SUSTAIN-ABILITY REPORT 2021

Valagro®

Where science serves nature

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

For about 40 years Valagro has been helping farmers to get the best out of their crops by **optimising** their use of resources and production inputs with one aim in mind: **creating a sustainable future for people and nature.** This is an objective that cannot be achieved without an inherent coherence that characterises not only the solutions offered to the global market, but also the production processes and corporate culture.

The Sustainability Report is a useful tool that helps us explain our consistent and constant commitment to sustainability year after year. It is an act of responsibility towards the wider community in which we operate and with which we hope to cultivate a culture that is increasingly respectful of the environment and attentive to the needs of the community.

THE VALAGRO GROUP **IN NUMBERS**

85

Countries where we are present with our distribution and sales network.

8

Key manufacturing facilities in Iyaly, Norway, India and Brasil.

13

Subsidiaries around the world.

€ **158 milion** Total revenue

VALAGRO GROUP 781 Employees worldwide

22 Ph.D's

The data illustrated in the rest of this document refer to Valagro SpA's environmental, economic and social achievements.

AN IMPORTANT YEAR FOR VALAGRO

Joining **Syngenta Crop Protection**

For Valagro, 2020 marked a 'new dawn', as in October the **Group joined Syngenta Crop Protection,** a world leader in agricultural innovation.

This synergy, as part of which Valagro remains an independent brand, opens an important chapter for the two companies, combining their commitment and experience to jointly and more effectively respond to the agricultural needs of the future. In this new scenario, Valagro will be able to strengthen its commitment to Biologicals and offer farmers an even wider range of innovative solutions that guarantee quality, productivity and sustainability at the same time.

Valagro and Syngenta Crop Protection do not only share a common mission of achieving a sustainable future for agriculture, but also a **common approach** based on the **centrality of technological innovation.** If we are to pursue a vision of sustainability that is not only environmental, but also social and economic, we need to look beyond the solutions that have already been developed and propose new, better ones that leverage innovation and take into account the challenges of the future.

It is for precisely this reason that the two companies have decided to join forces in pursuit of a **new concept of agriculture,** one that can respond effectively to the ever-increasing demand for food and at the same time ensure the wellbeing of the environment.

Two companies, one team. This is the approach with which Valagro and Syngenta Crop Protection intend to face the future, united by the desire to work together to build a healthier, more habitable and responsible world.

VALAGRO'S 40TH ANNIVERSARY AND THE INAUGURATION OF THE RESEARCH CENTRE

In 1980, Giuseppe Natale (the current CEO) and Ottorino La Rocca (co-founder and former President) created Valagro with a dream of a **sustainable future for people and nature.** Now in 2020, 40 years after Valagro was founded, we are not only aware that this future can be a reality, but we also know we are well on our way to realising it.

In 2020, Valagro celebrated its first 40 years in business: **40 years of commitment, growth and obstacles to overcome, but also of great innovation.** Today, Valagro is a **world leader in the research, production and marketing of biostimulants and nutritional specialities,** with 13 branches all over the world, yet it retains the same root system that has always nurtured it, **centred on people and their wellbeing** - a wellbeing that is inseparable from that of the environment.

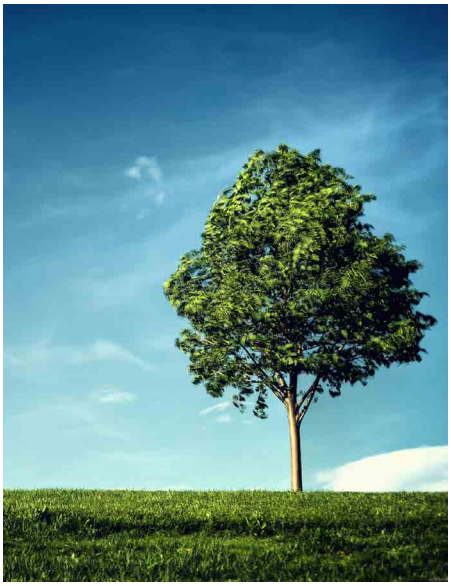
The security measures taken due to the Covid-19 emergency did not prevent us from celebrating the anniversary, which was marked with an online event entitled **"Creating the Future. Since 1980"** alongside national and international employees, customers, authorities and opinion leaders.

On this same occasion, Valagro officially inaugurated its **new Research Centre.** A total of 3,600 square metres of covered surface area, housing 12 laboratories, a growth chamber, conference rooms, lecture halls and warehouses, as well as more than 1,000 square metres on the roof of the building dedicated to greenhouses, equipped with **cutting-edge technology** and divided into four sections (**Agronomy, Physiology, Pathology and Spray Area**). These are the key figures of the futuristic structure located at the Group's Abruzzo Headquarters. Within these spaces, the teams of Valagro's Global Research Department will conduct research and experimentation in the fields of chemistry and formulation, microbiology, plant physiology, "omics sciences" and agronomy, supported by the application of computational and bioinformatics approaches, in order to **develop innovative solutions** in the Biologicals sector, including biostimulants, biofertilisers and products for biocontrol.

This newly established Research Centre provides a powerful impetus to **strengthen GeaPower®**, Valagro's proprietary technology platform from which its innovative crop solutions are derived, and with which Valagro aims to meet the requirements of farmers around the world for abundant, quality harvests obtained in a more sustainable manner. Furthermore, the Research Centre's collaborative and open environment will encourage the creation of a true innovation ecosystem with external partners, reinforcing the open innovation approach that has always characterised Valagro's research.

OUR ACTIVITIES MAINLY CONTRIBUTE TO THESE UN SUSTAINABLE DEVELOPMENT GOALS:

OUR **ENVIRONMENTAL IMPACT**

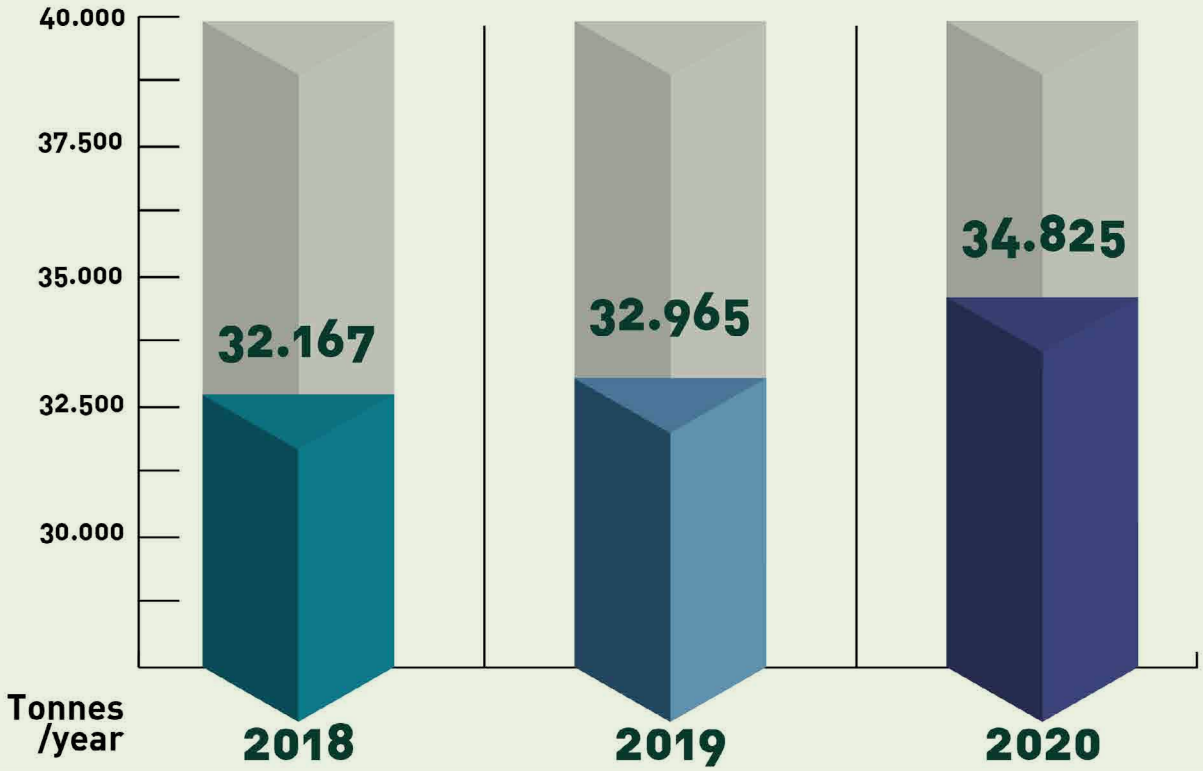


Introduction

As indicated in previous versions of our Sustainability Report, in order to correctly interpret the indicators relating to the environmental impact of Valagro SpA's activities, it is necessary to examine the relationship between these indicators and **the value of production.**

Compared to 2019, production in 2020 has increased by around 6%, while the company continued to improve its **environmental impact indicators.**

A more in-depth analysis can be found in the **EMAS - Eco-Management and Audit Scheme** declaration available on the Certifications page of the Valagro website.



