

# Environmental dimension

**1**

**Commitment to  
the environment**

Pag 95

# 1 Commitment to the environment



**GOAL:** *Minimise the environmental impact of the operations performed within our industrial group through adequate management of natural resources, ensuring environmental efficiency in the supply chain and contributing to the mitigation of and adaptation to climate change.*

The processes used at Ebro Group's production plants in both the rice and pasta divisions are relatively simple agri-food processes which do not generate any major environmental impacts and entail a minimal risk of accidental contamination. The most significant environmental risks relating to the Ebro Group can be classified as follows:

- ▶ **Air emissions:** Mainly emissions of particles during the handling of cereals (rice and wheat) and combustion gases for the production of steam and drying of the raw materials. The most widely used fuel is natural gas.
- ▶ **Greenhouse gas (GHG) emissions:** The GHG emissions generated by our activities are related to energy consumption, fossil fuels and electricity.
- ▶ **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.
- ▶ **Water consumption:** The amount of water used in our processes is very small (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.
- ▶ **Waste generation and management:** The Ebro Group generates minimal amounts of waste, both non-hazardous (mainly packaging of ingredients and ancillary materials) and hazardous (maintenance operations).

To minimise these impacts, the Ebro Group upholds protection of the environment as one of the basic principles of our activities and implements the necessary tools, measures and means in its companies to guarantee that protection. The Ebro Group takes measures to:

1. Ensure that its 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 its activity by seeking eco-friendly solutions and continually embarking on initiatives to reduce its emissions and waste generation and optimise its consumption of water, energy and packaging material.
3. Manage all its waste adequately and safely, encouraging recycling and reuse. Use recycled raw materials and/or those respectful of the environment, whenever possible.
4. Organise environmental awareness and training programmes for employees.

In Spain, to guarantee meeting the reduction, recycling and re-use targets defined in the Packaging and Packaging Waste Act 11/97 of 24 April, the 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) concept to show that the packager of the product has paid a sum of money for each package put on the market. [Punto Verde (Green Dot) is also the name given in Spain to Recycling Centres.]

Both the 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 recycle the material.

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

The Ebro Group also takes action on the rest of its value chain. It has launched a programme to control the environmental performance (social and governance) of its industrial suppliers through ethics audits and collaboration with them to enhance their environmental practices if necessary. It is using the Sedex platform as its management tool for this. During 2016, the Ebro Group created a holding account on that platform, in which all the companies in the rice division are already integrated, and the programme has been launched with the rice suppliers. During 2017, 30% of the suppliers in this Division were monitored in Sedex.

The company also takes an active approach to the promotion and investigation of environmentally sustainable growing techniques for application in the production of its agricultural raw materials, the principal material currently under study being rice. This work is done through own initiatives and specific collaborations with stakeholders and sectoral associations, particularly the Sustainable Agriculture Initiative Platform (SAI Platform) and the Sustainable Rice Platform. In this regard, the Group is also a member of the Climate Change Cluster promoted by Forética ([www.foretica.org](http://www.foretica.org)). That Cluster aims to position climate change strategically in the management of organisations, discuss and exchange views and good practices among the companies forming part of the cluster, be part of the global debate and be key to government decisions. Ebro also maintained its membership in 2017 of the Cool Farm Alliance (<https://coolfarmtool.org/cool-farm-alliance/>), an international platform for industry committed to developing sustainable agriculture by measuring different sustainability parameters, such as CO<sub>2</sub> emissions.

## Environmental performance indicators

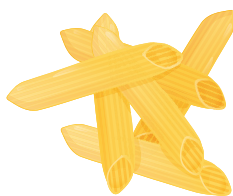
### SCOPE OF REPORTING

This report was prepared with information from all the production plants making up the Ebro Group's industrial park, except for Geovita and Transimpex, which were incorporated in the consolidated group as from mid-2017.

The comparison of 2017 and 2016 is somewhat distorted because the details of eight production plants were added to the consolidated group in 2017.

