



# Sustainability Report 2021

## Table of contents

Letter from the President .....	3
1. The Biolchim Group.....	6
1.1 History of the Biolchim Group.....	6
1.2 Vision, Mission and Values .....	7
1.3 Strategy of the Biolchim Group .....	8
1.4 Organizational chart of the Biolchim Group as of December 31 <sup>st</sup> , 2021.....	9
1.5 Market presence.....	10
1.6 The economic impacts .....	12
2. Our sustainability Approach .....	18
2.1 Materiality Analysis.....	18
2.2 Our stakeholders .....	18
2.3 Materiality matrix .....	19
3. Our products and customer responsibility.....	21
3.1 The product range .....	22
3.2 Research and Innovation .....	28
3.3 Quality and Safety of products .....	31
3.4 How to properly manage chemicals .....	34
3.5 our Supply chain .....	37
3.6 Our relationship with farmers and customer satisfaction.....	38
4. Environmental Responsibility .....	42
4.1 Our commitment to the environment.....	42
4.2 Energy consumption and emissions .....	43
4.3 Water consumption and discharges.....	45
4.4 Waste management.....	46
4.5 Circular economy practices and carbon neutrality .....	48
5. Our people.....	51
5.1 People of the Group.....	51

5.2 Employee engagement and well-being .....	55
5.3 Our commitment for employees' health and safety .....	56
6. Building the future .....	59
6.1 Win Project and the Co-creation .....	59
6.2 Networking initiatives and other activities – collaborations .....	61
7. Appendix.....	66
7.1 Material topics boundary .....	66
7.2 Performance Indicators.....	67
Methodological note.....	74
GRI Content Index .....	75

## Letter from the President

*Sustainability is our core business and therefore must permeate our strategic choices, as well as our organizational choices.*

*The whole Group culture must be informed of the principles and objectives necessary to strengthen the development of rational agriculture where, both those who pursue the objective of organic production and those who continue with conventional practices, find efficient, effective and sustainable solutions in the innovation of agronomic techniques and product technologies that we continuously propose.*

*But companies, even before strategies, technologies and organization, are made up of people and we know perfectly well that there can be no sustainability policy that does not give people working in the Group a central role.*

*Our Group has grown significantly in recent years both in size and complexity.*

*Today it consists of a complex of industrial, commercial and organizational structures operating all over the world and organized in many countries also through a direct presence. Over the years, this has enabled the propensity for cultural exchange and integration between companies with different histories and people of different languages, cultures, and religions to be expanded, strengthened, and improved.*

*With the resources available to a "Small Global Player" we pursue, through example and transparent communication, the dissemination and consolidation of simple but true values: Loyalty, mutual respect, frankness, and the strong sense of corporate social responsibility; the enterprise as a creator of job and development opportunities in respect of the rights and duties of all stakeholders and always with a great attention to the medium-long-term financial viability of any business choice.*

*The translation of these values into concrete, everyday behavior has proved even more important in the light of the Covid-19 related health emergency, which, although in the process of being resolved, changed the surrounding reality, and in the light of the recent international tensions that exploded in early 2022 following the outbreak of war in Ukraine.*

*In this context, the ability to team up and react in a timely and innovative manner to adversity has proved critical success factors of decisive importance.*

*The ability to combine production and commercial needs with the attention and respect of the people has allowed to reach the company objectives in full respect of the safety requirements foreseen by the regulations in force.*

*The objective we are proposing with our new industrial plan is to strengthen and consolidate the virtuous process of growth in financial sustainability. This growth will continue to materialize both for internal lines, through the strengthening of the partnership with our customers and the opening of new foreign branches, and for external lines through the identification in some key markets of companies with a profile compatible with our objectives. Among these, the main one is to pursue strategies that allow us to be "as close to market as possible" in order to support our business partners and farmers who use our products with the appropriate technical assistance and with the enrichment of experiences aimed at finding solutions that are increasingly effective but above all, through the rationalization of the use of all technical inputs and available natural resources.*

*Finally, in order to protect the sustainability of our business, we will continue to fight for the principle of free competition, which is an essential stimulus to continuous innovation. it is not overwhelmed by excessive regulation aimed more at creating barriers to entry for small and medium-sized enterprises than at effectively protecting consumer health and rights.*

**THE BIOLCHIM GROUP**

## 1. The Biolchim Group

### 1.1 History of the Biolchim Group

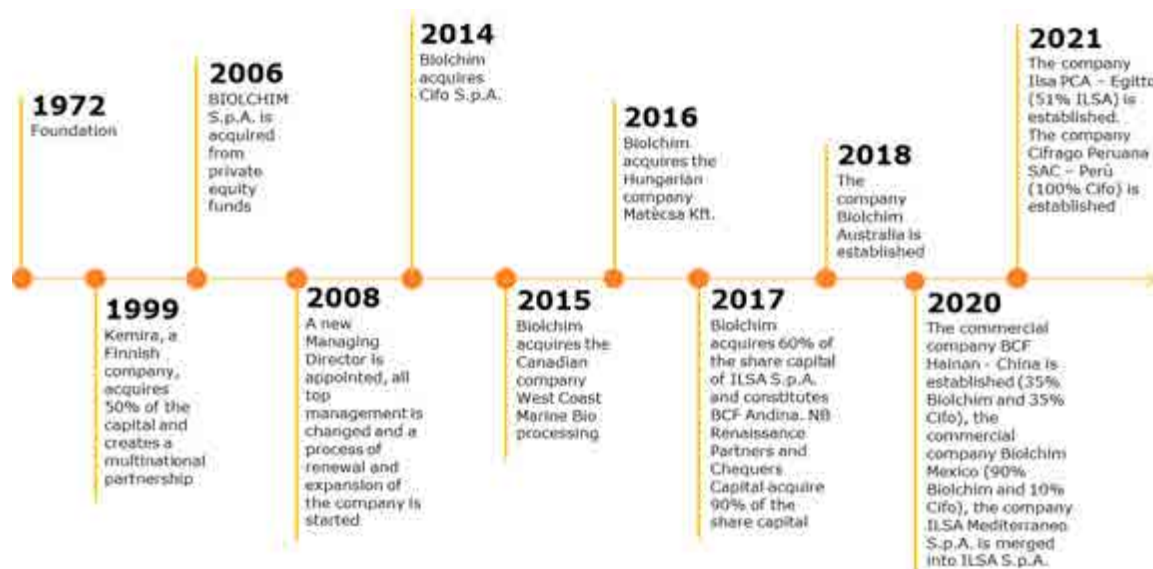
Founded in 1972 **Biolchim** is a leading company in the production and marketing of special fertilizers, in particular *Biostimulants*, innovative products for the raw materials that compose them and for the agronomic performances that allow them to pursue.

Since 2014 Biolchim has been the leader of a larger group of companies, including **CIFO**, Italian company that since 1965 produces and markets special fertilizers for the gardening and agriculture sector and the Canadian **West Coast Marine Bio Processing** specialized in the production and marketing of fertilizer products based on *Macrocyctis* alga.

In 2016, the Hungarian company **Matécsa Kft.**, a producer of turf and peat-based substrates and a leader in the Hungarian market, joined the group, followed by **ILSA S.p.A.**, the historic Italian company founded in 1956, specialized in the production of bio-stimulants, organic fertilizers and mineral organ, both liquid and solid, which is perfectly integrated in the group's development and innovation plan.

To date, Biolchim is the most important industrial and commercial group in the biostimulants sector in the world.

### Biolchim's Timeline



## 1.2 Vision, Mission and Values

The Biolchim Group's vision is to provide innovative, sustainable and eco-compatible technical means able to meet the needs of modern agricultural production.

For this reason, the Group's Mission aims to enhance and integrate the experiences and skills of three leading Italian companies in the fertilizer sector, in order to create an increasingly competitive group on the world market and oriented toward highly innovative and sustainable products.

Aware of the complexity of the situations in which the Group companies are operating and the need to take into account the interests of all stakeholders, the Biolchim Group clearly defines the values and responsibilities it recognizes, shares and assumes in the Group **Code of Ethics**.

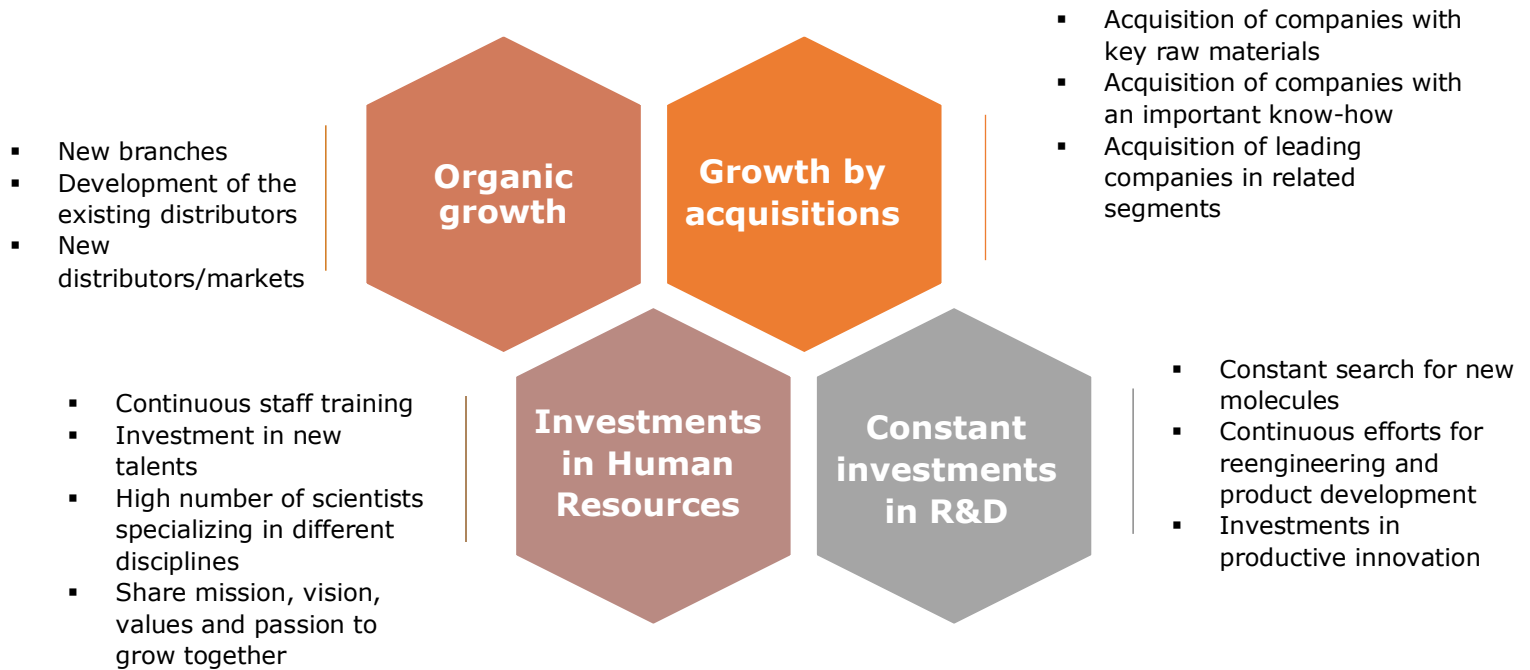
The Italian companies of the Group, Biolchim S.p.A., CIFO S.r.l. and ILSA S.p.A., have adopted the organization and management model according to Legislative Decree no. 231/2001, in order to structure a system of rules to allow the prevention of illegal behavior through the monitoring of areas and activities at risk and to guarantee the ethical management of its business activities. In addition, a whistleblowing system has been established, a series of channels for reporting violations and illegal conduct that employees can use, even anonymously. Acts of retaliation and discrimination against reporting agents are strictly prohibited by the organization.

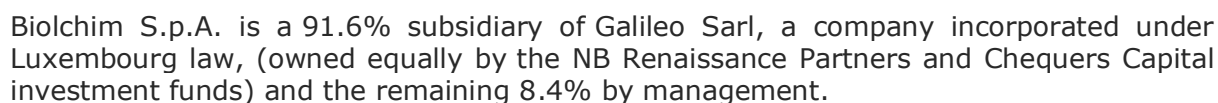
In addition, the Biolchim Group has adopted the **Code of Conduct for the Marketing of Biostimulants** drawn up by the EBIC (European Council of the Biostimulants Industry), with which the Group is committed to developing safe and effective products. By ensuring fair competition in the interests of the consumer and by providing clear information for users of products, thereby promoting market transparency and consumer awareness.



### 1.3 Strategy of the Biolchim Group

Biolchim's continued success and growth is the result of a four-core business strategy:





According to the traditional system, the Company Government provides for the Shareholders' Meeting, the Board of Directors and the Board of Statutory Auditors. The Board of Directors is responsible for strategic guidance and supervision, while the Board of Statutory Auditors is responsible for the control function.

The Board of Directors as of 31.12.2021 is composed as follows:

The Board of Directors of Biolchim S.p.A. as of 31.12.2021 is composed of 5 men, of whom 40% of the members belong to the age group 30-50 while the remaining 60% are over 50 years old.

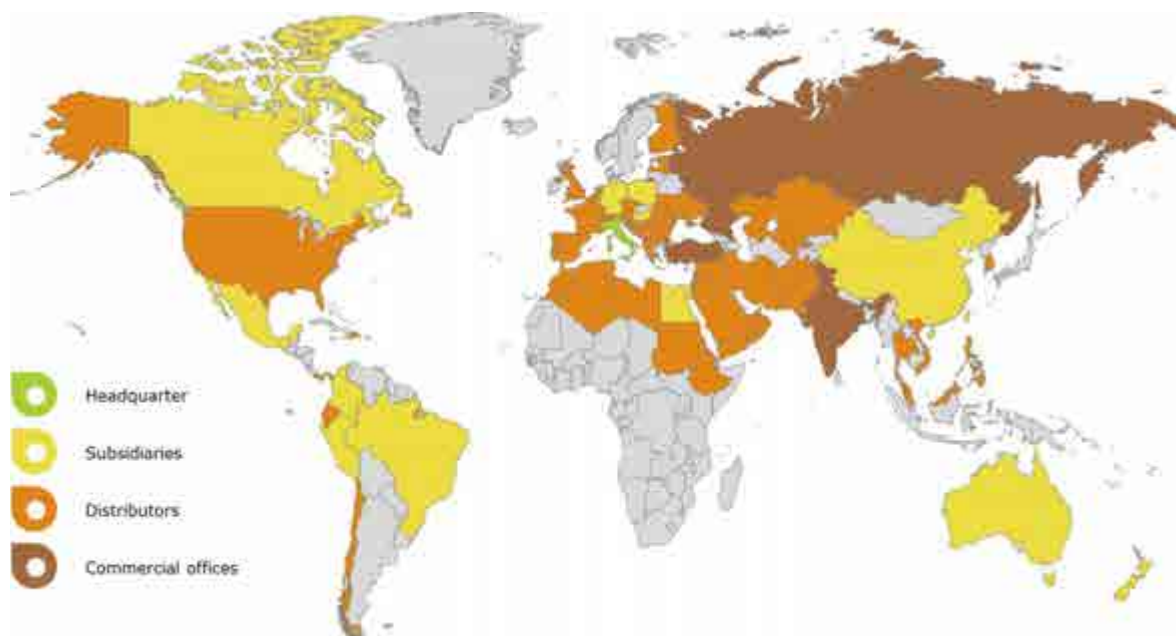
## 1.5 Market presence

Biolchim's headquarter is in Medicina (Bologna), where all the phases of the production cycle are carried out until the final packaging of the products, shipped all over the world.

The Group is present in more than 80 countries in Europe, Africa, Asia, and South America.

At the production level, in addition to the four Italian plants of Biolchim (Bologna), Cifo (Bologna) and Ilsa (Arzignano and Molfetta), the Group is also present through its **subsidiaries** in Germany, Poland, Hungary, New Zealand, Australia, China, Peru, Brazil, Colombia, Canada and Egypt. Biolchim, finally, operates in India, Lebanon, Russia and Turkey through **commercial offices** that allow it to build a close collaboration with its local distributors, thanks also to the continuous technical assistance and sales on the territory.

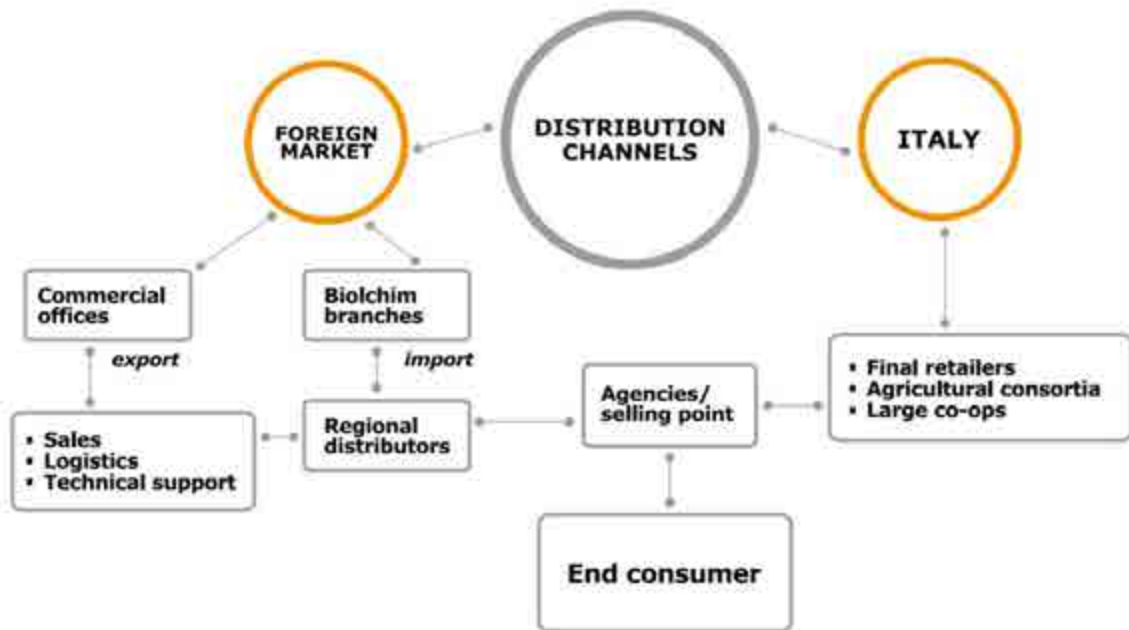
### BIOLCHIM IN THE WORLD



Biolchim's commercial network also covers many other countries through agents and **distributors**; these are supported and coordinated by a team of agronomists working daily in the countryside with technical functions to advise farmers of the most suitable fertilization programs.