HIGHLIGHTED

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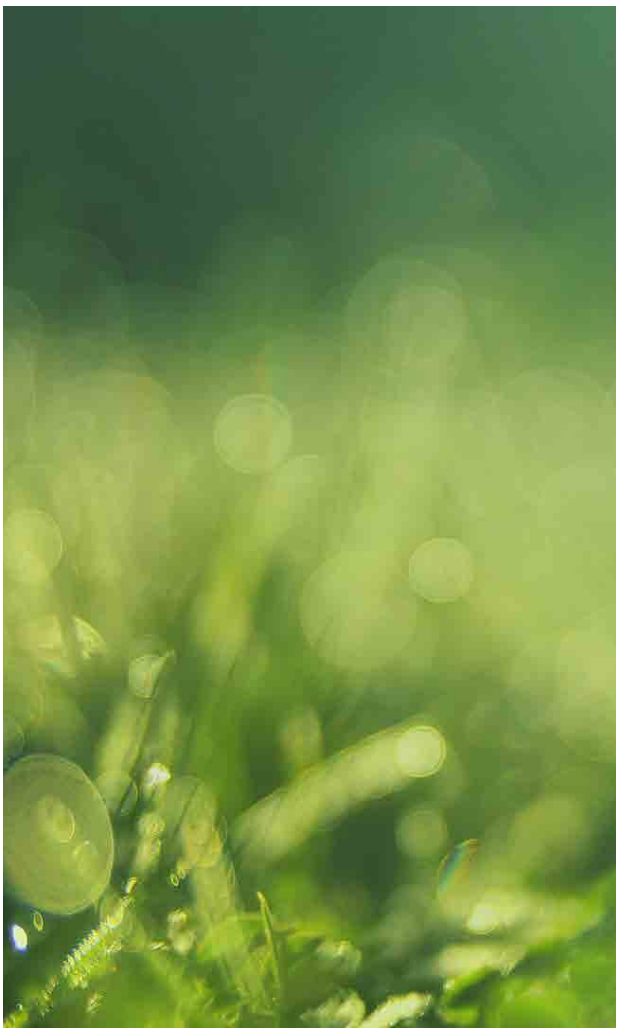
WASTE

Following the rationalisation of purchases to select suppliers who are able to guarantee supplies without packaging (in silos, tanks or with fully reusable returnable packaging), there has been a stabilisation of the total amount of waste generated, a sign that the improvements have succeeded in reducing the amount of waste generated per tonne of fertiliser produced.



TOTAL WASTE COMPARED TO PRODUCTION (tonnes / year)

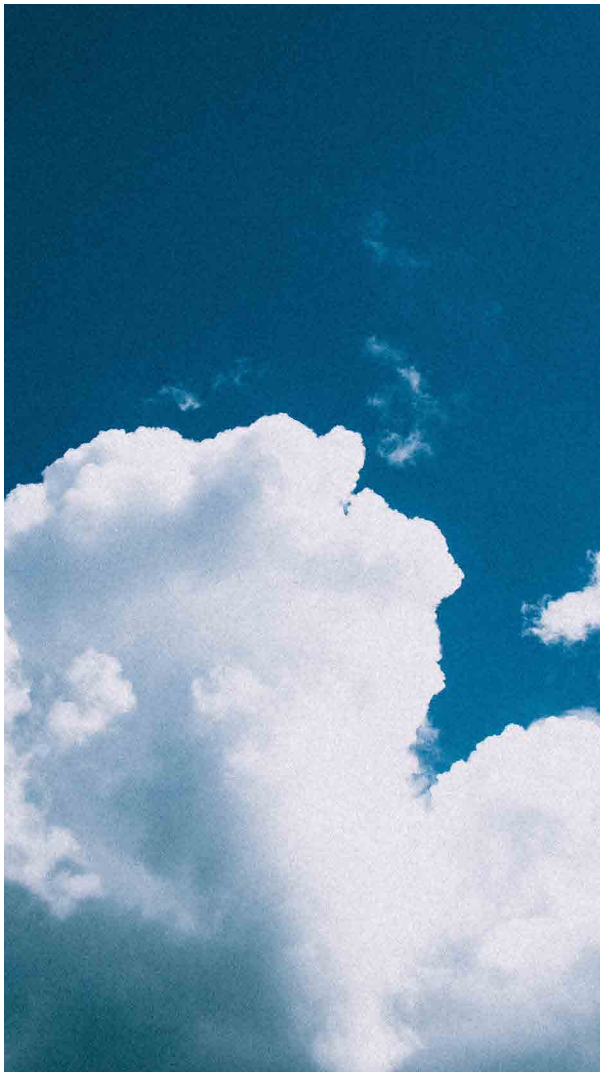
METALS EMISSIONS

With regard to atmospheric emissions, the quantities of metals emitted per tonne of production in 2020 remained stable despite an increase in production. This is thanks to triboelectric detectors that improve the detection of filter bag leaks; furthermore, the use of selected raw materials and the continuous search for higher environmental performance aim to reduce atmospheric emissions as much as possible. Metal emissions remained a significant target in 2020, which the company was able to properly manage.

METAL EMISSIONS
COMPARED TO **PRODUCTION**
(tonnes / year)

VOS–**VOLATILE ORGANIC SUBSTANCES**
(II - III – IV)

As regards the volatile organic compound emissions (phenol, isobutyl alcohol and isobutyl acetate), it is important to note that their level is influenced by the production mix. Increasing levels of VOC IV were found in 2020, but they were still below the authorised limits. This was due to the COVID-19 emergency, which caused a shift towards products using VOC IV in the production mix during the first half of 2020.