The figures set out below were prepared in accordance with the G4 guidelines of the Global Reporting Initiative (GRI).

| GEOGRAPHICAL LOCATION | NO. OF PLANTS REPORTING | COMPANIES  |
|-----------------------|-------------------------|--|
| <b>Europe</b>         | <b>36</b>               |  |
| Spain                 | 11                      | Herba Ricemills (8)<br>Harinas Santa Rita (1)<br>Vegetalia (2) |
| Portugal              | 1                       | Mundiarroz   |
| UK                    | 3                       | S&B  |
| Italy                 | 2                       | Mundi Riso / Garofalo  |
| France                | 11                      | Panzani / Lustucru / Roland<br>Monterrat / Celnat              |
| Belgium               | 1                       | Boost (1)  |
| Netherlands           | 5                       | Lassie (1)<br>Herba ingredients (4)                            |
| Germany               | 1                       | Keck   |
| Denmark               | 1                       | Danrice  |
| <b>North America</b>  | <b>13</b>               |  |
|                       |                         | Riviana (10)<br>Catelli (3)                                    |
| <b>Africa</b>         | <b>2</b>                |  |
| Morocco               | 1                       | Mundiriz   |
| Egypt                 | 1                       | Herba Egypt  |
| <b>Asia</b>           |                         |  |
| Thailand              | 2                       | Herba Bangkok  |
| India                 | 1                       | Ebro India   |
| <b>Total</b>          | <b>53</b>               |  |



## Materials

### RAW MATERIALS

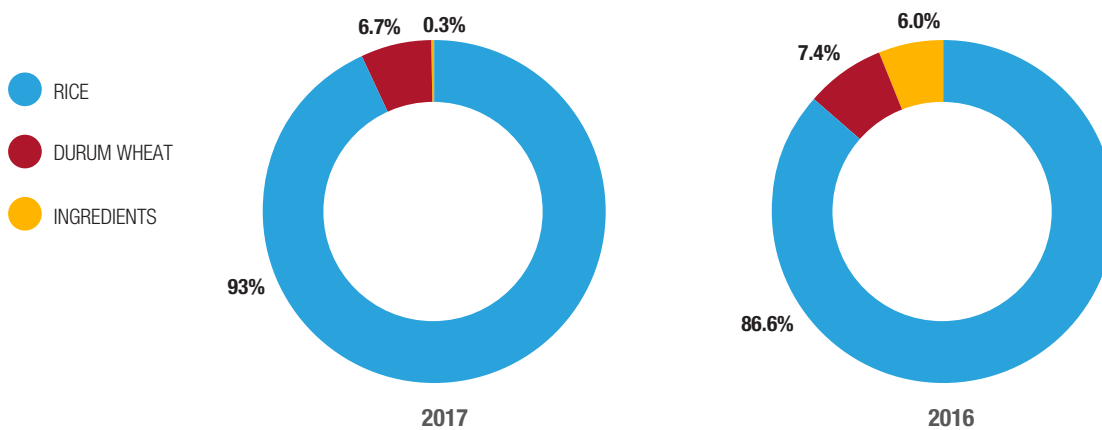
[EN1]

The raw materials used are divided into two major categories, those used in the preparation of finished goods and the packaging materials

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

- ▶ **Agricultural:** rice, wheat and quinoa
- ▶ **Processed:** ingredients (ready-to-serve)

| RAW MATERIALS FOR PRODUCT (T) | 2017              | 2016              |
|-------------------------------|-------------------|-------------------|
| Rice                          | 14,331,781        | 12,495,560        |
| Durum Wheat                   | 1,026,675         | 1,070,671         |
| Pulsus                        | 0                 | 0                 |
| Quinoa                        | 1,000             | 0                 |
| Ingredients                   | 45,925            | 862,618           |
| <b>Total</b>                  | <b>15,405,382</b> | <b>14,428,850</b> |



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

| INPUT MATERIALS FOR PACKAGING (T.) | 2017          | 2016          |
|------------------------------------|---------------|---------------|
| Paper                              | 16,197        | 16,865        |
| Cardboard                          | 42,761        | 40,314        |
| Plástico                           | 17,424        | 15,528        |
| Others                             | 1,246         | 2,124         |
| <b>Total</b>                       | <b>76,382</b> | <b>72,707</b> |