The Group has established commercial relations ranging from domestic to international export. The goal for the next few years is to continue internalization of its products, paying attention to the needs of customers that tend to vary from country to country.

### The distribution network of the Biolchim Group



## 1.6 The economic impacts

### Sector performance and company positioning

#### Macroeconomic context

In 2021, a year characterized by a significant rebound after the strong economic contraction caused by the Covid-19 pandemic, world GDP grew by 5.9% while Italy's GDP rose by 6.6% after the 8.9% decrease in 2020 (IMF and ISTAT data).

Growth forecasts for the year 2022, which have already been downsized from previous estimates due to the start of a strong inflationary spiral, still predict an increase of 3.6% of world GDP, 2.7% of the European Community's GDP and 2.4 % of our country's GDP (Source IMF - European Commission). The annual inflation rate is expected to be 6.1% in the European Union and 5.9% in Italy. The outbreak of war in Ukraine in February 2022 and the resulting geopolitical and economic tensions have made the growth outlook even more uncertain and fragile, reinforcing both inflation dynamics and expectations of a significant increase in interest rates with a consequent risk of stagflation.

#### Sector Performance

The Italian agri-food sector has shown a good resilience considering the particular health situation that has characterized the last two years. The slight decrease in the domestic market was largely offset by the industry growth driven by such record-breaking exports that Italian agri-food exports in 2021 grew by 11% over the previous year to reach a record value of 52 billion euro and, after the substantial breakeven of the pandemic year, the Italian trade balance in the sector returned to a surplus of 2.6 billion euro (source CREA).

On the domestic consumption front, food purchases amounted to around 87.3 billion euro, a slight decrease compared to 2020 (-0.3%). However, this is an extremely important value especially when compared to 2020 and considering the almost total reopening of hotels and restaurants (Horeca). As confirmation, it is sufficient to compare the 2021 data with the pre-pandemic data for 2019, where an increase of 7.5% was recorded.

The scenario described above is strongly influenced by rising raw materials and energy costs. These factors have a major impact on both the primary sector and the food industry and add uncertainty to transport and logistics.

These circumstances led to a final quarter of 2021 characterized by strong tensions on prices and on the functioning of many international supply chains, phenomena which were further strengthened in 2022 following the war in Ukraine.

At the end of 2021, Ismea noted that, during the last quarter of 2021, domestic agricultural products showed a trend increase of 15% mainly due to plant-based products (+19.5%) and livestock products (+10%).

In the last quarter of 2021, the increase in prices of current production means was +10.3%, trend driven by energy commodities (+19%), feed (+14.8%) and fertilizers (+27.4%), which were dragged down by a strong increase in raw materials and truly prohibitive cost of maritime transport (Source: ISMEA).

In 2021, the sale of fertilizers in Italy decreased in quantities by 0.6% compared to 2020, but with a very diversified trend among the different types of fertilizers: solids decreased

by 10.6% and water-soluble by 0.6% while liquids grew by 10.3%. It should also be noted that the steady growth of fertilizers used in organic farming continued in 2021, even though they still represent a limited part of the global market (Source: Assofertilizzanti). For the hobby industry, Griog's findings confirmed the growth trend of 5.1% compared to 2020, already strongly increased compared to 2019: the overall growth was determined by both the defense segment (+3.9% compared to 2020) and, above all, nutrition (+25.3% compared to 2020), while the insecticidal PMC segment decreased (-3.8% compared to 2020).

In 2021, the defense segment benefited from the extension of the marketing and use of plant protection products for non-professional use granted in the last days of 2020 until 3 November 2021. Despite the difficulties caused by a decree issued close to the deadline, companies in the sector managed to organize themselves to respond to the demands of a market which, in November 2021, benefited from a further extension to 31 December 2022 but which, it is now certain, it will no longer be able to benefit from further extensions.

The excellent performance of the nutrition segment finds, instead, a double motivation: on one hand it can be explained by the long wave of Italians' new passion for green care developed during the pandemic period, and, on the other hand, by an increase in the supply due to companies that, traditionally very strong in the defense segment, are partially repositioning themselves on nutrition.

Finally, it should be noted that the steady growth of the natural plant protection segment (sub-segment of defense not affected by legislative limitations), which is still small (estimated at about 1 million euro), has recorded record-breaking growth rates of about 87% over the last two years. In early 2022, the growth trend in the hobby sector slowed down as a result of a very unfavorable climate trend that strongly affected the demand.

## **The results for the financial year 2021**

The data for the year 2021 show a consolidated net profit of euro 15,302 thousand (31,829 thousand as of December 31, 2020), after having set taxes against the year for euro 4,077 thousand, consisting of current taxes of euro 5,239 thousand, and the positive balance of deferred and pre-paid taxes for 1,162 thousand euros. During the last year, profit was strongly influenced by the positive impact of taxes, due to the tax realignment on the Parent Company and the subsidiary Cifo S.r.l..

The result includes ordinary depreciation and write-downs of 9,945 thousand euros (9,682 thousand euros as of 31 December 2020).

The volume of ordinary revenues achieved in 2021 amounted to a total of 138,369 thousand euros, an increase of 12.9% compared to the previous year, with a net increase of 15,786 thousand euros.

The main economic, capital and financial indicators are summarized below:

<b>Economic indicators €/1000</b>	<b>31/12/2021</b>	<b>31/12/2020</b>	<b>Variation</b>	<b>Variation (%)</b>
Revenues	138,369	122,583	15,786	12.9%
Ebitda	32,414	29,271	3,143	10.7%
<b>Ebitda/Revenues</b>	<b>23.4%</b>	<b>23.9%</b>	<b>(0.5%)</b>	
Ebit	21,986	18,616	3,370	18.1%
<b>Ebit/Revenues</b>	<b>15.9%</b>	<b>15.2%</b>	<b>0.7%</b>	
Net income	15,302	31,829	(16,527)	(51.9%)
<b>Net income/Revenues</b>	<b>11.1%</b>	<b>26.0%</b>	<b>(14.9%)</b>	

The increase in revenues was accompanied by an increase in EBITDA of 3,143 thousand euros (+10.7), a change largely due to the increase in volumes.

The following is a summary of the balance sheet and financial data reclassified in the two comparison periods:

<b>Economic and capital indicators €/1000</b>	<b>31/12/2021</b>	<b>31/12/2020</b>	<b>Variation</b>	<b>Variation (%)</b>
Net fixed asset	177,399	180,870	(3,471)	-1.9%
Net working capital (NWC)	30,951	28,084	2,867	10.2%
Funds	(7,326)	(6,102)	(1,224)	20.1%
<b>Net invested capital (NIC)</b>	<b>201,024</b>	<b>202,852</b>	<b>(1,828)</b>	<b>-0.9%</b>
<b>Equity</b>	<b>186,945</b>	<b>171,561</b>	<b>15,384</b>	<b>9.0%</b>
<b>Net financial position (NFP)</b>	<b>14,079</b>	<b>31,291</b>	<b>(17,212)</b>	<b>(55.0%)</b>

Net invested Capital (NIC) increased by 1,828 thousand euros compared to last year. Equity increases by a total of 15,384 thousand euros, mainly due to the period profit and the effects of the translation reserve of financial statements in foreign currency on other comprehensive income (OCI) reserves.

The debt to the banking system is almost entirely attributable to the Parent Company Biolchim S.p.A., which also provides financial support on behalf of its subsidiaries.

The main economic and capital indicators are summarized in the following table:

<b>Economic and financial indicators €/1000</b>	<b>31/12/2021</b>	<b>31/12/2020</b>	<b>Variation</b>
<b>NPF/Ebitda</b>	<b>0.43</b>	<b>1.07</b>	<b>(0.64)</b>
<b>Roi (Ebit/NIC)</b>	<b>10.9%</b>	<b>9.2%</b>	<b>1.7%</b>
<b>Roe (Net income/Equity)</b>	<b>8.2%</b>	<b>18.6%</b>	<b>(10.4%)</b>

The **PNF/EBITDA** index, which is a multiple of the EBITDA, is a measure of the ability of the operating company to pay for net financial debt.

The **ROI**, i.e. the return on net invested capital, is given by the ratio between Ebit and Net invested capital (NIC) and is expressed as a percentage. This indicator measures the ability to generate wealth through operational management and thus to pay for equity and third-party capital.

The **ROE**, the return on equity, is the ratio of net profit for the period to equity, expressed as a percentage. This indicator is intended to measure the profitability of investors in terms of risk.

The profitability indices show substantially what has already been analyzed as regard to the economic performance recorded in the year. The importance of the decrease more than halved in the NFP/EBITDA ratio is also stressed, which highlights the extent to which operating management is able to support repayment of financial liabilities and at the same time to pay for equity.

### **Focus: Management of the Covid-19 Emergency**

After the outbreak of the Coronavirus-related health emergency in 2020, the Group, even in 2021, had to measure itself with a context that was far from full operational normality, even if characterized by fluctuating periods of restrictive measures related to the various waves that followed during the year.

In this context, the Group has continued to take all feasible measures to guarantee and protect the health of its workers, also inviting its suppliers to follow the same measures and modifying the access criteria at the Group's premises.

During 2021, travel and business visits resumed, even if not yet at full capacity in terms of international destinations, while customer care and agronomic support services to customers returned to being provided in person instead of remotely.

The Group has also further intensified the monitoring of trade receivables, foreseeing possible liquidity tensions of certain customers, especially small ones, who were also been monitored by reviewing the credit limits granted, reinforcing insurance coverage and proposing spot payments. It is considered likely that, during the financial year 2022, critical issues may arise linked to the deterioration of specific positions whose origins can be attributed to the pandemic crisis but which have remained latent thanks to the abundant liquidity guaranteed to the economic system by the monetary authorities and the banking system.

Finally, as regards communication with stakeholders, which was considerably intensified during the lockdown period, during 2021 it returned to the usual dynamics and modalities continuing to provide all information concerning both operation and the economic and financial sensitivity analysis carried out especially with reference to increases in price of raw materials, energy and logistics, as well as the difficult availability of certain types of products on international markets.

### **Focus: Geopolitical crisis and the consequences of the war in Ukraine**

On 24 February 2022, Russian invasion of Ukraine triggered a series of economic and financial tensions that built on the inflationary spiral and the intense rise in the cost of raw materials and energy, already seen at the end of 2021. From the accounting point of view, it should be noted that the Russia-Ukraine conflict is a non-adjusting event in accordance with IAS 10; nevertheless, it should be noted that there are no direct risks for the Group since it managed to safeguard business relations with customers in the countries involved in the conflict in the first months of 2022, despite enormous difficulties. On the other hand, there are no significant relationships with suppliers in these areas and it is emphasized that, with the exception of the subsidiary Ilsa, the Group does not consist



of energy-intensive companies. However, it is undeniable that such an event increases the degree of uncertainty in relation to systemic risks, especially in connection with the further acceleration of inflationary growth caused by the rise in the price of energy commodities, which will inevitably have a depressive effect on GDP growth and demand as a whole.

# **THE APPROACH TO SUSTAINABILITY**

## 2. Our sustainability Approach

### 2.1 Materiality Analysis

Since 2019, the Biolchim Group has started a process to identify, assess and map the most relevant and strategic aspects for its stakeholders and for the Group itself.

In 2021, representatives of the main business and corporate functions confirmed the assessments made during the 2020 materiality analysis. It was pointed out that no significant changes have taken place in the Group's structure and strategic sustainability guidelines, compared to the previous year.

The results of this activity are set out in the following paragraphs.

### 2.2 Our stakeholders

Biolchim believes it is necessary to define and maintain an effective and fruitful dialogue with its stakeholders, also in order to acquire new incentives in the field of innovation and product quality. The stakeholder mapping, shown below, represents the 11 most relevant stakeholder categories for the Group.



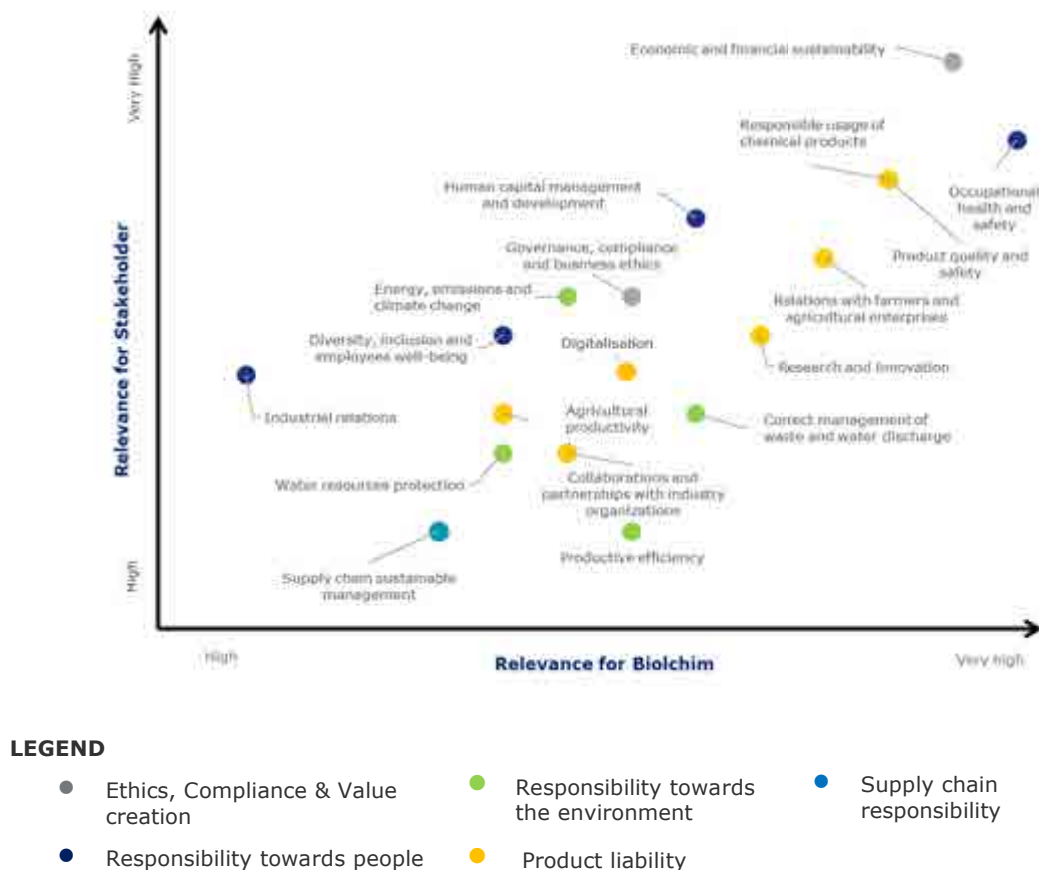
With a view to sharing and improving the relationship with its stakeholders, the Biolchim Group has, over the years, launched several paths of communication and exchange of information with them:

- through the website and social media, accessible to all stakeholders, news and initiatives realized by the Group companies are communicated;
- the intranet and corporate events represent some channels and moments of sharing used to communicate with employees;
- conventions and industry events are the tools to compare and gather expectations of the market, customers and end consumers. In relation to the latter, during 2020 the Group tried to maintain active communication and exchange moments with its stakeholders despite the limitations due to the health emergency thanks to the use of digital tools.

The continuous comparison, declined in the different forms of engagement and dialogue, allows the Group to be more and more efficient in understanding the needs and in providing answers to the requests of its stakeholders.

### 2.3 Materiality matrix

As part of the materiality analysis process undertaken by the Group, sustainability topics potentially relevant to the Biolchim Group business have been identified and evaluated. Through this process, 18 material themes have been identified for Biolchim and its stakeholders. The findings are reflected in the materiality matrix below.



Even for 2021, the following topics have a higher priority for Biolchim and its stakeholders:

- topics related to economic and financial sustainability and governance, compliance and business ethics, in the field of ethics, compliance & value creation;
- topics related to occupational health and safety, human capital management and development and diversity, inclusion and employee well-being, in the field of responsibility towards people;
- topics related to the responsible usage of chemical products, the product quality and safety, digitization, research and innovation and relations with farmers and agricultural enterprises, in the field of product liability;
- topics related to energy, emissions and climate change and the correct management of waste and water discharges, in the field of responsibility towards the environment.