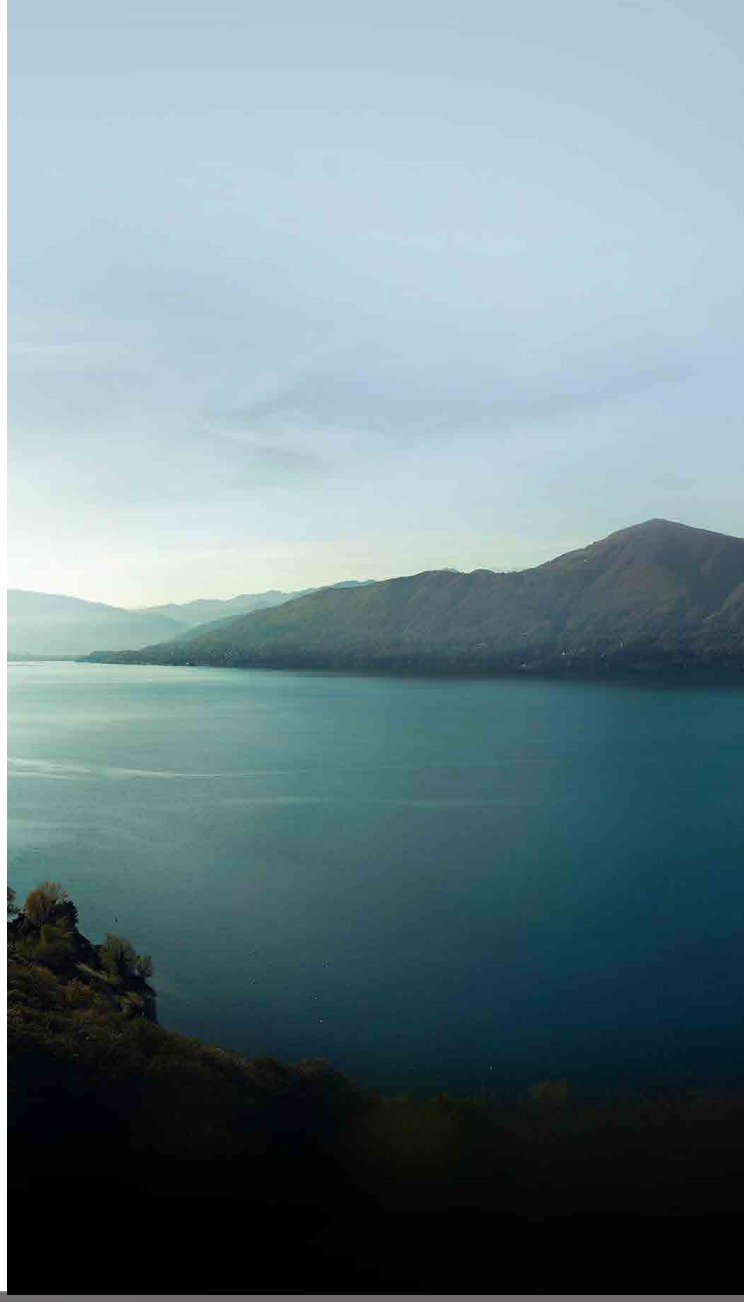


EMISSIONS OF VOLATILE ORGANIC SUBSTANCES
COMPARED TO **PRODUCTION**
(tonnes / year)

2018	2019	2020
SOV II 0.139	SOV II 0.166	SOV II 0.100
SOV III 0.128	SOV III 0.056	SOV III 0.340
SOV IV 0.147	SOV IV 0.071	SOV IV 4.743
32,167	32,965	34,825

THERMAL ENERGY

Thermal energy is one of the most critical factors in a company's production processes. During 2020, we saw a reduction in the thermal energy indicator (toe [ton of oil equivalent]/Ton PF) and this was due to a move towards less energy-intensive products in the production mix. Using the cogeneration plant within the production process has made processes involving heavy use of processing heat more efficient.



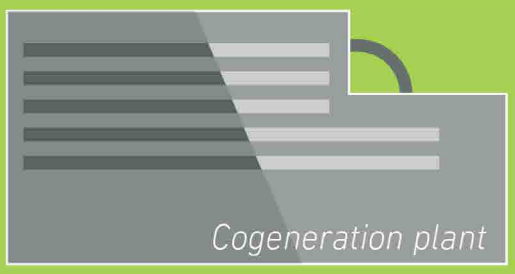
THERMAL ENERGY CONSUMPTION

	2018	2019	2020
Thermal energy / production (Tep / Tonne PF) X 100	5.66	6.18	5.85

ENERGY AND CO_2 EMISSIONS

At present, the cogeneration plant is a cornerstone in the optimisation of Valagro SpA's energy consumption. Its installation has made it possible to increase plant productivity, especially as regards the drying phase, taking advantage of the capacity to process all the semi-finished products coming from the reactors and thus guaranteeing high production standards. In addition to the thermal capacity, the plant provides approximately 400 kW of electrical power. This has made it possible to reduce the share of electrical energy purchased from the grid and to achieve an overall process efficiency (electrical and thermal) of over 85%.

COGENERATION PLANT



2018 TURBINE1 TURBINE2 →
EE (kwh) for cogeneration: 2,195,801
Tonnes of CO_2 Eq saved: -1,018.85

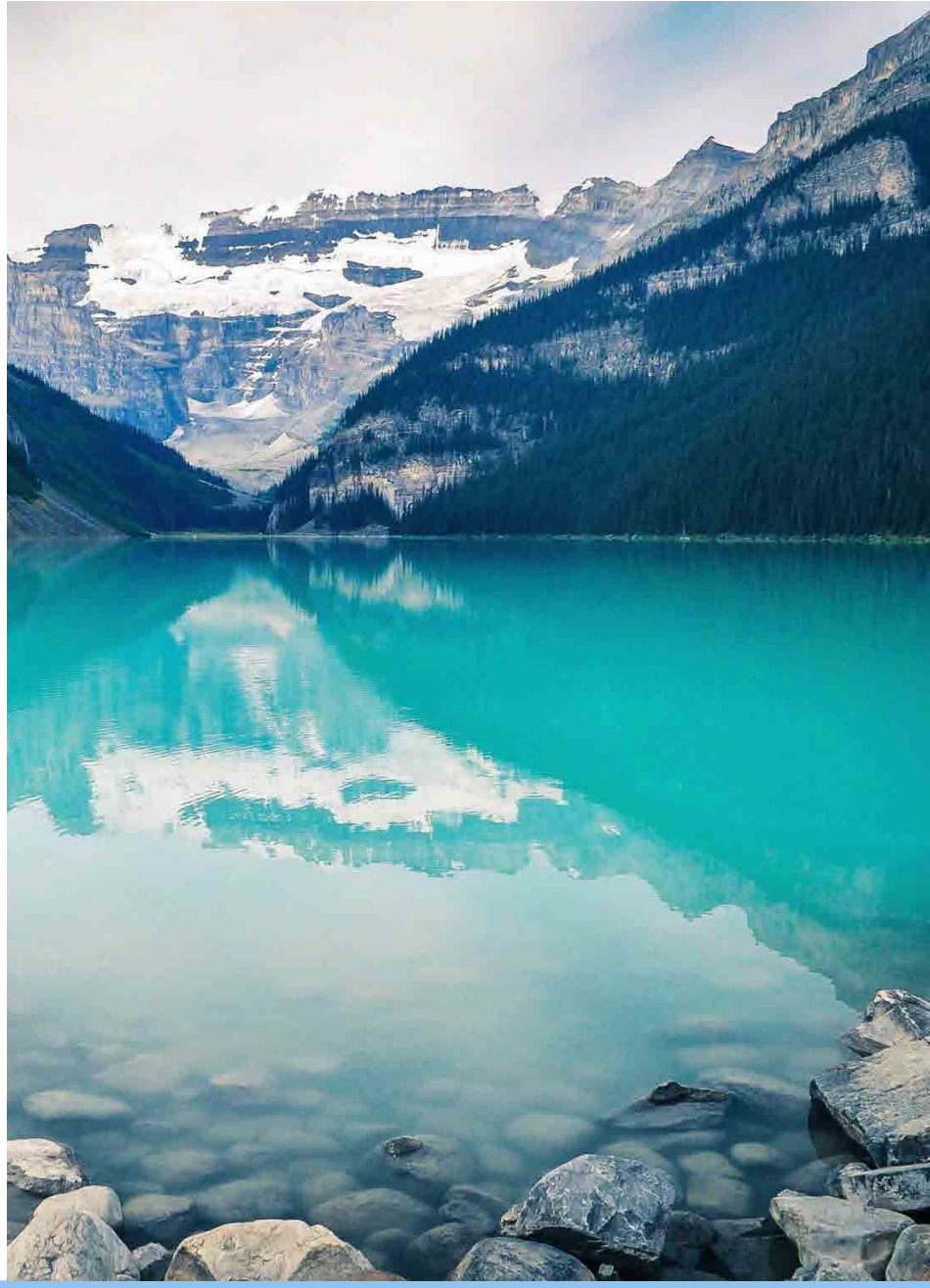
2019 TURBINE1 TURBINE2 →
EE (kwh) from cogeneration 2,347,000
(**+ 7%** compared with previous year)
Ton CO2 Eq saved -668*

2020 TURBINE1 TURBINE2 →
EE (kwh) from cogeneration 2,169,480
(**+ 7,5%** compared with previous year)
Ton CO2 Eq saved -603*

** value calculated on the basis of IISPRA data (Emission factors for the production and consumption of electricity in Italy updated to 2019 and preliminary estimates for 2020)*

WATER WITH-DRAWALS

Valagro believes that water is an indispensable and precious primary resource. For this very reason, efforts are made to minimise the consumption of mains water through a system of collection and use of rainwater for technical purposes. In 2020, there was an increase in water withdrawal that was mainly due to an increase in the production of products in liquid form (especially biostimulants). In addition, the low levels of rainfall in 2020 resulted in a reduction in the availability of rainwater.



