



Commitment to the
environment

9. Commitment to the environment

MANAGEMENT FOCUS

The main goals of the Ebro Group's environmental commitment are defined as follows in our Policy on Sustainability, Environment and Corporate Social Responsibility: "Steer the company's processes, activities and decisions to protect our environment, prevent and minimise environmental impact, optimise the use of natural resources and preserve biodiversity."

According to this declaration, the Group's actions are based on the following:

1. Ensure that our companies comply with the environmental laws applicable to their respective activities by implementing internal management systems and monitoring the applicable laws and regulations.
2. Minimise the environmental impact of our activity by seeking eco-friendly solutions and embarking on initiatives to reduce our emissions, optimising our consumption of water, energy and packaging materials.
3. Transition towards a circular economy, recovering waste and favouring its recycling and reuse, using recycled raw materials and/or those respectful of the environment, whenever possible.
4. Organise environmental awareness and training programmes for Group employees.
5. Promote the use of sustainable crop techniques among our agricultural suppliers.

With regard to our operations, the processes used at Ebro Group's production plants in both the Rice and Pasta Divisions are simple agri-food processes with a low environmental impact and entail minimal risks of accidental pollution. The most significant environmental risks relating to the Ebro Group can be classified as follows:

1. **Air emissions:** Mainly emissions of particles during the handling of cereals and greenhouse gas (GHG) emissions related to the consumption of fossil fuels and electricity. The fuel most widely used is natural gas.
2. **Noise emissions:** Produced during the operation of engines, compressors, sleeve filters and other manufacturing equipment. All our plants comply with the environmental standards and the noise levels are monitored regularly, taking mitigation measures wherever necessary.
3. **Production processes:** Essentially mechanical and hydrothermal, requiring the use of very few chemical products and in very small quantities. Most of these products are used to clean the equipment and cleanse the raw materials and are relatively harmless for the environment.

- 4. Water consumption:** The amount of water used in our processes is negligible (the vast majority of our products are dry) so the volume of effluent generated is also small. Moreover, the little effluent produced has a low level of contamination since the water consumed is basically used to produce steam, for cooling or as an ingredient in the finished products.
- 5. Waste generation and management:** The company generates minimal amounts of waste, both non-hazardous (mainly packaging of ingredients and ancillary materials) and hazardous (maintenance operations) and it is managed through authorised waste disposal contractors.

PRECAUTIONARY PRINCIPLE

The guidelines on which the precautionary principle is based are set out in the Group's Code of Conduct and Policy on Sustainability, Environment and Corporate Social Responsibility. In both texts, Ebro Foods declares its firm commitment to respect and conserve the environment and preserve biodiversity. It also sees that its companies comply with the environmental laws applicable to their operations and any additional commitments assumed voluntarily, and applies environmental sustainability programmes in specific matters.

SCOPE OF REPORTING

The information set out below includes the environmental performance corresponding to the 64 production plants (representing all our plants) and 8 of the 16 offices that the Ebro Group has through its different companies.

Calculation of our carbon footprint excludes the emissions from the 8 offices that the Ebro Group leases because the information is not available. Those offices are:

- * The 3 offices of Ebro Foods, S.A. in Spain: Madrid, Granada and Barcelona
- * The commercial office of Riceland in Hungary
- * The Toronto office of Riviana Foods Canada
- * The Houston office of Riviana Foods Inc
- * The Delhi office of Ebro India
- * The Thailand office of Herba Bangkok

All the emission factors, low calorific values (LCV) and global warming effect used are set out in Annex 3.

GRI 301: MATERIALES

This indicator is reported under standard GRI 301 (2016).

RAW MATERIALS [301-1]

The raw materials used are divided into two major categories:

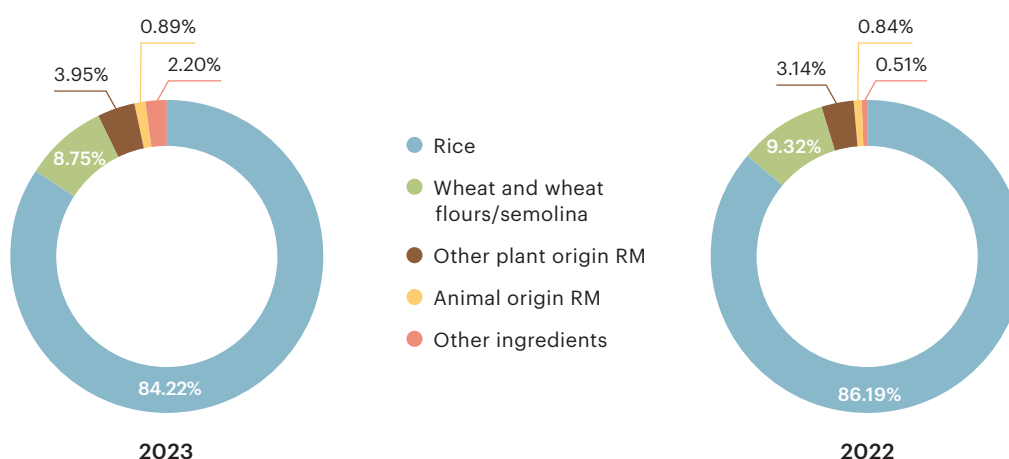
1. Those used in the preparation of finished goods.
2. Those used for the packaging materials

The **raw materials used in finished goods** are divided into five categories:

1. Rice.
2. Durum wheat and semolina/durum wheat flour.
2. Other raw materials of plant origin: quinoa, pulses, other cereals, other flours/semolinas, fruit and vegetables and soya/soybean oil.
4. Raw materials of animal origin: meat, fish and eggs.
5. Other ingredients: e.g. spices and flavourings used mainly in precooked food

RAW MATERIALS	2023		2022	
	T	%	T	%
Rice	2,033,040	84.22%	2,058,274	86.19%
Wheat and wheat flours/semolina	211,242	8.75%	222,542	9.32%
Other plant origin RM	95,312	3.95%	75,022	3.14%
Animal origin RM	21,422	0.89%	20,175	0.84%
Other ingredients	53,038	2.20%	12,179	0.51%
TOTAL (t)	2,414,054		2,388,191	

Raw Materials



We **do not use palm oil** in the preparation of any of our products.

The use of raw materials from animal origin in our products is less than 1% of the total. With regard to egg, the Ebro Group has undertaken to use exclusively ingredients from cage-free eggs in the production of any foods requiring that raw material as from 2025. This undertaking is extended to all the Group's companies in Spain and has also been adopted by Lustucru Frais in France. In 2023, the use of ingredients from cage-free eggs was 100% in Spain and 87% in France. We aim to reach 100% within 2024 in France.

PACKAGING MATERIALS [301-1]

The packaging materials for finished products are mainly paper, cardboard and plastic.