**OUR PRODUCTS AND  
RESPONSIBILITY TO  
CUSTOMERS**

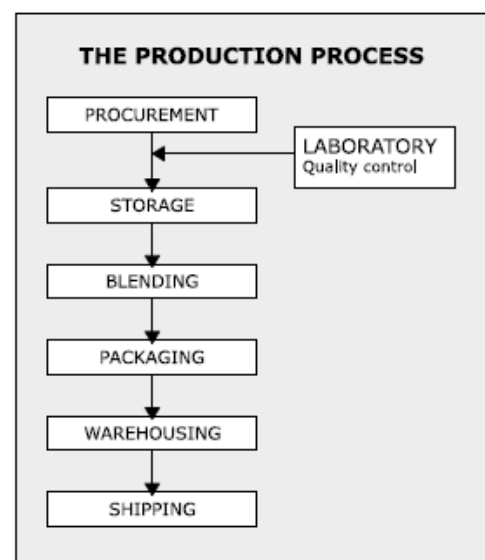
### 3.1 The product range

Thanks to the experience gained by the organization, the Group's brands offer farmers a wide range of efficient, safe and high-quality products. These come from the combination of **research**, **innovation** and **selection of raw materials**, including natural ones, and are able to maximize crop productivity in every agronomic context, in full respect of the environment and people.



Over the years, the range of products of the Group has experienced **continuous growth** in order to adapt to market demands and to the needs of the customer portfolio, which, on the basis of the geographical area and/or the types of culture, have highlighted the need for **diversified solutions**. The range has thus been enriched with various types of products and specialties to cover the different nutritional needs of crops in different geographical, and therefore climatic, areas in their turn different.

The diagram shows the main phases of the Group's production process.



The products provide a **nutrition for both the soil and the plant**, in order to help them during the whole life cycle and at times of greatest need, such as vegetative recovery, flowering and fruit making; in particular, biostimulants offer considerable advantages by enabling balanced and rational use of fertilizers, thereby reducing their impact, while **respecting the environment and biodiversity, as well as the health of agricultural operators and consumers**. All products are in line with the most stringent Italian and foreign regulations and are also suitable for organic farming.

In 2021 Biolchim launched **MICOVAR**, a new product based on mycorrhizae and other micro-organisms, to further enrich the Biolchim product range based on microbial. The BIO HELP product was revisited and transformed into **BIO-HELP PLUS**, with the aim of improving the anti-stress action from cold and heat that compromises the quantity and quality of the fruits produced every year.

Moreover, the Group has placed commercial focus on **organic fertilizers**, produced by **ILSA** from the waste of the tanning sector, making its sales significantly increase in the year.

The offer focuses on the following product families:

### Specialties

*Based on micro-organisms*



### Specialties

*Plant extracts*



### Specialties

*Seaweed-based products*



### Specialties

*Protein hydrolysates*



### Specialties

*NPK + Micro*



### Specialties

*Soil conditioner*



### Specialties

*Dual use products*





**Growth promoters**



Spray Dünger



Fixormon

**Meso and microelements**



Ligoplex



Calcium Fast

**Foliar NPK**



K-Bomber



Floral 20-20-20

**Fertigation products**



Green-Go



Idrofloral 15-10-30

**Special granular products**



TOP N



Phoskal



Now@ GR

**Organic products**



IlsaDrip Forte



Fertil Supemova

**Organic and mineral products**



Azoslow N20

**Complementary products**



Oxyclean



Bagnante Cifo

**Home & Garden**



Asso di Fiori



Torfy terriccio



Propoli Cifo

# Focus 2021:

## BIO-HELP PLUS



Adverse environmental conditions induce **osmotic shock in the plant**, resulting in the loss of intracellular fluids and the aggregation of macromolecules and subcellular structures. At the same time, proteins and lipids lose their structure and function, compromising the plant's main metabolic activities. Typical damage consists of growth interruptions, wilting, flower abortions, leaf drop, fruit cascola and, in the most serious cases, plant death.

In response to these phenomena, Biolchim has revamped its BIO HELP product into **BIO-HELP PLUS**, a bio-promoter of environmental stress resistance **that helps overcome environmental stresses** (thermal, water and salt) and **reactivates and supports metabolism**.

Bio-HELP PLUS provides glycine-betaine, trehalose and zeatin, with the following benefits:

- **glycine-betaine**, a biomolecule with a high osmoprotective power, preserves the plant's metabolic functions even under adverse environmental conditions;
- **trehalose** is a disaccharide with stabilizing and hydrating properties: in case of stress, even severe, trehalose forms a hydrogel that prevents the aggregation of cell solutes, helping the plant to preserve tissue turgidity;
- **zeatin** is a powerful natural cytokine that promotes balanced reactivation of growth metabolism, induces cell multiplication and regulates the fruit set.



# MICOVAR



**MICOVAR** is the new product that further enhances the Biolchim product range.

MICOVAR consists of a consortium of **mycorrhizal fungi, bacteria and rhizosphere fungi**, designed to improve the rooting of seedlings, promote seed germination and stimulate plant growth.

MICOVAR contributes to a rapid and homogeneous growth of the root system **by increasing its resistance to abiotic adversity**.





# Our specialties

These are innovative products based on skillfully blended plant extracts and represent Biolchim's winning solution for the problems of every crop in modern, eco-sustainable agriculture.

Originating from vegetal sources, Specialties ensure the intake of several biologically active ingredients that work in synergy to nourish the plant and enhance its metabolism, thus providing, at the same time, high quantitative and qualitative, environmental-friendly standards of production.

This product category includes:

- **Biostimulants and Biopromotors based on plant extracts**
- **Seaweed-based products**
- **Protein hydrolysates products**
- **NPK + Micro based products**
- **Soil Conditioner**
- **Microrganisms**



## Biolchim for organic farming

In recent years, organic farming and related issues such as food security, good farming practices and the preservation of ecosystems have gained increasing attention and interest from consumers.

The world of organic farming was the first to chart a new path, setting itself the goal of reducing the use of formulations with a high environmental and residual impact.

The Biolchim Group, which has always been sensitive to respect for the environment and minimization of the environmental impact of products and processes, offers farmers a **wide range of products allowed in organic farming**. These are highly innovative and completely natural formulations, allowing organic farmers to increase the performance and improve production quality.



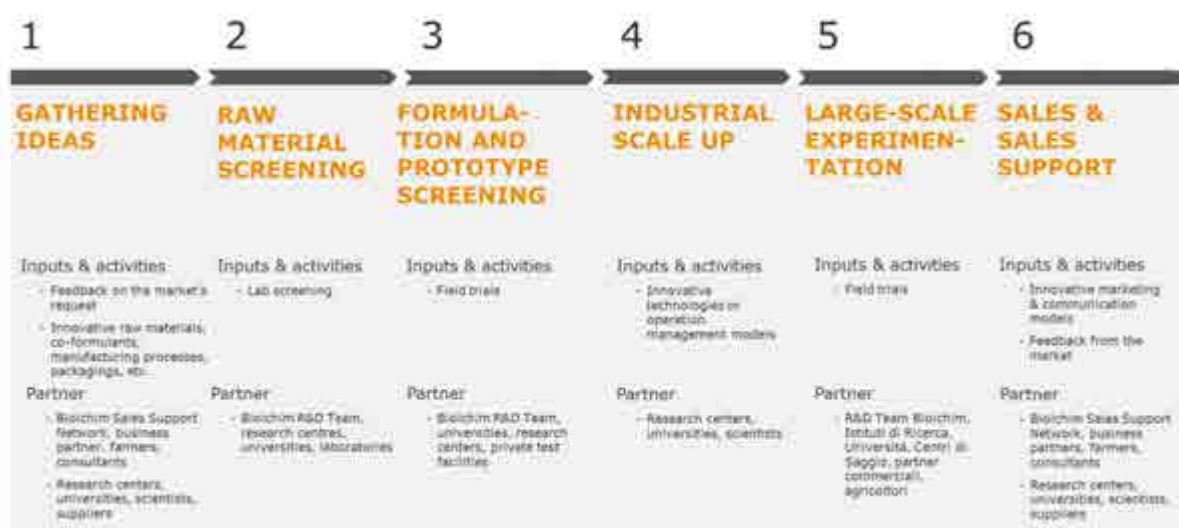
### 3.2 Research and Innovation

In ever-changing sectors such as plant nutrition, it is necessary to take a continuous improvement approach in order to respond to market requirements. To this end, the Parent Company invests a significant proportion of its annual turnover in Research and Development. The numerous special products launched or renewed in recent years, the various active patents and the numerous research projects in collaboration with Italian and foreign universities and research centers testify to the efforts made in this field.

The innovation process approach is based on three key factors:

1. Natural raw materials and by-products of the food industry to combine agronomic effectiveness and environmental sustainability;
2. Industrialization processes with a high technological content to maintain the biological properties of the raw materials;
3. Large-scale testing to ensure product effectiveness, reliability and safety.

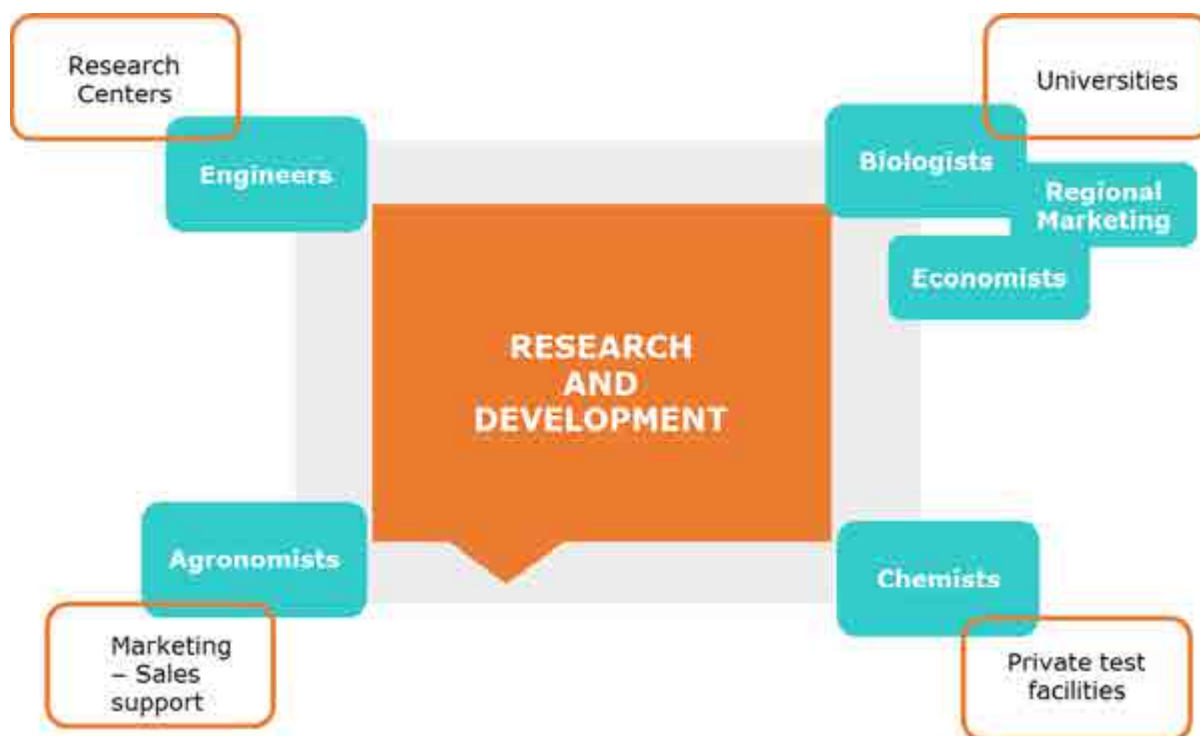
Here are the steps through which an innovative idea is presented it is carried out and the figures involved in such process:



Research projects are divided according to five strategic guidelines:

- Projects aimed at improving products already in range;
- Projects aimed at developing new formulas and new product technologies;
- Projects aimed at improving process technologies;
- Projects that aim to develop new products to expand the range;
- Projects related to the development of products in a different field from the vegetable nutrition.

The Research and development department of Biolchim consists of a highly specialized team of agronomists, biologists, biotechnologists, chemists and engineers who collaborate closely with institutional partners in the development of advanced and effective solutions, with the common objective of achieving product and process innovation.



In addition, the Biolchim Group has the most modern industrial equipment and technologies that represent a further strong point for Research and Development's function, allowing the Group's products to stand out for innovation, efficiency and know-how. In 2015, the Quality Control Laboratory of ILSA obtained accreditation, in accordance with the UNI CEI EN ISO/IEC 17025 standard, from the Italian *ACCREDIA* accreditation body, signatory of the EA MLA (European co-operation for Accreditation Multilateral Agreement) international mutual recognition agreements, becoming the first company in the sector to be certified.

### **RESEARCH AND INNOVATION** IN 2021



**284** International partnerships for innovation



**Nearly 30** ongoing and/or completed research projects



**650** internal and external screening activities carried out



**€1,6 million** invested in Research and Innovation

## Main research projects in collaboration with regional, national and European institutions

### **3S 4H PROJECT - Safe, Smart, Sustainable Food for Health**

*Intervention carried out using the financing of the European Regional Development Fund 2014-2020*

The project deals with the issues of food production from the point of view of safety, productivity, traceability, quality and sustainability, and the promotion of good health through proper and careful nutrition.

Finished in July 2021

### **EcoDPI PROJECT – ECoDesign and recycling of PPE in a circular industrial chain**

*Intervention carried out using the financing of the European Regional Development Fund POR-FESR 2014-2020 ASSE 1 "RICERCA, SVILUPPO TECNOLOGICO E INNOVAZIONE" AZIONE 1.1.4 "Sostegno alle attività collaborative R&S per lo sviluppo di nuove tecnologie sostenibili, di nuovi prodotti e servizi".*

The overall objective of the project is the valorization of waste from the use of personal protective equipment (PPE), including medical devices. The objective is pursued by studying the key stages of a potential circular supply chain for the production of such devices (raw material acquisition and pre-processing, production, use, end-of-life).

The project started in September 2020, and it will end in December 2022





### 3.3 Quality and Safety of products

For the Biolchim Group, quality is a fundamental aspect to guarantee to its customers. Throughout all the phases of the production process work is carried out to ensure and maintain high quality standards.

All Biolchim products are subject to strict regulations. The Group is committed, through functions and dedicated personnel, to the continuous updating and rigorous application of all the normative requirements to which both the finished goods and the substances used as raw materials are subjected.

The Group's internal division "*use of Products*", dedicated to ensuring compliance and conformity with national, European and global regulations to which products are subjected for their function, is divided into five sub-units according to the product type: fertilizers/biostimulants, pesticides (growth regulators and plant protection products), corroborants, SOAs (animal by-products), biocides and PMCs (medical devices).

With regard to fertilizers and biostimulants, the following activities and initiatives were carried out in 2021:

- launch of new internal procedures for adaptation to the new EU Regulation 1009/2019 (mandatory since 16.07.2022);
- in-depth analysis of the REACH status of all substances in relation to the requirements introduced by the new EU regulation. Consequently, data on 86 substances found not to meet the new requirements have been updated;
- study of the new protocol for the characterization of by-products which, in accordance with the circular economy principles, may be used for the formulation of fertilizers;
- active participation in national and international working tables aimed at drawing up proposals to be addressed to the European Commission and discussing the draft amendments to Legislative Decree 75/2010, which remains an important alternative to the application of Regulation 1009/2019;
- study of the new Mutual Recognition application procedures, which are implemented independently by each EU Member State.

With regard to pesticides, the process for the sales authorization of a fungicide in Hungary and Spain was successfully completed and the registration of certain plant growth regulators were renewed following important toxicological studies.



Below are the product registrations obtained by the Group in 2021.<sup>1</sup>

***TOTAL RECORDS OF PRODUCTS*** obtained in 2021 (Biolchim and Cifo)

**Conventional fertilizers: 384 started and 82 obtained**

**Organic fertilizers: 29 started and 34 obtained**

**Pesticides: 2 obtained**

In terms of product quality, as of March 2021, Biolchim and Cifo Quality Control started the new Group operating instruction for quality control of raw materials, products, finished products and packaging. In summary, the objectives of this new Group practice are as follows:

- unification of raw materials evaluation criteria to favor Group purchasing;
- optimization of production response times (reduced to 24h);
- optimization of control frequencies for raw materials, finished products and packaging for complete and representative screening of quality trends;
- introduction of tools that allow an immediate view of parameters trend over time for each raw material, finished product and packaging from/to each supplier.

In the first nine months of application, the new procedure achieved the following results:

**2021 Results**

<b>Stable production response times</b>	< 24h
<b>Controlled raw materials</b>	1,100
<b>Finished goods (bulk) checked</b>	613
<b>Raw materials validated in common</b>	22

During the first quarter of 2022, a comprehensive progress will be made, with an analysis of deviations from the expected data, in order to propose further improvements.

In addition, all Group companies subject their products to strict technical controls to guarantee excellent quality and to avoid health risks due to the use of improper materials. In advanced test laboratories, with the use of specialized machinery, all incoming raw materials are analyzed according to the criteria elaborated by Biolchim to verify the purity of the matter, the constant chemical-physical parameters, as well as the chemical composition.

<sup>1</sup> Three of the 34 organic fertilizer registrations obtained in 2021, some dossiers had been started in 2020.

