



# SUSTAINABILITY REPORT 2019



# OUR CONTINUOUS COMMITMENT TO REPORTING ON **VALAGRO'S** **SUSTAINABILITY**

For around 40 years, Valagro has been helping farmers get the best out of their production by optimising the use of resources and production inputs with one goal: **to create a sustainable future for people and nature.** This objective can only be achieved with a basic coherence that characterises not only the solutions offered to the global market, but also the production processes and corporate culture.

The Social and Environmental Report (or Sustainability Report) is a useful tool that helps us describe, year after year, our consistent and constant commitment to sustainability. It is an act of responsibility towards the wider community we operate in, and with which we hope to cultivate a culture that is ever more respectful of the environment and attentive to the community's needs.

**The data illustrated below refers to Valagro SpA's environmental, economic and social results.**

## THE VALAGRO GROUP IN NUMBERS

80

### Countries

Where we are present with our distribution and sales network.

8

**key manufacturing facilities** in Italy, Norway, India and Brazil

12

### Subsidiaries

around the world

€

**141,6  
million**

Total  
revenue

**VALAGRO  
GROUP  
667**

employees  
worldwide

23

PhD  
candidates

# OUR ACTIVITIES MAINLY CONTRIBUTE TO THESE UN SUSTAINABLE DEVELOPMENT GOALS:



# OUR ENVIRONMENTAL IMPACT

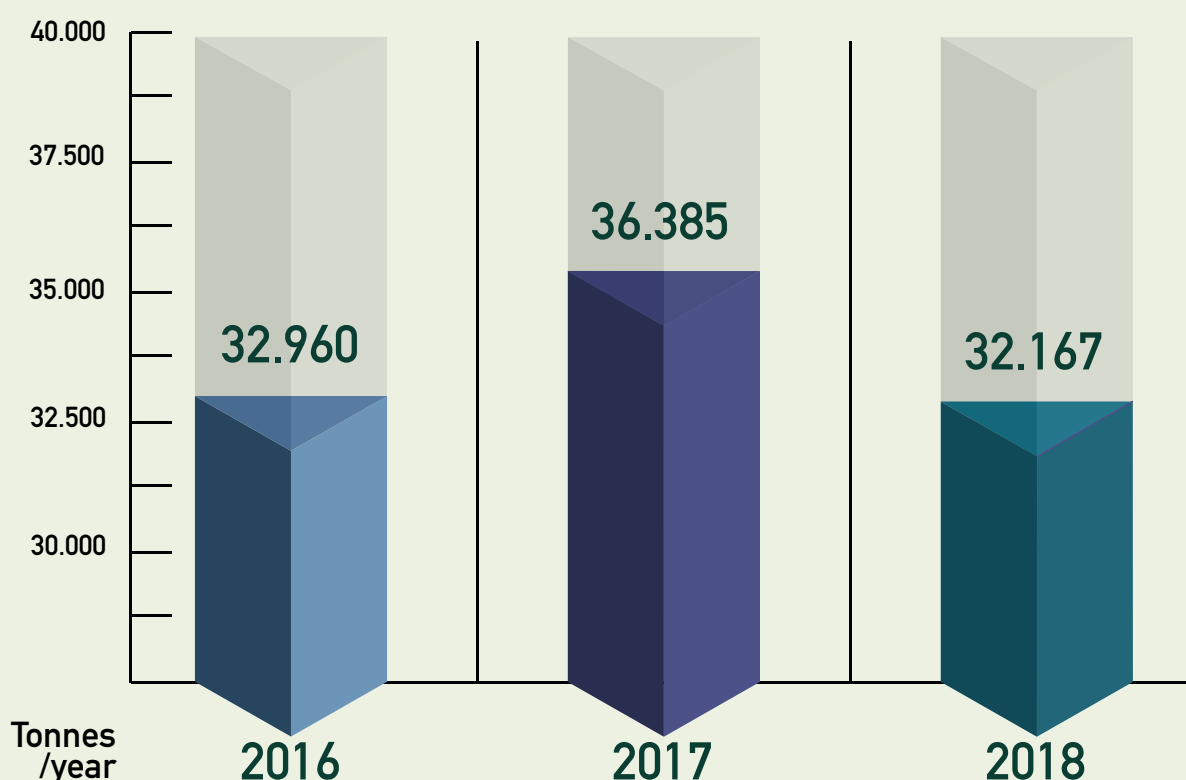


## INTRODUCTION

As indicated in the previous versions of the Social and Environmental Report, to correctly interpret the indicators relating to the environmental impact of Valagro SpA's activities we need to consider the relationship between these indicators and the **value of production**.

While the three-year period 2015 – 2017 recorded a significant increase in production, in 2018 there was a decrease in production due to stock balancing. However, as illustrated below in the Report, the company has undertaken numerous initiatives to continue

improving the environmental impact indicators. A more detailed analysis is available in the EMAS declaration - Eco - **Management and Audit Scheme** available on the Valagro website on the **Certifications** page.





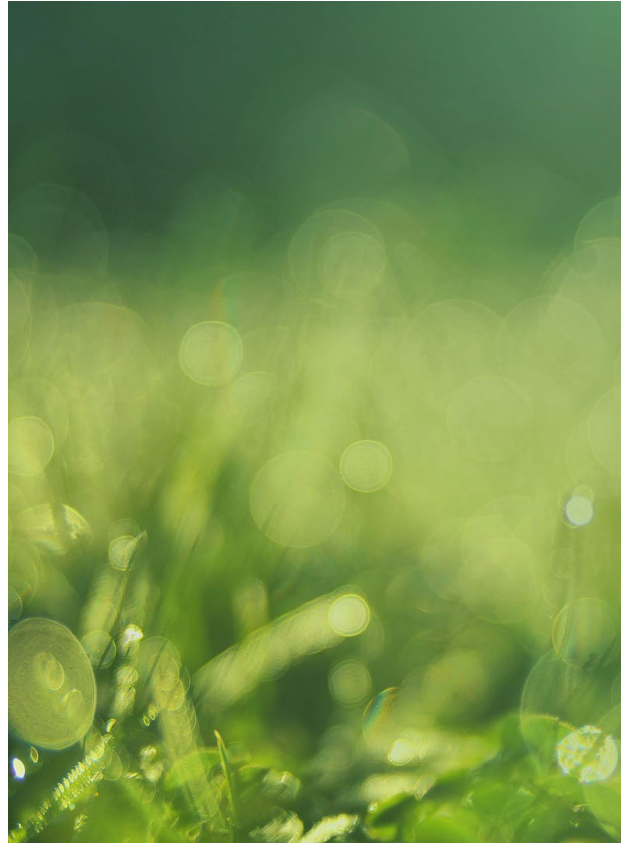


# FEATURED

# WASTE

Compared to the quantity of waste produced – which includes all the waste generated at the Atessa plant – there was an increase in this indicator in 2018 with respect to the reduction in production volumes.

As reported in the EMAS Declaration, 539.06 tonnes of total waste were non-hazardous waste. The increase in this waste was due to an agreement with two raw material suppliers, which in 2018 delivered the materials in big bags on wooden pallets, while in the past the wooden support was not present. The increase in hazardous waste was due instead to extraordinary cleaning of tunnels and tanks for the liquid and chelate plants, along with peak production at the liquid plant, which led to an increase in the resulting sludge.