TOTAL OF WATER WITHDRAWAL

	2018	2019	2020
M^3/year	14,180	16,420	23,291
	+1% vs 2017	+15% vs 2018	+41% vs 2019

IN FOCUS

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OUR FOOTPRINT IN AGRICULTURE

For Valagro, monitoring CO_2 emissions associated with the production of its solutions is a concrete commitment that allows the company to limit the environmental impact by making agricultural production more sustainable and of a higher quality.
To reach this goal, Valagro is working on the Environmental Product Declaration (EPD) certification of its products, in order to describe and quantify the environmental impact related to their entire life cycle.

The production of healthy food for a healthy world is a challenge that Valagro strongly believes in, and today this commitment takes on renewed value thanks to the Farm to Fork (F2F) strategy, the cornerstone of the European Green Deal. In line with the United Nations Sustainable Development Goals mentioned at the beginning of this report, and thanks to specific actions that affect the entire supply chain, from agriculture to the way food is labelled, the F2F strategy intends to promote the transition towards a fair, healthy and environmentally friendly food system on a global level, through trade policies and international cooperation between Europe and third countries.

LA NOSTRA IMPRONTA IN AGRICOLTURA

Valagro solutions, compared with standard management systems with reference only to fertilisation plans, have lower values of CO_2 emissions. This is to be related both to the lower quantities of product used and to the effectiveness of Valagro products.

The comparison of the emission of the two product types is purely indicative. The two approaches should not be understood as alternative, but as complementary.

	CROP	STANDARD SOLUTIONS	$KgCO_2$ eq Emissions STANDARD SOLUTIONS	VALAGRO SOLUTIONS	$KgCO_2$ Emissions VALAGRO SOLUTIONS
	DURUM WHEAT	*Sowing Diammonium phosphate 150kg* *Ammonium Nitrate 200kg*	**1800** $KgCO_2$ eq	*MICRO NP 25kg* *Plantafol 2,5kg* *Opifol 2,5kg* *Yieldon 2lit*	**111 Kg** $KgCO_2$
	CORN	*Ammonium Nitrate 250* *UREA 200kg*	**2310** $KgCO_2$ eq	*MICRO NP 25kg* *Megafol 3lit* *Opifol 2,5kg* *Yieldon 2lit*	**108 Kg** $KgCO_2$
	SOY	*Diammonium phosphate 150kg* *Potassium nitrate 150kg*	**788** $KgCO_2$ eq	*MICRO NP 25kg* *Megafol 3lit* *Opifol 2,5kg* *Yieldon 2lit*	**108 Kg** $KgCO_2$
	RAPE	*Urea 250kg* *Ammonium sulphate 250kg*	**976** $KgCO_2$ eq	*MICRO NP 25kg* *Megafol 3lit* *Opifol 2,5kg* *Yieldon 2lit*	**105 Kg** $KgCO_2$
	RICE	*Urea 200kg + 250kg*	**1460** $KgCO_2$ eq	*MICRO NP 25kg* *Megafol 3lit* *Opifol 2,5kg* *Yieldon 2lit*	**108 Kg** $KgCO_2$

Values calculated on the basis of internal tests and on the basis of Ecoinvent V3 coefficients.

This estimate does not take into account:
- emissions deriving from decomposition of fertilizers not absorbed by plants/soil;
- emissions deriving from the end-of-life of products.

FOCUS ON **SOLUTION**

LAUNCHING **TALETE** ON THE MARKET

Valagro's innovative biostimulant, Talete, was unveiled in November 2019 at the 4th World Biostimulant Congress and was launched on the market in Italy, Spain, Mexico and Colombia in early 2020 through a series of meetings open to distributors, technicians and agricultural producers in different locations in the four countries.

Talete is the innovative solution that was developed by the GeaPower technology platform to increase Crop Water Productivity, i.e. to guarantee an increase in production or economic yield for each unit of water used in agricultural production. Talete is intended to promote sustainable production both in conditions where there is sufficient water availability and where there is permanent or temporary shortage.

OUR SITES IN ITALY AND ABROAD

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ATESSA
HEAD QUARTER

A number of improvements were carried out at the Atessa Headquarters during 2020, aimed at optimising time and resources, as well as a general focus on sustainability, including:

- adopting a new strategy for drawing up the company car list with a view to reducing emissions, i.e. selecting models below a maximum CO_2 emissions threshold and including at least one hybrid, plug-in or electric car model in all bands;
- reinforcing the digitalisation process by implementing new Gamma modules (for attaching documents and avoiding paper), electronic signatures and the MES, a system for managing and controlling production processes to achieve a general digitisation of documents and a greater possibility of process automation;
- strengthening the network and tools to facilitate smart working.

ATESSA
PLANT

- Installation of a new scrubber (wet dust collector) in the Chelate plant to achieve better dust filtration and reduce dust concentration in the atmosphere, as well as improving plant reliability.
- Installation of a new washing line in the Water-Soluble Fertilisers plant to reduce liquid consumption and, therefore, the amount of liquid waste to be dealt with at the end of the process.
- Modernisation of the water-soluble production line by installing electromechanical devices to improve line safety. This was combined with a safety training and awareness programme for line operators.
- New Road Project, with the aim of reducing the risk index related to material handling and vehicle traffic inside the plant. The risk index was reduced by 65%.
- Other investments in plant safety, such as the opening of a new access route to the leaf plant loading area, replacing the existing staircase, so as to improve accessibility for operators.

GRABI

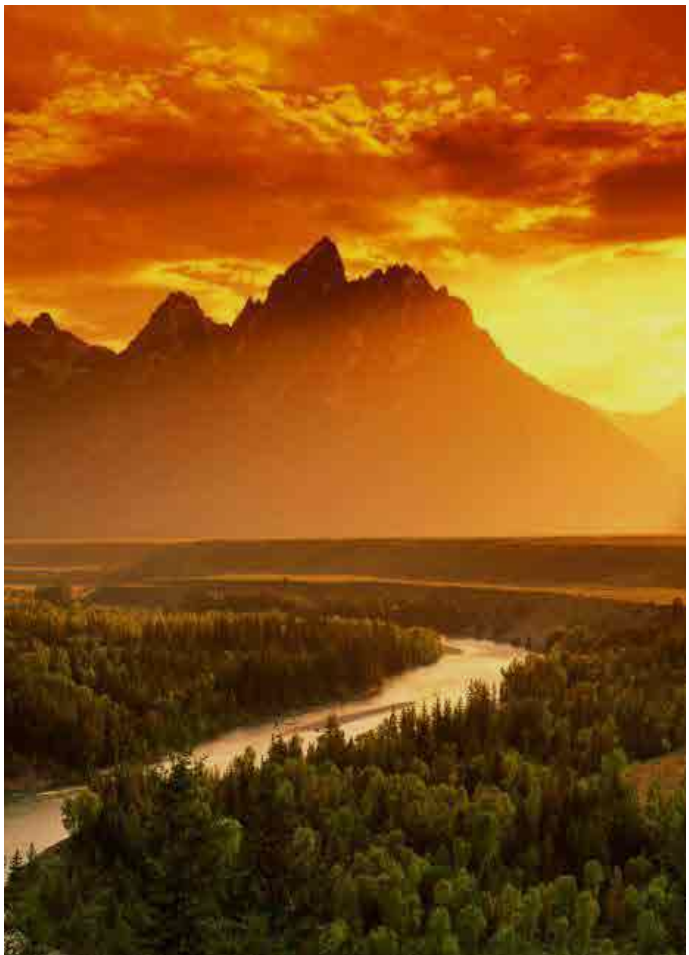
Amongst the main developments carried out at the Grabi site during 2020 were:

- the purchase of a mixing device for hazardous powders intended for the manufacture of products for the Biogas line. This prevents operators from coming into contact with the dust, and the emission of dust into the environment is prevented by the presence of special filters;
- the purchase of a wheeled vacuum cleaner with a heavy-duty filter for precise suction to be used for manual packaging work;
- the installation of 2 new emergency exits within the facility;
- the training of a security manager.