## RECYCLED PACKAGING MATERIALS

[EN2]

The recycled input materials for packaging set out below are partial, since this indicator has not been reported globally by all the companies.

| RECYCLED INPUT MATERIALS IN PACKAGING (T) | 2017          | 2016          |
|---|---------------|---------------|
| Recycled paper                            | 3,839         | 5,673         |
| Recycled cardboard                        | 17,055        | 11,410        |
| Recycled Plastic                          | 715           | 227           |
| <b>Total</b>                              | <b>21,609</b> | <b>17,310</b> |

## Energy

### ENERGY CONSUMPTION

[EN3]

The total energy consumption for the Ebro Group is shown below:

#### Direct consumption

| CONSUMPTION NON-RENEWABLE ENERGY SOURCES (GJ) | 2017             | 2016             |
|---|------------------|------------------|
| Natural Gas                                   | 3,327,082        | 3,216,440        |
| Others  | 65,935           | 36,786           |
| <b>Total</b>                                  | <b>3,393,017</b> | <b>3,253,226</b> |

| CONSUMPTION RENEWABLE ENERGY SOURCES (GJ) | 2017             | 2016             |
|---|------------------|------------------|
| Biomass (*)                               | 118,424          | 74,302           |
| <b>Total</b>                              | <b>118,424</b>   | <b>74,302</b>    |
| <b>Total direct consumption</b>           | <b>3,511,442</b> | <b>3,327,528</b> |

(\*) Biomass is exclusively rice husk, a by-product of our industrial processes.

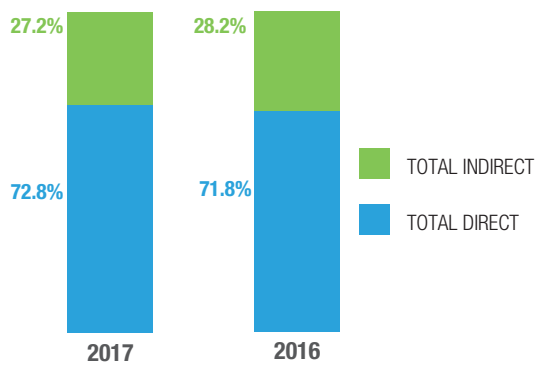
#### Indirect consumption

| INTERMEDIATE ENERGY ACQUIRED AND CONSUMED (GJ) | 2017             | 2016             |
|--|------------------|------------------|
| Electricity                                    | 1,311,458        | 1,304,886        |
| <b>Total indirect consumption</b>              | <b>1,311,458</b> | <b>1,304,886</b> |

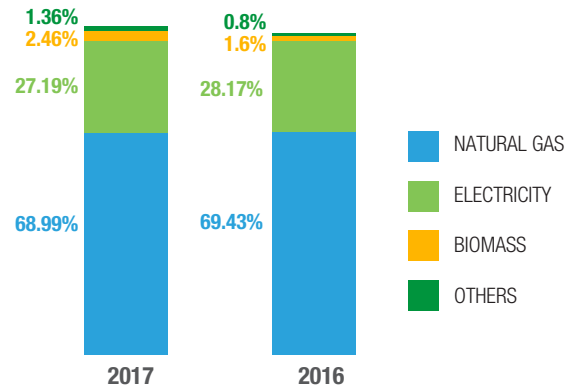
#### Total energy consumption

| TOTAL ENERGY CONSUMPTION (GJ) | 2017             | 2016             |
|-------------------------------|------------------|------------------|
|                               | <b>4,822,900</b> | <b>4,632,414</b> |

ENERGY CONSUMPTION / DIRECT AND INDIRECT



ENERGY CONSUMPTION BY SOURCE



Energy intensity [EN5]

|                                 | 2017      | 2016      |
|---------------------------------|-----------|-----------|
| Total produced (t)              | 2,912,525 | 2,862,109 |
| Total energy consumed (GJ)      | 4,822,900 | 4,632,414 |
| Energy intensity (GJ/t product) | 1.66      | 1.62      |





