



**CHEMYUNION**  
Inspiring Innovation



# Sustainability

REPORT



2023

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# Introduction

The beginning of the  
journey of commitment  
to innovation and  
sustainability



DEAR READER,

It is with great  
enthusiasm that  
we present the  
**Chemyunion 2023  
Sustainability Report.**

This document reflects our ongoing commitment to responsible social and environmental practices and represents a milestone in our journey of innovation.

In a constantly evolving world with increasing demands for healthier and lower-impact habits, the Chemyunion Group reaffirms its commitment to paving the way for a more conscious and equitable future. In this report, we present our tangible results and our aspirations.

Amid economic and environmental challenges, our technological

advancements and sustainable production practices have been fundamental pillars in meeting the emerging needs of society in an ethical and efficient manner. Each action and project mentioned in this report demonstrates our commitment to aligning our values with a greater purpose: to minimize the impact on the environment and the community in which we operate.

We invite you to explore our achievements and the lessons learned along this journey, covering topics ranging from Green Chemistry to Social Responsibility, including Environmental Indicators and Health and Well-being. This material is an account, but beyond that, it is a celebration of our collective commitment to sustainability and innovation.

As we share our timeline, achieved certifications, and inspiring interviews, we invite you to join us on this path of transformation. After all, it is through the collaboration and engagement of everyone involved that we can build a better and more sustainable future for generations to come.

**We sincerely thank you for your continued support and the vital role you play in driving us towards a fairer, healthier, and more prosperous world for all.**



**“a fairer and more equitable world for all,”**

## Message from the **CEO**

In another chapter of our journey towards sustainability and corporate responsibility, it is with great pleasure that I share with you the advances and achievements of the Chemyunion Group throughout the year 2023.

This report documents our accomplishments and also celebrates the spirit of innovation and commitment that permeates every initiative we undertake. In a global scenario of increasing environmental and social awareness, we recognize the fundamental role that the industry plays in driving responsible practices and seeking sustainable solutions.

Our sustainability policy is a commitment to a continuous journey towards the UN Sustainable Development Goals. Through our efforts, we strive to meet the highest standards of quality and environmental responsibility, as evidenced by our six certifications and investments in innovation, biodiversity, and supplier management.

Our vision of sustainability goes beyond meeting goals and regulations; it is founded on values of transparency, ethics, and respect. We firmly believe that by acting responsibly, we ensure the long-term success of our company and contribute to a fairer and more equitable world for all.

As we move forward, we remain firmly committed to reducing our environmental impact and promoting the health and well-being of our employees and partners.

I thank everyone involved in this process for their commitment and dedication. I hope this report transcends mere accountability, serving as an inspiration for us to remain united towards a more sustainable and prosperous future.

**Happy reading!**

**Marcelo Golino**

President of Chemyunion Group

# Chemyunion Group

## Experience and Innovation Drive Chemyunion

For 32 years in the market, we are a specialty chemicals company that offers innovative solutions by manufacturing cosmetic ingredients, pharmaceutical excipients, dietary supplements, and supplies for the veterinary market, as well as active ingredients for hygiene and cleaning.

We combine science and nature to promote health, beauty, and well-being, with the challenge of bringing innovation to the competitive markets in which we operate, facing the constant changes in consumption patterns and global trends. Our engaged employees are the driving force behind our mission to mitigate the negative impacts generated by our actions on the environment and society.

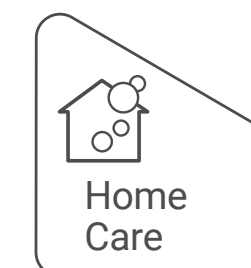
We have a global presence, constant investments in infrastructure, and training for the continuous improvement of our operations and process quality. Our products carry the technological expertise developed by a multidisciplinary team enthusiastic and passionate about the challenges of innovating, surprising, and meeting the demands and desires of our customers.

In our research and development platforms, we adopt cutting-edge technologies, globally recognized for their commitment to sustainability, reaffirming our commitment to developing and manufacturing innovative, sustainable, safe, and high-performance products.

With different business fronts, operations worldwide, and a focus on innovation, the Chemyunion group stands out in the segments in which it operates. Our constant growth is driven by the passion to be the first choice of our customers.

## Innovation and Science Aligned with Sustainability

### BUSINESS UNITS



### TECHNOLOGICAL KNOW-HOW

Delivery Systems

Organic Syntheses

Inorganic Syntheses

Plant Extractions

Peptides

Pharmaceutical Technologies

### SAFETY AND EFFICACY

In silico/ in vitro

Ex vivo

Clinical Evaluation

Be inspired by the Chemyunion Universe!

Learn more



[chemyunion.com](https://chemyunion.com)

# Sustainability Policy

## Our Commitment to the Future

Respect for the environment is intertwined with our commitment to the Sustainable Development Goals established by the United Nations (UN). We focus our efforts to ensure that this responsibility is present and prioritized in every action and decision we make.

At Chemyunion, our processes and resources are based on Good Manufacturing Practices and the standards ISO 9001/2015, ISO 22716/2008, and ISO 14001/2015. These guidelines ensure that we advance towards our goals of sustainable innovation and quality excellence. Moreover, reinforcing our commitment to these standards, we are certified in six areas: **ISO 14001, ISO 9001, Ecocert, COSMOS, RSPO, and HALAL**, demonstrating our rigor and dedication to quality and sustainability at all levels of our operation.

Our commitment to excellence drives us to constantly seek improvement in our business, always keeping the customer at the center of our attention. Our dedication is manifested in offering innovative products and services and the continuous optimization of our processes, always in compliance with the policies of our integrated management system:

**Constant innovation:** we are always looking for the best solutions to meet our customers' needs.

**High performance:** products that align with market trends, creating a perception of value for our customers.

**Ethics:** relationships based on ethics, compliance with legislation, and respect for customers, society, the environment, employees, and suppliers.

**Sustainability:** minimize and, when possible, eliminate the environmental impacts and health risks generated by our activities.

**Professional development:** Investment in the training and health of our employees.



## Environmental Management System

Eco-efficiency is the backbone of our management strategy, which seeks to balance economic and ecological efficiency to produce more using fewer resources. In this way, we reduce waste and minimize our environmental impact.

Our Environmental Management System is integrated with Chemyunion's business expansion strategies, focusing on preventing and minimizing the impacts of our operations on society and the environment. We promote sustainability at all levels of the company, using indicators and initiatives centered on eco-efficiency.

# Green Commitment

## Our Sustainability Goals for a Better Future

	SUBJECT	OBJECTIVE	GOAL
Develop a Sustainable Engineering system to ensure water and energy efficiency in new projects.	<b>Water</b>	Optimize the use of water resources in the administrative areas of Chemyunion's headquarters.	Increase rainwater reuse by 10% in 5 years
	<b>Energy</b>	Reduce energy consumption per ton of product produced, even with the annual increase in production quantity.	Reduce energy consumption by 15% per ton of product, reaching 0.59 MWh/ton within 5 years.
Implementation of CIP (Cleaning in Place) for product development with automation controls to optimize the cleaning stage and identify waste and leaks.	<b>Water</b>	Reduce water consumption per ton of product produced, even with the annual increase in production quantity.	Reduce water consumption by 5% per ton of product, reaching 3.99 m <sup>3</sup> /ton within 5 years.
Reduce organic waste	<b>Waste</b>	Implement composting at Chemyunion	Compost 80% of plant waste, reusing it for organic compost production by 2027
Zero Landfill Program	<b>Waste</b>	Reduce waste sent to landfill	Eliminate process waste sent to landfill by 2027
Establish a carbon-neutral target for our operations	<b>Climate Change</b>	Reduce greenhouse gas emissions	Reduce scope 1 and 2 GHG emissions in Brazil by 10% by 2028
		Neutralize greenhouse gas emissions	Achieve 100% offset of scope 1 and 2 GHG emissions in Brazil by 2028
My Pequi Project	<b>Forests</b>	Promote reforestation projects in Sorocaba by 2028	Produce at least 1,000 seedlings per year in Chemyunion's greenhouse and donate at least 80% of them to reforestation projects.
Positively impact the population of Sorocaba	<b>Society</b>	Create and maintain educational programs through partnerships with local schools to improve infrastructure and resource provision	Allocate 5% of net profit to promote the development of the community near the site

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# Material Topics

## Precision and Focus for Sustainable Innovation

Materiality in a business context represents the relative importance of the economic, environmental, and social impacts that a company generates. In a world oriented towards sustainable development, materiality plays a crucial role as it allows companies not only to recognize but also to prioritize the critical areas that require attention to enhance their environmental, social, and economic performance.