## TOTAL WASTE COMPARED TO PRODUCTION (tonnes / year)

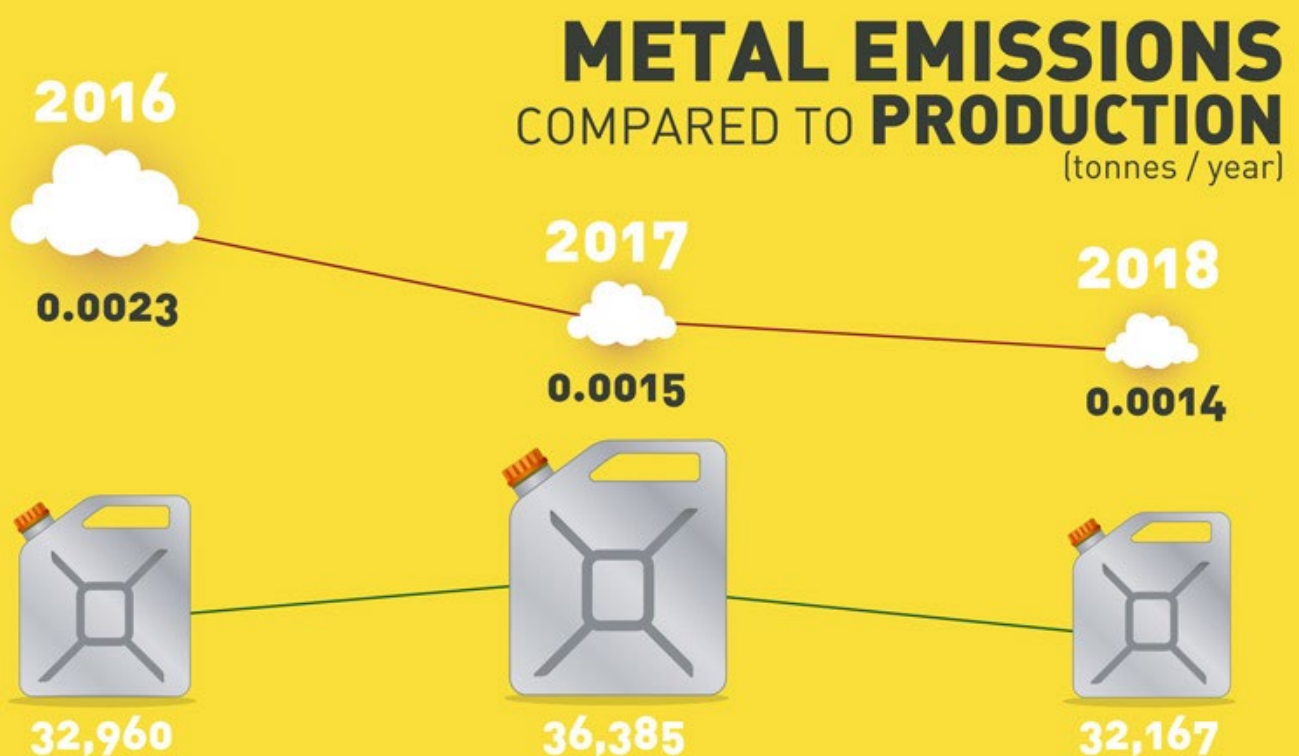




# METAL EMISSIONS

As for the abatement of emissions into the atmosphere, in 2018 the quantities of metals emitted per tonne of production decreased constantly, thanks to continuous improvements to the plants' bag filters which have been carried out over the years.

Triboelectric detectors were installed at all the chimneys where dust is present, to improve checks on any leaks from the filtering sleeves. Furthermore, the quantities of metals emitted are considerably lower than the authorised values: in all the checks carried out by an external laboratory, the authorised limits were never exceeded.



# VOS – VOLATILE ORGANIC SUBSTANCES (II – III – IV)

Regarding emissions of volatile organic substances (phenol, isobutyl alcohol and isobutyl acetate), it is important to note that the value for these substances is influenced by the Production Mix.

What is particularly clear in 2018 is the improvement of Classes II and IV compared with the previous year.

However, even for Class III substances the trend is positive because, despite the slight increase in this value, there is an overall decrease in VOS III starting from 2015-16, due to the supply of a purer raw material.

For all classes, the values are always well below the values authorised by law.



## VOC II, VOC III AND VOC IV EMISSIONS COMPARED TO PRODUCTION (tonnes / year)

**2016**



SOV II 0.194  
SOV III 0.239  
SOV IV 1.256

**2017**



SOV II 0.169  
SOV III 0.035  
SOV IV 0.476

**2018**



SOV II 0.139  
SOV III 0.128  
SOV IV 0.147



**32,960**



**36,385**



**32,167**



# THERMAL ENERGY

In the chemical industry, heat is an indicator of the technological level of production plants. A reduction in heat consumption indicates the overall effort of the entire company to create “low carbon products”, i.e. products with sustainable raw materials as a result of high research activity and which can guarantee results with positive effects on the external environment. In 2018 there was an increase in the thermal energy used in the



company; this is due to two main factors, the start-up of the cogeneration plant and its continuous operation, and the production during the entire year of a set of particularly energy-intensive products (from a thermal point of view). However, as illustrated below in this report,

it must be considered that the cogeneration plant, in addition to heat, has allowed us to produce about 50% of the electricity then used in the plants without any environmental impact (“carbon free”).

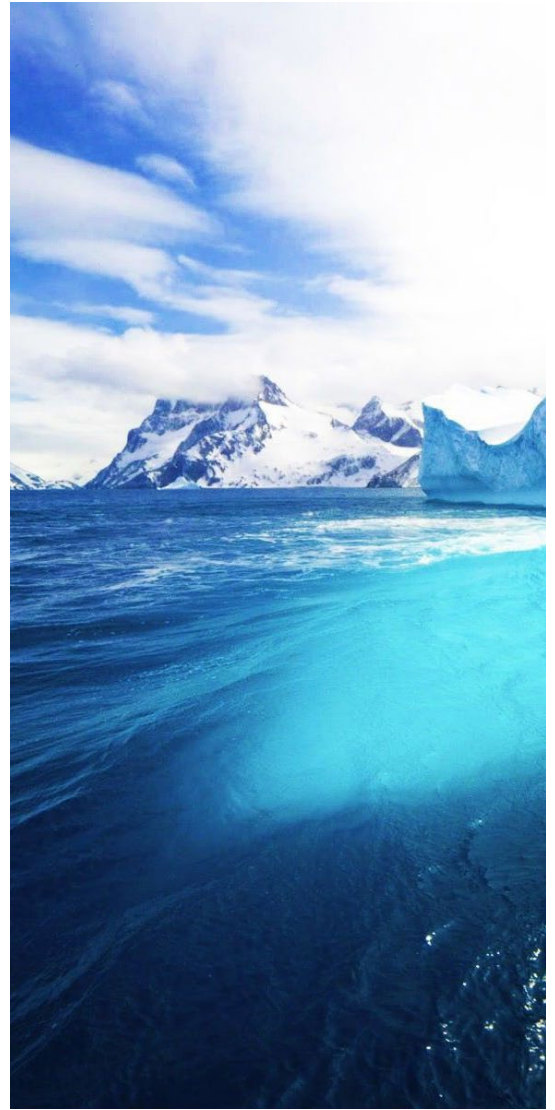
## THERMAL ENERGY CONSUMPTION



# WATER WITHDRAWAL

In line with its close attention to the use and sustainable management of resources in agriculture, Valagro considers water an essential asset and has always been committed to limiting waste in production processes.