## Reduction of energy consumption

[EN6]

Three group companies developed different initiatives in 2017 to reduce their energy consumption, by a total of €248,896.

| COMPANY          | INITIATIVE  | 2017             |
|------------------|---|------------------|
| Catelli          | Installation of a new more efficient natural gas boiler | 18,936 €         |
| Lustucru         | Installation of LED luminaires                          | 50,000           |
| Lustucru         | Replacement of burner in 6T boiler and drain tank       | 130,000 €        |
| Roland Monterrat | Installation of flow meters                             | 32,000 €         |
| Roland Monterrat | Reduction of steam production                           | 16,960 €         |
| Roland Monterrat | Reduction of water consumption                          | 1,000 €          |
| <b>Total</b>     |   | <b>248,896 €</b> |

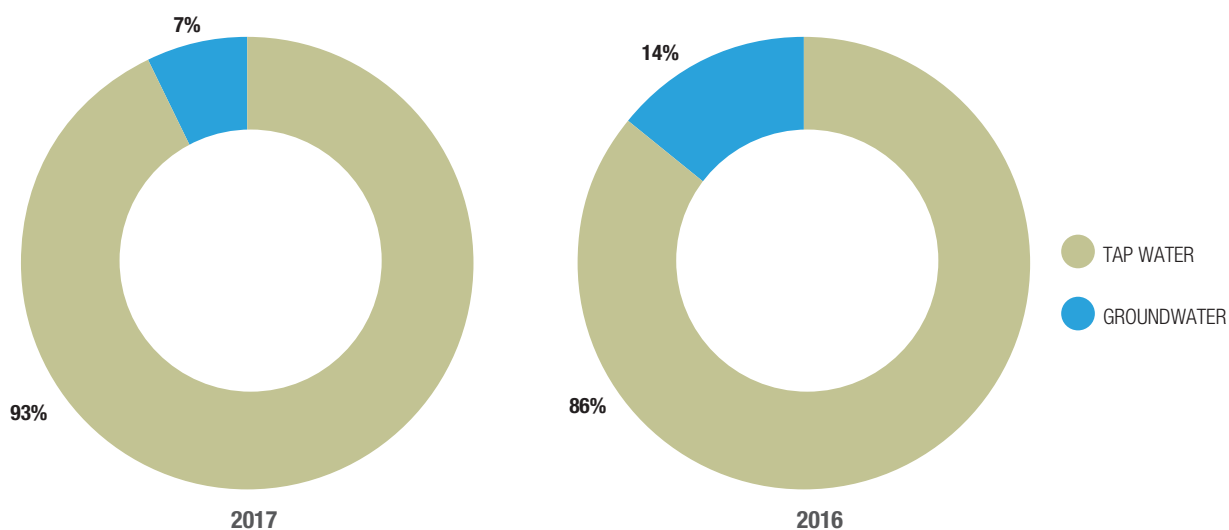
## Water

### WATER CONSUMPTION

[EN8]

| TOTAL VOLUME OF WATER WITHDRAW (M <sup>3</sup> ) | 2017              | 2016              |
|--|-------------------|-------------------|
| Tap water  | 3,310,017         | 2,828,917         |
| Groundwater                                      | 242,308           | 493,681           |
| <b>Total industrial processes</b>                | <b>3,552,324</b>  | <b>3,322,598</b>  |
| Surface water (*)                                | 17,340,000        | 17,340,000        |
| <b>Total water withdrawn</b>                     | <b>20,892,324</b> | <b>20,662,598</b> |