By defining our material topics, we can identify the most relevant and impactful issues for our operations and stakeholders. This clarity enables us to manage the risks associated with our business more effectively and identify valuable opportunities for sustainable innovation.



OBJECTIVES    MATERIAL TOPICS

Exploring materiality creates opportunities for the creation of shared value.


Chemyunion believes that materiality is essential in the pursuit of sustainable development

because it provides the framework for identifying and addressing critical issues, promoting a more holistic and responsible approach to business.



**Innovation** - Innovation transcends inventing, creating, and modernizing. For us, it is a process inspired by the desires and aspirations of our customers. We constantly strive to develop new ingredients, apply new technologies, and make productive improvements to offer solutions aligned with market trends that meet consumer needs.

**Biodiversity** - Biodiversity is the backbone of our existence, enriching not only natural products but also shaping services, quality of life, and the landscapes that surround us. It is a fundamental pillar of our reality. Today, the alarming loss of biodiversity is intrinsically linked to the unsustainable exploitation of natural resources and increasing deforestation.




**Conscious Consumption** - Our vision for the future seeks to balance technological growth and environmental preservation. We promote collective awareness of environmental balance, encouraging responsible and conscious management of natural resources for future generations.

**Production** - Our production processes are designed to be sustainable solutions. We prioritize reducing the consumption of natural resources, minimizing the generation of waste and effluents, and, when possible, reusing and recycling them—all without compromising the quality and efficiency of our products.



**Supplier Management** - We select suppliers who share our values, commitments, and policies. We prioritize the acquisition of products and services with socio-environmental concern and a commitment to sustainable development. Through regulatory assessments and close collaboration with suppliers, we ensure that any item not in compliance with our standards is reviewed and adjusted. Thus, we ensure that the product meets our policy standards.



**Human Rights** - Respecting others is a fundamental value that is part of our core principles. Aligned with the Universal Declaration of Human Rights, we advocate for the equal and non-discriminatory application of these rights, always recognizing the dignity and worth of every individual. We are committed to protecting and promoting human rights, valuing all people, both within and outside Chemyunion.

# Highlights

Key achievements in our journey of excellence and innovation in 2023

**3,842,739.5 kg**

of products produced



**260** employees



in **7** different countries

**15**

audits



More than

**900**

seedlings planted\*\*\*

with 475 of them being native shrub and ground cover species.

**175** hrs

audited



**35.35** tCO2e

of carbon captured\*\*



More than

**900**

trees planted\*



**6**

certifications

in total, namely:

ISO 14001, ISO 9001, Ecocert, COSMOS, RSPO and HALAL

## Other Relevant Numbers:

- **60 employees volunteered** in our social responsibility program
- **278 people directly benefited** and over 1000 people indirectly benefited through our social responsibility program
- **5 patents** granted and **24 applications** in progress
- **51%** female employees
- **1440 hours** in technical language, undergraduate, and postgraduate courses
- More than **2500 hours** of training and development

\*944 - Tree Nation

\*\*Estimated calculation

\*\*\*originating from Chemyunion's greenhouse.

# Timeline

A journey of evolution, innovation, and growth

**2006**

## Plants: a journey in species research

We intensified our investments in innovation to revolutionize sustainable production. Our approach involves adopting gentler processes that minimize or even eliminate the use of organic solvents. Additionally, we are implementing upcycling strategies and enriching our products with natural ingredients and their derivatives, demonstrating our commitment to harmonizing technological advancement with respect for the environment.



**2020**

## Sustainability seal: environmental and social awareness

We launched the sustainability seal, an initiative that connects the environment and society, promoting awareness among employees, customers, and partners about the importance of commitment to sustainable practices. This action reflects chemyunion's values in respecting and protecting the environment.

**2008**

## Botanical garden and greenhouse: the ideal environment

Our botanical garden transcends the conventional idea of a green space, functioning as a vibrant laboratory where we collect information and develop the plant species essential for creating our products. With its recent improvement and expansion, we have elevated cultivation to perfect conditions, ensuring that each plant reaches its maximum potential.



**2021**

## Organic production: *bidens, thyme, physalis* and jasmine

With a dedicated multidisciplinary team aligned with sustainable practices, we started the organic production of *bidens pilosa*, thyme, *physalis angulata*, and jasmine. We deeply value fauna and flora and are committed to using natural resources efficiently. Our commitment is to preserve the cultural and historical heritage of the community while promoting biodiversity conservation and boosting local sustainable development.



**2021**

**Zero landfill: sustainable and intelligent waste management**

Committed to a greener future, we launched the zero landfill project with the goal of reducing the amount of waste sent to landfills by 100% by 2027. We seek sustainable management and alternative solutions for waste disposal to mitigate the release of harmful substances into the ecosystem.



**2022**

**Tree nation: planting the future**

We began a strategic partnership with tree nation, dedicated to combating climate change through reforestation. Using an innovative virtual platform, we selected three reforestation and conservation projects . This is a significant contribution to the environment, boosting local development and preserving biodiversity.



**2022**

**Rainwater harvesting system: caring for our essential resource**

To preserve water, our primary resource, we inaugurated a rainwater harvesting system on the main roof of our headquarters, with an annual capacity of 4,200 m³. This system significantly complements the supply for various processes, primarily using the collected water to irrigate green areas.



**2022**

**100% Renewable energy: an environmental commitment with i-rec Brazil certification**

With the i-rec Brazil seal and sustainability certification from the international rec standard foundation, we reaffirmed our commitment to using renewable energy. We are pioneers to Brazil in proving the use of renewable energy sources in 100% of our operations. The i-rec certification ensures that our energy consumption comes from renewable sources, providing consumers with confidence in our sustainable practices and commitment to reducing environmental harm.



## 2023

### Photovoltaic plant: our commitment to clean energy

We installed a 60kw photovoltaic plant, composed of 186 445w panels, which ensures total energy supply for our administrative building, integrated with the public grid. This initiative meets the needs for lighting, air conditioning, heating, and all electrical infrastructure, responding to the growing demand for clean energy.



## 2023

### GHG inventory: focus on emission reduction

We created our first inventory of greenhouse gas (ghg) emissions, a fundamental tool for accounting for and managing the emissions associated with our activities. This data will serve as the basis for decision-making aimed at reducing emissions in our operations.



## 2023

### Native seedling cultivation: nature thanks you

Our primary goal is to strategically increase the cultivation of plant species, with a special focus on native species. This initiative aims to support reforestation projects in the region, significantly contributing to the preservation and enhancement of local biodiversity.



# Certifications and Standards

Our commitment to quality, safety, and sustainability

**Chemyunion** strengthens its commitment to **quality, safety, innovation,** and sustainability by integrating its processes into its Integrated Management System. The certifications and standards below attest to the compliance of our rigorous standards and reinforce our commitment to continually improve our operations in a responsible and sustainable manner.



The term "Halal" means permissible and refers to everything that complies with the rules established by Islamic Law, governing the customs and daily life of Muslims. The Halal certification aims to ensure that the industry complies with these rules in its processes, from the

acquisition of materials, production and storage, to commercialization. The Halal Management System (SGHCH) was implemented by Chemyunion in 2021, and each year, new products are incorporated into the certification scope.



The RSPO is a global non-profit organization dedicated to establishing global standards for the sustainable use of palm oil by developing environmental and social criteria that help reduce the negative impacts of palm oil production. Since 2021, Chemyunion has been a member of the RSPO, and in 2023, had its first RSPO certification audit with positive results. The adopted model was the Mass Balance (MB), which requires specific control of the inputs and outputs of palm oil-derived materials.



**COSMOS APPROVED**

The COSMOS standard promotes the responsible use of natural resources, utilizing clean production processes that respect human health and the environment and develop the concepts of Green Chemistry in cosmetic products. Most products in the Personal Care segment begin their development phases with a focus on the standards established by the COSMOS framework.

If you are interested in learning about the certified products, please contact your regional Commercial team.

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## ISO 16128

The ISO 16128 standard provides guidelines on the definitions of natural cosmetic ingredients, aiming to standardize the calculations of natural content indices. Personal Care products are developed with careful attention to naturalness parameters, employing the use of renewable resources and low-impact processes, guided by the Natural Origin Content (NOC). The higher this value, the greater the naturalness of the product.

Among the products introduced in 2023, **88%** had a Natural Origin Content **higher than 90%**.

## ISO 9001 and ISO 14001

Chemyunion has an Integrated Management System (IMS) based on both standards. This approach allows us to achieve sustainable growth and development, establishing a solid foundation that inspires confidence in our consumers. By combining the guidelines of ISO 9001:2015 and ISO 14001:2015, we deliver quality and environmental responsibility in all areas of our business. This provides us with an efficient framework for making decisions, promoting innovation, and offering solutions that meet the highest standards of quality and sustainability.