In order to guarantee the correct management of the quality and the safety of the processes, the main companies of the Group, Biolchim S.p.A., CIFO S.r.l. and ILSA S.p.A., have obtained the following certifications:

Certifications	Description	Certified companies
<b>ISO 9001:2015</b>	Quality management system	Biolchim S.p.A. Cifo S.r.l. Ilsa S.p.A.
<b>ISO 14001:2015</b>	Environmental management system	Biolchim S.p.A. Cifo S.r.l. Ilsa S.p.A.
<b>ISO 45001:2018</b>	Employees' Health and Safety management system	Biolchim S.p.A. Cifo S.r.l.
<b>ISO 50001:2011</b>	Energy management system	Ilsa S.p.A.
<b>ISO 17025:2017</b>	General requirements testing and calibration laboratories	Ilsa S.p.A.

### 3.4 How to properly manage chemicals

Chemical management is a complex area with environmental and human safety challenges. For the Biolchim Group it is essential that all partners in the value chain work together to reduce and better manage the impacts and risks caused by the constant use of chemicals.

The Group, through its functions, policies and procedures, manages, regulates and plans the use of chemical products. In order to be able to monitor chemicals throughout their process, the Group has arranged a detailed structure that includes:

- **Regulatory function** aimed at the study, updating and supervision of the correct application of all the regulations to which Biolchim products are subjected, from the raw material to the finished product, including chemicals. This function includes the so-called *chemicals* and *use of products divisions*. The first is responsible for managing the compliance of Biolchim products with national, European and world regulations as chemical substances or mixtures. *The chemicals division*, in turn, is divided into five units dedicated to specific topics: raw materials (compliance management of all raw materials used, with reference also to inventories worldwide), product safety (management of mixtures from production to marketing worldwide), transport (regulation on the transport of dangerous goods), export logistics (support to the commercial function for customs codes, declarations of preferential origin and other export practices) and other minor regulations. The second deals with the compliance with national, European and world regulations of Biolchim products which are distinguished by their function, mainly fertilizers, biostimulants and pesticides.<sup>2</sup>
- **Raw materials mapping process** including the entry, use and exit of chemicals. All incoming raw materials are subject to regulatory compliance and safety “pathways”, which include the use of safety data sheets and optimal use data sheets. documents with the purpose of informing about risk management and use situations already tested as safe for man and the environment. With this in mind and thanks to this process, it is possible to discard, during the design phase of the products, the highly dangerous raw materials or, in any case, not in conformity with the requirements of Biolchim.
- **Procedures** like Storage, transport, handling and use of chemicals: Biolchim undertakes to ensure that, once chemicals are introduced into the Group's premises, workers are prepared to store, transport, handle and use them responsibly to prevent environmental contamination and/or workers' exposure to risks. To this end, Biolchim has prepared a dedicated procedure for the storage, transport and handling of substances and products. All materials entering the warehouse, whether raw materials, semi-finished or finished goods, must be clearly identified. Maintaining and updating an inventory of chemicals is an important aspect for the Group, which allows the constant monitoring of possible risks.
- **Employees' Training and communication:** for chemicals to be handled responsibly, all workers who come in contact with them must be familiar with the practices and guidelines for responsible chemical management. The Group undertakes to train and inform about the correct management of the raw materials used through courses specific to each area.

---

<sup>2</sup> The functions, initiatives and objectives achieved by *the use of products Division* are described in paragraph 3.3 – Product Quality and Safety

## MAIN OBJECTIVES ACHIEVED IN 2021 BY THE CHEMICAL DIVISION

### ➔ RAW MATERIALS

- From the Chemical Substance Inventory in Turkey (KKDIK), 58 substances were notified to the SEA system (Turkish counterparty of the GHS) and monitoring of the SIEFs of all substances to be registered by 2024 was started.
- Start of monitoring of new inventories in the following geographical areas: Eurasia (Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia), India, South Korea, USA, Australia and Vietnam.
- Updating of documentation and information for 68 substances in the raw materials database.
- Launch of impact assessment on finished products.
- Monitoring of the regulatory situation regarding borates, removed from the list of substances intended for authorization, as they are considered non-substitutable in various sectors, including fertilizers.

### ➔ PRODUCT SAFETY

- Launch of the updated Safety Data Sheet (SDS) software in accordance to the new standards and the internally refined template. 187 safety data sheets were calculated and updated to the newly developed template and to all the current standards in force.
- Implemented the 17th ATP of the CLP Regulation (Reg. EU 2021/849) which changed the structure of the SDSs;
- Launch of an important Group project for the development of a software not linked to the AX management software for the automatic sending of SDS according to the rules foreseen by the regulations. The current system, according to the law, must be exceeded as it is connected to the internal management software, intended to be replaced.
- Advancement of the Group SDS process according to the models in force in: Turkey, Eurasia, Australia, New Zealand and China.
- Development of the Notification process to the European NCP Portal and the use of UFI codes.

### ➔ TRANSPORTATION

- Implementation of the amendments brought about by the editions of ADR 2021 and IMDG Cod. 2020: the new requirements have a very limited impact on business practices which have remained substantially unchanged.
- Revision of the hazardous waste shipment management procedure.

➔ **MINOR STANDARDS<sup>3</sup>**

- Fine-tuning of the automatic notification system to highlight the presence of prescription precursors on orders that require customers to fill in forms.
- Initiation of the inclusion in the SDSs of the notification of the explosives precursors subject to signaling. Approximately 40 SDSs were updated.

---

<sup>3</sup> The only minor rule that has a significant impact on chemical management activities is EU REGULATION 1148/2019 (explosives precursors). In 2020, the management system for substances and products that could be classified as precursors of explosives had been started.

### 3.5 Our Supply chain

The Biolchim Group recognizes the importance of relations with suppliers that must be based on mutual **trust, correctness, transparency** and **reliability** in order to guarantee the acquisition of the goods and services necessary to ensure the efficiency and continuity of company production processes.

The main categories of suppliers of the Group are related to:

- Raw materials;
- Packaging;
- Outsourcing services: transport, contract work, warehouse management;
- Technical services: consultancy, spare parts;
- General services: marketing and communication consultancy, administrative services.

As defined in the Code of Ethics, the most significant suppliers, and in particular those entered in the Supplier Register, are required to accept the Code of Ethics itself in the context of the relative contractual relations. The organization pays the utmost attention to the respect of high-quality standards of production processes, also from suppliers and from raw materials suppliers.

Since it is a chemical sector, characterized by a strong tendency to the phenomena of instability of the raw material, the Biolchim Group undertakes to adopt the **highest quality standards** in the selection of suppliers and to maintain a close relationship with the existing suppliers. It is also in the interest of the Group to provide evaluation tools to verify the suitability of suppliers, also in view of the continuity of the relationship. This attention is based both on the ethical level and on the level of quality and safety of products.

Suppliers are evaluated and selected based on economic, quality and technical, commercial and financial reliability requirements and the periodic evaluation of service levels. In addition, for the same requirements, preference is given to suppliers who demonstrate the implementation of good social responsibility practices and/or the possession of social or environmental certifications.

Before starting relationships with new suppliers, they are subjected to a complex qualification process in which compliance with the regulations and regulations of the sector are examined; the quality of the product offered and the suitability to enter the Group's production processes are also tested. In addition, audits may also be carried out at the suppliers' establishments.

In this respect, audits can be carried out both in advance of the establishment of a commercial relationship with the suppliers and during the same. Both are aimed at verifying the reliability of the supplier and the quality of the service offered, investigating aspects such as health and safety of the workplace, the safety and maintenance of the site or environmental authorizations and performance indicators such as the number of work-related injuries or the number of strikes of workers.

### 3.6 Our relationship with farmers and customer satisfaction

Customer satisfaction is an objective of absolute importance for the Biolchim Group. **All products are designed and built to best meet the diverse needs of customers around the world.**

To this end, the Group's activity is marked by a rigorous professional ethics oriented to the substantial correctness of relations and the **continuous improvement of performance** through an adequate identification of needs and a service characterized by high professionalism, reliability and accuracy.

In all areas of activity in which the Group operates, Biolchim undertakes to adopt responsible commercial and marketing practices and to always respect the interests of the customer.

Biolchim's customer experience is strengthened through **after-sales services**, which enable farmers to analyze their achievements, share their experiences, and chart new ways to feed agricultural crops that are increasingly focused and performing.

Thanks to this continuous exchange with customers, the Group is able to offer solutions that are more and more concrete and aligned with the needs of customers.

A fundamental aspect for the Group is the constant monitoring of **customer satisfaction levels**, both through targeted surveys and through a precise orientation of the commercial network in this direction.

The management and analysis of **complaints** is also seen as an opportunity for improvement: in this regard Biolchim aims at constructive solutions and looking for elements of convergence with the customer in order to restore a relationship of mutual satisfaction.



In 2018, a new concept of investigation was introduced that includes all the Group's divisions and regions and provides important insights into key success factors in the customer's business. A sample of about 250 customer companies was analyzed by the administration of a questionnaire: of these, 96% were satisfied or more than satisfied. The key points were the quality and effectiveness of the products, the delivery times, the assistance services provided and the breadth of the range of products offered.

In 2021, it was not possible to repeat the survey due to the continuation of the pandemic and the significant change in the prices of raw materials and its availability.

In response to these issues, alternative solutions were sought to strengthen our relationship with our customers:

- intensification of customer satisfaction monitoring through **complaint analysis**;
- increased digital marketing activities through the **organization of webinars**;
- **customer support on the territory** through product technicians.

**A strong support action in the territories** was also planned by the marketing and commercial functions, through **the organization of conferences and technical meetings**. Most of the conferences focused on the products of the Group's brands. In particular, the role of micro-organism-based products was highlighted, with the aim of stimulating and pushing their use as a replacement for synthetic plant protection products, and probiotic products that promote the development of micro-organisms in the soil and restore equilibrium.

#### **AGRICULTURAL PRODUCTIVITY AND PRECISION FARMING: GIVE LESS TO GET MORE!**

From the point of view of quality and customer satisfaction, Biolchim products seek to maximize the productivity of the crops in every agronomic context: This concept should not be understood as being tied simply to the qualitative aspect of production but also, and above all, to the aspect of quality and production efficiency. In this sense, therefore, the products developed by the companies of the Biolchim Group have as their reference, when possible, the principle of **precision farming**, that is, an agriculture that aims to **obtain the maximum from the crops, rationalizing the inputs and the substances used**, thus allowing an increase in the production quantity, but above all in the quality of crops, in a sustainable way.

The Biolchim Group has a team of specialists, including engineers, chemists, pathologists and biochemists, who provide solutions to maximize agricultural productivity and customer profitability.

Furthermore, every year, the Biolchim Group organizes or participates in technical research events involving vendors, farmers, and other operators in the sector. This year the **pandemic has accelerated the digital transition of communication channels** with our customers. In this regard, the Group has demonstrated its ability to adapt, enhancing its digital marketing and communication activities, such as:

- graphic redesign of the new website, with the aim of highlighting the research and development activities aimed at placing on the market products effective from an agronomic point of view and sustainable from an environmental point of view, carried out through the Win project;



## 2021 Sustainability Report – Biolchim Group

- realization of videos inserted in the YouTube page to highlight the results obtained;
- making presentation videos of products;
- realization of technical notes, sent directly to farmers on specific agronomic problems;
- organization of webinars with farmers and retailers.



# **ENVIRONMENTAL RESPONSIBILITY**

## 4.Environmental Responsibility

### 4.1 Our commitment to the environment

The principles of environmental protection are among the key elements included in the Code of Ethics. The Group recognizes the importance of proactively managing the environmental impacts of production activities, both towards the communities in which it operates and towards future generations, with a view to sustainability in the medium to long term.

The Group is committed to take a preventive approach to environmental challenges, implementing **a policy oriented toward the progressive reduction of the direct and indirect impacts** of its activities and the diffusion of greater **awareness and commitment** to the protection of the environment.

Activities are planned by adopting the most appropriate measures to preserve the territory in order to minimize the environmental and landscape impact of all operations.

To ensure proper and organic management of all the environmental aspects related to the production processes, in a perspective of continuous improvement, the Group's Italian companies have adopted an Environmental management system certified ISO 14001, and ILSA has also integrated an Energy management system certified ISO 50001.

Environmental management system certified **ISO 14001** for BIOLCHIM, CIFO And ILSA plants.

Energy management system certified **ISO 50001** for ILSA plant.

The environmental and safety performances achieved over the years are the result of Biolchim's commitment to several key dimensions of its operations:

- Technological investments;
- Management choices;
- Awareness campaigns and training of its employees.

Thanks to these interventions, operators are properly informed of the risks related to the activities carried out, both in terms of collective and individual safety and of environmental impact, and they receive training regarding the correct procedures to be followed in order to operate safely and with maximum respect for the environment.

All operations carried out on the site, also subject to potential environmental impacts, are carefully planned through appropriate procedures and operating instructions that are scrupulously followed by the personnel involved, who participated in their definition.

## 4.2 Energy consumption and emissions

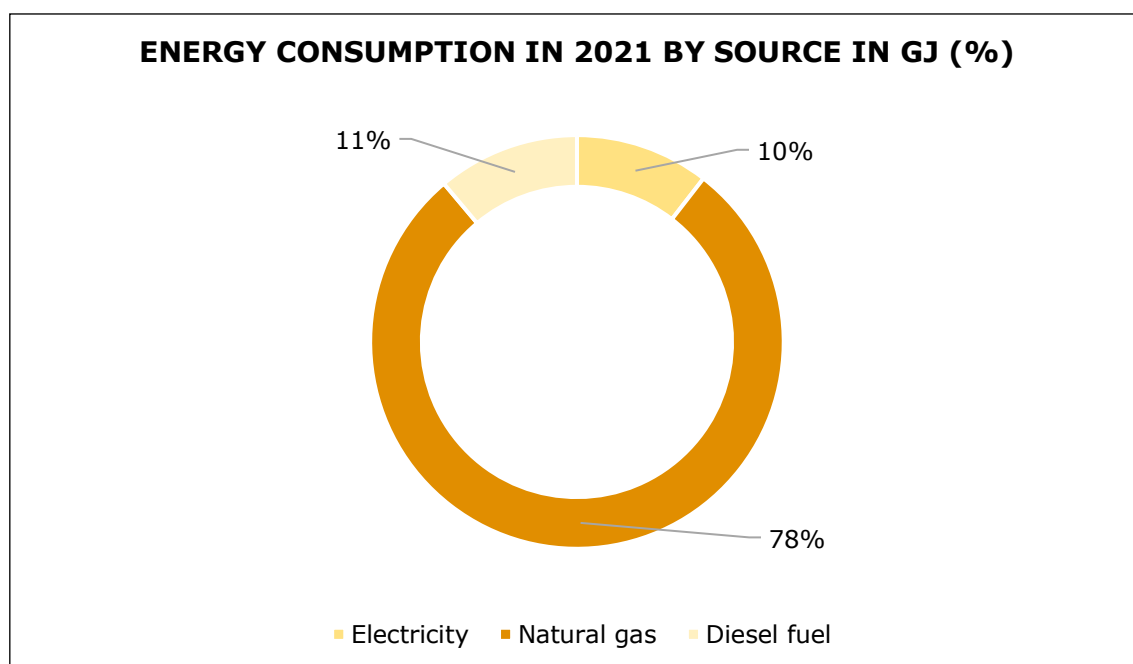
Within the framework of environmental and energy management systems, companies monitor indicators on an annual basis to constantly assess the efficiency of the system in reducing significant environmental impacts.<sup>4</sup>

In the Italian production companies of the Group, the main activities mainly use natural gas, electric energy and diesel, whose energy consumption is mainly associated with production processes.

In particular, electricity is used to power the production lines driven by electric motors, the cold room for storing the finished product, the growth chambers and the greenhouse, as well as the installations in the offices and the lighting of the entire industrial area.

Natural gas is used for the production of steam for production processes, in addition to the use for civil heating of offices and warehouses, which is produced with a dedicated boiler. Diesel fuel, on the other hand, is mainly used for internal handling activities.

In 2021, **the total energy consumption** of the Italian production companies amounted to **172,043 GJ**, an increase of 12.4% compared to 2020, but a decrease compared to the energy consumption of 2019, before the global health emergency.



The most widely used energy vector is natural gas, representing 78% of the Group's total consumption; fuel use is in fact intended for steam production at the various production sites, in particular at ILSA's site. ILSA, formally classified as "energy-intensive" under the MISE decree of 21 December 2017, uses a natural gas-fueled trigeneration plant for the

<sup>4</sup> For more information and details on the sources and factors used for energy consumption data, see chapter "Performance Indicators".