TYPE OF MATERIAL	2023		2022	
Plastic	45,369	49.16%	45,086	48.35%
Paper	45,771	49.59%	46,830	50.22%
Glass	0	0.00%	0	0.00%
Metal	4	0.00%	3	0.00%
Others	1,146	1.24%	1,340	1.44%
TOTAL (T)	92,291		93,258	

RECYCLED INPUT MATERIALS [301-2]

Based on the information received from the suppliers of packaging materials regarding the composition of their materials, we have calculated the recycled fibre/polymer content of the different types of packaging we use.

To preserve and guarantee the utmost food safety of our products, the primary packaging, which is in direct contact with the food, must have a 100% virgin material composition or be certified as suitable for use in the food industry. In this scenario, our primary packaging contains 2% recycled material.

The different secondary and tertiary packaging formats used by the different Group companies both contain 61% of recycled fibre, on average.

RECYCLED FIBRE CONTENT	2023	2022
Primary packaging	2%	6%
Secondary/tertiary packaging	61%	74%

GRI 302: ENERGY

This indicator is reported under standard GRI 302 (2016).

The energy consumption and inventory of greenhouse gas (GHG) emissions of all the Group companies is calculated under standard ISO 14064-1:2019.

ENERGY CONSUMPTION WITHIN THE ORGANISATION [302-1]

We separate energy consumption within the organisation into direct consumption and indirect consumption.

The calculation of direct energy consumption includes:

1. The consumption of non-renewable fuels in stationary and mobile sources.
2. The consumption of renewable fuels:
 - a. Rice husk, a by-product of our industrial processes, used by the subsidiaries Ebro India, Herba Ricemills and Mundiriso.
 - b. Wood chips used by Ebro Frost
 - c. Charcoal used by Ebro India
3. The self-supplied energy in own photovoltaic and cogeneration facilities
4. The self-supplied energy sold (practically non-existent) from own photovoltaic and cogeneration facilities

DIRECT CONSUMPTION (GJ)

Most of our direct energy consumption comes from natural gas, followed by renewable fuels (rice husk, wood chips and charcoal), other non-renewable fuels (mainly propane, petrol and diesel) and self-generated electricity.

NON-RENEWABLE ENERGY SOURCES CONSUMED	2023		2022	
Natural gas	2,743,305	93.43%	2,807,055	94.50%
Other non-renewables	74,579	2.54%	76,690	2.58%
Total consumption non-renewables (GJ)	2,817,884	95.97%	2,883,745	97.08%

RENEWABLE ENERGY SOURCES CONSUMED	2023		2022	
Biomass/Charcoal	99,185	3.38%	80,976	2.73%
Total consumption renewables (GJ)	99,185	3.38%	80,976	2.73%

SELF-GENERATED ENERGY	2023		2022	
Photovoltaic panels	19,512	0.66%	6,361	0.21%
Cogeneration	114,914	3.91%	101,081	3.40%
Total self-generation (GJ)	134,426	4.58%	107,442	3.62%

SELF-GENERATED ENERGY SOLD	2023		2022	
Photovoltaic panels	10	0.00%	6	0.00%
Stationary combustion/Cogeneration	491	0.02%	553	0.02%
Total self-generation sold (GJ)	501	0.02%	559	0.02%

SELF-CONSUMPTION PHOTOVOLTAIC	2023		2022	
Self-consumption PV (GJ)	19,502	0.66%	6,355	0.21%
Total Direct Consumption (GJ)	2,936,080	100.00%	2,970,524	100%

4.6% of the direct consumption energy is self-generated at the photovoltaic and cogeneration facilities of our production plants, at:

Photovoltaic facilities

- * Arotz: Navaleno
- * Bertagni: Avio y Vicenza
- * Ebro Frost Germany: Offingen
- * Ebro India: Taraori
- * Garofalo: Gragnano
- * Geovita: Bruno
- * Herba Bangkok: Nong Khae
- * Herba Ricemills: Rinconada y Algemesi
- * Mundiriso: Vercelli
- * Riviana Foods: Colusa
- * Transimpex: Lambsheim

Cogeneration facilities

- * Bertagni: Avio y Vicenza
- * Ebro Frost Germany: Offingen
- * Garofalo: Gragnano
- * Geovita: Vilanova Monferrato

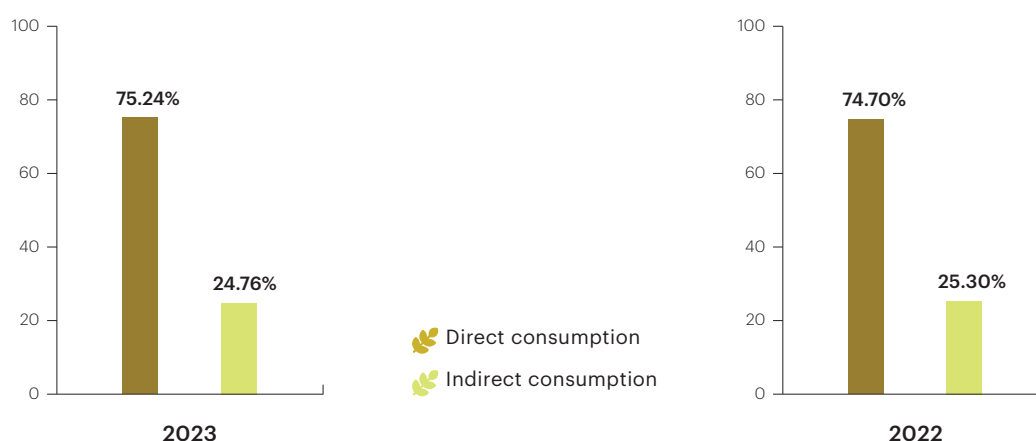


INDIRECT CONSUMPTION (GJ)

8.89% of our indirect consumption is electricity with **guarantee of renewable origin**.

INDIRECT CONSUMPTION	2023		2022	
Electricity without GO	870,541	90.08%	920,955	91.55%
Electricity with GO	85,937	8.89%	76,643	7.62%
Steam	9,623	1.00%	7,768	0.77%
Heat	360	0.04%	551	0.05%
Cooling	0	0.00%	0	0.00%
Total indirect consumption (GJ)	966,461	100.00%	1,005,916	100.00%

TOTAL ENERGY CONSUMPTION	2023		2022	
Direct consumption	2,936,080	75.24%	2,970,524	74.70%
Indirect consumption	966,461	24.76%	1,005,916	25.30%
Total energy consumption (GJ) (GWh)	3,902,541 1,084	100.00%	3,976,440 1,105	100.00%

Total energy consumption**ENERGY CONSUMPTION OUTSIDE OF THE ORGANISATION [302-2]**

We do not have the methodologies or activity data to calculate energy consumption outside of the organisation.

ENERGY INTENSITY [302-3]

ENERGY INTENSITY	2023	2022
Total energy consumed (GJ)	1,084	1,105
Net Sales Ebro (€m)	3,084.5	2,967.6
Energy intensity (GJ/€m net sales)	0.35	0.37

REDUCTION OF ENERGY CONSUMPTION [302-4]

Eleven companies in the Ebro Group have invested a total of EUR 905,971 to implement different initiatives to reduce their energy consumption.