INDIA

Some of the major projects completed in 2020 at the Pashamylaram plant include:

- a new water scrubber to reduce the release of dust and volatile organic compounds into the atmosphere during the production of liquid biostimulants;
- a new fire-fighting system, equipped with water booster pumps, deluge system inside the production areas and inside the offices, smoke detectors and alarms.



NORWAY

Main developments during 2020 at the Kristiansund site:

- the installation of a new high energy efficiency LPG boiler;
- the construction of a new chamber for the air compressor, acoustically insulated to reduce the noise level in the production plant.

Main developments carried out during 2020 at the Brønnøysund site:

- a general improvement in lighting efficiency using LED technology, with a consequent reduction in energy consumption;
- the insulation of the dryer to reduce energy consumption by 15%, equivalent to a saving of approximately 94 tonnes of CO2 per year.

BRAZIL

The following operations were completed at the Pirassununga plant during 2020:

- installation of a new optimised hot water line to reduce water consumption when washing the water-soluble fertiliser unit;
- installation of the new production line for Boroplus, to improve product quality, ease of setting up the packaging process and reduce the amount of water in the washing line;
- installation of a winch to safely position and remove the forming tube;
- implementation of safety improvements for operators when assembling pallets of water-soluble products.

OUR **ADDED VALUE**

Economic value distributed **88,054,820 millions**

Added Value summarises the company's ability to produce wealth and then distribute it to the various stakeholders.

Its basic components are the **Economic Value Generated** by the ordinary management of the company and then the breakdown in terms of Economic Value Distributed and Retained.

The portion of **Economic Value Distributed** is divided among the main stakeholders: Suppliers, Employees, Partners - Shareholders, Central Administration, Community and the environment.

Conversely, the Economic Value Retained relates to value adjustments, anticipated and deferred taxes, provisions to reserves and profit for the year.

Valagro SpA's economic value in Millions of euros

	2018	2019	2020
Generated	96,703,770	95,855,515	**103,219,019**
Distributed	84,528,279	88,938,566.96	**88,054,820**
Retained	12,175,491	6,916,947.71	**15,164,199**

Revenues by geographical area

REVENUES BY AREA	2020	Vs 2019
EMEA	47,555	18%
AMERICAS	20,657	-3%
ASIA PACIFIC	21,427	9%

OUR **AWARDS**

IFA Industry Stewardship Champion Award

Valagro's commitment to Safety, Health and Environmental Protection was recognised in 2020 when it was awarded the Gold Medal in the context of the IFA's Industry Stewardship Champion Award.

The IFA (International Fertiliser Association) awards the title of Industry Stewardship Champion to companies that have adhered to the latest Safety Performance, Environmental Performance and Energy Efficiency parameters and CO^2 Emission standards, and are IFA Protect & Sustain certified or hold internationally recognised certifications, such as ISO, OHSAS and Responsible Care.

The award given to Valagro recognises the company's dedication to making environmental performance and the safety of its employees a central focus of its day-to-day work, bearing witness to a process that places the maintenance of a healthy and safe working and non-working environment at the top of its list of priorities..

THE COMMITMENT TO **OUR PEOPLE**

Our Corporate Culture and the Culture Roadshow

Following the event at which the new Mission, Vision, Values and Corporate Culture were presented in 2019, February 2020 saw the start of the **Valagro Culture Roadshow,** a new international project dedicated to sharing Valagro Culture with our teams around the world. Through a series of encounters, each in a different Group country - from America to Asia via Europe, first in person and then virtually - we travelled on an exciting journey to honestly share our values, what we believe in and those behaviours that identify us as Valagro People, that is, as people who build relationships based on trust, who bring to life the power of collaboration and proactivity in order to succeed in what they do and progress together in "**creating a sustainable future for people and nature".**

At the same time as these events were taking place across the globe, different translations of the Culture Handbook were released, helping people to discover our Group's Culture. Authentic stories from people in Valagro about small and big challenges and successes, plus "exercises" to practice positive actions and behaviours - all with the aim of moving forward together as one team with a great purpose.
Thanks to the Culture Roadshow and Culture Handbook, and through the words of our CEO, Country Managers and colleagues who share their stories as Culture Ambassadors, we have taken the opportunity to cultivate the same commitment and passion for innovation that allows us to "challenge what has already been done".zione che ci permettono di "sfidare quello che è stato già fatto".

"Culture gives us the courage to imagine and to dream" (Giuseppe Natale, CEO)

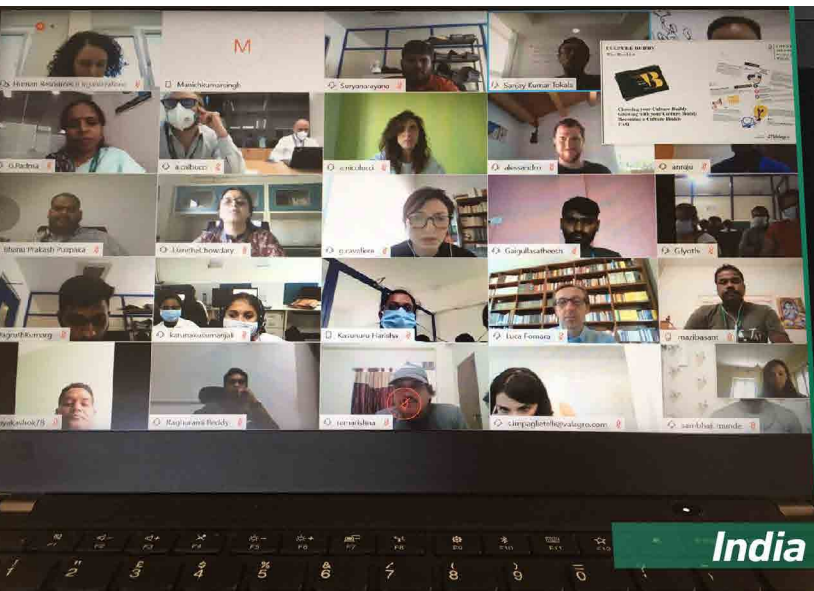
Valagro Corporate University becomes more and more digital

Its launch, the Valagro Corporate University has promoted digital learning, providing both free learning platforms and mixed digital/in-person formulas, and has represented Valagro's desire to become a 'learning organisation' capable of evolving and promoting its own growth.
The 2020 pandemic has accelerated the process of knowledge distribution worldwide, with a sharp increase in global connection. In Valagro, a large part of the training has been carried out digitally, multiplying participation, providing strong moral support and a message of resilience, while at the same time ensuring extensive development of soft skills across the Group.

VALAGRO CORPORATE UNIVERSITY

Consolidation of Project Management practices

During 2020, Valagro decided to make the working methods within the Group more efficient by disseminating a solid shared Project Management approach. Thanks to the work of the Task Force set up for this purpose, the Valagro Project Management (PM) Standard was then drawn up, based on a manual and a series of templates available to current and future project managers and members of the working groups. In addition, colleagues with different experiences in project management at the Valagro Corporate University have become facilitators in the distribution of the Valagro standard, with the aim of encouraging people to adopt a data-driven mentality and to share language and working tools, in keeping with the continuous improvement mentality cultivated at Valagro.