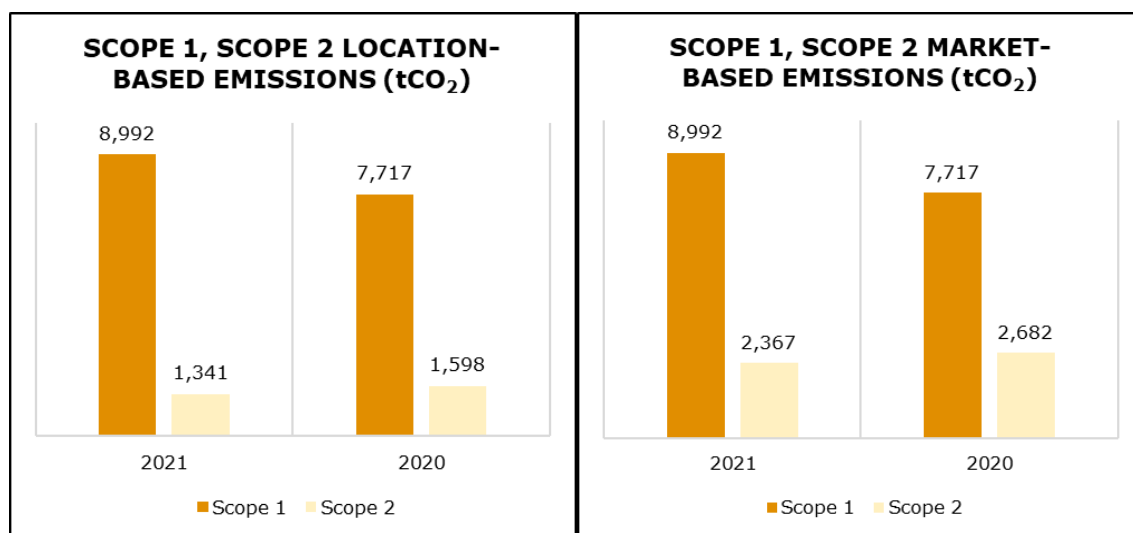
simultaneous production of steam and electricity, the latter contributing 40% of the side's total needs.

### ***Emissions into the atmosphere***

The CO<sub>2</sub> emissions associated with the Group's main consumptions can be divided into two categories:

- Direct emissions (Scope 1): Greenhouse gas emissions due to the Group's direct fuel consumption (natural gas, diesel);
- Indirect emissions (Scope 2): Greenhouse gas emissions from electricity consumption purchased and consumed by the Group. In particular, the calculation of scope 2 emissions can be carried out according to two different methodologies: The "location-based method" is based on the average emission factors related to regional, subnational or national energy generation; the "Market-based method" is based on CO<sub>2</sub> emissions from energy suppliers from which the organization purchases electricity through contract or on emission factors related to the reference market.

In 2021, the Italian production companies produced total emissions of **10,333 tons of CO<sub>2</sub> (+10.9%** compared to 2020), calculated by considering Scope 2 emissions according to the location-based method. Instead, using the market-based calculation method, the Group's total emissions were **11,359 tons of CO<sub>2</sub> (+9.2%** compared to 2020). The change, as well as for electricity consumption, is associated with the resumption of productive activities, thanks to the mitigation of the Covid-19 global health emergency that started in 2020. The emission values remain therefore at the 2019 values with an improvement of 4.62% for total emissions using the location-based method and of 0.92% for total emissions using the market-based method.<sup>5</sup>



<sup>5</sup> For more information and details on the sources and factors used for CO<sub>2</sub> emissions data, see chapter "Performance Indicators".

Other substances released into the atmosphere which are characteristic of the production processes and are associated with the sources authorized by specific environmental concessions relating to the Group's Italian sites are also monitored.

The sites are equipped with different abatement systems specific to the type of emission, such as fabric filters or activated carbon filters. Regular checks and measurements of the substances listed below are carried out, in addition to phosphoric acid which is monitored by the Cifo's production site in compliance with authorization requirements:

- dust from production processes;
- nitrogen oxides (NOx) from the production process;
- volatile organic compounds (VOCs);
- Carbon monoxide (CO).

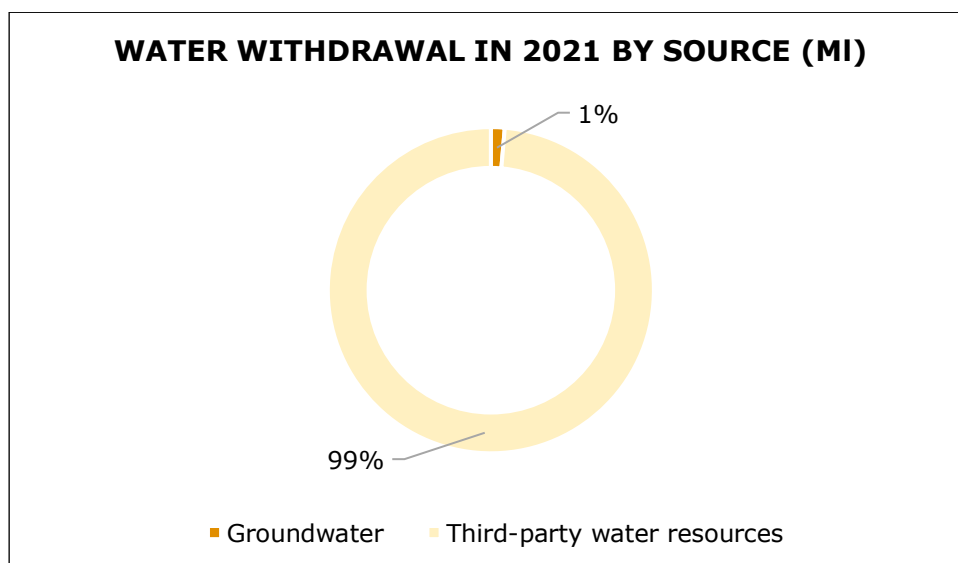
The limits are respected as stipulated respectively by the relative A.I.A. (*Autorizzazioni Integrate Ambientali*) or for the Cifo site, according to the provisions of the A.U.A (*Autorizzazione Unica Ambientale*) issued in September 2021.

#### 4.3 Water consumption and discharges

Water resources are used for both production and civil purposes and the municipal aqueduct is almost entirely the main source of supply for the Italian companies of the Group; only Cifo uses the water drawn from the artesian well to cover 17% of the site's water needs.

The water resource is used for both industrial steam production and for domestic sanitary uses, except for the ILSA site where the experimental growth chambers and the data center rooms are thermoregulated by water-cooled chillers.

In 2021, the total water withdrawal was **57.68 Megaliters**, an increase of about 10% compared to 2020.



### *Water discharges*

Wastewaters, although coming from productive settlements, are classified as comparable to civil discharges and flows into the public sewerage system after purification treatment. Wastewaters from production, such as, for example, plant washing water, are assimilated to waste and transferred to authorised disposers.

The industrial discharges of the Arzignano plant of ILSA S.p.A., on the other hand, flow through the industrial sewage system to the consortium purification plant which provides wastewater treatment for the entire industrial district to which the site belongs.

## 4.4 Waste management

The Biolchim Group is aware of the **management and disposal of waste**, recognizing the importance of the proper public health activities, in full compliance with the environmental regulations in force.

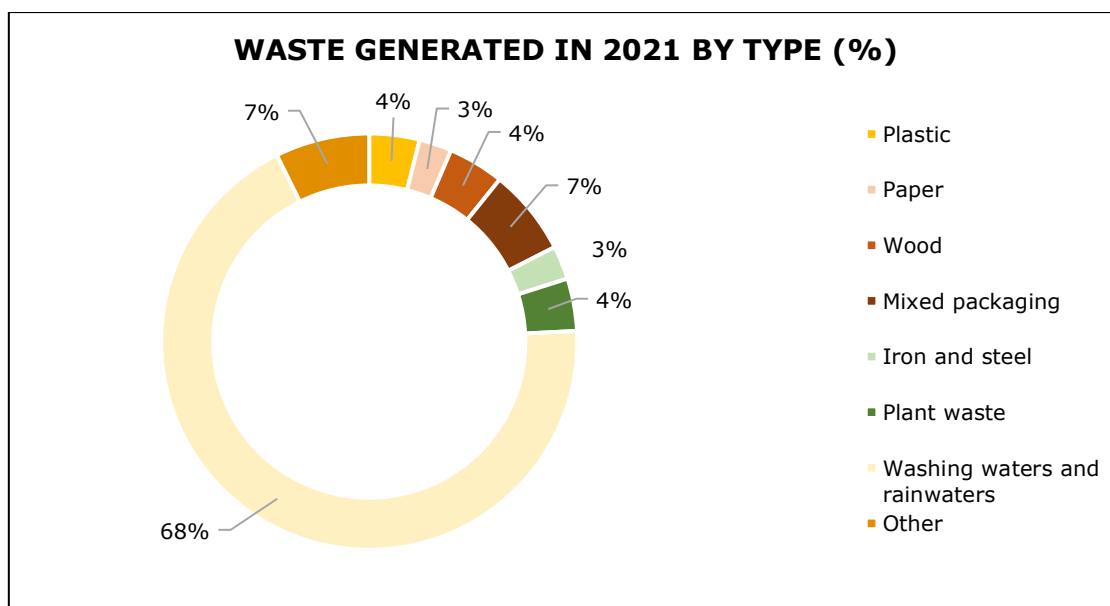
Waste is generated during production, laboratory and office operations and is sent for disposal in recovery centers or authorized landfills. Dedicated operating instructions are in place in the different plant areas to properly regulate the collection and management of waste at the different sites. Furthermore, the correct management of loading and unloading registers and forms allows the control of waste movements inside and outside the plants. All authorized transporters and disposal agents are selected according to specific qualification procedures of service providers.

To promote resource recovery, at Cifo's plant the waste from the extraction system is not disposed of as waste but is sold as a by-product for reuse in the large fertilizer packaging plants of one of the company's suppliers.

In 2021, a total of **2,965 tonnes of waste was generated** (+12% compared to 2020), the majority of which was non-hazardous waste (98%). Concerning **the type of waste generated in 2021**, expressed in tonnes, the majority consists of washing waters and rainwaters (68%). The following graph shows the detail.<sup>6</sup>

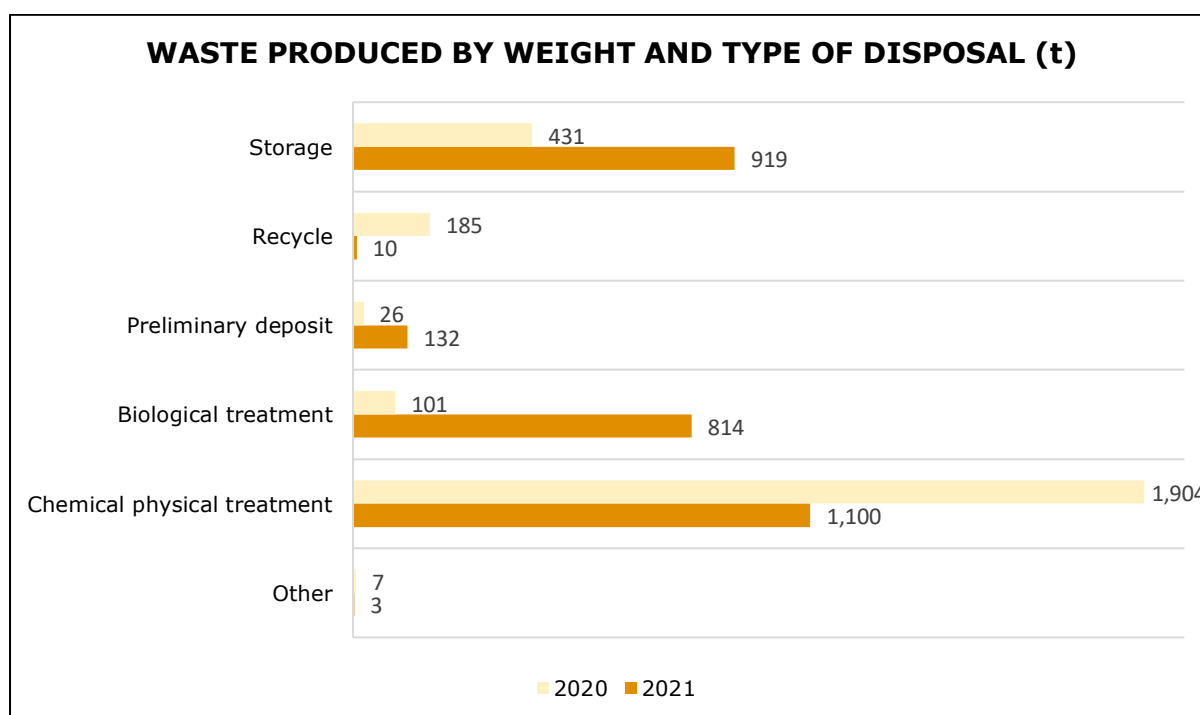
---

<sup>6</sup> It should be noted that from this year onwards, the reporting of waste data has been carried out using the new GRI 306 standard, published by the Global Reporting Initiative (GRI) in 2020 to replace the version published in 2016. For this reason, as well as following a continuous improvement in the reporting process, the data relating to waste produced in 2020 have been re-exposed with respect to those included in the 2020 Sustainability Report, published on the website [www.biolchim.com](http://www.biolchim.com)



Regarding the types of disposals, Biolchim Group companies mainly adopt storage, biological treatment and chemical physical treatment. In 2021, waste not intended for recovery operations accounted for 31 % of the total (compared to 23 % in 2020).

The following table shows the variations, in some cases significant, between the disposal types in 2020 and 2021. The differences are mainly due to the different ways in which the companies that managed waste disposal in 2021 operate.





## 4.5 Circular economy practices and carbon neutrality

### ***Circular economy***

The subsidiary ILSA realizes a large part of its production through **the recovery of the leather residues from the tanning chain, extracting the protein content through proprietary processes**. The manufacturing activity thus represents a **perfect example of a circular economy** since the 1970s, identifying in leather residues a raw material rich in proteins that can be used for plant nutrition and biostimulation products.

### ***ILSA AFFIRMS ITS COMMITMENT TO PROMOTE THE PRINCIPLES OF CIRCULAR ECONOMY BY INVESTING IN THE LIFE BIOPOL PROJECT AND MOBILIZING THE RESEARCH OF ECO-COMPATIBLE BIOPOLYMERS FOR THE SKIN SECTOR, COMING FROM PLANT AND ANIMAL BIOMASSES.***

The Life Biopol project, launched in 2015 and co-financed by the European Union under the life 2014-2020 program, aims to enhance the waste of the agricultural and land industry by using it for products intended for leather tanning processes.

The five public and private entities involved in the project have cooperated to synthesize a new class of biopolymers, an alternative to the chemical auxiliaries of petrochemical origin currently used in the tanning process. The challenge is to find viable alternatives to highly polluting substances, creating new chemical protocols that are free of hazardous substances and have a low environmental impact.

Thanks to its research laboratories, ILSA has completed the industrial development of four prototypes, one of animal origin and three of plant origin.

For each new biopolymer, 8 tons have been produced, and it has been possible to demonstrate that by applying these new biopolymers it is possible to obtain the same performance of tanning with chromium salts in re-tanning and traditional products.

### **Environmental results**

From the first results of the project it has emerged that the tanned hides in the Codyeco experimental plant have maintained a constant quality, a good light fastness, a brighter color. The greater quantity of substances of biological nature leads to the production of a skin of good biodegradability, an environmental footprint of the products up to 77% for the substances used in the production and 51% for the leather article. Then there was a decrease in chlorides of 15%, a near suppression of sulphates in production (reduced by 98%) and total nitrogen (reduced by 57%). Encouraging results also for water consumption, with a 25% reduction in the re-tanning phase. The addition of chromium salts was not necessary during re-tanning.

### ***Carbon neutrality***

#### ***THE PROJECT "ILSAZERO": THE COMPANY IN ARZIGNANO DONATES 4 THOUSAND FRUIT PLANTS. THE OBJECTIVE IS CARBON NEUTRALITY.***

Significant planting improves the economic sustainability of some small farming communities in Latin America and fosters a sustainable economy in the true sense of the word. It is the project of Ilsa, within the framework of "Ilsazero", the program launched by the company of Arzignano in 2019 that aims to achieve "carbon neutrality".

The company specializing in biotechnology for the production of fertilizers and bio-stimulants for organic and sustainable agriculture, also starts initiatives for farmers in Guatemala and Peru in 2021. It will support the planting of 4.000 fruit trees and endangered forest species in the Peruvian Amazon. The aim is to expand the orchards of small farmers by donating common and less widespread fruit trees, to improve their economic sustainability, by promoting the development of more stable social structures and preserving biodiversity.

ILSA has donated fruit plants such as orange, avocado, cedar, lime, mango, chico zapote, and reforestation such as mahogany. The technical means of the Biolchim Group's company from Vicenza, studied with the aim of developing an efficient and sustainable agriculture, find here their ideal use, closing a virtuous circle in favoring the extension of organic cultivations with high economic potential. For "Ilsazero", the starting point was the calculation of its environmental footprint, realized in 2014 that gave the company the data of its environmental impact calculated in CO2 equivalent.

A comforting figure that has shown lower impacts of up to 50% with equal nutritional units applied to the soil, compared to synthetic products historically present on the market and that Ilsa, for responsibility and transparency toward its stakeholders, has decided to bring to zero in the shortest possible time.

The company intends to achieve this goal both by monitoring its environmental performance and by constantly improving it, but also by compensating for its CO2. This is why the project began in 2019 with the planting of 3.000 trees in Guatemala, Colombia and Thailand, involving 176 farmers and continues today, after a year of forced suspension due to the pandemic, with a further 4,000 trees, in Guatemala and Peru, among fruit and reforestation plants.

#### ***ILSA IS COMMITTED TO MEASURING ITS PROCESS AND PRODUCT IMPACT (OEF/PEF)***

After the first study carried out in 2015, ILSA will conduct a new and updated calculation of the Product Environmental Footprint (PEF) and the Organization Environmental Footprint (OEF) according to EU Recommendation 179/2013, by the end of 2023. This will enable ILSA to assess and report the environmental performance of its products and organization, by evaluating their environmental impacts throughout their life cycle. This study will be officially certified by a third-party organization. This will reaffirm ILSA's commitment to environmental sustainability and responsible conduct in relation to environmental issues, facilitating the management of green supply chains.