COMPANY	PLANT	INITIATIVE	COST
Ebro Foods Belgium, N.V.	Merksem (plant A)	Insulation of production building	120,000 €
Ebro Foods Netherlands BV	Wormer + H.I Netherlands Plant D	Cladding of pipes and boiler	5,857 €
Ebro Ingredients, B.V.	Plant F	Modification of presses	33,750 €
Garofalo	Gagnano	New direct heat exchange boilers	436,976 €
Herba Ricemills	Jerez de la Frontera	Installation of biocool ducts to preserve energy	25,385 €
Lustucru Frais	St. Genis Laval	Change from conventional lighting to LED with radar sensor	19,520 €
Riviana Foods Canada	Hamilton	Change from conventional lighting to LED	14,523 €
Tilda	Classic Jazz	Energy saving and enhanced efficiency project	159,369 €
Arrozeiras Mundiarroz	Coruche	Change from conventional lighting to LED	2,110 €
Bertagni	Avio Vicenza	Electricity consumption monitoring system	31,495 €
Bertagni	Vicenza	Electricity consumption monitoring system	6,507 €
Ebro India	Taraori	Water heating system using renewable energy (rice husk)	50,480 €

GRI 303: WATER AND EFFLUENT

This indicator is reported under standard GRI 303 (2018)

INTERACTIONS WITH WATER [303-1]

Water consumption in Ebro includes water consumed in offices and in the manufacturing process. In this regard it should be noted that, apart from the production processes of pasta and precooked food, which are somewhat more water-intensive, the other processes, such as the dry rice production process, have a minimum water consumption.

This indicator also includes the consumption of water used by our company Agromeruan on the farm it leases to grow rice. This is the only agricultural process performed by the Ebro Group.

Most of the water we use in our industrial processes is tap water, and a small portion is well water.

In 2023 Ebro India installed a rain harvester to save water; with this equipment the company will save an estimated 40,000 m³/year.

MANAGEMENT OF WATER DISCHARGE-RELATED IMPACTS [303-2]

All effluent is discharged to the sewage networks, except from Bertagni, Ebro India, Ebro Frost Germany, Ebro Frost Denmark and Mundiriz, which discharge into inland waters..

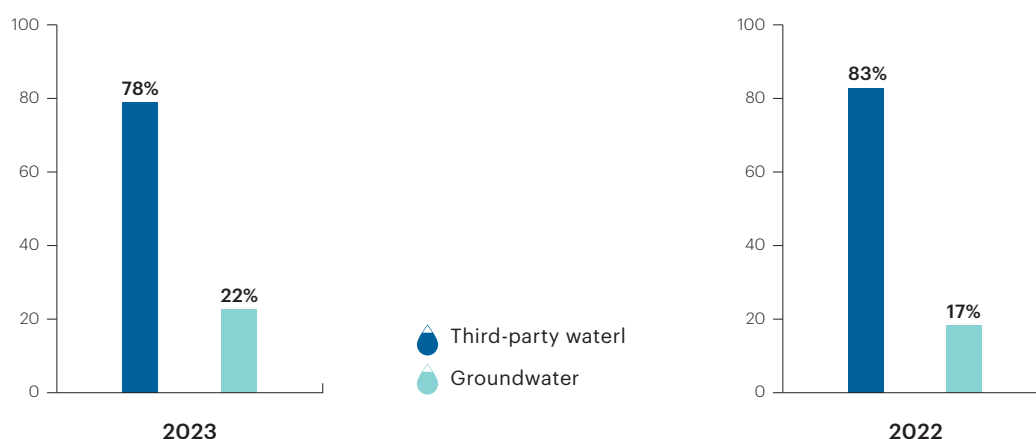
WATER WITHDRAWAL [303-3]

78% of the water withdrawal for our global industrial operations comes from the municipal water supply (third-party water) and 22% comes from groundwater.

Water consumption in industrial processes

WATER WITHDRAWAL - INDUSTRIAL	2023		2022	
Third-party water	2,464,180	78%	2,757,089	83%
Groundwater	698,982	22%	544,884	17%
Total Withdrawal - Industrial water (m3)	3,163,162		3,301,972	

Water consumption in industrial processes



Water consumption in agricultural process

Surface water is used for irrigation of the agricultural land leased by Agromeruan in Morocco. It is very important to note in this respect that of the water used for this process, **approximately 20-25% evaporates** (the % varies according to the weather conditions), **5% filters into the land**, where it nourishes the crop, and **the remaining 75% recirculates and returns to the flow**.

WATER WITHDRAWAL - RICE CROP	2023		2022	
Inland surface freshwater	11,880,000	100%	11,880,000	100%
Inland surface seawater	0	0%	0	0%
Total Withdrawal - Industrial water (m³)	11,880,000		11,880,000	

NB: The water consumption by the crop is estimated at 12,000 m³/ha.

Water withdrawal by areas of water stress

Using the World Resources Institute (WRI) classification of water stress areas, the group's water withdrawal by areas of water stress is as follows:

INDUSTRIAL WATER WITHDRAWAL BY AREAS OF WATER STRESS	2023		2022	
High	935,546	85%	976,367	85%
Low	73,687	0%	84,929	1%
Low-medium	1,403,477	9%	1,505,808	10%
Extremely high	65,279	0%	46,239	0%
Medium-high	685,174	5%	688,630	5%
Total water withdrawal (m³)	3,163,162		3,301,972	

NB: The withdrawal figure for 2022 has been recalculated to exclude the water consumption by Agromeruan (used for agricultural, not industrial, process in Morocco).

With regard to the agricultural process, the water withdrawal by Agromeruan for its rice crop corresponds to a high water stress area.

WATER DISCHARGE [303-4]

As mentioned earlier, 75% of the water withdrawn by Agromeruan for its rice crop is returned to the river. In this context, we have recalculated the 2022 figures, which did not include this important detail.

DESTINATION OF DISCHARGE	2023	2022
Third party water (sewage network, treatment plants)	1,972,758	2,002,340
Inland water	9,181,278	9,147,695
Seawater	0	0
Total (m³)	11,154,036	11,150,035

DISCHARGE TREATMENT	2023	2022
No treatment	9,952,313	9,958,824
Aerobic treatment	1,201,723	1,191,211
Anaerobic treatment	0	0
Total (m³)	11,154,036	11,150,035

TYPE OF DISCHARGE	2023	2022
Freshwater (SS<1000 mg/l)	10,530,012	10,593,276
Other water (SS>1000 mg/l)	624,024	556,760
Total (m³)	11,154,036	11,150,035

DISCHARGE BY AREAS OF WATER STRESS	2023		2022	
	FRESHWATER DISCHARGED (SS<1000 MG/L)	OTHER WATER DISCHARGED (SS>1000 MG/L)	FRESHWATER DISCHARGED (SS<1000 MG/L)	OTHER WATER DISCHARGED (SS>1000 MG/L)
High	9,623,120	0	9,723,284	0
Low	62,611	0	73,808	0
Low-medium	406,940	460,627	272,994	483,600
Extremely high	32,480	0	20,858	0
Medium-high	404,861	163,397	502,331	73,160
Total discharge (m³)	10,530,012	624,024	10,593,276	556,760

REDUCTION OF WATER CONSUMPTION AND IMPROVEMENTS TO EFFLUENT QUALITY

Three companies in the Ebro Group have developed initiatives to reduce water consumption or improve the quality of the effluent, with a total investment of EUR 796,862.