# Green Chemistry

## Transforming the industry with sustainable chemistry

In recent years, Chemyunion has dedicated itself to applying its synthetic processes to the concepts of green chemistry, aiming to reduce the environmental impacts of its product syntheses. Key aspects include applying atomic economy concepts, safe and planned synthesis to obtain molecules and polymers, using raw materials from renewable sources, improving process efficiency with reduced energy use, using renewable solvents, and synthesizing safe products.

Peptides, chemical compounds formed by covalent bonds between two or more amino acids, are recognized for regulating various metabolic pathways in living organisms. Traditionally seen as potential drugs, this class of molecules has gained prominence in the cosmetic field due to their high potency in modulating skin processes at low usage concentrations.

In the context of Green Chemistry, **SPPS (Solid Phase Peptide Synthesis)** has significant "green potential" that can be transformed into **Green Solid Phase Peptide Synthesis (GSPPS)**. By adopting specific strategies, it is possible to minimize impacts by following these characteristics:

**1** Performing all reactions in the same reactor, without mass transfer between reactors, reducing the frequency of cleaning procedures, positively impacting water consumption and industrial effluent generation.

**2** Reducing solvent consumption, as intermediates are not isolated.

**3** Achieving excellent yields, facilitating purification and reducing solvent use.

**4** Use of safer solvents

**5** Reusing solvents, especially in the purification process.

**6** Recovering and using waste from peptide purification processes in other industrial processes, such as obtaining Sensoveil Soft.

**7** Removing products by simple filtration, contributing to waste reduction and energy savings.

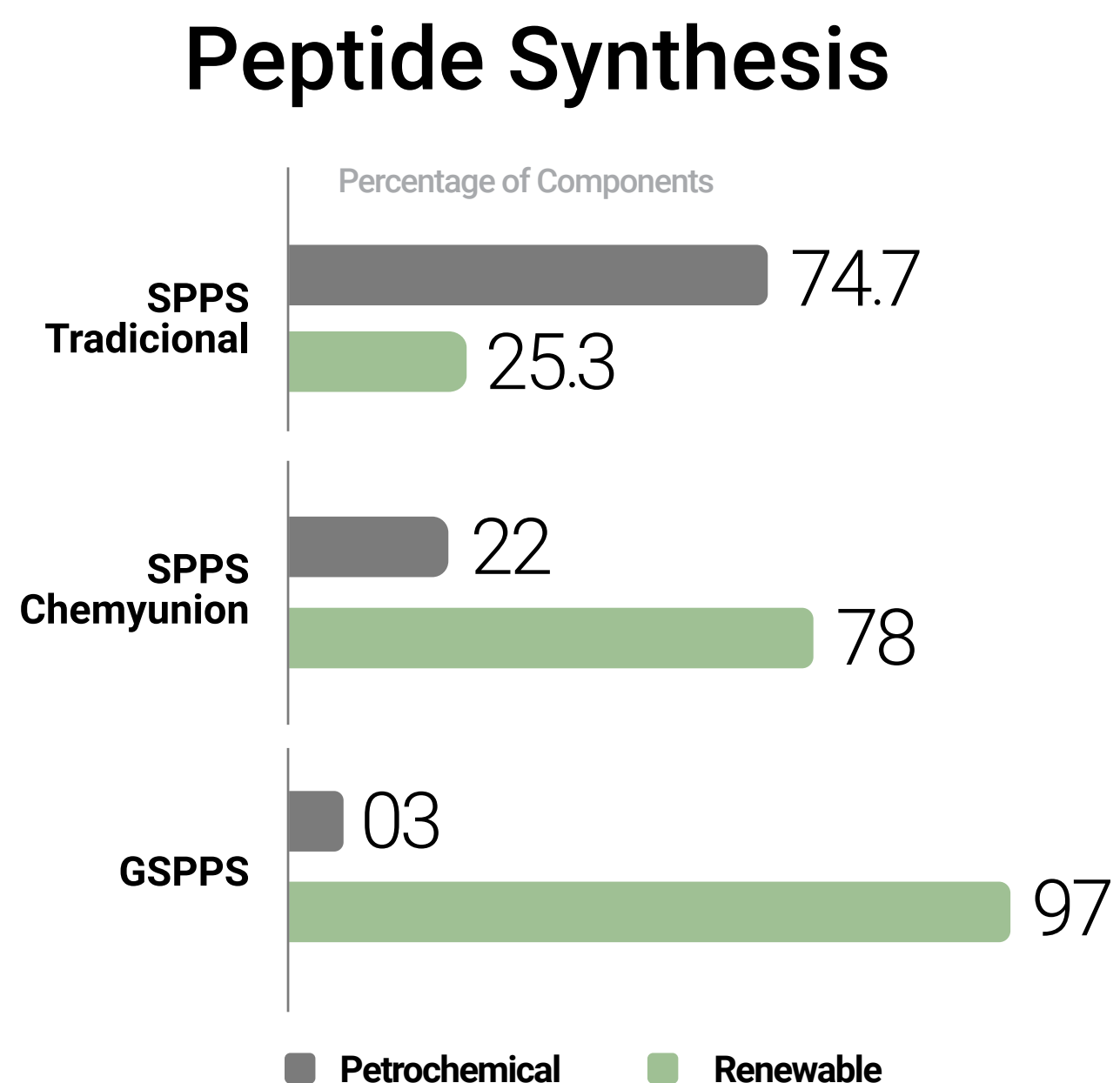


The most significant adverse environmental impact of the SPPS method is related to the consumption of organic solvents. Considering the total mass of the production process, solvents represent 97% or more of the total value. The methodology is divided into two main phases: synthesis and purification, both of which use organic solvents. However, the purification phase accounts for 65% of the total consumption mass. Therefore, the purification process of the SPPS method is the most relevant stage in environmental terms.

Given a scenario of changing consumption habits towards safer and eco-friendly substances, the work conducted by the ACS Green Chemistry Institute has highlighted the development of more innovative and sustainable processes for synthesizing biologically active peptides.

### Chemyunion's evolution in the synthesis and purification process has achieved a more than threefold reduction (from 74.7% to 22%)

in the use of raw materials and reagents from petrochemical and non-renewable sources, and a more than 300% increase (from 25.3% to 78.00%) in the use of raw materials and reagents from renewable sources, allowing the process to reach a naturalness index of 78%, which is high when it comes to peptide production. Currently, we are working to surpass a naturalness index of 97%, making the process more sustainable and aligned with all the principles of Green Solid Phase Peptide Synthesis (GSPPS).



Considering the product life cycle, in the disposal of production waste (incineration), we have:

### Method Tradicional

1 kg Peptide = 600 kg of petrochemical solvent

The incomplete combustion of this solvent results in the emission of

131.88 tCO<sub>2</sub>e for every 600 kg of solvent incinerated



### Method Chemyunion

1 kg Peptide = 500 kg of renewable solvent

Emission of only

0.52 tCO<sub>2</sub>e for every 500 kg of solvent incinerated

According to a study by CEPEA/ESALQ, 2.59 hectares are needed to offset 1 tCO<sub>2</sub>e per year. Based on this data, comparing the traditional methodology with Chemyunion's methodology, we have:

50.91 hectares would be needed to capture the emissions from the incineration of 600 kg of solvent in the production of 1 kg of peptides following the traditional methodology.

Only 0.2 hectares would be needed to capture the emissions from the incineration of 500 kg of solvent for the production of 1 kg of peptides.

This difference corresponds to an area equivalent to **2.7 Maracanã stadiums.**

**Polluout® Detox** is a hair active that facilitates the cleaning and revitalization of hair fibers and the scalp, eliminating or reducing impurities that can silently damage hair. Its formula ensures the overall health of the hair from root to tip.

Its formula works through a blend of a polydentate polymeric chelating agent, sodium polyitaconate, a chelating agent derived from alpha-hydroxy acid, sodium citrate, and a biosurfactant extracted from the fruit of *Sapindus mukorossi*, **Polluout® Detox**. The product has 100% Natural Origin Content (NOC) according to the definitions of ISO 16128/2016.

Sodium Polyitaconate is a biodegradable polymer of vegetable origin. Derived from itaconic acid, it adheres to the 12 principles of green chemistry in its conception, synthesized through radical polymerization reaction in an aqueous system at mild temperatures.

Itaconic acid, a monomer used in the construction of Sodium Polyitaconate, is listed by the United States Department of Energy (DOE) as one of the 12 building blocks convertible into a variety of high-value bio-based chemicals. It has been extensively researched as a "green" alternative monomer to acrylic acid in polymers based on this monomer. It is produced on a large scale through the fermentation of biomass, such as corn or rice, and lignocellulosic material. Biomass has significant potential to sustainably produce various polymers and chemicals, replacing non-renewable fossil-based products.