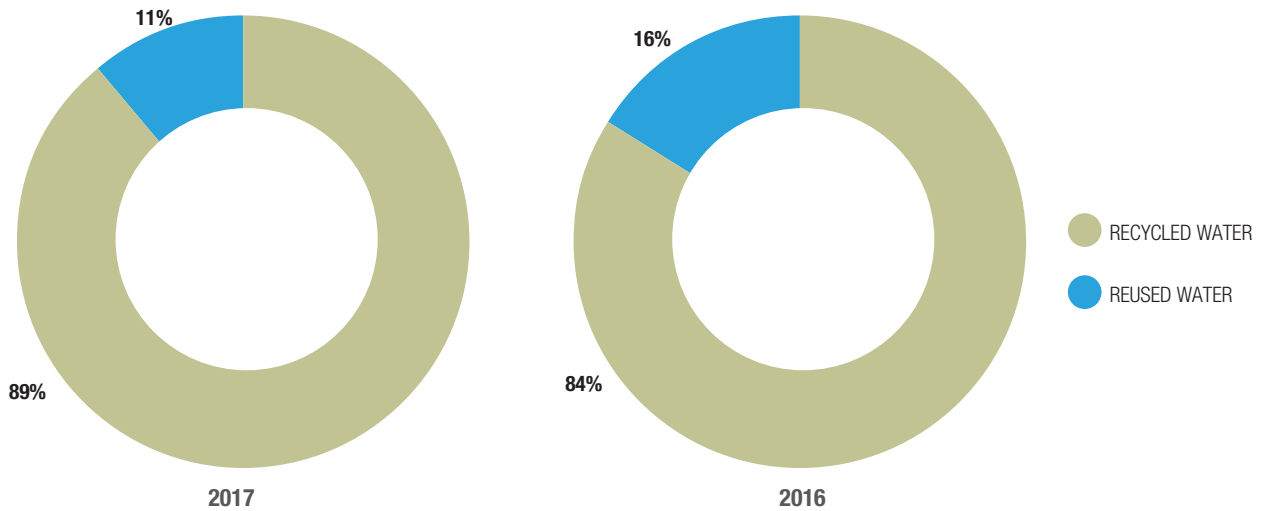
(\*) The surface water was not withdrawn for our industrial activity but the agricultural activity performed by the subsidiary Rivera del Arroz in Morocco.



## WATER RECYCLED AND REUSED

[EN10]

| TOTAL VOLUME OF WATER RECYCLED AND REUSED (M <sup>3</sup> ) | 2017           | 2016           |
|---|----------------|----------------|
| Recycled water  | 455,417        | 283,661        |
| Reused water  | 53,681         | 54,012         |
| <b>Total</b>  | <b>509,098</b> | <b>337,673</b> |



Two group companies developed initiatives in 2017 to reduce their water consumption, by a total of €70,000.

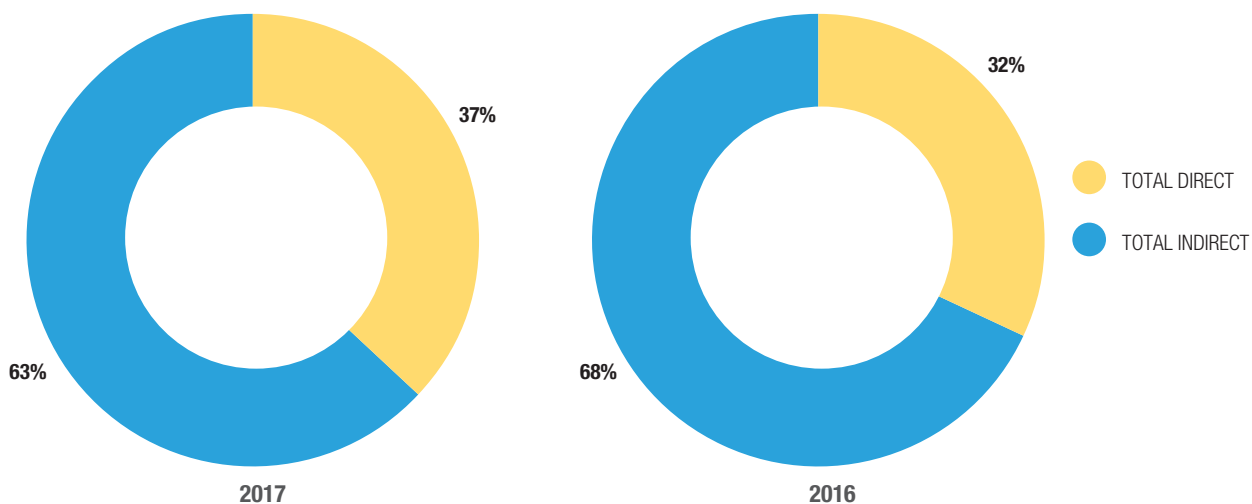
| COMPANY            | INITIATIVE                  | 2017            |
|--------------------|-----------------------------|-----------------|
| Garofalo           | Thermostat for reused water | 55,000 €        |
| Keck Spezialitäten | UV disinfection             | 15,000 €        |
| <b>Total cost</b>  |                             | <b>70,000 €</b> |