Although 2018 recorded a slight increase (+1%) compared with the previous year, there was a positive trend in water withdrawal throughout the three-year period. Following a water rationalisation objective, between 2015 and 2018 discharges were zeroed, in line with objective 5 of the QEHS improvement programme 2018-2021 (found within the EMAS). Parameter G4 EN 22 shows the quantities of rainwater sent for purification and the relative indicator. The amount of rainwater sent for purification is decreasing, since most is reused in production. In 2017 and 2018, all the rainwater was reused.



## TOTAL OF WATER WITHDRAWAL





# IN THE FOREGROUND



# OUR GREENHOUSE GAS EMISSIONS

According to the recent report “Climate change adaptation in the agriculture sector in Europe” published by the European Environment Agency (September 2019), European agriculture is seriously threatened by the negative effects of climate change.

Agriculture accounts for about 10% of all greenhouse gases in the EU, the Report recalls, a fact that highlights the commitment required from the entire sector to help achieve the goals of reducing greenhouse gas emissions by 2030 and 2050.

In line with the focus on the negative effects of climate change, over the years Valagro has implemented a series of initiatives aimed at containing greenhouse gas emissions, as demonstrated by the values linked to producing its solutions, which are well below the declared values for other consumer products.

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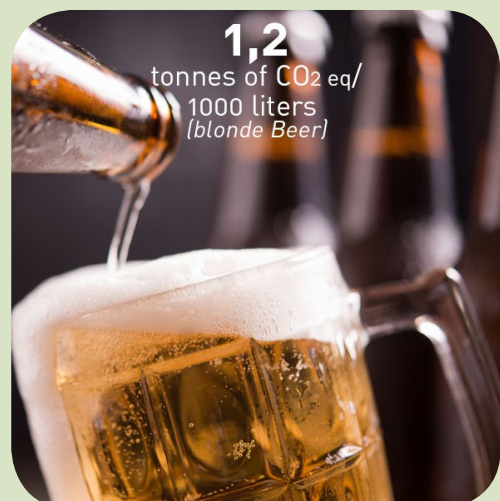
**0,20 tonnes  
of CO<sub>2</sub> / tonnes of product**  
= 200 kg / 1,000 kg of product



OUR  
GREENHOUSE  
GAS EMISSIONS  
COMPARED  
TO THE  
GREENHOUSE  
GAS  
EMISSIONS  
OF OTHER  
COMPANIES



**0,20 tonnes CO<sub>2</sub> /  
tonnes of product**  
= 200kg / 1,000 kg of product

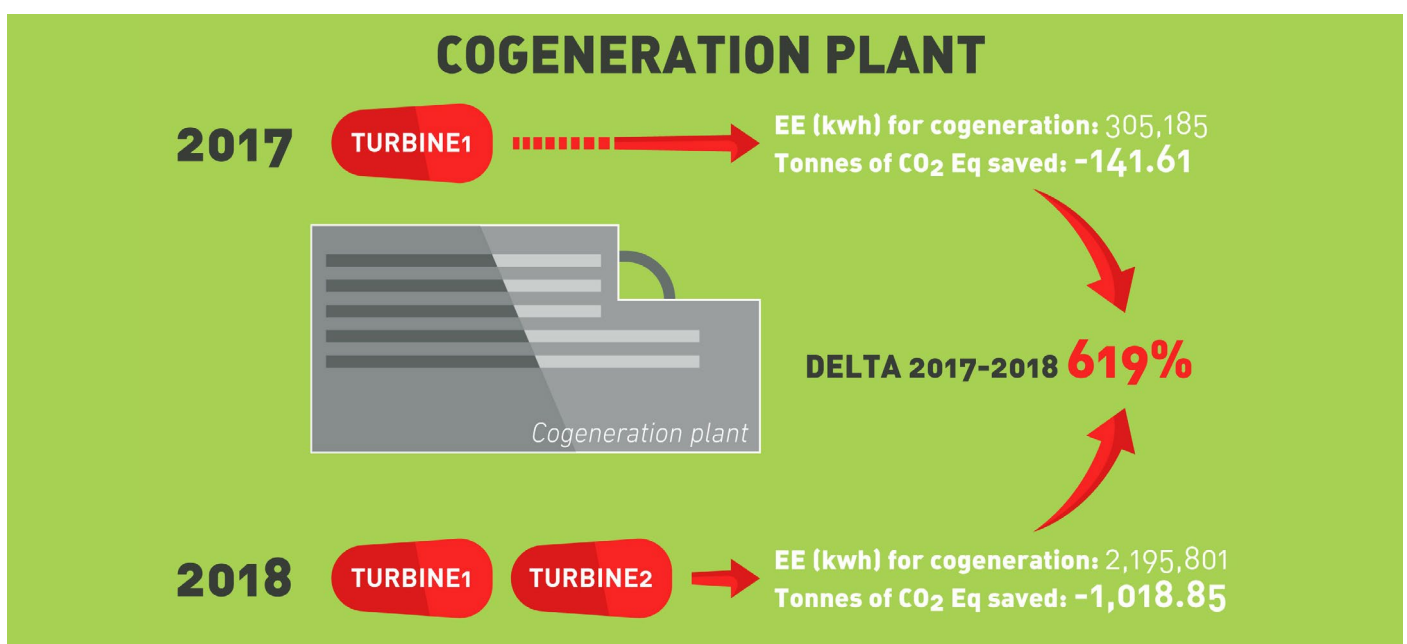


# REDUCTION OF CO<sub>2</sub> EMISSIONS

Climate change is the main challenge that needs to be solved in the coming years. The basic cause is the GHG emitted into the atmosphere by human activity. Cutting emissions by adopting sustainable technologies and more responsible lifestyles forms the basis of the strategies national governments are gradually adopting all over the world. Valagro also considers this development essential to reduce the low environmental impact of crops and guarantee a low carbon footprint for the crops they are applied to.

With regard to the total quantity of greenhouse gases (GHG) emitted by Valagro, we can see that the values increased compared with 2017, but decreased compared with 2016. In particular, the values for flights and electricity consumption (produced outside the organisation) decreased, while the share of GHGs for the use of Natural Gas increased. This is due to a specific corporate strategy aimed at increasing energy efficiency (through the use of cogeneration) and reducing emissions through reorganisable services (teleconferencing instead of international travel, when possible).

Thanks to the cogeneration plant, Valagro SPA's production facilities use both electricity and heat to produce many key products. The installation of two gas turbines has made it possible, on one hand, to produce electricity used throughout the plant and recover heat from exhaust gases to use it directly in production plants. This has made it possible to improve energy efficiency and reduce GHG emissions by around 530 tonnes in 2018 (4,370) compared with 2017 (4,900).







# OUR MANUFACTURING FACILITIES ABROAD



# INDIA

The project to revamp the hydrosoluble plant at the Indian site in Pashamylaram began in May 2017 with the process design phase, and ended in March 2018 with the start-up of the plant and the first production of NPK (Master line). The project's main interventions, which involved restoring and modernising an existing production line, were:

- extraordinary maintenance of recovery equipment
- the process design of new equipment and machines to replace existing ones or to supplement the line
- the process design of the drive scheme, instrumentation and automation
- construction of surrounding civil works;
- design of the new dust suppression system
- procurement, installation, start-up.

The line has a capacity of 6000 t/year, and is divided into 3 main sections: mixing, packaging and dust suppression.

The installation of the dust suppression system has allowed a better work environment inside the shed, free from micro-dust, with a significant positive impact for line workers and the external environment.



# NORWAY



The project to revamping the algae extraction plant in Norway, at the Kristiansund site, began in 2018.

Two venturi scrubbers were installed to eliminate odours and dust from the extraction and drying sections.

An initial environmental impact study was carried out: the environmental consulting company undertook odour measurements in Algea (Kristiansund), performed calculations for the dispersions, and finally created a map of odours in the surrounding area.