COMPANY	PLANT	INITIATIVE	COST
Bertagni	Avio	New purification plant	113,961 €
Bertagni	Vicenza	New purification plant	647,763 €
Ebro India	Taraori	Rain harvester	18,737 €
Herba Ricemills	Silla	Installation of decalcification /chlorination to improve water quality	16,401 €

WATER CONSUMPTION [303-5]

WATER CONSUMPTION	2023	2022
Water withdrawal	15,043,162	15,181,972
Water discharge	11,154,036	11,150,035
Water sold	0	0
Total water consumption(m³)	3,889,126	4,031,937

NB: The 2022 figures have been recalculated taking into account that 75% of the water withdrawn by Agromeruan for its rice crop is returned to the river (discharge)..

DISCHARGE BY AREAS OF WATER STRESS	2023		2022	
High	3,192,426	82%	3,133,083	93%
Low	11,076	0%	11,121	0%
Low-medium	535,909	14%	749,214	6%
Extremely high	32,799	1%	25,381	0%
Medium-high	116,915	3%	113,139	1%
Total water consumption(m³)	3,889,126		4,031,937	

INTENSITY OF WATER CONSUMPTION

INTENSITY OF WATER CONSUMPTION	2023	2022
Water consumed (Th m ³)	3,889	4,032
Net Sales Ebro (€m)	3,084.5	2,967.6
Intensity of water (Th m ³ /€m net sales)	1.26	1.36

GRI 304: BIODIVERSITY

This indicator is reported under standard GRI 304 (2016).

OPERATIONAL SITES IN OR ADJACENT TO PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS [304-1]

1. The Riviana plant in Freeport, Texas (United States) is adjacent to a protected area of wetland, PEM1A, Brazos River.
2. Tilda has a jetty on the River Thames (United Kingdom).

SIGNIFICANT IMPACTS OF ACTIVITIES, PRODUCTS, AND SERVICES ON BIODIVERSITY [304-2]

There were no impacts in any areas considered of high biodiversity value during 2023.

HABITATS PROTECTED OR RESTORED [304-3]

No restoration measures were implemented in protected habitats in 2023.

GRI 305: EMISSIONS

This indicator is reported under standard GRI 305 (2016).

METHODOLOGIES FOR MEASUREMENT OF SCOPE 1, 2 AND 3 EMISSIONS

To calculate Scope 1 and 2 of the Group's Carbon Footprint we developed a Greenhouse Gas Emissions Inventory procedure for all the Group companies under standard ISO 14064-1:2019. The methodology used is of calculation based on activity data from each company/plant and emission factors taken from official sources (Annex 3), applied to all the Group plants. All gases are included in the calculation: CO₂, CH₄, N₂O, HFC, PFC, SF₆ and NF₃.

In 2023 we completed for the first time the exercise of measuring the Group's Scope 3 footprint, following the calculation and reporting standards established by GHG Protocol, and had it verified externally (as part of the audit process for this Report).

We started by assessing the applicability and relevance of the different Scope 3 categories defined by GHG Protocol (**screening**), which served as the basis for a subsequent **detailed calculation** for the different companies in the Group. As a result of this initial analysis, we were able to go into greater detail in the calculation of the most important categories, in terms of volume in the Group's total carbon footprint and the potential definition and application of decarbonisation levers.

Our Scope 3 calculation is thus based on both analyses made on activity data obtained from the different Group companies and on primary information provided directly by our suppliers.

As a result of the Group-wide measurement of our Scope 3 carbon footprint, we have included in the analysis the following categories and indirect emission sources (focusing on the most important ones within the framework of the analysis):

- ✱ **Cat.1. Purchased goods and services.** The purchases we make from our supply chain are the principal source of the Group's emissions, especially emissions associated with the sourcing of rice and raw materials used to manufacture pasta (wheat, wheat flour). In order to obtain data for calculation of the footprint with optimum granularity (by geographical region and level of processing), we used information obtained from HowGood, which has the largest sustainability database for the agri-food sector. We also included considerations regarding the sustainable agriculture projects developed by some of the Group companies.
- ✱ **Cat.2. Capital goods.**
- ✱ **Cat.3. Fuel- and energy-related activities.**
- ✱ **Cat.4 and Cat.9. Upstream and downstream transportation.** Given the complexity of the Group's international logistics activities, we made a detailed analysis of the emissions associated with sea and land transportation of the different companies. Moreover, in order to calculate the emissions in categories "3.4 - Upstream Transportation and Distribution" and "3.9 - Downstream Transportation and Distribution" we used primary information on the carbon footprints of our suppliers (including EccoFreight and the European logistics providers of Tilda UK) and the calculations made as part of our commitment to the Lean & Green Programme.
- ✱ **Cat.5. Waste generated in operations.**
- ✱ **Cat.6 and Cat.7. Business travel and employee commuting.**
- ✱ **Cat.10 and Cat.11. Use, processing and disposal of sold products.** Our calculations of the emissions associated with the processing of our sales to industrial customers, the cooking of our products by consumers and end-customers and the disposal of food and packaging waste, were based on product life cycle assessments made by Herba Ricemills and Garofalo (within the framework of their collaboration with the Association of Pasta Manufacturers of the European Union) for our SOS rice and dry pasta products, respectively.
- ✱ **Cat.15. Investments.** We included in our analyses the emissions associated with the Group's investments, owing to the importance of our participation in other companies in the rice sector (Riso Scotti).
- ✱ **Cat.8 and Cat.13 (upstream and downstream leased assets) and Cat.14 (franchises)** are not applicable.

In the next stage, we will incorporate the results of this Scope 4 measurement within the definition of the different emission reduction plans to be developed within the Group.

The Ebro Group's GHG emissions are consolidated under the operational control approach, including: (a) direct Scope 1 emissions, (b) indirect Scope 2 emissions and (c) indirect Scope 3 emissions.

DIRECT (SCOPE 1) GHG EMISSIONS [305-1]

The sources of direct (Scope 1) GHG emissions are:

- * Emissions of CO₂, CH₄ and N₂O from fossil fuel consumption by stationary sources and mobile sources (fleet of vehicles and machinery).
- * Leaks of cooling gases (HFC) from HCAV equipment.
- * Emissions of CH₄ from the rice crop. The emissions generated by the rice crop of Agromeruan in Morocco represent 2.6% of the Scope 1 emissions and 1.7% of the total emissions of the Group.
- * Emissions of N₂O from elimination of nutrients in water treatment.
- * Direct emissions of CH₄ and N₂O from Biomass (rice husk, wood and charcoal).