## Chemyunion is committed to continuously innovating its synthetic processes for obtaining actives and polymers,

using more modern and safer raw materials in its synthetic processes, based on the risk hierarchy. Additionally, the company has innovated its peptide purification and polymer production process by replacing petrochemical substances with renewable and sustainable ones. These changes aim to make the peptide and polymer production process more sustainable and increase the naturalness index in the synthetic process, as the consumption of petrochemical solvents is the most significant adverse impact factor in the current production process.

# Production

## Excellence in action, focus on sustainability

Conscious production is fundamental to sustainable development by minimizing the consumption of non-renewable natural resources, reducing waste and pollution, and promoting efficient energy use. Chemyunion recognizes this premise and works on every detail of its processes, driven by technological innovation and the demands of responsible consumers.

Fractional distillation is an efficient process for separating components based on their boiling points. At Chemyunion, the fractional distillation column operates on the difference in boiling temperatures of the mixture components. Initially, the mixture is heated, and the resulting vapors are directed to the column, filled with trays that provide different stages

of condensation and evaporation. As the vapors rise in the column, selective condensation of components with higher boiling points occurs. Each tray acts as a separation stage, cooling the vapors and causing the more volatile components to return to the liquid state. This process repeats successively until the components are sufficiently separated.

We continuously invest in improving our processes to achieve greener production.

**We have adopted fractional distillation, which has an average distillation potential of 70 tons per year, as a productive process to reuse ethanol for nanoparticle precipitation.**

Currently, we have an entirely enclosed system for this operation, mitigating risks and facilitating the production of 92°GL ethanol. Fractional distillation is one of the most effective methods for separating liquid mixtures, especially when involving components with different boiling points. The fractional distillation column is the heart of this process, playing a vital role in obtaining pure products from complex mixtures. Using the fractional distillation column for ethanol recovery offers several environmental advantages, making it a more sustainable option compared to traditional methods.





## Here are some points highlighting these advantages:

### 1. Energy Efficiency

The fractional distillation column is designed to separate components based on boiling point differences. For ethanol, this allows for efficient recovery of alcohol from complex mixtures. The energy efficiency of this process contributes to reducing total energy consumption, which is environmentally beneficial as it implies less use of non-renewable resources.

### 2. Waste Reduction

Recovering ethanol through fractional distillation minimizes waste production. More efficient processes result in fewer undesirable by-products, reducing the environmental impact associated with treating and disposing of these wastes.

### 3. Lower Greenhouse Gas Emissions

Fractional distillation is a more precise and controlled method compared to less efficient techniques. Ethanol recovery using this technology minimizes the release of greenhouse gases, as the process is optimized to avoid losses and ensure cleaner production.

### 4. Use of Sustainable Technologies

Implementing fractional distillation columns in ethanol recovery processes can be integrated with sustainable technologies, such as using renewable energy sources to power heating systems. This contributes to reducing the carbon footprint associated with recovered ethanol.

### 5. Lower Use of Solvents and Chemicals

Fractional distillation, compared to alternative methods, often requires fewer solvents and chemicals to achieve the desired separation. This not only reduces operational costs but also minimizes the environmental impacts associated with handling and disposing of these chemicals.

In 2023, 54,880.00 kg of hydrated ethanol from the mentioned distillation and reuse methods were used, representing approximately 1.5% of Chemyunion's total production. The fractional distillation column plays an essential role in producing pure substances, being a versatile and crucial technique for our operations. Its basic principle of separation by boiling point differences allows for obtaining high-purity products, significantly contributing to the quality and efficiency of industrial processes.

# Environmental Indicators

## Translating our efforts into concrete results

Chemyunion's journey towards sustainability is marked by tangible results and an unwavering commitment to environmental preservation. Prioritizing responsible generation and consumption, we highlight our dedication to operational efficiency, avoiding waste, and promoting consumption reduction.

### Energy

Responsible energy consumption plays a crucial role in sustainable development, serving as a fundamental pillar for environmental preservation and climate change mitigation. This approach not only ensures resource availability for future generations but also strengthens societal resilience to environmental challenges.

In 2023, we saw only a 9.49% increase in consumption compared to the previous year, despite a 27% increase in production. This resulted in a reduction of 0.11 MWh per ton of product, equivalent to an 11% reduction in consumption per ton produced. These figures demonstrate the efficiency of our operations and our commitment to avoiding waste and using energy rationally and efficiently.

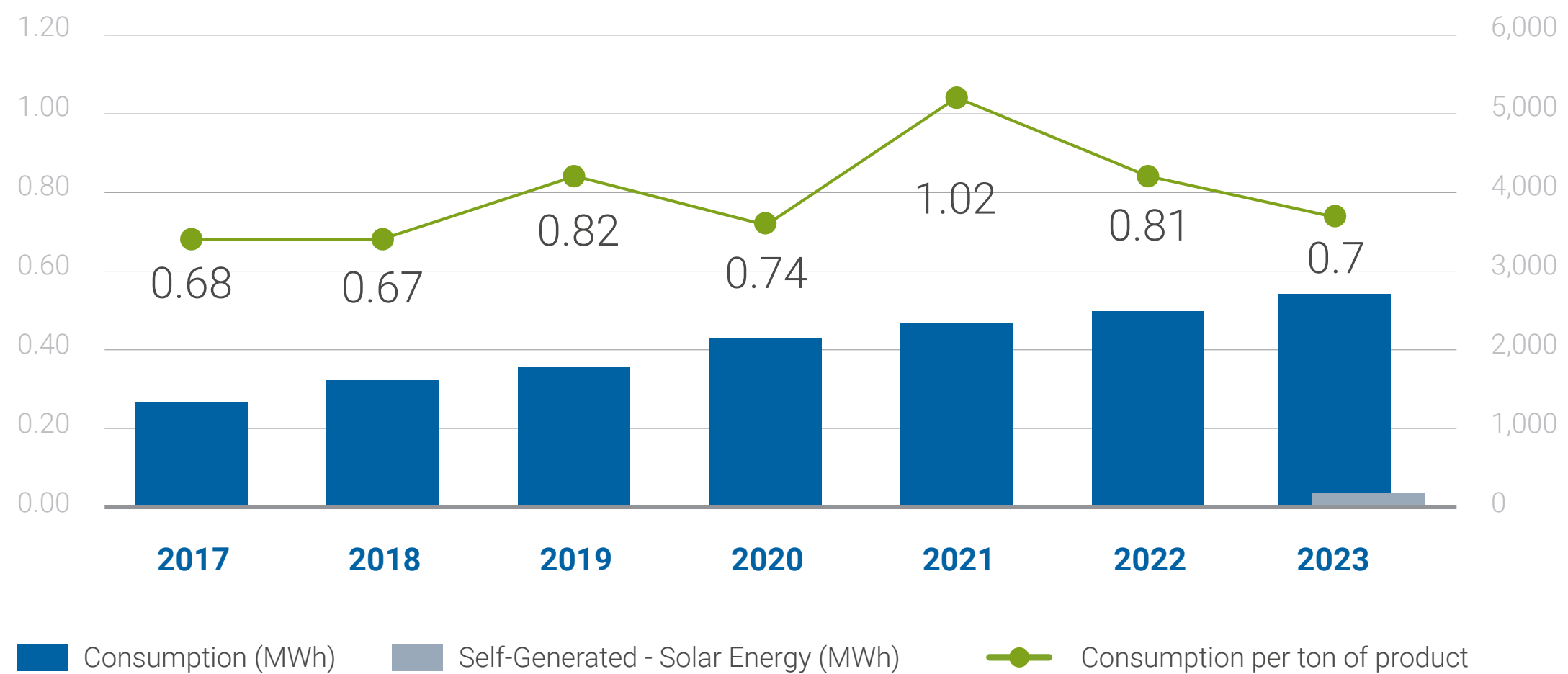
The introduction of the photovoltaic plant in March 2023 marked a positive step in Chemyunion's journey towards energy autonomy. The plant generated 7.56 MWh since its inception, and we foresee opportunities for expansion in the coming years.

At Chemyunion, our dedication to using renewable energy goes beyond efficiency and self-production. We take



pride in verifying the use of renewable sources recognized by the I-REC Brazil seal and The International REC Standard Foundation certification, consolidating and strengthening our consumers' trust in sustainable practices.

