

ENVIRONMENTAL PERFORMANCE



GOALS AND COMMITMENTS

PRODUCTION ACTIVITY

According to Ebro's Corporate Social Responsibility policy set out in its Code of Conduct, the management of environmental aspects related with the production activity of Ebro Foods to guarantee sustainable growth is based on the following fundamental aspects:

- ❖ Total compliance with the applicable environmental laws
- ❖ Minimising of energy and water consumption through continuous optimisation of its production processes
- ❖ Minimising of emissions (air, noise and effluent) and the generation of waste.

AGRICULTURAL COMMODITIES

Ebro Foods also acts outside its perimeter, working actively to improve the environmental sustainability in its supply chain of agricultural commodities, especially rice. For this purpose it has embarked on a project through its subsidiary Herba Ricemills called "Rice crop sustainability programme" which we presented in our Sustainability Report 2012.

This programme, developed in collaboration with IFAPA (*), aims to acquire scientific expertise on the key parameters of environmental sustainability of the crop and inform the sector with a view to encouraging the application of sustainable agricultural practices.

The first results obtained through this programme are described below:

- ❖ **Optimising of nitrogen fertilizer:** it has been proved through several field studies that the doses of nitrogen fertilizer permitted by the European Union (EU) are not the most adequate, since they cause a loss of profit of around 8% for growers. We aim to present these results to the EU and request adaptation of the permitted doses to the optimum dose, which is just 10% above the dose currently permitted.
- ❖ **Phosphorus fertilizer:** Studies conducted in rice fields over ten years have established the evolution of phosphorus content in the soil after applying different doses of fertilizer and the effect of this phosphorus content on the crop. Some general recommendations have thus been established on the real needs of phosphorus fertilizer according to the content of this element in the soil. These results will enable growers to optimise their use of phosphorus fertilizer, thereby reducing costs and environmental impact.
- ❖ **Calculation of the global crop water balance:** two components of the water balance have been determined scientifically, evapotranspiration and percolation, for which there were previously no reliable data. The results show that owing to the particular irrigation system with recirculation used in the Seville area, the real water consumption of the crop (water lost through irrigation) is much smaller than the water used. Contrary to what was commonly believed, most (over half) of the water that enters the fields is returned to the environment, in this case the River Guadalquivir. Calculation of the water footprint of the crop in the Seville area will be based on this work.
- ❖ **Effect of salinity on the crop:** studies have established the threshold of salinity above which yield is affected and, above all, how and to what extent. This information will be useful for growers to optimise the quantity of irrigation water according to salinity and thus avoid loss of yield.

(* *Institute of Agricultural, Fisheries and Food Research and Training and ecological production, a public institution of the Regional Government of Andalusia. <http://www.juntadeandalucia.es/agriculturaypesca/ifapa/web>*

All these results have been published on the IFAPA website and were presented to the interested parties and players in the Sevillian rice sector at a technical seminar held in March this year. The event was attended by numerous growers, as well as heads of cooperatives, managers of plant protection product companies, representatives of the Rice Growers' Federation, heads of several irrigation farmer associations and integrated production experts, among others.

The next goals focus on further work on the impact of salinity on the different physiological states of the plant (project in progress), calculating the crop water footprint, addressing aspects of greenhouse gas emissions in rice fields and, finally, biodiversity.

ENVIRONMENTAL PERFORMANCE – GRI INDICATORS

The figures set out below correspond to all the production centres of the different subsidiaries of the Ebro Foods Group (listed in the chapter Parameters of the Report) and have been prepared in accordance with the G4 Guidelines of the Global Reporting Initiative (GRI).

NUMBER OF WORKPLACES REPORTING

Europe	24
North America	10
Africa	2
Asia	2
Total	38

MATERIALS

EN1

Raw Materials

The raw materials used to in the preparation of finished goods are divided into two major categories:

- ❖ Agricultural: rice and wheat
- ❖ Processed: ingredients (pre-cooked food)
- ❖ Packing and packaging materials

RAW MATERIALS FOR PRODUCTS	QUANTITY (t)
Rice	1,507,714
Wheat	682,570
Ingredients	11,728
Total	2,202,013

RAW MATERIALS FOR PRODUCTS



The packing and packaging materials used for the finished goods are mainly paper, cardboard and plastic.

MATERIALS FOR PACKAGING	QUANTITY (t)	% RECYCLED
Paper	8,231	
Cardboard	36,664	
Plastic	15,471	
Others	249	
Total	60,615	

MATERIALS FOR PACKAGING



We have not been able to obtain reliable consolidated details regarding the percentage of recycled input materials used in packaging material (EN2), so this information is not included this year. It is, however, a key aspect for Ebro Foods and we are working with our suppliers to be able to present this information next year.

ENERGY

EN3

Energy consumption

The total energy consumption for the group is shown below:

DIRECT CONSUMPTION

NON-RENEWABLE ENERGY SOURCES	CONSUMPTION (GJ)
Natural gas	756,272
Others	48,006
Total	804,279

RENEWABLE ENERGY SOURCES	CONSUMPTION (GJ)
Biomass (*)	91,367
Total	91,367
Total directas	895,645

(*) This is exclusively rice husk, a by-product from our industrial processes.