India

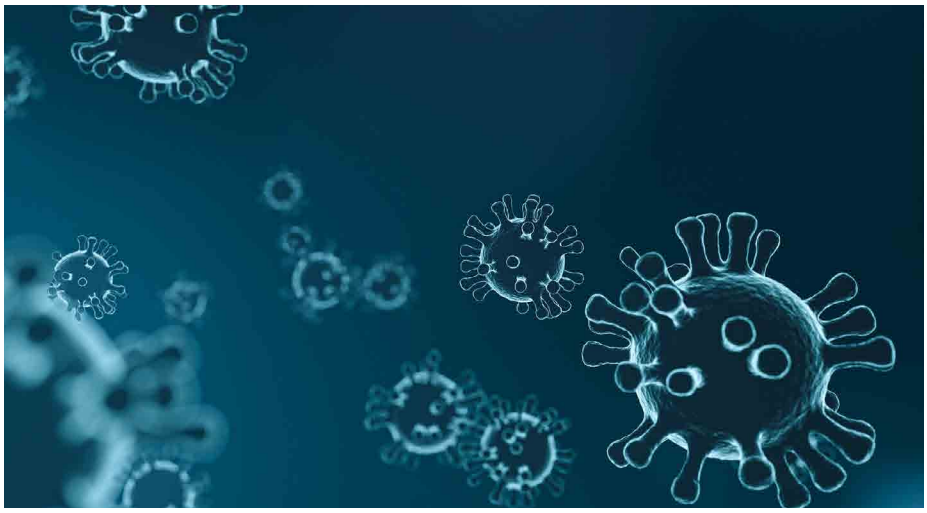
Cina

Assistance for employees during the global Covid-19 pandemic

The health and wellbeing of its people have always been paramount to Valagro SpA.

During this particularly delicate and difficult period caused by the spread of the Covid-19 pandemic, the Company has once again demonstrated its close relationship with employees and their families, with concrete and tangible support.
In fact, in addition to the safety measures adopted in all working environments, Valagro has activated an **insurance policy** to protect all Valagro S.p.A. employees and their families should they become infected by Coronavirus.

Moreover, in the knowledge that the highest incidence of contagion of the virus occurs within the family environment and with the intention of making everyone aware of the need to adopt behaviours that can help to make prevention from contagion more effective, the Company has provided 5 **masks per month** (FFP2 model) to each worker from November 2020 to 31 July 2021, to be used by their families.

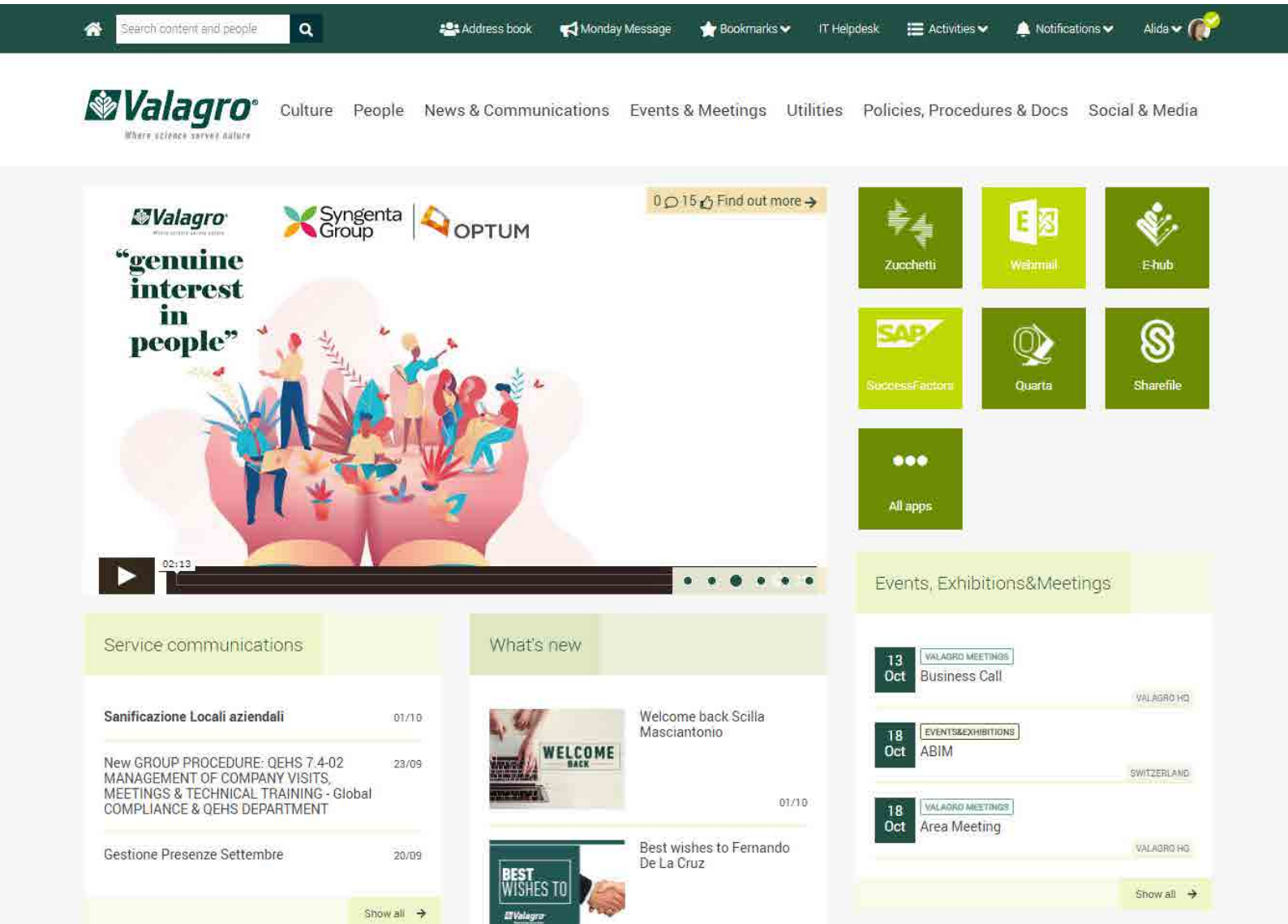


Launch of the new MyValagro corporate Intranet

The year 2019 saw the presentation of the new Mission, Vision, Values and Corporate Cultures, while in 2020 the rollout of Valagro's culture continued through the Culture Roadshows. We haven't stopped there, however, for **working at Valagro means living Valagro every day,** breathing in its values and its way of being from all parts of the world.

This is why, in 2020, the **new MyValagro Intranet** was inaugurated, not only as an operational tool with great practical utility, but also as a **real entry point for digital navigation of the Valagro world and culture.** Containing content in both Italian and English, the intranet is designed to be a point of reference for all employees in their daily activities and incorporates a number of existing applications with a view to optimal, customisable management of employees' needs.

The various modules deployed on the Intranet, such as the repository of company procedures and documents, canteen bookings, the IT helpdesk and the graphic Monday Message, have responded to a need for simplified management of digital processes, while at the same time strengthening employee involvement in Valagro's corporate life and culture in every corner of the world.



THE COMMITMENT TO **OUR PEOPLE**

in summary

COMMITMENT TO OUR **CUSTOMERS**

Valagro Academy

Valagro Academy is a programme designed to share our expertise in crop nutrition and biostimulants with Valagro customers and to illustrate how Valagro solutions can improve crop performance to enhance agricultural efficiency and sustainability. Since its formation in 2016, training activities have mainly taken place in-person, but since February 2020 (and for much of the year), training has taken place predominantly online due to the global emergency health situation. Between training sessions dedicated to the Valagro Sales Network Team on the world of plant nutrition and biostimulants and specific events focused on the local needs of customers, the commitment of Valagro's Marketing Team and Market Development Managers has continued to ensure the Academy's high-quality training and support activities remained at maximum, even at a distance.

COMMITMENT TO OUR **CUSTOMERS**

International webinar on row crops

Valagro organised the **first international webinar dedicated to row crops** in 2020, with the aim of deepening, alongside researchers, technicians and farmers, the role of biostimulants and Valagro solutions in the management of these crops.

The webinar was attended by more than 250 people from all over the world and featured a discussion that was enriched by guests of great relevance in the world of international agronomic research, such as Prof. Paulo Sentelhas from the University of São Paulo, Prof. Fred Below, lecturer at the University of Illinois, and Connor Sible, researcher at the same institute.