## ENERGY CONSUMPTION



YEAR	2017	2018	2019	2020	2021	2022	2023
CONSUMPTION (MWH)	1381	1758	1828	2068	2240	2464	2698
SELF-GENERATED - SOLAR ENERGY (MWH)	0	0	0	0	0	0	7.56
CONSUMPTION PER TON OF PRODUCT (MWH/TON.)	0.68	0.67	0.82	0.74	1.02	0.81	0.7

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## Water Resources

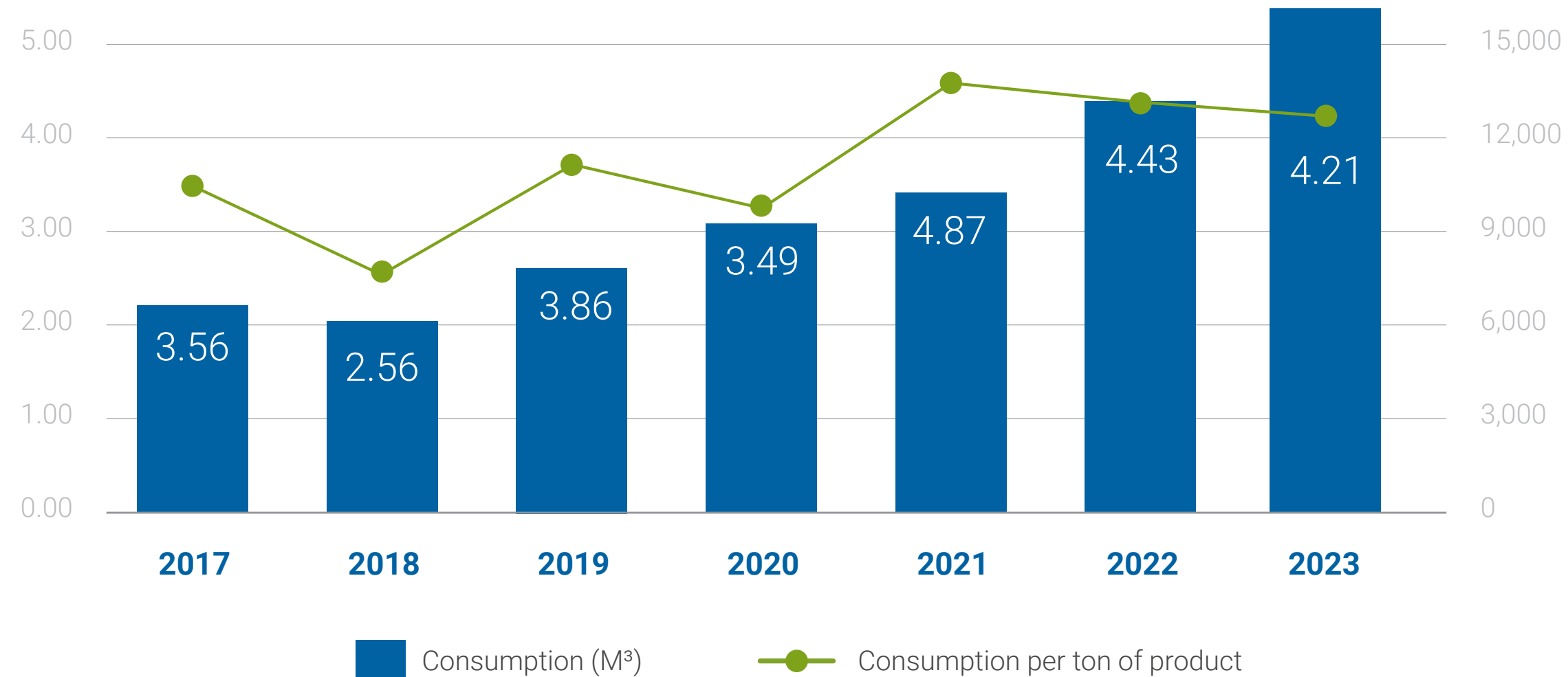
Reducing waste and implementing sustainable technologies protect ecosystems and help address the challenges associated with climate change and water scarcity.

Chemyunion implements various projects to improve water quality, reduce pollution, and promote water reuse and recycling. Additionally, we promote awareness of conscious and responsible water consumption.

One of our highlights is the rainwater harvesting and treatment system, which allows for the reuse of rainwater, fully supplying the ornamental lake and irrigation system used to maintain Chemyunion's green area. This promotes water reuse and maximizes regional drainage.

Although we recorded a 20% increase in total water consumption compared to the previous year, this increase was proportionally smaller than the 27% production growth. This indicates greater efficiency in water use relative to our production expansion. The efficiency of our operations is also evident in the consumption rate per ton produced, which was 0.22 m<sup>3</sup>/ton less than the previous year. This means that for every ton produced, the company saved 220 liters of water compared to the previous year, demonstrating our commitment to environmental responsibility.

## WATER RESOURCE CONSUMPTION



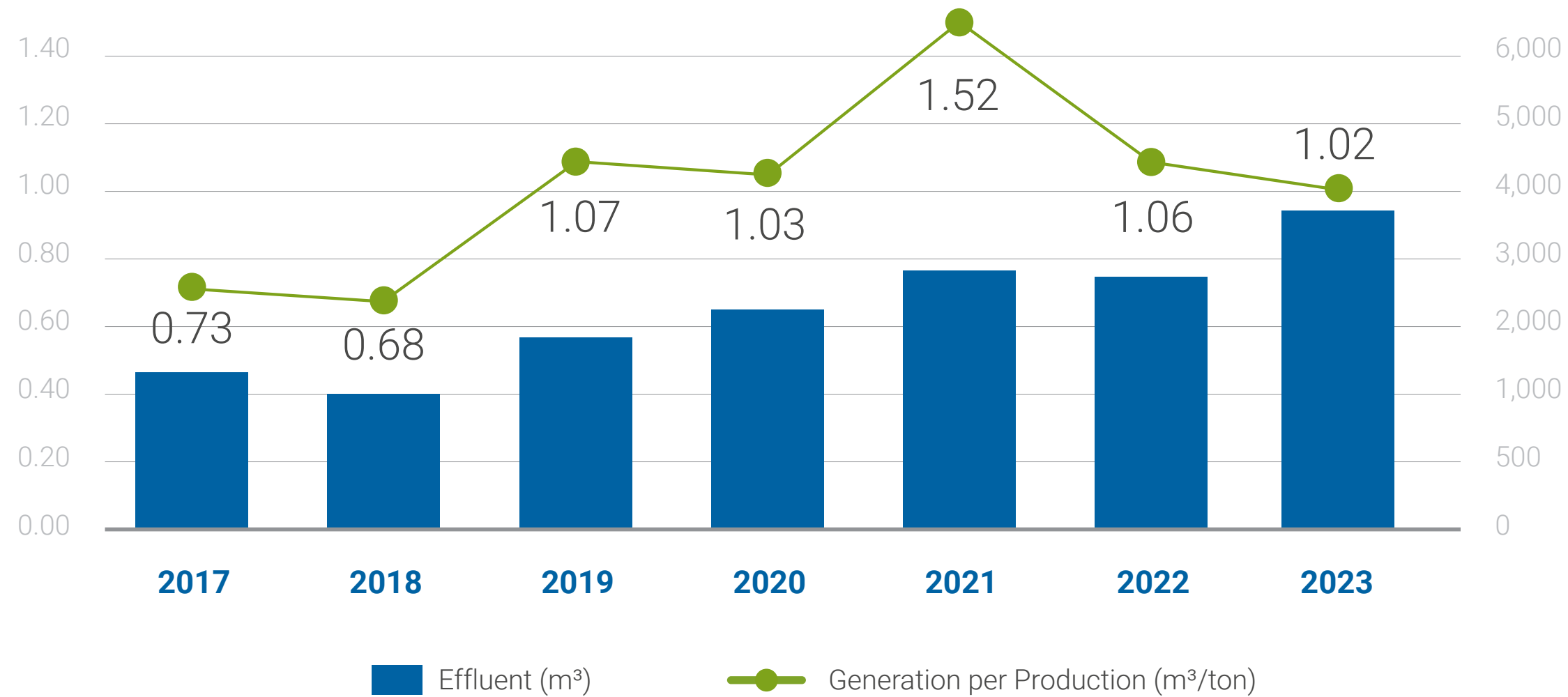
YEAR	2017	2018	2019	2020	2021	2022	2023
CONSUMPTION (M <sup>3</sup> )	7192	6672	8564	9702	10700	13424	16161
CONSUMPTION PER TON OF PRODUCT (M <sup>3</sup> /TON.)	3.56	2.56	3.86	3.49	4.87	4.43	4.21

### Effluents

At Chemyunion, we adopt a proactive and responsible approach to effluent treatment, with an in-house effluent treatment plant (ETP). This strategy allows the company to treat effluents on-site, minimizing the transport of liquid waste to other facilities and reducing the environmental impact associated with transportation.