**OUR PEOPLE**

## 5. Our people

### 5.1 People of the Group

For the Biolchim Group, **every person has great value**. The company considers the value and development of employees to be of great importance and values such as personal dignity, tolerance, transparency and safety of workers.

The Group aims to maintain a **high level of motivation** among its people, providing the resources and tools necessary to ensure that the high internal skills are used with the maximum benefit for the organization.

The Group's people, in carrying out their duties, favor a work environment free of prejudices, respecting the personality of the workers.

As of December 31, 2021, the Group's total workforce was **410**, an **increase of more than 2%** compared to the previous year. The corporate population is mostly employed in Italy (69% with 281 employees), while the remaining share is divided between European countries (mainly in Germany, Poland, Hungary) and non-European countries (mainly in Brazil, Canada, China, Colombia, New Zealand and Australia).

#### **HUMAN RESOURCES**

As of 31.12.2021

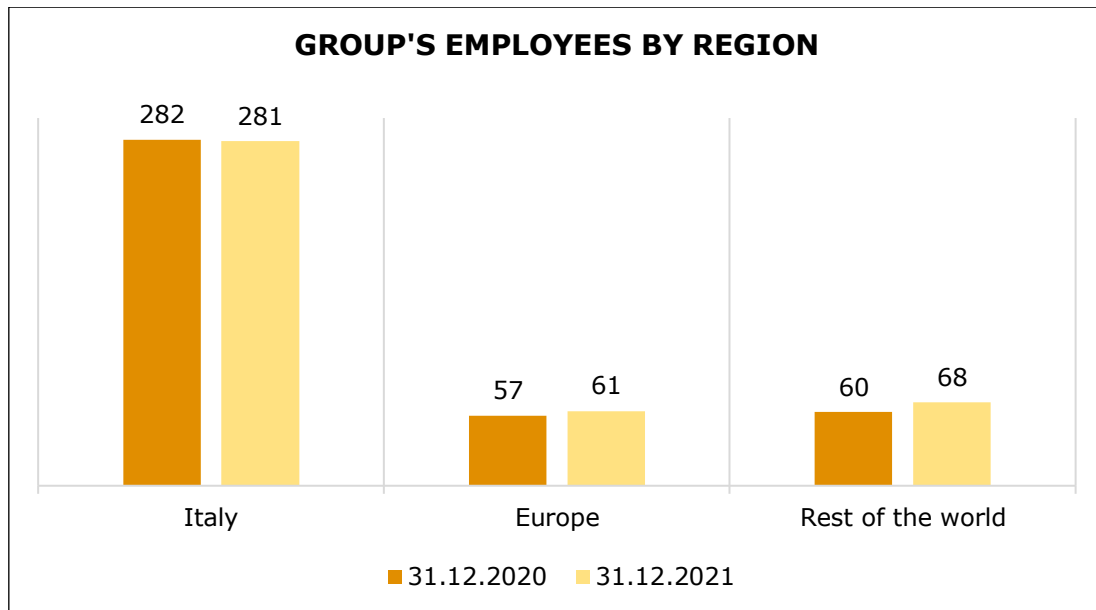
**410** employees

Of which:

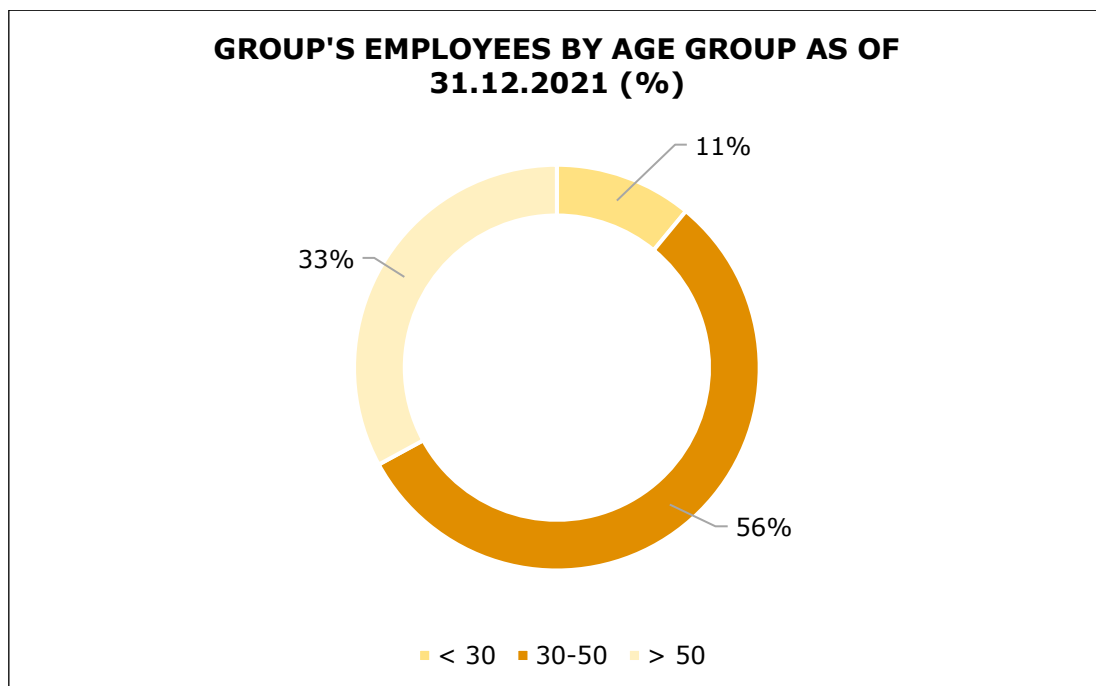
**32%** Women

**90%** Permanent  
Contract

**76** New hires

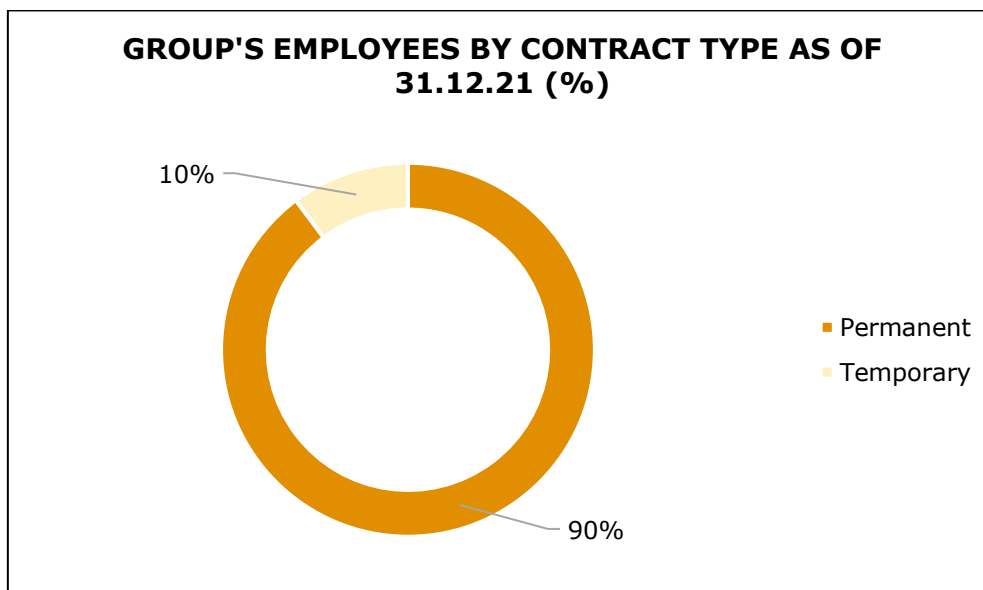


56% of the Group's staff are in the age group between 30 and 50, followed by 33% of employees over 50 and 11% under 30.



The type of **permanent contract** is predominant (**90%**), in line with the Group's desire to create **strong and lasting professional relations**.

As regards the type of employment, **part-time** accounts for only **5%** of the total employees of the Group.



In addition to the 410 employees as of December 31, 2021, the Group employs 242 external workers, of which almost all are commercial agents, who contribute to the dissemination of the Group's products and innovations.

Biolchim has always maintained strong relations with the technical institutes of the territory, in order to **select the best resources**, motivated to undertake a professional path. In this regard, Biolchim takes part in the so-called "career days" in the main technical institutes and universities of the territory (Bologna, Ferrara, Padua mainly) to meet students close to the diploma and degree.

The Group is committed to maintaining a relationship with the social partners and workers' representatives based on a constructive dialogue and on the principles of fairness and transparency. As far as Group companies are concerned, it should be noted that the percentage of employees covered by collective bargaining agreements is equal to 100% of the total for Italian companies, while in other countries employment contracts are based on the different reference state regulations.

### ***Employee development and retention***

Biolchim considers **training to be fundamental**, as it is necessary for **the growth of personnel** and **for the development of the key skills** underlying the success of the company; therefore, it promotes continuous training with courses both for updating and for specific subjects, in order to enhance the knowledge and skills of each resource within the organization.

Considering the compulsory and non-compulsory training activity carried out by the Group's main production companies, in 2021 more than **3,420 hours of training** were provided, of which 73% were dedicated to white collars, 22% were dedicated to blue

collars and 5% to managers. Due to the constraints of the 2020 health emergency, training hours in 2021 were tripled compared to the previous year.<sup>7</sup>

The correct evaluation and management of the resources present in the company has become a fundamental tool for Biolchim to correctly guide the management of the company. Using a **self-assessment template**, the individual can submit training requests to their manager, who in turn evaluates and approves the request based on the employee's skills and abilities.

By investing constantly in the development of human capital, the Biolchim Group has traditionally developed a policy that focuses on the retention of personnel and the attraction of new talent. The Group's outgoing turnover rate as of 31.12.2021 was 16%, while the hiring rate was 19% (13% in 2020).



---

<sup>7</sup> The training hours include data relating to Biolchim S.p.A., Cifo S.r.l. and ILSA S.p.A.. For more information on health and safety performance, see chapter "Performance Indicators".



## 5.2 Employee engagement and well-being

The Biolchim Group's human resources management aims at **integrating, respecting and promoting all forms of diversity**, impeding any discrimination resulting, for example, from gender, nationality, sexual orientation, age or political and/or religious opinions, and considering them opportunities for growth for the organization.

Biolchim has always been **a multicultural reality** and has worked overtime to create an inclusive working environment free from discrimination of any kind: multiculturalism embodies the Group's international vocation and it is in our interest to promote an inclusive environment.

Relations between employees are conducted with respect for the rights and freedoms of persons, as well as fundamental principles which affirm equal social dignity without discrimination on grounds of nationality, language, sex, race, religious belief, political and union membership, physical or mental conditions.

No reports of actual or alleged discriminatory practices occurred in 2021.

To support and promote the well-being of its people, Biolchim has implemented over the years some welfare initiatives to try to improve the lives of employees in the workplace, including conventions with restaurants and meal vouchers. Employees are provided with health care, parental leave and pension contributions as expected by CCNL. Only managers are covered by life insurance and insurance in the event of disability.





### 5.3 Our commitment for employees' health and safety

Biolchim is committed to spreading and consolidating a culture of security. All employees are required, in the context of their activities, to consider, in addition to the production aspects, also those of safety and protection of the environment, with the same application and intensity.

The activities of the Group are conducted in full compliance with the regulations in force and with the company directives on the prevention and protection of workers, and safety at work. In 2020, there was a migration from OHSAS 18001 certification to **UNI ISO 45001** – Employees' Health and Safety management system – for both Biolchim and Cifo, with the aim of creating a health and safety culture, capable of promoting continuous improvement on these corporate aspects. The management system provides for the presence of all the necessary functions, in line with the legal parameters, including the appointment of persons responsible for the prevention and protection service (RSPP) and the election of workers' representatives for safety (RLS).

Occupational health and safety risks are mapped and evaluated within the DVR (Risk Assessment Document). For several years, a "bottom-up information" system has been in place that encourages all employees, in offices and in production, to report any critical issues, so as to make their own contribution, each within its own tasks, to the process of identification and prevention of risks, protection of health and safety against themselves, colleagues and third parties.

The Group is inspired by the following principles:

- avoid risks by preventing them at source and assess risks that cannot be avoided in order to ensure proper management;
- adapt work to man, in particular as regards the design of jobs and the choice of work equipment and working and production methods, in particular to attenuate monotonous and repetitive work and to reduce the effects of such work on health;
- promote practices and materials that reduce the risk of work, including on the basis of technical innovations in this field;
- plan prevention, aiming at a coherent complex integrating the technique, the organization of work, working conditions, social relations and the influence of the factors of the working environment;
- give priority to collective protection measures over individual protection measures, by disseminating appropriate instructions to workers;
- ensure that all workers receive training in health and safety at work, not just compulsory.

These principles are used by the Group companies to take the necessary measures to protect the health and safety of workers, including activities to prevent occupational risks,

#### **OCCUPATIONAL HEALTH AND SAFETY**

**ISO  
45001:2018** for  
BIOLCHIM and CIFO  
plants.

**10 work-related  
injuries** in 2021

**3.9 injury rate** in  
2021

information and training, as well as the establishment of an organization and the necessary means.

In 2021, 10 work-related injuries were recorded in the Italian companies (12 work-related injuries in 2020). In 2021, the work-related injuries rate decreased by 24%, from 5.2% to 3.9%<sup>8</sup>. The significant reduction in the rate is due both to a decrease in the number of injuries and to a 10% increase in hours worked during the year (465,115 in 2020 and 511,289 in 2021). "Near-miss" events are monitored as well as work-related injuries and workers are made aware of the importance of reporting these events through training sessions. The RSPP receives and evaluates the reports, which are managed with the assistance of the RLS.

## RISK MANAGEMENT: PREVENTION OF COVID 19

Following the spread of the Covid-19 epidemic in early 2020, the Biolchim Group has been working to implement appropriate security and control measures in order to ensure operational continuity in production sites, through careful management of the emergency and the reorganization of the working activity to safeguard the health and safety of people. In particular:

- the behavioral Decalogue issued by the higher Institute of Health has been transposed and disseminated.
- Limitations have been put in place to the conduct of meetings (favoring video-conference communications) to close contacts with external staff (through specific operating instructions).
- for operators, ad hoc training was performed to limit close contacts and to respect the behavioral Decalogue.
- have been made available to all personnel disinfectant and protective masks.
- a periodic disinfestation of the corporate premises with products based on sodium hypochlorite has been planned.
- Smart working has been activated, in order to substantially limit contacts within offices, and a set of new mobile PCs has been purchased, to increase the number of people who can work in from their homes.
- an ad hoc insurance for Covid-19 risks HAS been stipulated that covers health costs for employees who contract the virus;
- initiatives have been taken to support employee morals such as the distribution of food "friendly expense" at km 0.

During the months, the Group has promptly transposed the directives of the Ministerial Decrees issued and has continued to maintain a high level of attention for the health and safety of its employees, adapting all internal organizational and procedural rules, thanks to the efforts of all the managers, the RSPP and all employees. In 2021, *smartworking* remained in place, with a system of turnover, for about 30-35% of employees.

---

<sup>8</sup> The data refer to the Italian companies: Biolchim S.p.A., Cifo S.r.l., Ilsa S.p.A.. For more information on health and safety performance, see chapter "Performance Indicators".

**BUILDING THE FUTURE**

## 6. Building the future

### 6.1 Win project and the Co-creation

In January 2012, Biolchim launched the **Win** (Worldwide Innovation Network) project, an international network of collaborations aimed at creating innovation and structured according to the principles of co-creation.



Through Win project, Biolchim cooperates with partners in all phases of product development, from conception to marketing, with two distinct purposes:

- **Facilitating technology transfer:** in collaboration with Universities, Research Centers, Spin off and innovative Start Up, Biolchim participates in important research projects in the fields of plant nutrition, industrial technologies, logistics, marketing and communication with the aim of transforming the results obtained into innovative products and services, effective and with low environmental impact;
- **Reduce product development and marketing time:** by testing new products simultaneously in the realities in which business partners operate, Biolchim works with them in the realization of targeted strategies that accelerate their introduction to the single market. The agronomic data collected in field tests conducted worldwide also constitute a vast collection of technical product knowledge available to all project participants.

Win is a project in constant development; potential partners over the years have been:

#### Partners of the Win project

	2012	2014	2017	2019	2020	2021
<i>Universities</i>	3	11	27	28	28	65
<i>Research centers</i>	7	14	21	21	21	74
<i>Private laboratories</i>	5	7	26	30	30	46
<i>Business partners</i>	4	7	20	20	20	99
<b>Total</b>	<b>19</b>	<b>39</b>	<b>94</b>	<b>99</b>	<b>101</b>	<b>284</b>

**Co-creation** is a new innovation strategy based on the realization of a business value shared and co-generated by all market players. The use of external resources in the process of innovation has so far been understood only as one-way academic collaborations, that is, the development of corporate projects by Universities and Research Centers. In the co-creation, collaboration networks are expanded and structured in a two-way sense: Company, University, Research Centers and market players share resources and means to develop ideas born externally or internally with mutual benefit of all parties involved.