Benefiting from Valagro's know-how in identifying optimal solutions tailored to the customer, the webinar explored how biostimulants can help optimise industrial crop management through mechanisms such as reducing environmental stress, improving soil health and enhancing plant nutrition, thus helping farmers to achieve higher yields with a higher return on investment.

COMMITMENT TO THE **COMMUNITY**

Supporting the regions during the Covid-19 emergency

During the emergency health situation faced by the whole world last year, every contribution made a difference and Valagro did not stand idly by, giving practical support to the local area and community wherever possible.

In March 2020, Valagro made a Đ100,000 donation to the Local Health Authority (ASL) Lanciano-Vasto-Chieti to help create 60 new beds in the Medical Department and purchase 3 lung ventilators. It also made a donation of €25,000 to the Coronavirus solidarity fundraising campaign promoted by Confindustria (the General Confederation of Italian Industry) in Chieti Pescara.

Supply of Covid-19 protective equipment to workers

Valagro Iberia, a subsidiary of the Valagro Group, together with some members of AEFA, the Spanish Association of Agronutrient Producers, joined a solidarity campaign in which a total of €90,000 was raised for the purchase of protective equipment for seasonal workers engaged in harvesting. The material purchased was produced by the Fundación Laboral Santa Bárbara, whose staff is composed of workers with mental, physical or sensory disabilities.

OUR **RESEARCH**

Research activities progressed smoothly in the year 2020, undertaken by the Global Research Team and in full compliance with safety regulations. This has made it possible to continue **producing scientific articles and filing patents,** as well as scientific communication in virtual mode.

In terms of research, Valagro continued its commitment to the **two projects "RECOVER"** (for the recovery and valorisation of absorbent hygiene products with the aim of producing nutritional solutions for agriculture) **and "INNOPAQ** - Sustainable innovation for quality agri-food productions" (aimed at the study and development of biostimulants in order to improve the characteristics of certain typical crops in the area), both of which had already taken off in 2019. Similarly, collaboration continues with the University of Bari as part of an **industrial doctorate project** for the development of the aquatic plant Posidonia on the Mediterranean seabed.

The panorama of research projects in which Valagro participates was further enriched by the **start of the Bicy project**: "Biostimulant increase crop yield", which had its initial co-ordination phases in August 2020, and by the launch of the f**irst interactions between the Valagro and Syngenta research groups** in relation to two strategic fields of application: biostimulation ("crop enhancement") and biocontrol. Through thematic "deep dives" (plant science, microbiology, plant pathology, innovative technologies and models, etc.), the project opportunities and synergy of the Valagro-Syngenta binomial were analysed, identified and prioritised. All with the aim of meeting the needs of present and future Agri-Businesses in the light of ongoing climate change.

MAIN TECHNICAL AND SCIENTIFIC INNOVATIONS

The focus on raw material research and optimisation was central during 2020, with the Global Research Team engaged in specific activities on both fronts.

On the one hand, specific projects have been defined to **scout and screen raw materials** from which to develop new products that meet the needs of sustainable agriculture. While on the other hand, work has been done on the valorisation of raw materials used in the Atessa production plant, in order to improve its environmental impact from a **circular economy perspective.** Finally, the algae extraction process has been modified to make it more sustainable and less energy-intensive.

In the Quality unit, operations management has been improved thanks to the inauguration of a **new laboratory dedicated to Quality Control**, which, being located close to the production facilities, allows the Global Research Team to ensure short response times and generally improve their support service.

OUR **RESEARCH** in summary

3
Oral presentations

Scientific publication on
1
international peer-reviewed journals

1
Informative article

1
Filed
Patent

THE **G4 GRI** GUIDELINES

Starting with the 2016 edition of the Sustainability Report, we have embarked on a path of progressive adaptation to the **international standards** dictated by the **Global Reporting Initiative** - GRI. This innovation is an integral part of our commitment to sharing and transparency, because it provides us with an objectively valid basis for our relations with the whole community, as is the purpose of this report: the G4 GRI guidelines help us communicate the impact of our business activities from a social, environmental and economic perspective.

We chose this standard because we wanted an internationally recognised tool with the specific characteristics of comparability, accuracy, clarity, timeliness and reliability.

In order to highlight this path, this publication will expressly outline the indicators reported by the various corporate functions according to the availability of the information required by the standard.

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GRI INDICATORS
CATEGORY ENVIRONMENTAL

CATEGORY: ENVIRONMENTAL
ASPECT: MATERIALS

MATERIALS USED BY WEIGHT OR VOLUME

G4 EN1

Valagro SUSTAINABILITY REPORT 2021

	2018	2019	2020
External Source (Kg)	40.334.706	38.738.554	39.237.675
Internal Source (Kg)	1.609.620	2.021.625	1.890.014
Non-renewable materials used (Kg)	39.044.706	35.120.579	38.751.155

CATEGORY: ENVIRONMENTAL
ASPECT: MATERIALS

RECYCLED INPUT MATERIALS USED

G4 EN2

Valagro SUSTAINABILITY REPORT 2021

Identify the total weight or volume of materials used as reported under G4-EN1	2018	2019	2020
Total weight (tonnes)	2,899	3,617	2,376

CATEGORY: ENVIRONMENTAL
ASPECT: ENERGY

ENERGY CONSUMPTION WITHIN THE ORGANIZATION

G4 EN3

	2018	2019	2020
Identify the types of energy (fuel, electricity, heating, cooling, and steam) consumed within the organization (TJ)	2.331	2.950	2.827
Report fuel consumption for renewable fuel source (TJ)	0.00	0.00	0.00

CATEGORY: ENVIRONMENTAL
ASPECT: ENERGY

ENERGY INTENSITY

G4 EN5

	2018	2019	2020
Report the energy intensity ratio (MWh/Ton)	0.81	0.94	0.83
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

G4 EN8

Valagro® Where science serves nature SUSTAINABILITY REPORT 2021

Identify the total volume of water withdrawn from any water source	2018	2019	2020
Report the total volume of water withdrawn	28.597	35.944	40.563

CATEGORY: ENVIRONMENTAL
ASPECT: WATER

WATER SOURCES SIGNIFICANTLY AFFECTED BY WITHDRAWAL OF WATER

G4 EN9

Valagro® Where science serves nature SUSTAINABILITY REPORT 2021

Identify water sources significantly affected by water withdrawal by the organization	2018	2019	2020
Report the total number of water sources significantly affected by withdrawal	2	2	2

CATEGORY: ENVIRONMENTAL
ASPECT: WATER

WATER RECYCLED AND REUSED

G4 EN10

Valagro SUSTAINABILITY REPORT 2021

	2018	2019	2020
Report the total volume of water recycled and reused as a percentage of the total water withdrawal reported under Indicator G4-EN8.	5,245	4,870	4,650

CATEGORY: ENVIRONMENTAL
ASPECT: EMISSIONS

DIRECT (SCOPE 1) GHG EMISSIONS

G4 EN15

Valagro SUSTAINABILITY REPORT 2021

Identify direct emissions of GHGs from sources owned or controlled by the organization	2018	2019	2020
Report gross direct (Scope 1) GHG emissions in metric tons of CO_2 equivalent	4891,12	5484,46	4965,14
Report gases included in the calculation	All	All	All
Report biogenic CO_2 emissions	0	0	0

CATEGORY: ENVIRONMENTAL
ASPECT: EMISSIONS

ENERGY INDIRECT (SCOPE 2) GHG EMISSIONS

G4 EN16

	2018	2019	2020
Report gross energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent	984,64	774,88	931,75
Report gases included in the calculation	All	All	All

CATEGORY: ENVIRONMENTAL
ASPECT: EMISSIONS

OTHER INDIRECT (SCOPE 3) GHG EMISSIONS

G4 EN17

	2018	2019	2020
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	878,19	878,06	173,84