INDIRECT (SCOPE 2) GHG EMISSIONS [305-2]

The Scope 2 emissions are calculated according to location, using the specific emission factors of each country.

The sources of indirect (Scope 2) GHG emissions are:

- * Emissions of CO₂ from energy consumption (electricity, heat, steam and cold) in installations and processes.

GHG EMISSIONS	2023		2022	
Scope 1 emissions	168,777	67%	171,685	63%
Scope 2 emissions	84,619	33%	102,467	37%
Total Scope 1 & 2 emissions (Tm CO₂e)	253,396		274,153	

GHG emissions



BIOGENIC CO₂ EMISSIONS

Biogenic CO₂ emissions are produced in the combustion of renewable fuels, in our case rice husk, wood chips and charcoal.

BIOGENIC CO ₂ EMISSIONS	2023	2022
Biogenic CO ₂ (t)	10,534	8,666

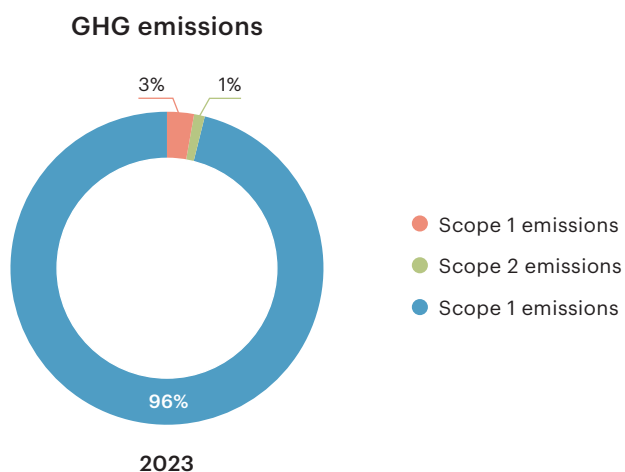
INDIRECT (SCOPE 3) GHG EMISSIONS [305-3]

3.7 - Employee commuting		2023	
Upstream	3.1 - Purchased goods and services	4,262,696	78.69%
	3.2 - Capital goods	18,774	0.35%
	3.3 - Fuel- and energy-related activities	40,973	0.76%
	3.4 - Upstream transportation	310,030	5.72%
	3.5 - Waste	6,135	0.11%
	3.6 - Business travel	504	0.01%
	3.7 - Employee commuting	4,581	0.08%
Downstream	3.9 - Downstream transportation	194,500	3.59%
	3.10 - Industrial processing of sold products	47,957	0.89%
	3.11 - Use of sold products	361,138	6.67%
	3.12 - End-of-Life treatment of sold product	16,226	0.30%
	3.15 - Investments	153,794	2.84%
Total Scope 3 emissions 3 (Tm CO ₂ e)		5,417,308	

GHG EMISSIONS INTENSITY [305-4]

Scope 3 emissions account for 96% of the Group's global carbon footprint.

GHG EMISSIONS	2023	
Scope 1 emissions	168,777	3%
Scope 2 emissions	84,619	1%
Scope 3 emissions	5,417,308	96%
Total emissions (Tm CO ₂ e)	5,670,705	



EMISSIONS INTENSITY	2023
Total GHG emissions (kt CO ₂ e) Scopes 1-2-3	5,671
Ebro Net Sales (€m)	3,084.5
GHG emissions intensity (kt CO₂e/€m net sales)	1.84

EMISSIONS OF OZONE-DEPLETING SUBSTANCES (ODS) [305-6]

Thanks to the development of specific laws (international, European and national) and the efforts of the sectors affected, ODS production and consumption have been practically phased out. The Ebro Group's activities are not included in any of the main sectors that use or used ODS, so it is not a material indicator in our case and is not calculated.

NO_x, SO_x OTHER SIGNIFICANT AIR EMISSIONS [305-7]

We calculate the emissions of air pollutants associated with the stationary and mobile combustion processes, as they are the most significant. The NO_x, SO_x, etc. emissions are obtained by multiplying the GJ by a specific emissions factor for each type of pollutant.

In accordance with the applicable environmental laws and regulations, regular inspections and measurements are made by an external company to check compliance. No non-compliance was detected during the year.

NO _x , SO _x & OTHER EMISSIONS (T)	2023							
	NO _x	CO	COV	SO _x	PM10	PM2.5	PM	TOTAL
Stationary combustion	219	138	94	3	17	16		487
Mobile combustion	8	13	2				0	24
Total Pollutants (t)	228	151	96	3	17	16	0	511

NO _x , SO _x & OTHER EMISSIONS (T)	2022							
	NO _x	CO	COV	SO _x	PM10	PM2.5	PM	TOTAL
Stationary combustion	224	129	90	3	14	14		474
Mobile combustion	9	13	2				1	25
Total Pollutants (t)	233	142	92	3	14	14	1	499

MEASURES TO REDUCE NOISE AND LIGHT POLLUTION AND PARTICULATE MATTER

All our plants comply with the environmental standards applicable in their respective areas and make the necessary measurements to make sure they keep within the noise and light pollution limits.

INITIATIVES TO REDUCE NOISE AND LIGHT POLLUTION AND PARTICULATE MATTER

Three companies in the Ebro Group have developed measures intended to reduce noise and light pollution and particulate matter. The total amount invested in those actions was **EUR 1,118,428**.

COMPANY	PLANT	INITIATIVE	COST
Ebro Ingredients, B.V.	Plant F	New silencer	16,000 €
Herba Ricemills	Algemesi/Saladar	New suction turbine in mill to reduce particles in suspension	5,035 €
Herba Ricemills	La Rinconada	New aspiration in cooking area to reduce particles in suspension	5,703 €
Mundi Riso	Vercelli	New aspiration system	1,091,690 €

MITIGATION OF THE RISK AND REDUCTION OF EBRO'S CARBON FOOTPRINT [305-5]

Climate change poses a serious threat for the Group's business activities as it directly affects essential aspects such as the production of raw materials, the availability of critical resources (such as water), the viability of product transportation, logistics and distribution operations and increased energy needs of our production processes, among others. Therefore, climate variables are an essential part of the environmental criteria that the Ebro Group includes in our management strategy.

Accordingly, in 2023 the Group began the analysis of climate-related risks and opportunities of our Organisation under the reference framework of the Task Force on Climate-related Financial Disclosures (TCFD), which provides guidelines for identifying, managing, reporting and monitoring the principal physical and transition risks to which the Organisation may be exposed as a result of climate change, as well as potential business and development opportunities. This analysis covers the Rice and Pasta (wheat) Divisions, including both the processing plants and the principal warehouses and sourcing areas of these commodities in Spain and worldwide. (For more information see Chapter 4 of this Report.)

Moreover, this year (2024) when we have completed the calculation of our Scope 3 carbon footprint, we plan first to define the science-based reduction targets (SBTi) for the entire Group and secondly to develop a first Decarbonisation Plan for our companies in Spain.