The dispersion calculations show that since the scrubbers were installed, the odours are lower than the authorised limit of 2 ou E/m<sup>3</sup>.

As regards the Bronnoysund site, work has been done to reduce the external impact of the noise from the manufacturing processes. Specifically, mobile sound-absorbing panels have been installed to reduce the noise from the mill area, where the seaweed is ground; furthermore, in the first treatment area for freshly harvested seaweed, where stones and shells are removed, a fan was moved from outside to inside the shed. The fan was then suitably insulated to reduce the impact on occupational safety.





# BRAZIL

In 2018, the installation of the new acetic acid dosing line with a dedicated pump was completed, improving the aspects of process safety related to handling this raw material.





# SPECIAL PROJECTS




# THE ENVIRONMENTAL PRODUCT DECLARATION (EPD) PROJECT

The EPD (Environmental Product Declaration) project was launched in 2017 and provides verified, transparent and comparable information on the environmental impact of the product life cycle. Within the project, 135 products were examined according

to all the environmental impact categories, namely: climate change, ozone layer reduction, acid rain, freshwater eutrophication, marine eutrophication, human toxicity, photochemical oxidant formation, particulate formation, terrestrial ecotoxicity,

fresh water ecotoxicity, marine ecotoxicity, ionising radiation, occupation of agricultural land, occupation of urban land, transformation of natural soils, depletion of water resources, depletion of metals, depletion of fossil fuels.

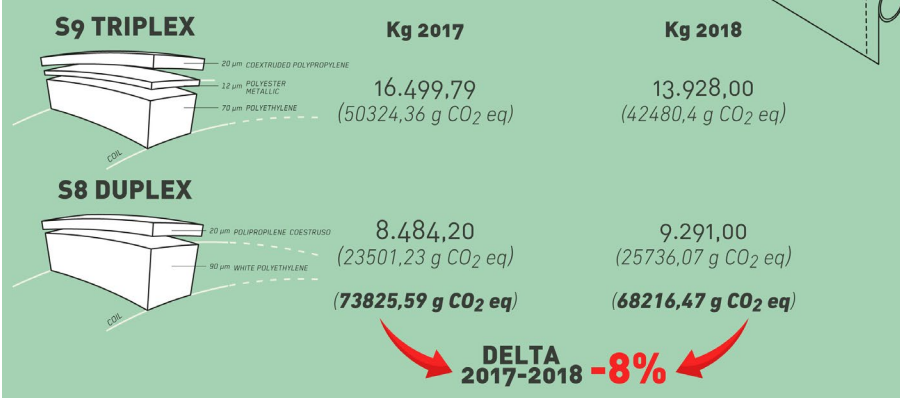
## EPD – AVERAGE VALUES BY PRODUCT FAMILY\*

FAMILIES OF PRODUCTS	GLOBAL WARMING Kg CO <sub>2</sub> eq	ACIDIFICATION Kg SO <sub>2</sub> eq	WATER USE m <sup>3</sup>	FOSSIL FUEL CONSUMPTION kg OIL eq AVERAGE
 <b>BS</b>	1.14	0.01	4.24	0.46
 <b>ME</b>	4.23	0.03	21.35	1.55
 <b>WSN</b>	2.67	0.02	5.55	0.81
<b>MEDIA</b>	<b>2.89</b>	<b>0.02</b>	<b>11.66</b>	<b>1.02</b>

\* The table above shows some of the preliminary study data. The average values for the three families of products analysed, *Bioestimulants*, *Microelements* and *Water Soluble*, can be seen for four of the 15 environmental impact categories studied.

The study, which uses the Life Cycle Assessment methodology, focused on all phases of the life cycle, starting from the use of raw materials, through production processes and product packaging, to the company gates. In the coming years, we also expect to implement studies into the impact of using products in the field. In this way, we will be able to obtain a complete analysis of the product life cycle that will let the company make improvements to the various phases analysed.

## CO<sub>2</sub> EMISSIONS RELATED TO THE TYPE OF PACKAGING



Among the work already carried out to limit products' environmental impact, it is particularly worth mentioning the decision to continue replacing TRIPLEX packaging with DUPLEX flexible packaging, which has led to a related reduction in costs and environmental impact.

# OUR ADDED VALUE

**DISTRIBUTED  
ECONOMIC VALUE  
84,528,279  
million**

**A**dded Value summarises the company's ability to produce wealth to then distribute it to the various stakeholders.

Its fundamental components are the **Economic Value Generated** from ordinary

company management and then the distribution in terms of **Economic Value Distributed** and **Economic Value Retained**.

The portion of Economic Value Distributed is divided among the main stakeholders: Suppliers, Employees,

Partners - Shareholders, Central Administration, Community and the environment. On the other hand, the Economic Value Retained relates to value adjustments, anticipated and deferred taxes, provisions to reserves and profit for the year.

## Revenue by Geographic Area

REVENUE BY AREA	2018	Vs 2017
<b>EMEA</b>	48,329	-5%
<b>AMERICAS</b>	22,488	7%
<b>ASIA PACIFIC</b>	17,948	-14%

Thousands of Euros

## Economic value of Valagro SpA in millions €

	2016	2017	2018
Generated	85.898.210	99,179,769	96,703,770
Distributed	74.382.712	93,275,647	84,528,279
Retained	11.515.497	5,904,121	12,175,491

Economic value of Valagro SpA in millions €





# OUR PEOPLE

## ORGANISATIONAL CHANGE 2018

Our Group is constantly focused on keeping the organisation effective and able to get closer to the customer.

With this spirit and based on Corporate goals, in 2018 Valagro decided to divide the Global Research and Development area into Global Research and Global Field Development. In this way our Global Research Department can allow greater focus on specific research matters that strengthen our GeaPower technology. Moreover, the contribution of new technologies and new skills will speed up the offer and the effectiveness of new products.

Global Development was integrated as Global Field Development in the Global Marketing Department, which changed its name to the Global Marketing and Development Department. This new structure includes managing multiple projects that help the company gain a competitive edge in the marketplace by developing unique solutions, taking us closer to market needs, and by developing new synergies between Field Development, Market Development, Product Management and Sales.

## NEW COMPETENCY MODEL

In 2018 Valagro defined a new Competency Model, in order to guide the behaviours and actions of every person in the Company, to ultimately reinforce a common organisational DNA that allows people to perform well and achieve the business goals. The new Competency Model has been implemented in processes, procedures, behaviours and approaches and the company has set to work putting the model into practice.



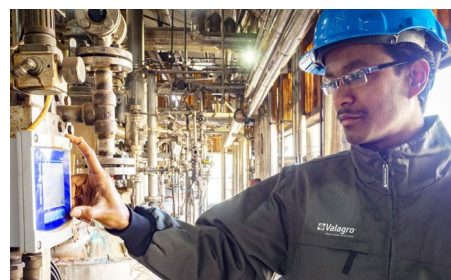


## VALAGRO CORPORATE UNIVERSITY

Learning to learn is the way to excellence. And excellence is one of Valagro's core values in its future path to greater success. Valagro is committed to becoming a 'learning organisation' through constant and pervasive learning. That's why in 2018 the Company decided to invest in people, providing tools for employees to improve their professional and managerial skills. The Valagro Corporate University was launched to guide and support people's growth by enabling continual, digital tech and multi-modal learning, requiring personal responsibility and engagement to make learning part of the job. The new initiative initially involved the Atessa Headquarters and the Brazilian, US and Indian subsidiaries.