## Emissions

### DIRECT AND INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1 AND 2) [EN15 / EN16]

| GHG EMISSIONS (T CO <sub>2</sub> -EQ) | 2017           | 2016           |
|---------------------------------------|----------------|----------------|
| Direct emissions                      | 191,256        | 182,899        |
| Indirect emissions                    | 325,979        | 389,371        |
| <b>Total emissions</b>                | <b>517,234</b> | <b>572,270</b> |



### OTHER INDIRECT GHG EMISSIONS (SCOPE 3) [EN17]

In 2015 the Ebro Foods rice division contracted its main shipping service provider, EccoFreight, to calculate the carbon footprint of shipping our raw materials and products.

This calculation is made using the tool Eccoprint developed by EccoFreight and has a gate-to-gate scope, including the transport (by rail and/or road) from the source plant to the port of departure and from the port of arrival to our plants.

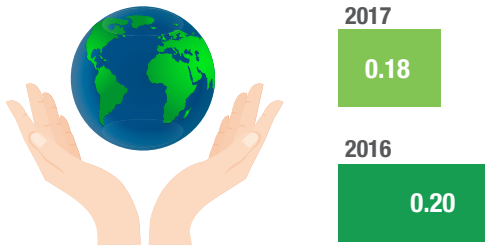
During 2017, EccoFreight handled 71.4% of the shipments of the rice division, with a total of 117,029 tonnes shipped (9,546 TEUS), producing GHG emissions of 29,599 tonnes of CO<sub>2</sub> eq.

These emissions were not counted for calculation of the indicator EN18.

As from 2017, Ebro Foods has started using the Cool Farm Tool predictive model of Cool Farm Alliance, of which it is a member, to estimate the GHG emissions generated in the production of its agricultural produce, which account for over 50% of the carbon footprint of its products in the case of rice.

**GHG EMISSIONS INTENSITY**  
[EN18]

|   | 2017      | 2016      |
|---|-----------|-----------|
| Total produced (t)  | 2,912,525 | 2,862,109 |
| Total GHG emissions (t CO <sub>2</sub> -eq)                 | 517,234   | 572,270   |
| GHG emissions intensity (t CO <sub>2</sub> -eq / t product) | 0.18      | 0.20      |



**EMISSIONS OF OZONE-DEPLETING SUBSTANCES**  
[EN20]

Practically no ozone-depleting substances have been generated.

| TYPE OF GAS                             | 2017        | 2016        |
|---|-------------|-------------|
| Hydrofluorocarbons (HFCs)               | 0.28        | 0.15        |
| Nitrogen trifluoride (NF <sub>3</sub> ) | 0.00        | 0.00        |
| Perfluorocarbons (PFCs)                 | 0.00        | 0.00        |
| Sulphur hexafluoride (SF <sub>6</sub> ) | 0.00        | 0.00        |
| <b>Total</b>                            | <b>0.28</b> | <b>0.15</b> |

**NO<sub>x</sub>, SO<sub>x</sub> AND OTHER SIGNIFICANT AIR EMISSIONS**  
[EN21]

| TYPE OF GAS                      | 2017          | 2016         |
|----------------------------------|---------------|--------------|
| NO <sub>x</sub>                  | 121.75        | 51.77        |
| Other emissions                  | 29.45         | 22.82        |
| Particulate matter (PM)          | 3.97          | 2.96         |
| SO <sub>x</sub>                  | 12.00         | 18.01        |
| Volatile Organic Compounds (VOC) | <b>2.43</b>   | <b>1.89</b>  |
| <b>Total</b>                     | <b>169.60</b> | <b>97.46</b> |

Only natural gas combustion (principal source) has been considered at our plants to calculate the NO<sub>x</sub>, SO<sub>x</sub> and VOC emissions.