DECARBONISATION LEVERS FOR SCOPES 1&2

The Group has already taken various actions aimed at decarbonising the emissions generated by our companies, namely:

1. Installation of photovoltaic plants for self-consumption
2. Installation of renewable biomass combustion plants (using rice husk, charcoal and wood chips) to obtain thermal energy
3. Installation of cogeneration (CHP) plants
4. Purchase of electricity with guarantee of renewable origin (GO).

During 2023, **4 new photovoltaic facilities** came on stream in Bertagni, Herba Bangkok, Herba Ricemills and Riviana Foods, adding to those we already had.

DETAILS OF PHOTOVOLTAIC, BIOMASS AND COGENERATION FACILITIES IN THE EBRO GROUP

COMPANY	PLANT	PHOTOVOLTAIC	BIOMASS	COGENERATION
Arotz	Navaleno	X		
Bertagni	Avio	X		X
	Vicenza	X		X
Ebro Frost Denmark	Orbaek		X	
Ebro Frost Germany	Offingen	X		X
Ebro Frost UK	Beckley			
Ebro India	Taraori	X	X	
Garofalo	Gragnano	X		X
Geovita	Bruno	X		
	Villanova Monferrato			X
Herba Bangkok	Nong Khae	X		
Herba Ricemills	Algemesi	X		
	Rinconada	X		
	San Juan		X	
Mundiriso	Vercelli	X		
Riviana Foods	Colusa	X		
S&B	Fullbourn			
	Regent			
Tilda	Classic			
	Jazz			
Transimpex	Lambsheim	X		

In 2023, we avoided the emission of 13,170 t CO₂e, 41% more than in 2022, through a 25% increase in the purchase of electricity with guarantee of origin (GO), photovoltaic self-generation and the use of renewable fuels.

ACTIVITY	2023	2023	2022	2022
	MWH	EMISSIONS AVOIDED	MWH	EMISSIONS AVOIDED
Electricity with GO	23,871	5,103	21,290	4,117
Photovoltaic self-generation	5,420	2,497	1,767	685
Biomass	27,551	5,570	22,493	4,547
Total (Tm CO₂e)	56,843	13,170	45,550	9,350

In addition to the energy reduction initiatives described in section 302 Energy, which entail reducing emissions, five Group companies have implemented initiatives to reduce GHG emissions, for a total value of **EUR 1,774,462**. The global investment in GHG emissions and energy reduction programmes is **EUR 2,680,433**.

COMPANY	PLANT	INITIATIVE	COST
Arrozeiras Mundiarroz	Coruche	Hybrid cars	9,359 €
Bertagni	Avio	Photovoltaic plant	964,000 €
Herba Ricemills	La Rinconada	Expansion photovoltaic plant	86,757 €
Bertagni	Avio	Interconnection photovoltaic plant	168,405 €
Ebro India	Taraori	Dust filters to reduce particles in suspension	110,548 €
Ebro India	Taraori	RECD (retrofit emission control device)	55,682 €
Ebro India	Taraori	New air-conditioning equipment using a refrigerant with a lower GWP and enhanced efficiency	8,708 €
Herba Bangkok	Nong Khae	Photovoltaic plant	371,002 €

SCOPE 3 DECARBONISATION LEVERS

After completing the calculation of Scope 3 emissions and identifying the most important categories and decarbonisation levers for the Group, in 2024 we will set reduction targets in at least some of the following categories: (i) purchase of goods and services, (ii) upstream and downstream transportation, (iii) end-of-life treatment and (iv) waste.

This notwithstanding, the Group already has a clear, defined path in the development of measures and actions to reduce our Scope 3 emissions.

PRINCIPAL ACTIONS TO REDUCE SCOPE 3 EMISSIONS

Purchase of goods and services (category 1)

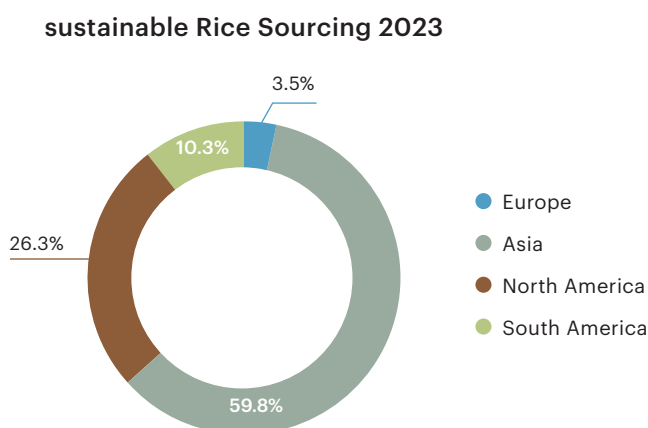
In this specific category, the Group has considerable expertise in the research and promotion of environmentally sustainable growing practices applicable to the rice crop in our principal sourcing areas. The main goals of these programmes are to contribute towards greater environmental conservation, promote biodiversity and mitigate the effects of climate change. This work is done through own initiatives and specific collaborations with stakeholders and industry associations such as the SAI Platform (SAI-P) and the Sustainable Rice Platform (SRP).

The best examples of the work we did in 2023 are indicated below:

COMPANY	CROP	COUNTRY	NAME OF PROJECT	INDICATORS
Herba Ricemills	Rice	Spain	Origins	<ul style="list-style-type: none"> • Training in good practices • Optimisation of resources • Incorporation of women and young people in agriculture
			Oryzonte	<ul style="list-style-type: none"> • Reduction of use of water through AWD • Reduction of GHG emissions: -60% in 255 Ha with AWD • Improvement of biodiversity • SRP verification
		Pakistan	SRP verification	<ul style="list-style-type: none"> • SRP verification • Certified seed • Laser levelling • Intermittent irrigation (AWD) • Reduction of water consumption

COMPANY	CROP	COUNTRY	NAME OF PROJECT	INDICATORS
Ebro India	Rice	India	Organic farming	<ul style="list-style-type: none"> Organic certification Fair Trade certification
			Control farming & EKTA	<ul style="list-style-type: none"> Training in good practices Reduction pesticides Certified seed Laser levelling
			Sustainable practices	<ul style="list-style-type: none"> Intermittent irrigation (AWD) Reduction of water consumption Biological pest control Reduction of GHG emissions
			Stop stubble burning	<ul style="list-style-type: none"> Use of fungi to produce bioenzymes developed by the Indian Agricultural Research Institute (IARI), which break down the straw in approx. 25 days so that the soil can be prepared for the next crop. Reduction in use of fertilizers by around 20-25%
Mundiriso	Rice	Italy	FSA verification	<ul style="list-style-type: none"> FSA verification
Herba Bangkok	Rice	Thailandi	SARI-T	<ul style="list-style-type: none"> Training in good practices Increase in productivity of water Increase in number of women in agriculture Biological pest control Reduction of GHG emissions SRP verification
Herba Bangkok	Rice	Thailandi	Green Climate Fund	<ul style="list-style-type: none"> Reduction of GHG emissions Climate smart technologies and crop practices Carbon credits as additional income
La Loma /Neofarms	Rice	Argentina	Organic farming	<ul style="list-style-type: none"> Organic Verification
Riviana Foods	Rice	USA	Regenerative Agriculture	<ul style="list-style-type: none"> Reduction of water: reductions obtained of 7-3% Reduction of GHG emissions: reduction of methane by 32-80%, depending on number of dryings made (AWD) FSA verification
Garofalo	Durum wheat	Italy	Sustainable durum wheat	Use of climate smart technology for: <ul style="list-style-type: none"> Optimisation use of fertilizers Optimisation use of pesticides Optimisation use of water