## 6.2 Networking initiatives and other activities – collaborations

### European Biostimulant Industry Council (EBIC)

Biolchim is one of the founders of the **European Biostimulant Industry Council**, which in 2021 has 66 members of the most important companies operating in the sector. EBIC's aim is to ensure that plant biostimulants technology is assessed as an integral part of European agriculture through an appropriate regulatory framework. Also, thanks to EBIC's work, plant biostimulants have been included within the new European Regulation on fertilizer products (Reg. 2019/1009) and will have access to the single market for the first time in 2022. This regulation is specific at European level for the biostimulants market and offers an opportunity to harmonization, ensuring safety and efficacy for these products.



Today, EBIC works to optimize the implementation of the Regulation and strengthen relations with stakeholders in the agri-food chain with the aim of informing and making operators aware of the benefits that biostimulants can bring to agriculture.

### 2<sup>nd</sup> National Workshop on Biostimulants - BARI 2021



The second edition of Biostimulants Conference was an opportunity to bring together the most influential voices in the industry, biostimulant producers and those who use them every day, with the aim of deepening the knowledge of these products and their physiological, applicative and regulatory aspects.

On the dedicated days of 23 and 25 February, 2021, the Group presented the processes that lead to the formulation of biostimulants, illustrating the product development phases, controlled environment testing and large-scale field trials.



### Biocontrol Conference - BARI 2021

*Spreading knowledge about biocontrol tools* is the objective of the Biocontrol Conference held in Bari on 9 and 10 November 2021: a direct bridge to information coming from the world of research, companies producing biocontrol tools and from the experiences of private technical assistance, in line with the European objectives set by the Farm to Fork strategy of the European Green Deal.

During a speech on 10 November Cifo presented **the T34 Biocontrol**, the biological fungicide of Cifo and Biolchim. The dialogue that took place during the conference was a unique opportunity to deepen the dynamics of the Trichoderma in the soil.



### Combi Maize Project: second place at the national Confagricoltura award

Combi Mais Hydrotechnologies' innovative precision farming protocol – in which Cifo, a long-standing partner, participates with specific products for localized nutrition at sowing and fertigation, and with foliar biostimulants – in 2019 won the **second place at the national Confagricoltura award "Innovation in Agriculture"** in the "New frontiers" category, **dedicated to technological innovations** in processes, products and services, applied at enterprise level, overcoming the selection of a jury composed of prestigious representatives of the business and academic world.

In 2021, the project reached the 8.0 edition, renewing its commitment through a protocol that is now a reference in the national context and capable of combining innovation, profitability for farmers and sustainable production of excellent quality. In this edition, space was also carefully dedicated to Precision Farming topics.





### **Valpolicella Superiore - A Territory opportunity**

*Valpolicella Superiore – a Territory opportunity* is the new development and commercial valorization project organized by the Consortium of Veneto's first red wine PDO, in which Cifo took part. The initiative was realized through a totally digital format that connected producers, operators and national and international press for a focus entirely dedicated to the area's 'youngest and freshest' denomination. The main objective of this journey is to bring to the market's attention the entire qualitative pyramid expressed by method wines, such as Amarone, Valpolicella Ripasso and Recioto, and the territorial wines represented by Valpolicella and Valpolicella Superiore.





## Confagricoltura Agreement

Confagricoltura Agreement is an agreement created with the aim of fostering an increasingly sustainable agriculture through the creation of cohesive supply chains both upstream and downstream from the production. The farmers' organization and Cifo have launched a series of initiatives aimed at information and dissemination. In particular, they agreed to set up "showcase campuses" on emerging crops or crops of national interest. These are campuses where farmers associated with Confagricoltura can learn, field-test and delve into innovative agronomic techniques.



## Garden Festival d'autunno AICG

Cifo sponsored the sixth edition of **the Garden Festival d'autunno 2021**, an event promoted by AICG, which took place in the numerous Garden Centers in Italy, adhering to the initiative, from 18 September to 17 October.

The aim of the sixth edition of the Garden Festival d'autunno was to make people reflect on the close connections between nature and mind. Therefore, in the AICG Garden Centers it was possible to understand the close link between man and nature within six dedicated narrative corners.



### **Other initiatives**

Learn about other 2021 initiatives through QR Codes



**BIOLCHIM**



**ILSA**



**CIFO**

## 7. Appendix

### 7.1 Material topics boundary

MATERIAL TOPICS	GRI STANDARD	IMPACT BOUNDARY	TYPE OF IMPACT
<b>Economic and financial sustainability</b>	-	Biolchim Group	Caused by the Group
<b>Governance, compliance and business ethics</b>	ANTICORRUPTION (GRI 205) ANTI-COMPETITIVE BEHAVIOR (GRI 206) ENVIRONMENTAL COMPLIANCE (GRI 307) SOCIO-ECONOMIC COMPLIANCE (GRI 419)	Biolchim Group	Caused by the Group
<b>Energy, emissions and climate change</b>	ENERGY (GRI 302) EMISSIONS (GRI 305)	Production sites of the Group	Caused by the Group
<b>Water resources protection</b>	WATER AND WATER DRAINS (GRI 303)	Production sites of the Group	Caused by the Group
<b>Productive efficiency</b>	-	Biolchim Group	Caused by the Group
<b>Responsible use of chemicals</b>	-	Biolchim Group	
<b>Correct management of waste and waste discharge</b>	WASTE (GRI 306)	Production sites of the Group	Caused by the Group
<b>Human capital management and development</b>	EMPLOYMENT (GRI 401) TRAINING AND EDUCATION (GRI 404)	Biolchim Group	Caused by the Group
<b>Diversity, inclusion and employees well-being</b>	EMPLOYMENT (GRI 401) DIVERSITY AND EQUAL OPPORTUNITIES (GRI 405) NON-DISCRIMINATION (GRI 406)	Employees of the Biolchim Group	Caused by the Group
<b>Industrial relations</b>	-	Biolchim Group	Caused by the Group
<b>Occupational health and safety</b>	OCCUPATIONAL HEALTH AND SAFETY (GRI 403)	Biolchim Group's employees <sup>9</sup>	Caused by the Group
<b>Relations with farmers and agricultural enterprises</b>	-	Biolchim Group	Caused by the Group and directly connected through a business relationship
<b>Product quality and safety</b>	CUSTOMER HEALTH AND SAFETY (GRI 416) MARKETING AND LABELING (GRI 417)	Biolchim Group	Caused by the Group
<b>Research and innovation</b>	-	Biolchim Group	Caused by the Group and directly connected through a business relationship
<b>Agricultural productivity</b>	-	Biolchim Group	Caused by the Group
<b>Collaborations and partnerships with industry organizations</b>	-	Biolchim Group	Caused by the Group and directly connected through a business relationship
<b>Sustainable supply chain management</b>	-	Biolchim Group	Caused by the Group and directly connected through a business relationship
<b>Digitalization</b>	-	Biolchim Group	Caused by the Group

<sup>9</sup> The perimeter of health and safety data includes only the employees of Biolchim S.p.A., Cifo S.r.l. and ILSA S.p.A.. The Group is considering the possibility of collecting this data for all employees of the Group and also for external collaborators and suppliers operating at the Group's headquarters.

## 7.2 Performance Indicators

## Environmental data

*Energy consumption within the organization (GJ)<sup>10</sup>*

Type of consumption	2020	2021
<b>Energy sources</b>	<b>132,621</b>	<b>154,003</b>
Natural gas	117,702	134,868
Diesel fuel	14,919	19,136
<b>Purchased electricity</b>	<b>20,721</b>	<b>18,583</b>
of which from renewable sources	-	-
of which from non-renewable sources	20,721	18,583
<b>Self-produced electricity</b>	<b>4,841</b>	<b>8,931</b>
of which from renewable sources	-	-
of which from non-renewable sources	4,841	8,931
<b>Self-produced electricity and sold to the grid</b>	<b>299</b>	<b>544</b>
of which from renewable sources	-	-
of which from non-renewable sources	299	544
<b>Total</b>	<b>153,042</b>	<b>172,043</b>

*GHG emissions - Scope 1 and Scope 2 (tCO<sub>2</sub>)<sup>11</sup>*

		2020	2021
<b>Scope 1</b>	Direct emissions (Scope 1)	7,717	8,992
<b>Scope 2</b>	Indirect emissions (Scope 2) Location-based	1,598	1,341

<sup>10</sup> The following conversion factors were used for the calculation of energy consumption in GJ:

Natural gas: for the years 2020 and 2021 it is equal to 35,3 GJ/1000\*stdm3 (source: Ministry of the Environment 2020; Ministry of the Environment 2021);

Diesel fuel: for the years 2020 and 2021 it is equal to 36,0 GJ/1000\*I (source: Ministry of the Environment 2020; Ministry of the Environment 2021);

Diesel fuel for motor vehicles: for the years 2020 and 2021 it is equal to 35,9 GJ/1000\*I (source: Ministry of the Environment 2020; Ministry of the Environment 2021).

<sup>11</sup> The emission factors used for the calculation of scope 1 are:

- Natural gas: for 2020 it is 1,984 tCO<sub>2</sub>/1000\*StdM3; for 2021 it is 1,983 tCO<sub>2</sub>/1000\*StdM3 (Source: Ministry of the Environment 2020; Ministry of the Environment 2021)

- Diesel fuel: for 2020 it is 3,155 tCO<sub>2</sub>/l; for 2021 it is 3,169 tCO<sub>2</sub>/l (Source: Ministry of the Environment 2020; Ministry of the Environment 2021)

- Diesel fuel for motor vehicles: for the years 2020 and 2021 it is equal to 3,151 tCO<sub>2</sub>/l (source: ISPRA 2020; ISPRA 2021).

Both calculation methodologies were used to calculate scope 2 emissions, in line with GRI Sustainability Reporting Standards.

The Market-based is based on the CO<sub>2</sub> emissions emitted by the energy suppliers from which the organization buys electricity through a contract and can be calculated by considering: certificates of guarantee of origin of energy and direct contracts with suppliers, supplier specific emission factors, emission factors related to the "residual mix", i.e. energy and emissions not monitored or not claimed (methodology used, with Italy 2020 emission factor: 466 gCO<sub>2</sub>/kWh - source: AIB - European residual mixes 2019; 2021: 4586 gCO<sub>2</sub>/kWh - source: AIB - European residual mixes 2020). The Location-based method is based on average emission factors related to the generation of energy for well-defined geographical boundaries, including local, subnational or national boundaries (methodology used, with Italian emission factor 2020: 277,6 g CO<sub>2</sub>/kWh - source: ISPRA 2020; 2021: 259,8 g CO<sub>2</sub>/kWh - source ISPRA 2021).

Scope 1 emissions are expressed in tons of CO<sub>2</sub>, as the source used does not report emission factors for other gases other than CO<sub>2</sub>. Scope 2 emissions are expressed in tons of CO<sub>2</sub>, however the percentage of methane and nitrous oxide has a negligible effect on total greenhouse gas emissions (CO<sub>2</sub> equivalents) as can be deduced from the technical reference literature.

	Indirect emissions (Scope 2) Market based	2,682	2,367
<b>Total</b>	<b>Total Scope 1 and Scope 2 (Location-based)</b>	<b>9,315</b>	<b>10,333</b>
	<b>Total Scope 1 and Scope 2 (Market-based)</b>	<b>10,399</b>	<b>11,359</b>

*Nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>) and other significant emissions (t/year)*

	2020	2021
<b>NO<sub>x</sub></b>	8.7	4.9
<b>Volatile Organic Compounds (VOC)</b>	15.1	13.9
<b>Particulate Matter (PM)</b>	10.9	7.4
<b>Other standard emission categories identified in the applicable legislation</b>	2.8	2.6
<b>Total</b>	<b>37.5</b>	<b>28.8</b>

*Water withdrawal by source (MI)<sup>12</sup>*

Source of the levy	2020	2021
<b>Groundwater</b>	0.7	0.8
<b>Third-party water resources</b>	51.8	56.9
<b>Total</b>	<b>53</b>	<b>58</b>

*Water discharge by destination (MI)<sup>13</sup>*

Destination of the exhaust	2020	2021
<b>Third-party water resources</b>	45	44
<b>Total</b>	<b>45</b>	<b>44</b>

*Waste generated (t)<sup>14</sup>*

Waste by composition	2020				2021			
	Hazardous	Non-hazardous	Total	% of total	Hazardous	Non-hazardous	Total	% of total
<b>Plastic</b>	-	99.1	<b>99.1</b>	<b>4%</b>	-	115.7	<b>115.7</b>	<b>4%</b>
<b>Paper</b>	-	50.2	<b>50.2</b>	<b>2%</b>	-	75.2	<b>75.2</b>	<b>3%</b>
<b>Wood</b>	-	105.7	<b>105.7</b>	<b>4%</b>	-	129.0	<b>129.0</b>	<b>4%</b>
<b>Mixed packaging</b>	23.5	168.6	<b>192.1</b>	<b>7%</b>	16.0	183.1	<b>199.1</b>	<b>7%</b>
<b>Iron and steel</b>	-	64.2	<b>64.2</b>	<b>2%</b>	10.3	67.0	<b>77.3</b>	<b>3%</b>
<b>Plant waste</b>	-	-	-	<b>0%</b>	-	120.8	<b>120.8</b>	<b>4%</b>
<b>Washing waters and rainwaters</b>	4.1	1,997.9	<b>2,002.0</b>	<b>76%</b>	3.0	2,028.1	<b>2,031.1</b>	<b>68%</b>
<b>Other</b>	68.8	57.0	<b>125.8</b>	<b>5%</b>	40.0	177.0	<b>217.1</b>	<b>7%</b>

<sup>12</sup> Water withdrawal from areas not subject to water stress.

<sup>13</sup> Discharge of water in areas not subject to water stress. The water discharges for Biolchim S.p.A. and Cifo S.r.l. were estimated based on water withdrawals and the quantities of particular types of liquid waste disposed of, deriving from the use of the water resource in the production process.

<sup>14</sup> It should be noted that from this year onwards, the reporting of waste data has been carried out using the new GRI 306 standard, published by the Global Reporting Initiative (GRI) in 2020 to replace the version published in 2016. For this reason, as well as following a continuous improvement in the reporting process, the data relating to waste produced in 2020 have been re-exposed with respect to those included in the 2020 Sustainability Report, published on the website [www.biolchim.com](http://www.biolchim.com)

<b>Total<sup>15</sup></b>	<b>96</b>	<b>2.543</b>	<b>2.639</b>	<b>100%</b>	<b>69</b>	<b>2.896</b>	<b>2.965</b>	<b>100%</b>
---------------------------	-----------	--------------	--------------	-------------	-----------	--------------	--------------	-------------

*Waste diverted from disposal (t)*

Recovery method	2020				2021			
	Offsite	Onsite	Total	% of the total waste generated	Offsite	Onsite	Total	% of the total waste generated
<b>Hazardous waste</b>								
<b>Storage</b>	58.1	-	58.1	2%	37.8	-	37.8	1%
<b>Non-hazardous waste</b>								
<b>Recycling</b>	185.3	-	185.3	7%	10.0	-	10.0	0%
<b>Storage</b>	373.2	-	373.2	14%	880.7	-	880.7	30%
<b>Total</b>	<b>617</b>	<b>-</b>	<b>617</b>	<b>23%</b>	<b>929</b>	<b>-</b>	<b>929</b>	<b>31%</b>

*Waste directed to disposal (t)*

Disposal method	2020				2021			
	Offsite	Onsite	Total	% of the total waste generated	Offsite	Onsite	Total	% of the total waste generated
<b>Hazardous waste</b>								
<b>Preliminary deposit</b>	26.0	-	26.0	1%	6.0	-	6.0	0%
<b>Other disposal operations</b>	7.0	-	7.0	0%	5.3	-	5.3	0%
<b>Non-hazardous waste</b>								
<b>Preliminary deposit</b>	-	-	-	0%	125.5	-	125.5	4%
<b>Biological treatment</b>	101.4	-	101.4	4%	814.4	-	814.4	27%
<b>Other disposal operations</b>	1,903.9	-	1,903.9	72%	1,098	-	1,098.2	37%
<b>Total</b>	<b>2,038</b>	<b>-</b>	<b>2,038</b>	<b>77%</b>	<b>2,049</b>	<b>-</b>	<b>2,049</b>	<b>69%</b>

<sup>15</sup> The total waste shown in the table "Waste generated" (GRI 306-3) does not correspond to the sum of the totals in the tables "Waste diverted from disposal" (GRI 306-4) and "Waste directed to disposal" (GRI 306-5). The difference is justified by the presence of undisposed stocks at the end of the year and because of residual stocks falling within the previous year that were not disposed of during that period.