The emissions of particulate matter reported are those produced in the handling of agricultural raw materials at our plants. These data are merely approximate since not all our plants obtained a reliable figure. We are still working towards obtaining complete, consistent information on this point.

## Effluent and waste

### WATER DISCHARGE [EN22]

| WATER DISCHARGED (M <sup>3</sup> ) | 2017             | 2016             |
|------------------------------------|------------------|------------------|
| Process water and sewage           | 2,447,632        | 2,140,813        |
| <b>Total effluent</b>              | <b>2,447,632</b> | <b>2,140,813</b> |

| DESTINATION OF WATER DISCHARGE (M <sup>3</sup> ) | 2017      | 2016      |
|--|-----------|-----------|
| Sewerage system or treatment facility            | 1,879,317 | 1,869,329 |
| Surface water                                    | 568,315   | 271,484   |

### WASTE GENERATION [EN23]

| WASTE (T.)         | 2017          | 2016          |
|--------------------|---------------|---------------|
| Hazardous          | 40            | 66            |
| Non-hazardous      | 31,891        | 23,854        |
| <b>Total Waste</b> | <b>31,932</b> | <b>23,921</b> |

All the hazardous waste is transferred to authorised waste disposal contractors for treatment according to the laws in place in each region.

Non-hazardous waste is separated by type and also handled by authorised waste disposal contractors, favouring recycling and reuse whenever possible.

### SIGNIFICANT SPILLS [EN24]

No spills occurred in 2017.

## Compliance & expenditure and investment

### REGULATORY COMPLIANCE

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.

## ENVIRONMENTAL CERTIFICATION AND MANAGEMENT SYSTEMS

The following table shows the plants at which Panzani and Garofalo have an environmental management system certified under UNE-EN-ISO 14001.

| COMPANY                   | COUNTRY | NAME OF PLANT               | CERTIFICATE |
|---------------------------|---------|-----------------------------|-------------|
| Panzani                   | France  | SEMOLINA GENNEVILLIERS      | ISO 14.001  |
| Panzani                   | France  | SEMOLINA MARSEILLE LITTORAL | ISO 14.001  |
| Panzani                   | France  | SEMOLINA MARSEILLE ST. JUST | ISO 14.001  |
| Pastificio Lucio Garofalo | Italy   | GRAGNANO                    | ISO 14.001  |

## NON-COMPLIANCE AND FINES

[EN29]

There have been two cases of non-compliance with the law, with the corresponding fines

| SUBSIDIARY | NON-COMPLIANCE                                       | FINE   |
|------------|--|--|
| Vegetalia  | Exceeding the maximum instantaneous flow of effluent | Fine of €750 imposed by Consorci del Besòs - Tordera |
| Vegetalia  | Effluent limits                                      | Fine of €750 imposed by Consorci del Besòs - Tordera |

## ENVIRONMENTAL PROTECTION EXPENDITURES AND INVESTMENT

[EN31]

|   | 2017               | 2016               |
|---|--------------------|--------------------|
| Expenditure in management and control       | 784,096 €          | 350,395 €          |
| Investment to minimise environmental impact | 2,164,158 €        | 3,334,544 €        |
| <b>Total</b>                                | <b>2,948,254 €</b> | <b>3,684,939 €</b> |

## Biodiversity

As established in the different strategies, plans and national action registers for biodiversity in the different geographical areas in which our production plants are situated, none of the Ebro Group companies has any operational site owned, leased, managed in, or adjacent to, protected areas or areas of high biodiversity value outside protected areas.