## GRADUATE TALENT PROGRAM

Since 2016, Valagro has offered a Graduate Talent Programme to new graduates and PhDs. In 18-24 months, the students have the opportunity to get to know the company dynamics, work in a team, participate in innovative projects and start their career in an international company.



### PADARTHI ESWAR RAJA BABU Production & process technology assistant

Eswar is originally from India. Thanks to the Graduate Talent Programme, he was able to make a valuable contribution to the **Special company projects** initiative by taking part in some of Valagro's strategic projects in Norway, where he went for a short time, and Valagro BioSciences in India, which was the subject of his degree thesis. In addition, Eswar spent a few days in Global Research with the team of Juan Fernando Mejia, Microbial Science Coordinator, as part of the **True day experience initiative**.



### MATTEO DI MUZIO Microbials laboratory associate

It was India that welcomed Matteo for his brief stay provided by the Short Assignment initiative; among other initiatives, this was in addition to the True day experience, involving 2 days shadowing Andrea Sodi, Area Sales Manager Italy.



# IN SUMMARY

**269**  
employees  
for Valagro Spa

**399**  
Subsidiary  
Employees

**43,43**  
Average training hours  
for employees

**11683**  
Total training  
hours

# ... AND THEIR WELL-BEING

## FEATURED PROJECTS: THE COMPANY CANTEEN

In the panorama of initiatives implemented during 2018, the project to create the new company canteen is particularly noteworthy. It aimed to achieve the dual objective of improving employees' well-being – with a greater investment in the quality of food, obtained

at zero miles – and at the same time reducing the impact of meals, thanks to the progressive elimination of disposable tableware and plastic water bottles.

### CANTEEN SERVICE – 2017

#### INTERNAL CANTEEN

PRE-PACKED and PRE-COOKED  
(Plastic tableware and 0.5 l plastic bottle)

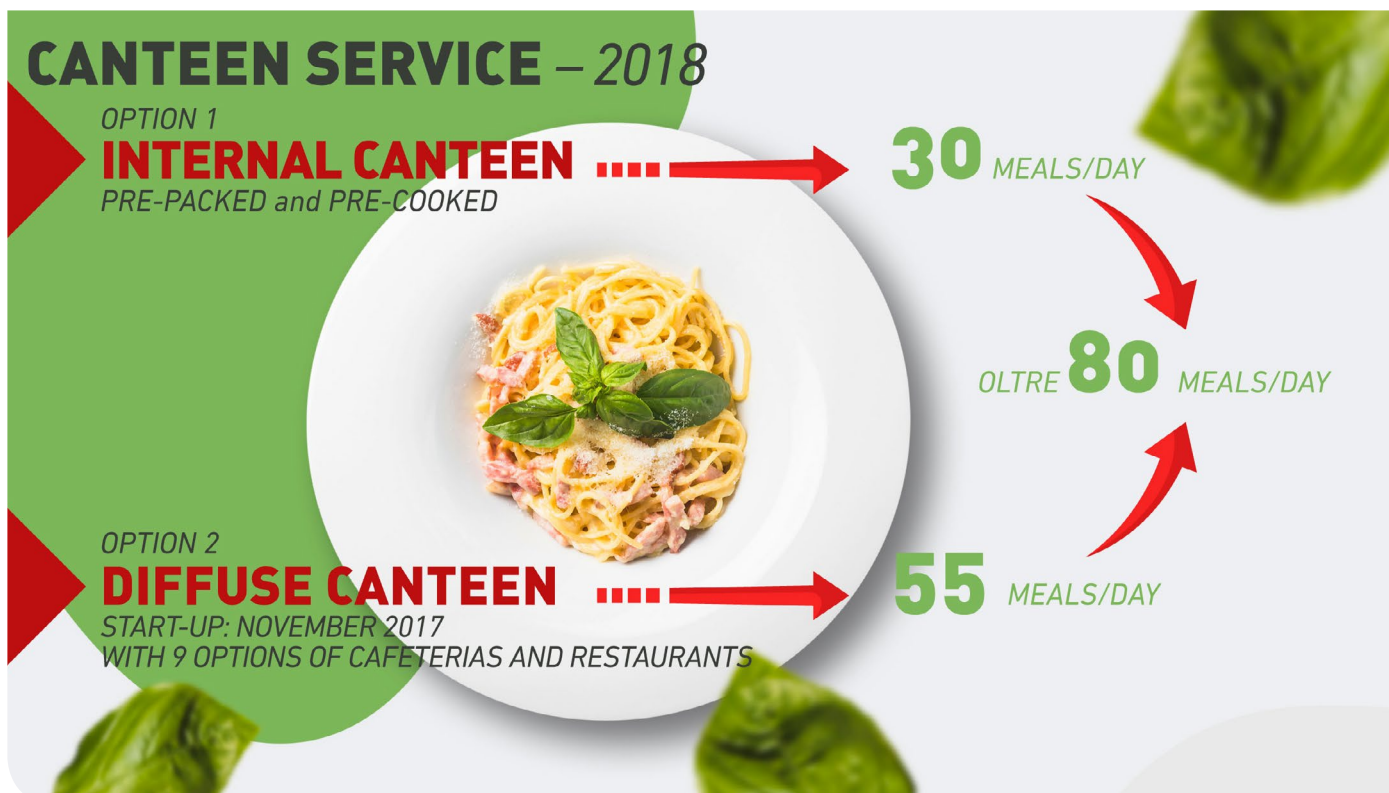
40 MEALS/DAY





# MAIN RESULTS:

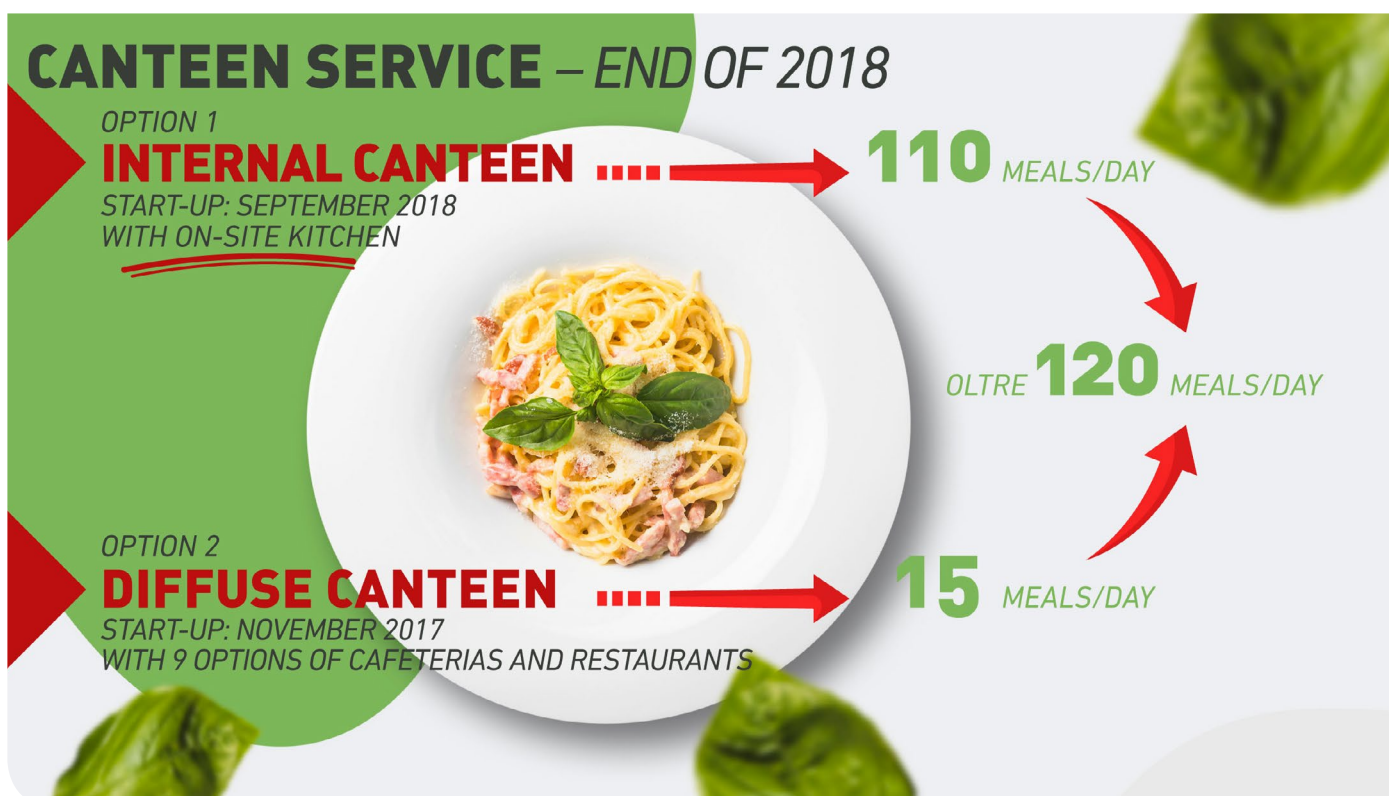
- Over 100% increase in employees who get a meal through a company service.
- Development opportunities with local businesses.
- Reduction of the cost of the external solution by over 25% thanks to partnerships with EDENRED (one of the largest companies in Italy specialized in corporate welfare).
- Reduction of the cost of the external solution for the employee by over 60%, thanks also to the company contribution.