## Human resources data

*Total number of employees by employment contract (permanent and temporary)*

	31.12.2020			31.12.2021		
	Men	Women	Total	Men	Women	Total
<b>Permanent employees</b>	245	114	<b>359</b>	249	119	<b>368</b>
<b>Temporary employees</b>	31	9	<b>40</b>	31	11	<b>42</b>
<b>Total</b>	<b>276</b>	<b>123</b>	<b>399</b>	<b>280</b>	<b>130</b>	<b>410</b>

*Total number of employees by employment contract (permanent and temporary) and region*

	31.12.2020				31.12.2021			
	Italy	Europe	Rest of the world	Total	Italy	Europe	Rest of the world	Total
<b>Permanent employees</b>	273	56	30	<b>359</b>	269	61	38	<b>368</b>
<b>Temporary employees</b>	9	1	30	<b>40</b>	12	0	30	<b>42</b>
<b>Total</b>	<b>282</b>	<b>57</b>	<b>60</b>	<b>399</b>	<b>281</b>	<b>61</b>	<b>68</b>	<b>410</b>

*Total number of employees employment type (full-time and part-time) and gender*

	31.12.2020			31.12.2021		
	Men	Women	Total	Men	Women	Total
<b>Full-time</b>	263	111	<b>374</b>	273	117	<b>390</b>
<b>Part-time</b>	13	12	<b>25</b>	7	13	<b>20</b>
<b>Part-time (%)</b>	5%	10%	<b>6%</b>	3%	10%	<b>5%</b>
<b>Total</b>	<b>276</b>	<b>123</b>	<b>399</b>	<b>280</b>	<b>130</b>	<b>410</b>

*Total number of external workers by gender*

	31.12.2020			31.12.2021		
	Men	Women	Total	Men	Women	Total
<b>Administered workers</b>	7	1	<b>8</b>	14	1	<b>15</b>
<b>Agents</b>	214	13	<b>227</b>	215	12	<b>227</b>
<b>Interns</b>	-	-	<b>-</b>	-	-	<b>-</b>
<b>Total</b>	<b>221</b>	<b>14</b>	<b>235</b>	<b>229</b>	<b>13</b>	<b>242</b>

*Number and rate of new employees hires by gender, age group and region*

	2020					2021				
	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate
<b>Italy</b>										
<b>Men</b>	3	13	2	18	10%	9	9	3	21	12%
<b>Women</b>	3	3	1	7	7%	4	8	2	14	13%
<b>Total</b>	6	16	3	25	9%	13	17	5	35	12%
<b>Rate</b>	30%	11%	3%	9%		57%	12%	4%	12%	
<b>Europe</b>										
<b>Men</b>	2	5	3	10	19%	-	5	5	10	18%
<b>Women</b>	-	-	-	-	0%	1	2	-	3	60%
<b>Total</b>	2	5	3	10	18%	1	7	5	13	21%
<b>Rate</b>	10%	3%	3%	4%		13%	17%	42%	21%	
<b>Rest of the world</b>										
<b>Men</b>	3	8	3	14	32%	7	7	5	19	38%
<b>Women</b>	2	1	-	3	19%	5	4	-	9	50%
<b>Total</b>	5	9	3	17	28%	12	11	5	28	41%
<b>Rate</b>	50%	22%	33%	28%		86%	25%	50%	41%	
<b>Total</b>										
<b>Men</b>	8	26	8	42	15%	16	21	13	50	18%
<b>Women</b>	5	4	1	10	8%	10	14	2	26	20%
<b>Total</b>	13	30	9	52	13%	26	35	15	76	19%
<b>Rate</b>	34%	13%	7%	13%		58%	15%	11%	19%	

*Number and rate of employee turnover by gender, age group and region*

	2020					2021				
	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate
<b>Italy</b>										
<b>Men</b>	1	8	6	15	8%	4	14	7	25	14%
<b>Women</b>	2	2	5	9	9%	1	3	7	11	10%
<b>Total</b>	3	10	11	24	9%	5	17	14	36	13%
<b>Rate</b>	15%	7%	10%	9%		22%	12%	12%	13%	
<b>Europe</b>										
<b>Men</b>	2	3	4	9	17%	-	1	7	8	14%
<b>Women</b>	-	-	1	1	33%	-	1	-	1	20%
<b>Total</b>	2	3	5	10	18%	-	2	7	9	15%
<b>Rate</b>	25%	8%	45%	18%		0%	5%	58%	15%	
<b>Rest of the world</b>										
<b>Men</b>	1	6	-	7	16%	4	8	4	16	32%
<b>Women</b>	1	2	-	3	19%	3	1	-	4	22%
<b>Total</b>	2	8	-	10	17%	7	9	4	20	29%
<b>Rate</b>	20%	20%	0%	17%		50%	20%	40%	29%	
<b>Total</b>										
<b>Men</b>	4	17	10	31	11%	8	23	18	49	18%
<b>Women</b>	3	4	6	13	11%	4	5	7	16	12%
<b>Total</b>	7	21	16	44	11%	12	28	25	65	16%
<b>Rate</b>	18%	9%	12%	11%		27%	12%	19%	16%	



*Average annual training hours per capita by gender and category<sup>16</sup>*

	2020			2021		
	Men	Women	Total	Men	Women	Total
<b>Managers</b>	2	-	<b>2</b>	12	-	<b>11</b>
<b>White-collar</b>	3	1	<b>2</b>	16	11	<b>14</b>
<b>Blue-collar</b>	6	2	<b>5</b>	10	2	<b>9</b>
<b>Total</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>14</b>	<b>10</b>	<b>12</b>

*Percentage of employees by employee category and gender*

	31.12.2020			31.12.2021		
	Men	Women	Total	Men	Women	Total
<b>Managers</b>	91%	9%	<b>6%</b>	91%	9%	<b>5%</b>
<b>White-collar</b>	61%	39%	<b>63%</b>	60%	40%	<b>64%</b>
<b>Blue-collar</b>	82%	18%	<b>31%</b>	81%	19%	<b>30%</b>
<b>Total</b>	<b>69%</b>	<b>31%</b>	<b>100%</b>	<b>68%</b>	<b>32%</b>	<b>100%</b>

*Percentage of employees by employee category and age group*

	31.12.2020				31.12.2021			
	<30 years	30-50 years	>50 years	Total	<30 years	30-50 years	>50 years	Total
<b>Managers</b>	0%	38%	62%	<b>6%</b>	0%	29%	71%	<b>5%</b>
<b>White-collar</b>	9%	54%	36%	<b>63%</b>	10%	54%	36%	<b>64%</b>
<b>Blue-collar</b>	3%	51%	46%	<b>31%</b>	6%	49%	45%	<b>30%</b>
<b>Total</b>	<b>10%</b>	<b>57%</b>	<b>34%</b>	<b>100%</b>	<b>11%</b>	<b>56%</b>	<b>33%</b>	<b>100%</b>

*Percentage of employees belonging to vulnerable categories (e.g. protected categories)<sup>17</sup>*

	31.12.2020	31.12.2021
<b>Managers</b>	-	-
<b>White-collar</b>	5.6%	6.1%
<b>Blue-collar</b>	5.6%	6.9%
<b>Total</b>	<b>5.3%</b>	<b>6%</b>

<sup>16</sup> The training hours include data relating to Biolchim S.p.A., Cifo S.r.l. and ILSA S.p.A.

<sup>17</sup> The data refer to the Italian companies: Biolchim S.p.A., Cifo S.r.l., Ilsa S.p.A.,

## Health and safety indicators<sup>18</sup>

### *Work-related injuries*

	2020	2021
<b>Total number of fatalities as a result of work-related injury</b>	-	-
<b>Total number of high-consequence work-related injuries (excluding fatalities) <sup>19</sup></b>	-	-
<b>Total number of recordable work-related injuries</b>	12	10

	2020	2021
<b>Hours worked</b>	465,115	511,289
<b>Multiplier for the calculation</b>	200,000	200,000

### *Death and injury rates of employees*

	2020	2021
<b>Rate of fatalities as a result of work-related injury</b>	-	-
<b>Rate of high-consequence work-related injuries (excluding fatalities)</b>	-	-
<b>Rate of recordable work-related injuries<sup>20</sup></b>	5.2	3.9

<sup>18</sup> The data refer to the Italian companies: Biolchim S.p.A., Cifo S.r.l., Ilsa S.p.A.,

<sup>19</sup> Work-related injuries that have led to damage from which the worker cannot recover, resume or it is unrealistic to expect to recover completely back to the state of health prior to the work-related injury within 6 months

<sup>20</sup> The accident rate was calculated as the ratio between the total number of injuries and the total hours worked, using a multiplication factor of 200.000. The data includes injuries on the home-work journey only if the transport was managed by the organization.

## Methodological note

This document is the third edition of the Biolchim Group Sustainability Report (also in the document “Biolchim” or “the Group”) and describes its performance in the field of environmental, social and economic sustainability for the financial year 2021 (from 1 January to 31 December). In order to allow comparability of data over time, a comparison with data for the year 2020 is also reported.

This annual Sustainability Report was prepared by reporting a selection of the “GRI Sustainability Reporting Standards” published by the Global Reporting Initiative (GRI), as indicated in the table “GRI Content Index”, which provides evidence of the coverage of the GRI indicators associated with each sustainability topic reported in this document.

In particular, the content reported was selected on the basis of the results of the Materiality analysis updated in 2020 and confirmed for 2021, which enabled the identification of material topics for the Biolchim Group and its stakeholders, as described in the “The approach to sustainability” chapter of this document.

The scope of economic data and information corresponds to that of the Biolchim Group's Consolidated Financial Statements as of December 31, 2021.

The scope of social data and information corresponds to that of the companies fully consolidated in the Biolchim Group's Consolidated Financial Statements as of December 31, 2021.

With reference to environmental data and information, the reporting scope includes the main production companies of the Group in Italy: the parent company, Biolchim S.p.A., and the subsidiaries Cifo S.r.l. and Ilsa S.p.A..

Any changes in the scope of topics or indicators are expressly explained in the text.

In order to ensure the reliability of the data, the use of estimates has also been limited as far as possible. Whenever present, estimates are based on the best available and appropriately reported methodologies. The re-exposures of the data published in the previous Sustainability Report are also appropriately indicated in this document.

Regarding significant changes in the Group, it should be noted that Cifrigo Peruana SAC (a company 90% owned by Cifo S.r.l. and 10% by Biolchim S.p.a.) was established on 21 December 2021 and, following the amendment of the shareholders' agreements, control of the Egyptian commercial company Ilsa PCA (controlled by Ilsa S.p.A. with a share of 51%, in turn controlled by Biolchim S.p.A. for 60%) was achieved. No further significant changes in size, ownership and supply chain are reported.

For more information regarding this document please contact:

biolchim@biolchim.it

This document is also available on the Biolchim Group website:

<https://www.biolchim.com/magazine/>

## GRI Content Index

This material refers to the following disclosure GRI:

GRI Standard	Informative	Page number	Notes
<b>GRI 101: FOUNDATION (2016)</b>			
<b>GRI 102: GENERAL DISCLOSURES (2016)</b>			
<b>Organization Profile</b>			
102-1	Name of the organization	9; 74	
102-2	Activities, brands, products and services	22-40	
102-3	Location of headquarters	10	
102-4	Location of operations	10	
102-5	Ownership and legal form	9	
102-6	Markets served	10-11	
102-7	Scale of the organization	10-16; 22-24; 51	The indicator is compliant with requirements a.i, a.ii and a.iii of the reference standards
102-8	Information on employees and other workers	51-56; 70	
102-9	Supply chain	37	
102-10	Significant changes to the organization and its supply chain	74	
102-12	External initiatives	7; 31; 33	
<b>Strategy</b>			
102-14	Statement from senior decision-maker	3-4	
<b>Ethics and Integrity</b>			
102-16	Values, principles, standards and norms of behavior	7	
<b>Governance</b>			
102-18	Governance structure	9	
<b>Stakeholder involvement</b>			
102-40	List of stakeholder groups	18	

102-41	Collective bargaining agreements	53	
102-42	Identifying and selecting stakeholders	18-19	
<b>Reporting practices</b>			
102-45	Entities included in the consolidated financial statements	9; 74	
102-46	Defining report content and topic Boundaries	19-20; 66; 74	
102-47	List of material topics	19-20	
102-48	Restatements of information	46; 68	
102-49	Changes in reporting	19-20; 66	
102-50	Reporting period	74	
102-51	Date of most recent report	Luglio 2021	
102-52	Reporting cycle	74	
102-53	Contact point for questions regarding the report	74	
102-54	Claims of reporting in accordance with the GRI Standards	75	
102-55	GRI content index	75-83	
102-56	External assurance	The document is not subject to external assurance	

SPECIFIC DISCLOSURE			
GRI Standard	Informative	Page number	Notes
<b>GRI 200: ECONOMIC SERIES</b>			
<b>Material topic: Governance, compliance and business ethics</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	7; 9	
<b>GRI-205: Anti-corruption (2016)</b>			
205-3	Confirmed incidents of corruption and actions taken	No confirmed incidents of corruption reported during 2021	
<b>GRI-206: Anti-competitive behavior (2016)</b>			
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No legal actions for anti-competitive behavior, antitrust and monopolistic practices reported during 2021	
<b>GRI-307: Environmental Compliance (2016)</b>			
307-1	Non-compliance with environmental laws and regulations	No non-compliance with environmental laws and regulations cases reported during 2021	
<b>GRI-419 Socio-economic compliance (2016)</b>			
419-1	Non-compliance with laws and regulations in the social and economic area	No non-compliance with laws and regulations in the social and economic area reported in 2021	
<b>GRI 300: ENVIRONMENTAL SERIES</b>			
<b>Material topic: Energy, emissions and climate change</b>			

SPECIFIC DISCLOSURE			
GRI Standard	Informative	Page number	Notes
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	42-45	
103-3	Evaluation of the management approach	42-45	
<b>GRI-302: Energy (2016)</b>			
302-1	Energy consumed within the organization	43-44; 67	
<b>GRI-305: Emissions (2016)</b>			
305-1	Direct (Scope 1) GHG emissions	44; 67-68	
305-2	Energy indirect (Scope 2) GHG emissions	44; 67-68	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	45; 68	
<b>Material topic: Water resources protection</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	42; 45-46	
103-3	Evaluation of the management approach	42; 45-46	
<b>GRI-303: Water and effluents (2018)</b>			
303-3	Water withdrawal	45; 68	The indicators compliant with requirements A. and B. of the reference standard
303-4	Water discharge	46; 68	The indicators compliant with requirement A. of the reference standard

SPECIFIC DISCLOSURE			
GRI Standard	Informative	Page number	Notes
<b>Material topic: Correct management of waste and water discharge</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	42; 46-47	
103-3	Evaluation of the management approach	42; 46-47	
<b>GRI-306: Waste (2020)</b>			
306-3	Waste generated	46-47; 68-69	
306-4	Waste diverted from disposal	47; 69	
306-5	Waste directed to disposal	47; 69	
<b>GRI 400: SOCIAL SERIES</b>			
<b>Material topic: Human capital management and development</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	51-54	
103-3	Evaluation of the management approach	51-54	
<b>GRI-401: Employment (2016)</b>			
401-1	New employee hires and employee turnover	53-54; 71	
<b>GRI-404: Training and education (2016)</b>			
404-1	Average hours of training per year per employee	53-54; 72	
<b>Material topic: Occupational health and safety</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	56-57	
103-3	Evaluation of the management approach	56-57	



SPECIFIC DISCLOSURE			
GRI Standard	Informative	Page number	Notes
<b>GRI-403: Occupational health and safety (2018)</b>			
403-1	Occupational health and safety management system	56	
403-2	Hazard identification, risk assessment, and incident investigation	56	
403-4	Worker participation, consultation, and communication on occupational health and safety	56-57	
403-5	Worker training on occupational health and safety	56-57	
403-9	Work-related injuries	56-57; 73	The indicator is compliant with requirements A.; C.; D.; E.; G.; of the reference standard
<b>Material topic: Diversity, inclusion and employees well-being</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	51-53; 55	
103-3	Evaluation of the management approach	51-53; 55	
<b>GRI- 405: Diversity and equal opportunity (2016)</b>			
405-1	Diversity of governance bodies and employees	9; 51-53; 72	
<b>GRI-406: Non-discrimination (2016)</b>			
406-1	Incidents of discrimination and corrective actions taken	55	
<b>Material topic: Product quality and safety</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	7; 31-36;	

SPECIFIC DISCLOSURE			
GRI Standard	Informative	Page number	Notes
103-3	Evaluation of the management approach	7; 31-36;	
<b>GRI-416 Customer Health and Safety (2016)</b>			
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No incidents of non-compliance concerning the health and safety impacts of products and services reported in 2021	
<b>GRI-417: Marketing and labeling (2016)</b>			
417-2	Incidents of non-compliance concerning product and service information and labelling	No incidents of non-compliance concerning product and service information and labeling reported in 2021	
<b>Material topic: Economic and financial sustainability</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	12-16	
<b>Material topic: Productive efficiency</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	22-23; 28-29	
103-3	Evaluation of the management approach	22-23; 28-29	
<b>Material topic: Responsible usage of chemical products</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	

SPECIFIC DISCLOSURE			
GRI Standard	Informative	Page number	Notes
103-2	The management approach and its components	38-40	
103-3	Evaluation of the management approach	38-40	
<b>Material topic: Industrial relations</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	56	
<b>Material topic: Relations with farmers and agricultural enterprises</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	38-40	
103-3	Evaluation of the management approach	38-40	
<b>Material topic: Research and innovation</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	28-30	
103-3	Evaluation of the management approach	28-30	
<b>Material topic: Agricultural productivity</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	39-40	
103-3	Evaluation of the management approach	39-40	
<b>Material topic: Collaborations and partnerships with industry organizations</b>			
<b>GRI-103: Management approach (2016)</b>			

<b>SPECIFIC DISCLOSURE</b>			
<b>GRI Standard</b>	<b>Informative</b>	<b>Page number</b>	<b>Notes</b>
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	59-65	
103-3	Evaluation of the management approach	59-65	
<b>Material topic: Sustainable supply chain management</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	37	
103-3	Evaluation of the management approach	37	
<b>Material topic: Digitization</b>			
<b>GRI-103: Management approach (2016)</b>			
103-1	Explanation of the material topic and its boundary	19-20; 66	
103-2	The management approach and its components	39-40	
103-3	Evaluation of the management approach	39-40	