Furthermore, in-house effluent treatment provides more efficient management of local water resources and allows for a direct response to local environmental regulations, ensuring compliance with disposal and water quality standards effectively.

## EFFLUENT GENERATION



YEAR	2017	2018	2019	2020	2021	2022	2023
EFFLUENT (M³)	1476	1782	2384	2858	3343	3220	3914
GENERATION PER PRODUCTION ((M³/TON.))	0.73	0.68	1.07	1.03	1.52	1.06	1.02

### Solid Waste

Our solid waste management aims to promote efficiency in waste management and ensure the conservation of natural resources. This involves responsible practices and strategies, including reduction, reuse, recycling, and environmentally appropriate final disposal of waste.

One of the most effective approaches to dealing with solid waste is reducing its generation at the source. When creating new products, Chemyunion promotes practices such as eco-friendly product design.

Promoting the reuse of products and materials is another important strategy adopted by Chemyunion to reduce the amount of waste generated and sent for final disposal. A successful example is the use of the upcycling methodology for product development.

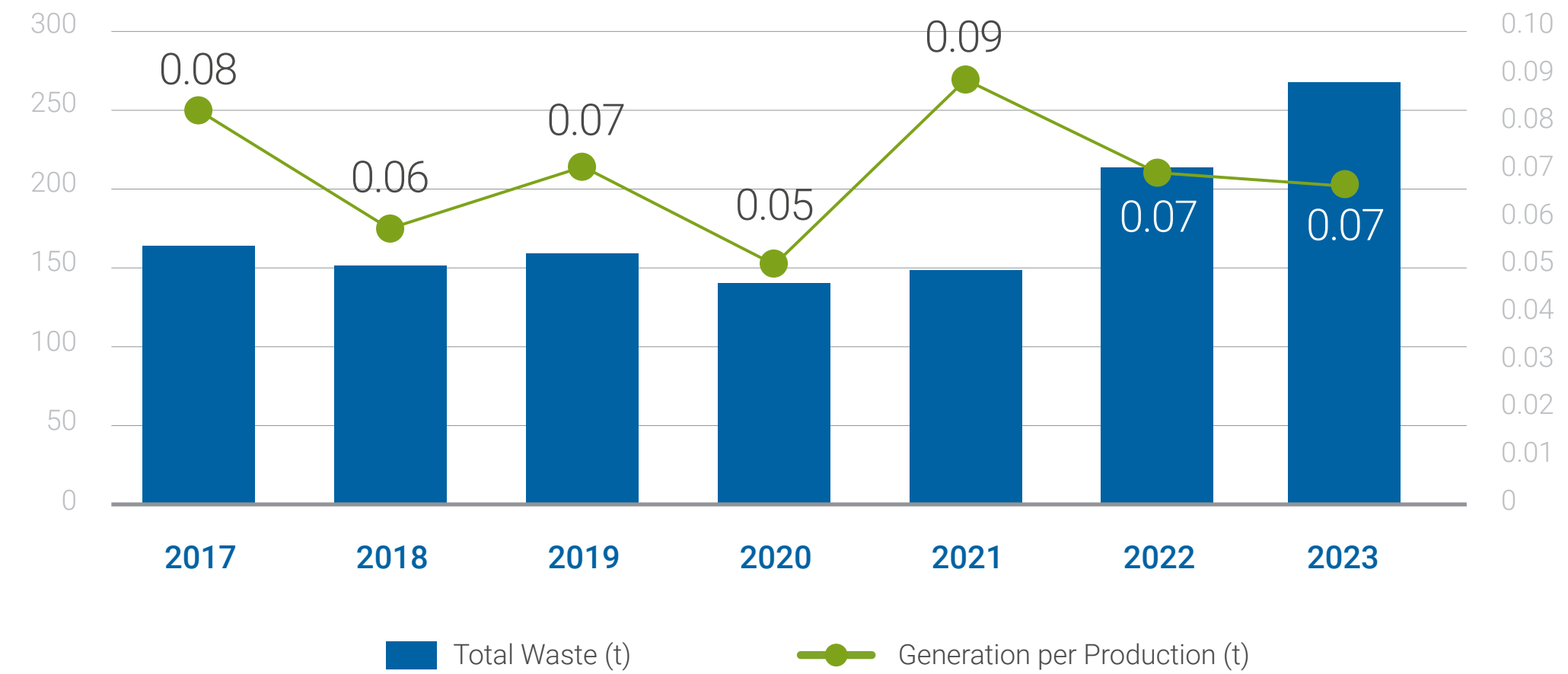
Finally, recycling involves collecting, separating, and processing recyclable materials such as paper, plastic, glass, and metal to produce new products,

and even non-recyclable ones are used for energy generation. Recycling helps conserve natural resources and reduce pollution. In 2023, Chemyunion sent over 80 tons for recycling, 27 tons more than the previous year, representing 30% of all our waste.

In addition to traditional waste management practices, Chemyunion is investing in advanced technologies for solid waste treatment, such as pyrolysis. These technologies can help recover energy from waste, further reducing the environmental impact.

**In 2023, only 17% of all our waste was sent to landfill, 3% less than the previous year, despite a 27% production growth. This means that despite the increase in production, we reduced the amount of waste sent to landfill.**

## SOLID WASTE GENERATION



YEAR	2017	2018	2019	2020	2021	2022	2023
CO-PROCESSING <sup>1</sup>	6.15	14.03	30.20	35.91	93.70	125.59	140.10
RECYCLING	23.01	23.47	20.70	22.17	34.41	53.63	81.32
LANDFILL	140.30	154.95	139.80	123.60	70.23	46.57	45.99
AUTOCLAVE	-	-	-	-	0.02	0.19	0.16
<b>TOTAL<sup>2</sup> (T)</b>	<b>163.31</b>	<b>154.95</b>	<b>160.50</b>	<b>145.77</b>	<b>198.35</b>	<b>225.98</b>	<b>267.56</b>
<b>RATE PER PRODUCTION (TON.)</b>	<b>0.08</b>	<b>0.06</b>	<b>0.07</b>	<b>0.05</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>

1 - CLASS I AND CLASS II B WASTE

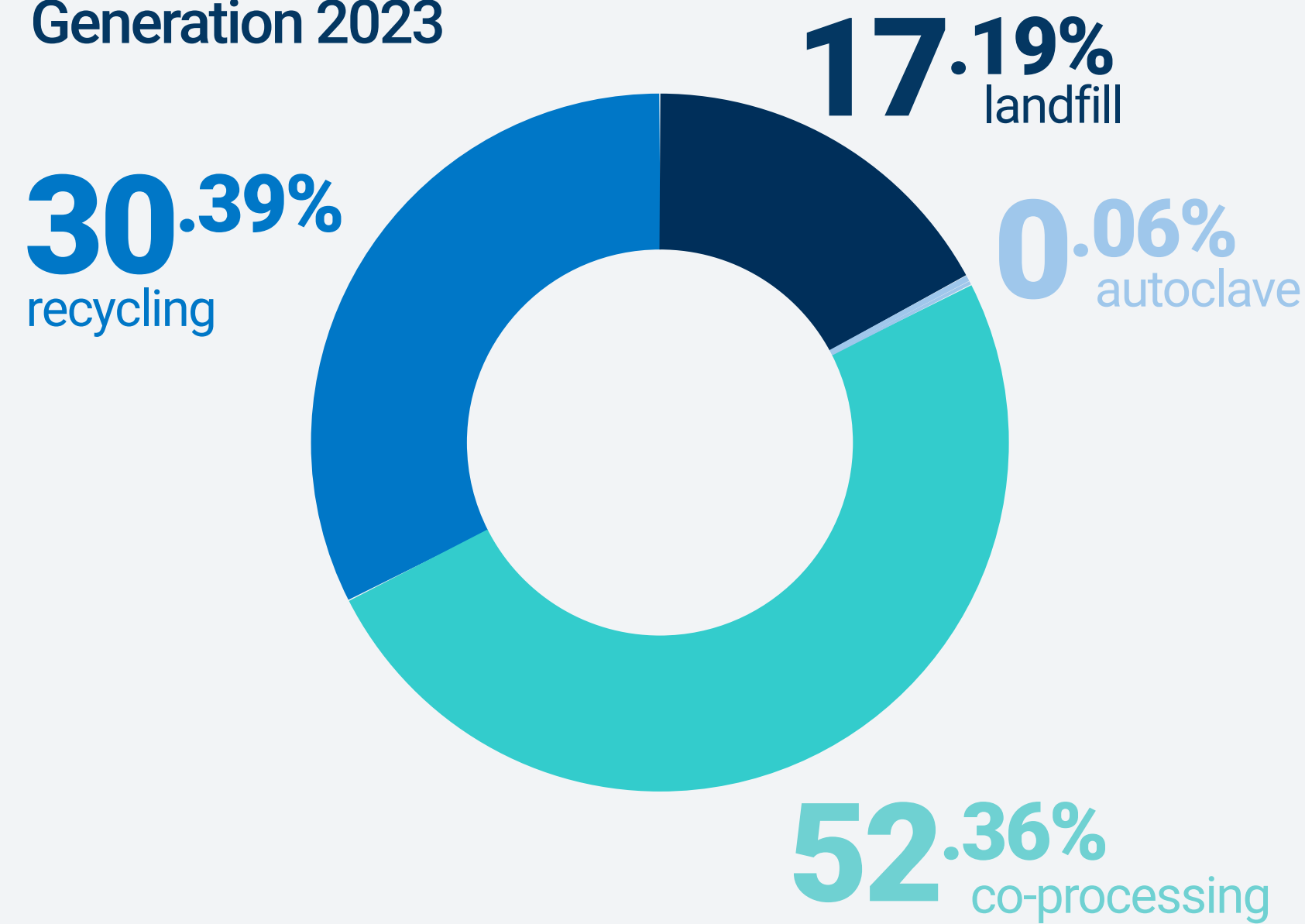
2 - CLASS IIA WASTE SENT TO INERT LANDFILLS IS NOT INCLUDED.



