes. They are a key part of the **carbon footprint calculation**. EFs are usually converted to a known unit, such as carbon dioxide equivalents or CO<sub>2</sub>e.

**DEFRA:**

The Department for Environment, Food and Rural Affairs (Defra) is the government department responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities in the United Kingdom of Great Britain and Northern Ireland. The concordats established agreed frameworks for cooperation between it and the Scottish government, [2] the Welsh government [3] and the Northern Ireland Executive, [4] which have devolved responsibility for these matters to their respective nations.

**Kyoto Protocol:**

The Kyoto Protocol is a protocol to the United Nations Framework Convention on Climate Change (UNFCCC), and an international agreement that aims to reduce emissions of six greenhouse gases (GHGs). This document committed industrialised country signatories to stabilise GHG emissions, and the Convention for its part has encouraged countries to do so. Structured around the principles of the Convention, the protocol sets binding emission reduction targets for 37 countries and the European Union (EU), implicitly recognising that, in 1997, they were primarily responsible for the high levels of GHG emissions in the atmosphere.

## **8. GREENHOUSE GAS EMISSIONS INVENTORY INDEPENDENT LIMITED ASSURANCE REPORT**