# THE COMPANY CANTEEN END OF 2018

## PRINCIPALI RISULTATI

- Increase of more than 50% compared to the previous solution and over 400% compared to the initial solution of employees getting a meal through the company service.
- Development of “Canteen project with zero miles” and controlled supply chain.
- Reduction in plastic consumption (elimination of disposable tableware and plastic bottles).





# OUR RESEARCH

In 2018, a new organization of the Global Research Department was presented, in order to allow greater focus on specific research areas, speed up the release of new products, and strengthen the GeaPower technology platform. Such organization put in connection 5 main Research Units:

- Plant Science (including the JointLabs “Valagro @PlantLab” (Sant’Anna School of Advanced Studies, Pisa, Italy) and “Valagro @PHENOLab” (ALSIA-Metapontum Agrobios Research Center, Matera, Italy);

- Microbial Science (including Valagro Biosciences in India);
- Formulation Development;
- Analytical Chemistry;
- Quality.

An additional Unit, named “Computational”, was also conceived with the task to process and analyze the research data released from the 5 main Units, and return outputs capable of supporting strategies, models and actions of Global Research.

## GLOBAL RESEARCH DEPARTMENT (HQ)



**FORMULATION DEVELOPMENT**  
*Developing innovative formulations.*



**ANALYTICAL CHEMISTRY**  
*Screening of strategic materials and fermentation products.  
Study of actives.  
Plant Metabolomics.*



**QUALITY**  
*Deals with quality control for processes and products.  
Automation in lab.*



**MICROBIAL SCIENCE**  
*Discovery and study of beneficial microorganisms.  
VMC and external collections (scouting).  
Actives from fermentation.*



**COMPUTATIONAL**  
*Computational biology and bioinformatics.*



**PLANT SCIENCE**  
*Plant Physiology and “omics”: discovery and biological screening of actives&formulations (M.o.A.)*

**Valagro Biosciences USA**  
*(Research activities particularly focused on row crops.  
tbd 2019/2020)*

Joint labs

Genomics



**Sant'Anna**  
Scuola Universitaria Superiore Pisa



Phenomics

*Primary screening: agronomic results of actives and formulations on various crops.*

# THE MAIN SCIENTIFIC-TECHNOLOGICAL INNOVATIONS

## QUALITY UNIT

### 1. Implementation of a new “Autosampler” (Agilent 1280 Infinity II HPLC).

With this new tool it is possible to run analytical (“HPLC”) analysis overnight with increasing of productivity (+100%)

With this new tool there is no need of operator for sample analysis, therefore less probability of errors

### 1. New automatized certificate of analysis (generated directly by ERP - Gamma).

In 2018 we implemented this system that allows to achieve certificate of analysis parameters of the finished product by simply digit the batch number. With this simple implementation it is possible to save up to 200 working hours per year avoiding human error in manual manipulation of data.

5 Patent applications were filed by Global Research Department during 2018.





# THE G4 GRI GUIDELINES

Starting with the 2016 edition of the Sustainability Report, we have embarked on a journey of progressive compliance with the **international standards set out by the Global Reporting Initiative (GRI)**. This innovation is an integral part of our commitment to sharing and transparency, because it provides us with objective support that helps us better relate to the whole community, which is the purpose of this report. The G4 GRI guidelines help us to communicate the impact of our business activities from a social, environmental and economic point of view.

We chose this standard because of our desire to equip ourselves with an internationally recognised tool that had the specific characteristics of comparability, accuracy, clarity, timeliness and reliability.

To highlight this journey, this publication includes indicators provided by our various business departments, expressly specified based on the availability of information required by the standard.

# GRI INDICATORS

## CATEGORY

## ENVIRONMENTAL

CATEGORY: ENVIRONMENTAL  
ASPECT: MATERIALS

### MATERIALS USED BY WEIGHT OR VOLUME



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	2016	2017	2018
External Source (Kg)	31,873,997	35,968,893	40,334,706
Internal Source (Kg)	847,834	886,965	1,609,620
Non-renewable materials used (Kg)	28,194,357	33,131,610	39,044,706

CATEGORY: ENVIRONMENTAL  
ASPECT: MATERIALS

### RECYCLED INPUT MATERIALS USED



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Identify the total weight or volume of materials used as reported under G4-EN1	2016	2017	2018
Total weight (tonnes)	3,679	3,724	2,899



CATEGORY: ENVIRONMENTAL

ASPECT: ENERGY

## ENERGY CONSUMPTION WITHIN THE ORGANIZATION



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	2016	2017	2018
Identify the types of energy (fuel, electricity, heating, cooling, and steam) consumed within the organization (TJ)	2,259	2,250	2,321
Report fuel consumption for renewable fuel source (TJ)	0.66	0.00	0.00

CATEGORY: ENVIRONMENTAL

ASPECT: ENERGY

## ENERGY INTENSITY



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	2016	2017	2018
Report the energy intensity ratio (MWh/Ton)	0.69	0.63	0.81
Report the types of energy included in the intensity ratio	All	All	All
Report whether the ratio uses energy consumed within the organization, outside of it or both	Within	Within	Within

CATEGORY: ENVIRONMENTAL

ASPECT: WATER

## WATER WITHDRAWAL BY SOURCE



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Identify the total volume of water withdrawn from any water source	2016	2017	2018
Report the total volume of water withdrawn	36,310	29,961	28,597

CATEGORY: ENVIRONMENTAL

ASPECT: WATER

## WATER SOURCES SIGNIFICANTLY AFFECTED BY WITHDRAWAL OF WATER



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Identify water sources significantly affected by water withdrawal by the organization	2016	2017	2018
Report the total number of water sources significantly affected by withdrawal	2	2	2