# The Zero Landfill Project aims to eliminate the amount of waste sent to landfills by 2027.

It's worth highlighting the energy recovery measure for waste that would otherwise go to landfill, avoiding sending more than 72 tons to landfill in addition to those sent for recycling.

## Solid Waste Generation 2023



Sustainability in solid waste management requires a holistic approach that combines actions, technologies, education, and environmental awareness. These measures help minimize the environmental impact of solid waste and contribute to the conservation of natural resources, promoting healthier and more resilient communities.

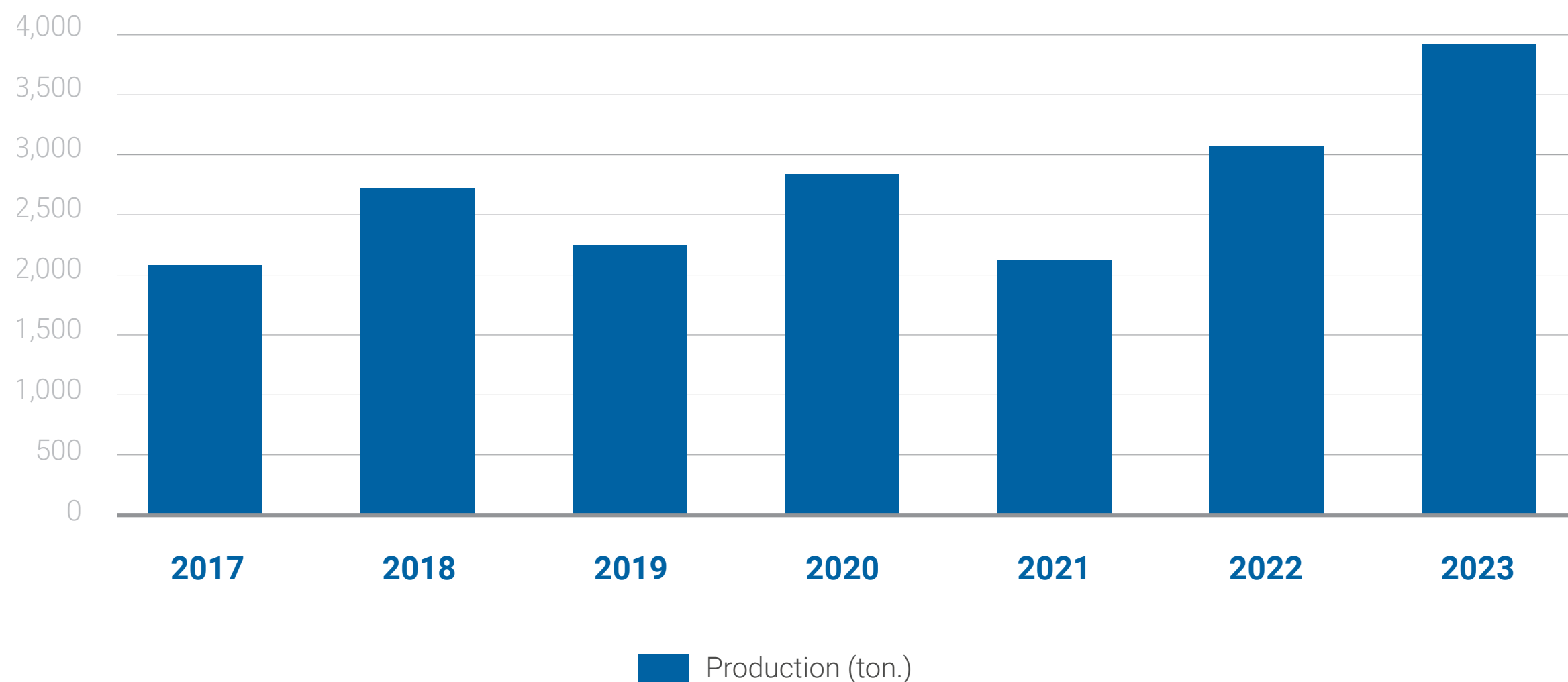
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## Production

Chemyunion demonstrates expertise throughout the production chain, achieving a 27% growth compared to the previous year, always aligned with its values and principles in responsible production. We constantly seek suppliers who share our commitments, ensuring that the acquisition of products and services aligns with our socio-environmental concerns and sustainable development ideals.

We recognize the power of innovation as a tool to promote sustainable management that respects natural resources and guarantees a safe option for our consumers.

# PRODUCTION



YEAR	2017	2018	2019	2020	2021	2022	2023
PRODUCTION (TON.)	2020	2607	2221	2781	2195	3028	3843

# Climate Change

## Assessing our impact with the greenhouse gas inventory

At Chemyunion, our approach to climate change is driven by our commitment to seeking new processes and solutions, utilizing analytical tools to measure and assess our impacts. The Greenhouse Gas (GHG) Emissions Inventory is a management tool that enables the accounting of emissions related to the company's activities and serves as a basis for continuous GHG emission reduction pathways.

Eco-efficiency is the core of our sustainability strategy. We strive to maximize economic and ecological efficiency, producing more with fewer resources and reducing environmental impact.



In 2023, we developed our first Greenhouse Gas Inventory, a significant milestone in our environmental responsibility initiatives. The summary, which presents emissions calculated by category for Scopes 1 and 2, follows the methodology of the Brazilian GHG Protocol Program. We include comparisons between the baseline years of 2022 and 2023, highlighting the representativeness of different emission sources in 2023.

### SCOPE 1

Category	2022	2023	SOURCE REPRESENTATIVENESS (%) 2023
	Emissions tCO2e	Emissions tCO2e	
Mobile Combustion	3,912	15,801	2.6%
Stationary Combustion	586,461	553,044	91.8%
Industrial Processes	36,048	18,950	3.1%
Solid Waste and Liquid Effluents	9,350	9,350	1.6%
Fugitive Emissions	6,670	5,406	0.9%
Agricultural Activities	-	-	0%
Land Use Change	-	-	0%
<b>TOTAL EMISSIONS</b>	<b>642,441</b>	<b>602,551</b>	