GREENHOUSE GAS (GHG) EMISSIONS INTENSITY

G4 EN18

	2018	2019	2020
Indirect emissions (tonnes)	984	774,88	931,75
Other indirect (tonnes)	301	301	125,84
Flights (tonnes)	577	577	48
Total scope 1,2 and 3 (tonnes)	6753	7137	7060
Turnover M€	83,64	81,83	87.67
Tonnes CO2 /M€	81,36	87,21	69,78
Production	32.167	32.965	34.825
Tonnes CO2/Kg Product	0.20	0.22	0.17
Employees	279	282	290
Tonnes CO2/ Employees	24,20	25,30	20,00

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

G4 EN21

	2018	2019	2020
NOX	NA	NA	NA
SOX	NA	NA	NA
POP	NA	NA	NA
VOC (UNI EN 13649:2002 UNI EN 13649:2002)	415	297	5185
PM (UNI EN 13284-1:2003)	483.1	93.74	149.5
Metals	1.43	1.59	1.51

WATER DISCHARGE BY QUALITY AND DESTINATION

G4 EN22

Rainwater	2018	2019	2020
Destination	0	0	0
Quality of the water including treatment method (kg/year)	COD: 0 Nitrogen: 0 Phosphorus: 0 Metals: 0	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	2018	2019	2020
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

G4 EN23

Identify the weight of waste created by the organization's operations	2018	2019	2020
Hazardous	90.143	215.843	82.750
Non-hazardous	539.057	433.309	567.371
Report the total weight of hazardous and non-hazardous waste, by the following disposal methods:			
Recycling	543.063	264.746	412.315
Composting	1.400	15.000	15.000
Landfill	84.737	191.751	81.746

CATEGORY: ENVIRONMENTAL
ASPECT: EFFLUENTS AND WASTE

TRANSPORT OF HAZARDOUS WASTE

G4 EN25

Total weight of hazardous waste transported by destination	2018	2019	2020
Total weight (kg)	90.143	215.843	82.750

CATEGORY: ENVIRONMENTAL
ASPECT: COMPLIANCE

NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

G4 EN29

Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	2018	2019	2020
Report significant fines and non-monetary sanctions	0	0	0

CATEGORY: ENVIRONMENTAL
ASPECT: OVERALL

TOTAL ENVIRONMENTAL PROTECTION EXPENDITURES AND INVESTMENTS BY TYPE

G4 EN31

Valagro Where science serves nature SUSTAINABILITY REPORT 2021

	2018	2019	2020
Report total environmental protection (€)	610.000	400.000	300.000

GRI INDICATORS
CATEGORY SOCIAL - LABOR PRACTICES AND DECENT WORK

CATEGORY: LABOR PRACTICES AND DECENT WORK
ASPECT: EMPLOYMENT

NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER

G4 LA1

TOTAL NEW RECRUITS BY AGE GROUP W/M	2018	2019	2020
Under 30 years old	5/14	6/11	5/6
30-50 years old	14/23	17/21	17/15
Over 50 years old	1/19	0/12	1/13

STAFF TURNOVER BY AGE GROUP W/M	2018	2019	2020
Under 30 years old	5/15	4/11	5/5
30-50 years old	12/28	13/13	11/21
Over 50 years old	0/15	0/13	3/21

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

WORKERS REPRESENTATION IN FORMAL JOINT MANAGEMENT–WORKER HEALTH AND SAFETY COMMITTEES

G4 LA5

Valagro Where science serves nature SUSTAINABILITY REPORT 2021

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	2018	2019	2020
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

G4 LA6

Valagro Where science serves nature SUSTAINABILITY REPORT 2021

Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities	2018	2019	2020
Injury	1.32	0	1
Occupational diseases	0	0	0
Severity Index	0.21	0	0.035

CATEGORY: FAIR WORK PRACTICES AND CONDITIONS
ASPECT: TRAINING

AVERAGE HOURS OF TRAINING PER YEAR FOR EMPLOYEE

G4 LA9

TOTAL EMPLOYEE BY GROUP W/M AND CATEGORY	2018	2019	2020
Total	**269**	**278**	**271**
Gender (W/M)	82/187	86/192	89/182
Directors	13	15	15
Executives	29	33	37
Desk Employees	121	127	129
Technicians	106	103	90

TRAINING TOTAL HOURS	2018	2019	2020
Total	**11683**	**7682***	**6725***
Directors	713	656	586
Executives	1327	730	992
Desk Employees	7808	3129	4043
Technicians	1835	3167	1104

AVARAGE TRAINING HOURS PER EMPLOYEE	2018	2019	2020
Total	**43,43**	**27,63**	**24,81**
Gender (W/M)	31% / 69%	28% / 72%	24% / 76%
Directors	16,38	11,71	11,47
Executives	16,38	10,52	6,77
Desk Employees	1,49	2,45	1,66
Technicians	6,37	2,42	6,09

* VCU launch impacted learning hours with the introduction of digital learning.

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

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES

G4 LA12

TOTAL GROUP EMPLOYEES (AS OF DECEMBER 31, 2020)	by gender W/M	by age Under 30 years old	by age 30-50 years old	by age Over 50 years old
Governance bodies	1/1	0	1	1
Directors	2/13	0	5	10
Executives	14/23	0	24	13
Desk Employees	58/71	6	97	26

GRI INDICATORS
CATEGORY ECONOMIC

CATEGORY: ECONOMIC
ASPECT: ECONOMIC PERFORMANCE

DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

G4 EC1

Valagro SUSTAINABILITY REPORT 2021

DIRECT ECONOMIC VALUE GENERATED (€)	2018	2019	2020
Cash received as interest on financial loans, as dividends from shareholdings, as royalties, and as direct income generated from assets	96.703.770	95.855.515	103.219.019

REVENUE DETAIL FOR REGIONS (€)	2018	2019	2020
Center and South America	12.134	13.772	13.001
Europe	43.699	40.449	47.555
Far East	5.894	4.961	6.085
Middle East and Africa	9.509	11.598	11.637
North America	10.354	7.453	7.656
Oceania	2.546	3.168	3.705
Total revenues	**84.136**	**81.401**	**89.639**
Dividends from subsidiaries	2.386	6.786	4.281
Interest income from subsidiaries	7.423	570	213
Total Economic value directly generated	**93.945**	**88.757**	**94.133**

CATEGORY: ECONOMIC
ASPECT: ECONOMIC PERFORMANCE

DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

G4 EC1

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DEFINED BENEFIT PLAN OBLIGATIONS AND OTHER RETIREMENT PLANS

G4 EC3

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 2014, the contribution rate is set at 1.85% 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

G4 EC4

Valagro® Where science serves nature SUSTAINABILITY REPORT 2021

	2018	2019	2020
Report the total monetary value of financial assistance received by the organization from governments during the reporting period, including, as a minimum:	176.853	233.177	287.777

CATEGORY: ECONOMIC
ASPECT: PROCUREMENT PRACTICES

PROPORTION OF SPENDING ON LOCAL SUPPLIERS

G4 EC9

Valagro® Where science serves nature SUSTAINABILITY REPORT 2021

	2018	2019	2020
Calculate the percentages based on invoices or commitments made during the reporting period	39%	45%	57%

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

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

G4 PR4

Valagro® Where science serves nature SUSTAINABILITY REPORT 2021

	2018	2019	2020
Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	10	6	2

GRI INDICATORS
CATEGORY SOCIETY

CATEGORY: SOCIAL - SOCIETY
ASPECT: PUBLIC POLICY

POLITICAL CONTRIBUTIONS

G4 S06

Valagro SUSTAINABILITY REPORT 2021

	2018	2019	2020
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

G4 S08

Valagro SUSTAINABILITY REPORT 2021

Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	2018	2019	2020
Highway Code administrative sanctions	4,311	2,132	1,527
Voluntary tax deduction correction	0	24	0
Chamber of Commerce administrative sanctions	559	0	0
Motor vehicle stamp duty	311	0	0
INPS + ENASARCO contributions	0	6	0
Stamp duty	30	0	1

Active repentance	0	829	0
Sanctions for ADMINISTRATIVE VIOLATION on FERTILIZER ANALYTICAL RESULT	0	0	253
Registration tax	0	0	5
Total	5,231	2,985	1,785


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