Thanks to this work, the Group purchased a total of 224,050 tonnes of sustainable rice in 2023, from the following sources:



Moreover, the Sustainable Aromatic Rice Initiative for Thailand (SARI-T) programme developed to improve the economic viability of 1,200 rice growers in the Roi Et province and the sustainable production of high quality Hom Mali aromatic rice has concluded after almost 6 years. The work done and the growers participating in this project will have continuity in a new project called "Strengthening Climate-Smart rice farming, Green Climate Fund" (FAA), which will commence this year (2024).

Upstream and downstream transportation (categories 4 and 9)

The work to reduce emissions in this category are tackled from the point of view of land and sea transport.

★ **Emissions associated with national land logistics (Spain).** After joining the Lean & Green Programme, in 2023 we continued working to reduce our logistics carbon footprint. Thus, after defining 2019 as the base year and the total t CO₂e/tonne of product transported for sale as the indicator for monitoring, significant progress has been achieved:

2020: 6.06% reduction

2021: 0.14% reduction (recalculated after receiving new data from suppliers)

2022: 35.83% reduction

2023: measurement in progress

★ **For the emissions associated with the maritime logistics,** we have primary data from our logistics provider Ecco-freight, which has developed a calculation tool, Eccoprint, that includes transport (by rail and/or road) from the source plant to the port of departure and from the port of arrival to our plant.

In 2023, Eccofreight handled 320,363 tonnes shipped and GHG emissions of 81,649 t CO₂e, representing 16.18% of all the Group's logistics emissions.

By choosing more efficient routes instead of other alternative routes available with larger carbon footprints, we avoided the emission of 24,764 t CO₂e.

End-of-life treatment (category 12)

The principal actions to reduce emissions in this category are associated with changes in the packaging material of our products. In accordance with the Group's commitment to making its packaging 100% recyclable by 2030, the packaging of the dry rice products of the brands SOS, SOS Specialties, La Fallera, Sabroz and La Cigala in Spain, Risella in Finland and the Brillante rice cups, one of the Group's best selling formats, are already 100% recyclable.

Further developing that commitment, the Group worked on three main projects in 2023 to continue making progress in the recyclability of our packaging.

1. Our subsidiary Pastificio Lucio Garofalo developed a new line of packaging made up of 30% recycled plastic obtained from chemical recycling, which is different from the mechanical recycling process and opens up unprecedented recycling possibilities for fractions of waste that are currently difficult to recycle, such as plastic from domestic waste collection. Chemical recycling breaks down the molecules of the polymers that make up the different types of plastic used for packaging, converting them into a raw material equivalent to a virgin material that can be used to produce new plastic.

Initially, this new packaging is being used for five SKUs: Spaghetti, Penne, Fusilli, Farfalle and Elicoidale, and the brand aims to progressively increase the number of SKUs and the percentage of recycled plastic used.

In line with this programme, Garofalo has joined the Zero Impact project of LifeGate, a programme based on three concepts: calculate, reduce and offset. Its participation in this initiative will allow Garofalo to offset the CO₂ emissions generated in the manufacturing and sale of the primary packaging of its products for the Italian market. The emissions will be offset by buying carbon credits for the project being developed in the Rimba Raya Reserve (Indonesia), which seeks to conserve the tropical peat swamp forest, a very important

area in biodiversity that is home to 94 threatened species from the Red List of the UICN, such as the Bornean Orangutan, the Sunda Pangolin and the Clouded Leopard.

2. During 2023 Ebro Benelux started developing the project 'Sustainable Boil in the Bag Solution', which aims to replace the material currently used for the 'boil in the bag' category (HDPE, made from fossil fuels) with a biological-based bioplastic (PLA), specifically made from corn starch. This initiative will also have a positive impact on reducing emissions, since bioplastics have the unique property of neutralising CO₂.
3. We continue testing and seeking alternatives that guarantee the food preservation properties of the doypack formats currently in use: the triplex Polyester/Polyamide/Polypropylene and Polyester/High Barrier Polyester/Polypropylene (PET/PA/PP and PET/HB PET/PP) and the compact polypropylene format for 1 kg and 0.5 kg doypacks.

In the Group overall at year-end 2023, the portion of non-recyclable packaging had been reduced to 7%, as opposed to 11% in the previous year; 57% of the Group's packaging is 100% recyclable, 12% more than in 2022, and 35% is ready-to-recycle packaging. This significant progress proves the Company's commitment to achieving 100% recyclability by 2030.

To guarantee meeting the reduction, recycling and re-use targets defined in the Packaging and Packaging Waste Act 11/97 of 24 April, our Spanish subsidiary Herba has joined Ecoembalajes España, S.A. (Ecoembes), which has the mission of designing and developing systems for selective collection and recovery of used packaging and packaging waste. Ecoembes uses the "Green Dot" (symbol that appears on the packaging) to show that the packager of the product has paid a sum of money for each package put on the market.

Both the European rice companies and the head offices of Ebro Foods have signed agreements with companies similar to Ecoembes for the destruction of paper and other data carriers. With these agreements, apart from complying with the Data Protection Act, they guarantee a sustainable management of the documentation through the undertaking by these companies to destroy and recycle the material.

Waste (category 5)

This category includes actions developed to increase waste recovery and/or reduce food waste in our operations.

Waste management

On a Group level, in 2023 we **reduced waste disposal by 34%** year on year and increased recovery by 18%. In this respect, Herba Ricemills (Spain) has made a major change in its waste management. As a result, during 2023 95% of the waste it generated was managed through recovery operations.

Another four Group companies also embarked on different initiatives to improve waste management and recovery. The total amount of these initiatives was **EUR 189,990**.

COMPANY	PLANT	INITIATIVE	COST
Tilda	Classic y Jazz	Improvements in waste separation	59,599 €
Lustucru Frais	St. Genis Laval	Improvements in waste separation to increase waste recovery	103,874€
Herba Ricemills	Silla	Fumigation boxes recirculated to silos	26,017 €
Riviana Foods Canada	Hamilton	Recovery of tertiary packaging that previously went to the landfill	500 €

Food waste action policy

The main internal policy for food surplus within the Group (defining surplus as products suitable for consumption but which, for different reasons -such as packaging defects, being close to their use-by date, etc.- are not suitable for sale to consumers) is donation to food banks.