CATEGORY: ENVIRONMENTAL

ASPECT: WATER

## WATER RECYCLED AND REUSED



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	2016	2017	2018
Report the total volume of water recycled and reused as a percentage of the total water withdrawal reported under Indicator G4-EN8.	4,971	4,429	5,245



CATEGORY: ENVIRONMENTAL

ASPECT: EMISSIONS

## DIRECT (SCOPE 1) GHG EMISSIONS



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Identify direct emissions of GHGs from sources owned or controlled by the organization	2016	2017	2018
Report gross direct (Scope 1) GHG emissions in metric tons of CO2 equivalent	3,977.43	3,918.9	4,891.12
Report gases included in the calculation	All	All	All
Report biogenic CO2 emissions	0	0	0

CATEGORY: ENVIRONMENTAL

ASPECT: EMISSIONS

## ENERGY INDIRECT (SCOPE 2) GHG EMISSIONS



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	2016	2017	2018
Report gross energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent	1,664.94	1,354.33	984.64
Report gases included in the calculation	All	All	All

CATEGORY: ENVIRONMENTAL

ASPECT: EMISSIONS

## OTHER INDIRECT (SCOPE 3) GHG EMISSIONS



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	2016	2017	2018
Report gross other indirect (Scope 3) GHG emissions in metric tons of CO2 equivalent, excluding indirect emissions from the generation of purchased or acquired electricity, heating, cooling, and steam consumed by the organization	1,184.23	922.36	878.19

CATEGORY: ENVIRONMENTAL

ASPECT: EMISSIONS

## GREENHOUSE GAS (GHG) EMISSIONS INTENSITY



**Valagro**® SUSTAINABILITY REPORT 2019  
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	2016	2017	2018
Indirect emissions (tonnes)	1,665	1,354	984
Other indirect (tonnes)	299	301	301
Flights (tonnes)	884.96	621.34	577
Total scope 1,2 and 3 (tonnes)	6,827	6,258	6,753
Turnover M€	78.91	86.14	83.64



Tonnes CO2 /M€	86.51	72.60	81.36
Production	32,960	36,385	32,167
Tonnes CO2/Kg Product	0.21	0.17	0.20
Employees	271	274	279
Tonnes CO2/ Employees	25.19	22.84	24.20

CATEGORY: ENVIRONMENTAL  
ASPECT: EMISSIONS

## NITROGEN OXIDES (NOX), SULFUR OXIDES (SOX), AND OTHER SIGNIFICANT AIR EMISSIONS



**Valagro** SUSTAINABILITY REPORT 2019  
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	2016	2017	2018
NOX	NA	NA	NA
SOX	NA	NA	NA
POP	NA	NA	NA
VOC (UNI EN 13649:2002 UNI EN 13649:2002)	1,689	681.04	415
PM (UNI EN 13284-1:2003)	197.86	249.5	483.1
Metals	2.37	1.56	1.43

CATEGORY: ENVIRONMENTAL  
ASPECT: EFFLUENTS AND WASTE

## WATER DISCHARGE BY QUALITY AND DESTINATION



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Rainwater	2016	2017	2018
Destination	146	0	0
Quality of the water including treatment method (kg/year)	COD: 28 Nitrogen: 2.33 Phosphorus: 0.99 Metals: 0.76	COD: 0 Nitrogen: 0 Phosphorus: 0 Metals: 0	COD: 0 Nitrogen: 0 Phosphorus: 0 Metals: 0
Whether it was reused by another organization	No	No	No

Black waters	2016	2017	2018
Destination	Sewerage	Sewerage	Sewerage
Whether it was reused by another organization	No	No	No

CATEGORY: ENVIRONMENTAL  
ASPECT: EFFLUENTS AND WASTE

## WASTE BY TYPE AND DISPOSAL METHOD



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Identify the weight of waste created by the organization's operations	2016	2017	2018
Hazardous	36,229	49,157	90,143
Non-hazardous	357,087	328,397	539,057

Report the total weight of hazardous and non-hazardous waste, by the following disposal methods:

Recycling	324,508	379,517	543,063
Composting	23,190	7,420	1,400
Landfill	42,361	46,978	84,737

CATEGORY: ENVIRONMENTAL  
ASPECT: EFFLUENTS AND WASTE

## TRANSPORT OF HAZARDOUS WASTE



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Total weight of hazardous waste transported by destination	2016	2017	2018
Total weight (kg)	36,229	49,157	90,143



CATEGORY: ENVIRONMENTAL

ASPECT: COMPLIANCE

## NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS



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**G4**  
**EN29**

	2016	2017	2018
Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations			
Report significant fines and non-monetary sanctions	0	0	0

CATEGORY: ENVIRONMENTAL

ASPECT: OVERALL

## TOTAL ENVIRONMENTAL PROTECTION EXPENDITURES AND INVESTMENTS BY TYPE



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**G4**  
**EN31**

	2016	2017	2018
Report total environmental protection	220,000	240,000	610,000

# GRI INDICATORS

## CATEGORY SOCIAL

## LABOR PRACTICES AND

## DECENT WORK

CATEGORY: LABOR PRACTICES AND DECENT WORK  
ASPECT: EMPLOYMENT

### NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER



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TOTAL NEW RECRUITS BY AGE GROUP W/M	2016	2017	2018
Under 30 years old	4/5	7/14	5/14
30-50 years old	2/9	27/31	14/23
Over 50 years old	0/1	2/0	1/19

STAFF TURNOVER BY AGE GROUP W/M	2016	2017	2018
Under 30 years old	2/4	4/15	5/15
30-50 years old	3/5	12/31	12/28
Over 50 years old	0/2	1/17	0/15

CATEGORY: LABOR PRACTICES AND DECENT WORK  
ASPECT: OCCUPATIONAL HEALTH AND SAFETY

## WORKERS REPRESENTATION IN FORMAL JOINT MANAGEMENT-WORKER HEALTH AND SAFETY COMMITTEES

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Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	2016	2017	2018
Report the level at which each formal joint management-worker health and safety committee typically operates within the organization.	1	1	1
Report the percentage of the total workforce represented in formal joint management-worker health and safety committees.	100	100	100

CATEGORY: LABOR PRACTICES AND DECENT WORK  
ASPECT: OCCUPATIONAL HEALTH AND SAFETY

## TYPES OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS, AND ABSENTEEISM, AND NUMBER OF WORK-RELATED FATALITIES

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Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities	2016	2017	2018
Injury	0	1.34	1.32
Occupational diseases	0	0	0
Severity Index	0	0.08	0.21



CATEGORY: FAIR WORK PRACTICES AND CONDITIONS  
ASPECT: TRAINING

## AVERAGE HOURS OF TRAINING PER YEAR FOR EMPLOYEE



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TOTAL EMPLOYEE BY GROUP W/M AND CATEGORY	2016	2017	2018
Total	249	269	269
Gender (W/M)	73/176	80/189	82/187
Directors	12	12	13
Executives	31	32	29
Desk Employees	120	120	121
Technicians	86	105	106
TRAINING TOTAL HOURS	2016	2017	2018
Total	10295	10911	11683
Directors	568	780	713
Executives	403	1038	1327
Desk Employees	8230	6414	7808
Technicians	1094	2679	1835
AVERAGE TRAINING HOURS PER EMPLOYEE	2016	2017	2018
Total	41,34	40,56	43,43
Gender (W/M)	30% / 70%	28% / 72%	31% / 69%
Directors	18,12	13,99	16,38
Executives	25,54	13,99	16,38
Desk Employees	1,25	1,70	1,49
Technicians	12,70	4,07	6,37