INDIRECT CONSUMPTION

INTERMEDIATE ENERGY ACQUIRED AND CONSUMED	CONSUMPTION (GJ)
Electricity	876,717
Steam	74,786
Total indirect energy consumption	951,503

ENERGY CONSUMPTION



EN5

Energy intensity

2013 will be the base year for monitoring the evolution of the group's energy intensity.

TOTAL PRODUCED	TONNES
	1,840,772
TOTAL ENERGY CONSUMED	GJ
	1,847,747
ENERGY INTENSITY	GJ/T OF PRODUCT
	1.003

EN6

Reduction of energy consumption

Three subsidiaries have reported initiatives to reduce energy consumption, especially in lighting, by almost €150,000.

SUBSIDIARIES	INITIATIVE	COST	REDUCTION
Riviana – Clearbrook	Installation of 50 LED luminaires	28,833€	670 GJ/year – Estimate
NWP - Montreal	Modernisation of lighting	88,788 €	0.245 GJ/t - Estimate
	Repair steam circuit	1,446 €	0.006 GJ/t - Estimate
Herba Ricemills - Sevilla	Instalación luminaria bajo consumo	30,000 €	
Total		149,067 €	

WATER CONSUMPTION

EN8

Total water withdrawal

TOTAL VOLUME OF WATER WITHDRAWN	m ³
Municipal water supplies or other water utilities	2,021,828
Ground water	290,444
Total processes	2,312,272
Surface water (1)	21,550,000
Total water withdrawn	23,862,272

(1) The consumption of water withdrawn from surface water, 21,550,000 m³, does not correspond to our industrial activity but the agricultural activity performed by the subsidiary Rivera del Arroz in Morocco. This company was included in environmental performance in 2012 with a surface water consumption of 19,296,858 m³.



EN10
Water recycled and reused

TOTAL VOLUME OF WATER RECYCLED AND REUSED	m³
Water recycled	98,304
Water reused	13,165
Total	111,469

None of the subsidiaries of Ebro Foods has so far calculated the water footprint of its products.



BIODIVERSITY

None of the Group companies has any operational site owned, leased, managed in, or adjacent to, protected areas or areas of high biodiversity value outside protected areas.

EMISSIONS

EN15 Y EN16
Direct and indirect greenhouse gas (GHG) emissions (Scope 1 and 2)

GHG EMISSIONS	t CO2-eq
Direct emissions (Scope 1)	45,977
Indirect emissions (Scope 2)	62,121
Total emissions	108,098



EN17
Other indirect GHG emissions (Scope 3)

The greatest source of indirect GHG emissions of scope 3 is in the agricultural production of our raw material, rice. The flooding of the fields to grow this cereal fosters the appearance of anaerobic degradation of soil organic matter (fermentation), which generates significant emissions of methane. These emissions can vary enormously depending on the soil and climate conditions and agricultural practices, and they are difficult to measure.

Our subsidiary Herba Ricemills is working actively, in collaboration with several players in the European rice sector and major commercial partners, on the preparation of a predictive model based on direct measurement. This model will enable us to estimate those emissions reliably and propose mitigation strategies for the growers in our supply chain.

EN18

GHG emissions intensity

2013 will be the base year for monitoring the evolution of the group's GHG emissions intensity.

TOTAL PRODUCED	TONNES
	1,840,772
TOTAL GHG EMISSIONS	t CO2-eq
	108,098
GHG EMISSIONS INTENSITY	t CO2-eq /TONNES PRODUCT
	0.059

EN20

Emissions of ozone-depleting substances

No ozone-depleting substances have been generated.

EN21

NO_x, SO_x and other significant air emissions

AIR EMISSIONS	TONNES
NO _x	68
SO _x	15
VOC	3
Particulate matter (PM)	29
Total emissions	115

These data must be considered approximate as not all workplaces have been able to report on this aspect. Ebro Foods is working towards obtaining more complete, consistent information on this point.

EFFLUENTS AND WASTE

EN22

Water discharge

WATER DISCHARGED	m³
Process water and sewage	1,523,160
Total effluent	1,523,160

DESTINATION OF WATER DISCHARGE	m³
Sewerage system or treatment facility	1,497,836
Surface water	25,324

EN23

Waste generation

WASTE	TONNES
Hazardous	42
Non-hazardous	11,973
Total Waste	12,015

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

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

NON-HAZARDOUS WASTE	DISPOSAL METHOD
Paper / Cardboard	Recycling
Plastic	Recycling + reuse
SUW	Landfill + Incineration
Metal scrap	Recycling
Wood	Reuse
Treatment facility sludge	Reuse

EN24

Significant spills

No spills have occurred in 2013.

COMPLIANCE / EXPENDITURE AND INVESTMENT

COMPLIANCE WITH LAWS AND REGULATIONS

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

In this regard, our Spanish rice subsidiary, Herba Ricemills, is implementing a tool to monitor and update information on environmental laws and management of the regulatory inspections and controls. This tool is expected to be operational in all Herba Ricemills production facilities by the end of 2014.

ENVIRONMENTAL CERTIFICATION AND MANAGEMENT SYSTEMS

Three semolina production facilities of the French subsidiary Panzani have had their environmental management systems certified under the standard UNE-EN-ISO 14001 to ensure enhanced compliance.

EN29

Non-compliance, fines and sanctions

There has been no non-compliance with laws or regulations and no fines or sanctions.

EN31

Environmental protection expenditures and investment

WASTE	EUROS
Expenditure in management and control	354,214
Investment to minimise environmental impact	362,940
Total	717,154