The Ebro Group also participates actively in the programme “Don’t waste food”, a collaborative initiative to reduce food waste, led by AECOC, the association of large consumer companies.

The three principal objectives of the project are to:

- * Establish prevention and efficiency practices throughout the food chain to reduce waste
- * Maximise use of the surplus produced in different stages of the value chain (redistribution, reuse and recycling)
- * Make society aware of this problem and the need to reduce food waste

The initiative is supported by over 600 manufacturers and distributors in the large consumer sector, logistics and haulage operators, business associations, consumer organisations and other institutions and is coordinated by AECOC.

The programme aims to inform people about the efforts being made by companies to prevent food waste and promote enhanced collaboration to gradually reduce the problem. Every year some 7.7 million tonnes of food is wasted in Spain. Therefore, the “Don’t waste food” programme aims to make consumers throughout the world aware of the problems of food waste and get them to participate in the initiative, encouraging them to collaborate in order to reduce the waste generated by each person.

GRI 306: WASTE

This indicator is reported under standard GRI 306 (2020).

WASTE GENERATION [306-1]

Most of the waste generated by our business is classified as non-hazardous waste. There is also a small proportion of hazardous waste generation, mainly waste from the packaging of chemical products used in maintenance work at our facilities.

MANAGEMENT OF SIGNIFICANT WASTE-RELATED IMPACTS [306-2]

All the companies in our Group have contracted the management of hazardous and non-hazardous waste to authorised waste disposal contractors.

All waste of whatever type is separated by kind and taken to authorised waste disposal contractors for treatment according to the laws in place in each geographical area, giving priority to recycling and reuse wherever possible.

WASTE GENERATED [306-3]

WASTE	2023		2022	
Non-hazardous	35,493	98%	36,757	99%
Hazardous	712	2%	285	1%
Total Waste (t)	36,205		37,042	

WASTE FOR RECOVERY [306-4] AND DISPOSAL [306-5]

DESTINATION OF WASTE	2023		2022	
Total Waste for Disposal	9,321	26%	14,193	38%
Total Waste for Recovery	26,884	74%	22,850	62%
Total Waste (t)	36,205		37,042	

NON-HAZARDOUS WASTE FOR DISPOSAL	2023		2022	
Landfill	7,008	20%	10,416	28%
Incineration	635	2%	727	2%
Other disposal operations	1,020	3%	2,801	8%
Total disposal NH waste (t)	8,663	24%	13,943	38%

NON-HAZARDOUS WASTE FOR RECOVERY	2023		2022	
Recycled	8,854	25%	8,913	24%
Composted	3,665	10%	3,552	10%
Reused	9,519	27%	10,164	28%
Other recovery operations	4,793	14%	185	1%
Total recovery NH waste (t)	26,830	76%	22,814	62%
Total Non-Hazardous Waste (t)	35,493		36,757	

HAZARDOUS WASTE FOR DISPOSAL	2023		2022	
Landfill	325	46%	218	76%
Incineration	327	46%	16	6%
Other disposal operations	5	1%	16	6%
Total disposal H waste (t)	658	92%	250	88%

HAZARDOUS WASTE FOR RECOVERY	2023		2022	
Recycled	48	7%	32	11%
Composted	0	0%	0	0%
Reused	0	0%	1	0%
Other recovery operations	6	1%	2	1%
Total recovery H waste (t)	54	8%	36	12%
Total Hazardous Waste (t)	712		285	

WASTE INTENSITY

WASTE INTENSITY	2023	2022
Total Waste (t)	36,205	37,042
Ebro Net Sales (€m)	3,084.5	2,967.6
Waste Intensity (t/€m net sales)	11.74	12.48

GRI 2-27 ENVIRONMENTAL COMPLIANCE**NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS [2-27]**

In 2023, two plants reported cases of minor non-compliance with environmental laws and regulations that did not lead to fines as appropriate measures had been taken in each case.

COMPANY	PLANT	ENVIRONMENTAL NON-COMPLIANCE	REMEDIAL ACTION
Lustucru	St. Genis Laval	Non-compliance of pH and temperature of effluent	Investment in effluent treatment plant
	Lorette	Non-compliance with effluent parameters	Maintenance contract with specialist

Provisions and guarantees for environmental risks

All the Group companies have taken out third party liability insurance covering any damage caused by sudden, unintentional, accidental pollution; that insurance is considered to cover any possible risks of this nature. To date there have been no significant claims for environmental issues, favourable outcomes of audits and inspections, and no allegations in the processing of Integrated Environmental Authorisations, etc.

Environmental assessment and certification procedures

Total compliance with the laws and regulations applicable to its activities is a basic principle and goal in the Ebro Group environmental management. All the production plants of the Ebro Group operate under the applicable certifications, specifications and authorisations in their respective geographical areas and internally manage their environmental aspects accordingly.

The following workplaces have an environmental management system certified under UNE-EN-ISO 14.001:

- ✱ Herba Ricemills: San Juan, Coria, Los Palacios, La Rinconada and Isla Mayor plants
- ✱ Pastificio Lucio Garofalo: Gragnano plant

INVESTMENTS IN ENVIRONMENTAL RISK PREVENTION

Thirteen of the 34 companies covered by this Report have reported investments in measures to mitigate climate change risks.

The investments reported here include measures to reduce energy consumption, reduce water consumption, improve the quality of effluent, reduce GHG and particle emissions, improve waste management, sustainable agriculture and due diligence, and the costs of waste management, regulatory inspections, noise measurements and analyses.

Those companies were:

* Arrozeiras Mundiarroz	* Ebro Ingredients	* Mundiriso
* Bertagni	* Garofalo	* Riviana Foods Canada
* Ebro Foods Belgium	* Herba Bangkok	* Tilda
* Ebro Foods Netherlands	* Herba Ricemills	
* Ebro India	* Lustucru Frais	

The principal investments were made by Bertagni, Mundiriso and Herba Bangkok.

ENVIRONMENTAL EXPENSE AND INVESTMENT	2023	2022
Cost of management and control	2,337,768 €	1,404,433 €
Initiatives to mitigate climate change risks	9,473,237 €	5,763,427 €
Total	11,811,005 €	7,167,860 €

NB: The 2022 figures have been recalculated to include the investment in sustainable agriculture projects, which had not been reported earlier.

SUMMARY OF INITIATIVES TO MITIGATE CLIMATE CHANGE RISKS	2023	2022
Energy - direct and indirect consumption	905,971 €	1,017,718 €
Water	35,138 €	184,308 €
Effluent	761,724 €	233,298 €
GHG emissions - scopes 1&2	1,774,462 €	1,397,933 €
Air quality	1,102,428 €	0 €
Waste - cat. 5 scope 3	189,990 €	14,100 €
Noise pollution	16,000 €	0 €
Sustainable agriculture - cat. 1 scope 3	4,687,526 €	2,916,070 €
Total	9,473,237 €	5,763,427 €