CATEGORY: LABOR PRACTICES AND DECENT WORK  
ASPECT: DIVERSITY AND EQUAL OPPORTUNITY

## DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES



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TOTAL GROUP EMPLOYEES (AS OF DECEMBER 31, 2018)				
	by gender W/M	by age Under 30 years old	by age 30-50 years old	by age Over 50 years old
Governance bodies	0/7	0	1	6
Managers	1/12	0	4	9
Middle managers	10/19	0	19	10
Office and manual workers	51/70	8	93	20

# GRI INDICATORS

## CATEGORY ECONOMIC

CATEGORY: ECONOMIC  
ASPECT: ECONOMIC PERFORMANCE

### DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED



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DIRECT ECONOMIC VALUE GENERATED (€)	2016	2017	2018
Cash received as interest on financial loans, as dividends from shareholdings, as royalties, and as direct income generated from assets	85,898,210	99,179,769	96,703,770

REVENUE DETAIL FOR REGIONS (€)	2016	2017	2018
Center and South America	12,956	14,885	12,134
Europe	43,177	51,074	48,329
Far East	5,154	6,865	5,894
Middle East and Africa	10,017	12,165	9,509
North America	7,405	6,090	10,354
Oceania	1,317	1,863	2,546
<b>Total revenues</b>	<b>80,026</b>	<b>92,941</b>	<b>88,764</b>
Dividends from subsidiaries	5,772	6,058	2,386
Interest income from subsidiaries	100	181	7,423
<b>Total Economic value directly generated</b>	<b>85,898</b>	<b>99,180</b>	<b>98,573</b>



CATEGORY: ECONOMIC  
ASPECT: ECONOMIC PERFORMANCE

## DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED



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DIRECT ECONOMIC VALUE DISTRIBUTED (€)	2016	2017	2018
Operating costs: property rental, license fees, facilitation payments, royalties, payments for contract workers, employee training costs	54.,280,812	61,899,530	60,612,478
Employee wages and benefits: regular contributions as well as other employee	16,229,050	19,213,000	18,794,124
Payments to providers of capital: interest payments made to providers of loans	921,255	9,389,252	3,990,963
Payments to government: all organization taxes and related penalties paid at the international, national, and local levels	2,825,903	2,612,346	947,126
Community investments: Voluntary donations and investment of funds in the broader community	125,693	161,520	183,587
Total	74,382,712	93,275,647	84,528,278

ECONOMIC VALUE RETAINED	2016	2017	2018
Direct economic value generated' less 'Economic value distributed	11,515,497	5,904,122	12,175,491

## DEFINED BENEFIT PLAN OBLIGATIONS AND OTHER RETIREMENT PLANS



### COVERAGE OF THE ORGANIZATION'S DEFINED BENEFIT PLAN OBLIGATIONS

#### Defined contribution plans offered to employees

A defined contribution plan is a retirement plan under which the Company pays fixed contributions to a separate organisation. The Company has no legal or other obligation regarding the payment of additional contributions if the fund is not sufficient to pay benefits for the working period to all employees. Contribution obligations of employees for pensions and other types of payments are charged to the income statement when incurred.

#### Defined benefit plans offered to employees

Net obligations related to defined benefit plans mainly consist of employee severance indemnities (TFR) and end director's mandate indemnities (TFM), and are calculated by estimating the actuarial amount of the future benefit that the employees and the directors concerned have accrued in the current financial year and in previous years. The resulting benefit is discounted and is net of the fair value of any related assets. The calculation is carried out by an independent actuary, using the projected unit credit method. Actuarial gains and losses are recognised in the statement of comprehensive income for the year in which they occur.

Following the introduction of new legislation on supplementary pensions, as provided for by Legislative Decree 252/2005 implemented by the Financial Act 2007, the possibility has been given of providing the supplementary pension with the accruing severance indemnity. Consequently, in the actuarial valuation of the employee severance indemnity fund as of December 31, 2008, the effects of these new provisions have been taken into account, by evaluating for IAS/IFRS purposes only the liability relating to the termination indemnity accrued in the company since the further portions accruing are paid to a separate entity (supplementary pension scheme or INPS funds).

#### Long-Term Incentive Plan

The company adopted a loyalty plan for the 2014-2017 period addressed to the Core Team Member which, subject to certain conditions, provides for the provision of an incentive. According to the provisions of IAS 19 Revised, loyalty plans are classified as "other long-term employee benefits" and the valuation is to be carried out by adopting the "Projected Unit Credit Method" as well as "post-employment benefits".

Contribution rates of supplementary pension fund for FONCHIM category (extract CCNL CHEMICAL INDUSTRY - Part V) – at the expense of the worker and the company as of 1 January 2001, the contribution rate is set at 1.2% of the payable benefit for the calculation of the TFR;

– at the expense of the company:

- as of 1 July 2011, the contribution rate is set at 1.65% of the payable benefit for the calculation of the severance indemnity (TFR);
- as of 1 July 2011, the contribution rate is set at 1.65% of the payable benefit for the calculation of the severance indemnity (TFR);
- as of 1 March 2017, the contribution rate is set at 2.1% of the payable benefit for the calculation of the severance indemnity (TFR);

As of 1 January 2007, the company must make a further payment for each employee who is registered with FONCHIM, exclusively for the fixed category FUND set at 0.20% of the payable benefit for the calculation of the severance indemnity (TFR), which will be provided to the FUND for insurance coverage in the case of predecease or permanent invalidity, sanctioned by the competent institutions, which determines the termination of the employment relationship.

No contribution is payable by the company if the employee decides to enter a pension scheme other than the contractual scheme.

CATEGORY: ECONOMIC  
ASPECT: ECONOMIC PERFORMANCE

## FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT



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	2015	2016	2017
Report the total monetary value of financial assistance received by the organization from governments during the reporting period, including, as a minimum:	0	48,000	471,276

CATEGORY: ECONOMIC  
ASPECT: PROCUREMENT PRACTICES

## PROPORTION OF SPENDING ON LOCAL SUPPLIERS



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	2015	2016	2017
Calculate the percentages based on invoices or commitments made during the reporting period	34%	34%	41%

CATEGORY: SOCIAL - PRODUCT RESPONSIBILITY  
ASPECT: PRODUCT AND SERVICE LABELING

## INCIDENTS OF NON-COMPLIANCE CONCERNING PRODUCT AND SERVICE INFORMATION AND LABELING



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	2016	2017	2018
Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	10	12	10



# GRI INDICATORS

## CATEGORY SOCIETY

CATEGORY: SOCIAL - SOCIETY  
ASPECT: PUBLIC POLICY  
**POLITICAL CONTRIBUTIONS**



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	2016	2017	2018
Total value of political contributions by country and recipient/beneficiary	0	0	0

The Company did not provide contributions to political parties, political individuals and related institutions during the periods considered.

CATEGORY: SOCIAL - SOCIETY  
ASPECT: COMPLIANCE  
**NON-COMPLIANCE  
WITH LAWS AND REGULATIONS  
IN THE SOCIAL AND ECONOMIC AREA**



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Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	2016	2017	2018
Highway Code administrative sanctions	6,365	7,104	4,311
Voluntary tax deduction correction	0	0	0
Chamber of Commerce administrative sanctions	43	0	559
Motor vehicle stamp duty	291	662	311
INPS contributions	0	0	0
Prize competition	8	0	0

Stamp duty	20	1	30
Administrators fee deductions	144	0	0
AVIS commercial leases	0	50	0
Equitalia payment folder on the CCIAA Annual Law	0	31	0
LEROY Penal	0	1,494	0
Telepass stolen	0	56	0
Total	6,872	9,397	5,211