### SCOPE 2

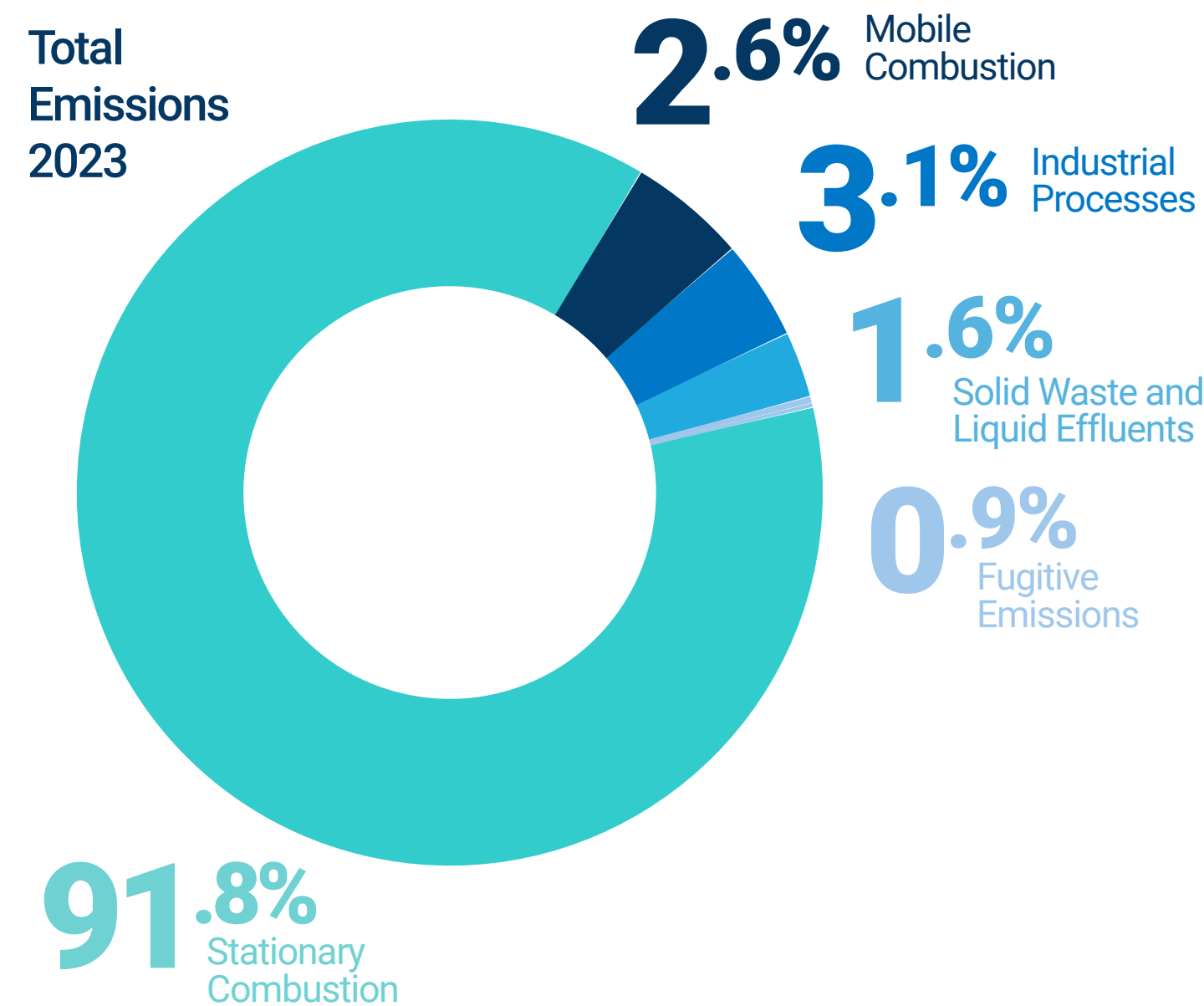
Acquisition of Electrical Energy	105,641	105,147	100%
Acquisition of Thermal Energy	-	-	-
<b>TOTAL EMISSIONS</b>	<b>105,641</b>	<b>105,147</b>	

## The methodology for calculating GHG emissions followed the guidelines of the Brazilian GHG Protocol program and ISO 14064 standards, adhering to five criteria:

- **RELEVANCE** - Careful selection of the information needed to ensure that the GHG inventory reflects the company's emissions and meets Chemyunion's decision-making needs.
- **COMPLETENESS** - Inclusion of all GHG emission sources and activities within the chosen inventory boundary, transparently justifying any exclusions.
- **CONSISTENCY** - Credibility in methodologies to allow meaningful comparisons of emissions over time.
- **ACCURACY** - Quantification of GHG emissions as close to reality as possible, reducing uncertainties to the practicable extent.
- **TRANSPARENCY** - Disclosure of sufficient and appropriate information related to GHG emissions and the methodologies used.

An important aspect is identifying the types and proportions of greenhouse gases emitted, converting gases such as CO<sub>2</sub> (carbon dioxide), CH<sub>4</sub> (methane), N<sub>2</sub>O (nitrous oxide), and HFCs (hydrofluorocarbons) to CO<sub>2</sub>e (carbon dioxide equivalent) based on their Global Warming Potentials (GWP). For 2023, it is important to note that 91.8% of total Scope 1 and 2 emissions originate from stationary combustion.

This is due to the acquisition of the I-RECs certificate of traceability for clean energy origin, which nullifies Scope 2 emissions through the purchasing approach. Within Scope 1, the largest emission source is diesel consumption, used for powering generators, machinery, and primarily thermal fluid heaters.



In line with our commitment and the Paris Agreement goals to combat climate change, our main objective is to replace the fuel powering thermal fluid heaters with natural gas. With this initiative, we expect to reduce stationary combustion GHG emissions by 10% starting in 2024.

In addition to reducing our emissions, we recognize the importance of neutralization and offsetting actions in combating climate change.

**Therefore, we have set the goal to offset 100% of our Scope 1 and 2 emissions by 2028.**

# Forests

## Protecting the guardians of balance

Native forests play a crucial role in combating climate change, contributing to mitigating adverse effects such as carbon sequestration, climate regulation, biodiversity preservation, water resource protection, natural disaster prevention, and economic and socio-environmental development. Preserving and restoring forests is essential for global ecological balance, and Chemyunion recognizes the need for local efforts to protect

these vital ecosystems and promote sustainability to ensure a more resilient future for the planet.

Aligned with its commitment to environmental responsibility, Chemyunion maintains a legally protected reserve of 42,000 m<sup>2</sup> that houses native vegetation from the Cerrado and Atlantic Forest transition biome, ensuring the area's preservation. Additionally, the company owns a 900-hectare area in the interior of the Amazon, which is preserved. We take pride in contributing to the conservation of this biome, which is one of the richest and most biodiverse on the planet.

In 2023, Chemyunion reinaugurated its greenhouse, with a vision to enhance the areas at the headquarters and donate seedlings to reforestation projects or communities committed to biodiversity conservation.

The main objective of this greenhouse is to promote sustainability, reforestation, the preservation of native plant species found in the surroundings, and the sustainable development of the region.

In this project, seeds of native plant species found at the headquarters are collected, sown, and propagated in our greenhouse until they reach a suitable size for planting.

**In 2023, the company established a partnership with the private company to assist in reforesting an area located in the Pirapora and Ipaneminha River basins.**



Chemyunion's greenhouse has the capacity to produce more than 3,000 seedlings annually, with investment in quality cultivation. The initial investment allowed for the production of 2,902 seedlings in its first year of operation. Among the native tree species, 596 seedlings were produced, with 237 donated, marking our first steps towards a significant goal.

**The table below shows the details.**

TREE SPECIES	PRODUCED	PLANTED	DONATED
Amendoim falso	20	0	0
Araçá roxo	108	5	58
Aroeira pimenteira	10	0	0
Barbatimão	3	0	0
Ingá	54	0	54
Ipê Amarelo	45	1	1
Jabuticaba	46	0	5
Jatobá	10	0	0
Mama-cadela	17	0	0
Paratudo	58	0	5
Pata de vaca	37	0	2
Pitanga	188	1	112
	<b>596</b>	<b>7</b>	<b>237</b>
SHRUBS AND FORAGING			
Trialis	432	250	0
Orelha de onça	270	145	93
Flor do guarujá	54	54	0
Caliandra rosa	220	16	143
Lantanas	170	150	20
Abacaxi vermelho	42	26	0
Alecrim	270	0	131
Lavandas	424	0	198
Tomilho	289	214	20
Camapú	135	40	0
	<b>2306</b>	<b>895</b>	<b>605</b>
<b>TOTAL</b>	<b>2902</b>	<b>902</b>	<b>842</b>

Our commitment and passion for the environment go beyond cultivating seedlings, encompassing environmental education and conservation awareness. We open our doors to the community, customers, students, employees, and citizens of Sorocaba, offering them the opportunity to learn about the Atlantic Forest and Cerrado biomes. In the second half of 2023, we welcomed botanists from the Sorocaba Botanical Garden Irmãos Villas-Bôas and provided an enriching experience for Chemyunion's gardening team, allowing them to deepen their knowledge about Chemyunion's green area, native species, and discuss the importance of forests and environmental conservation strategies.

# Social Responsibility

## Empathy, passion, and action

For over a decade, Chemyunion has demonstrated its commitment to social responsibility through internal and external actions that promote the common good, becoming co-responsible for socio-environmental development. This commitment is led by the Social Responsibility Committee, known as Chemyunidos.

During 2023, the group dedicated itself to projects based on two essential pillars: education and contributing to a better world. All projects took place within the "Gaming for Good" event, a competition that awarded points to employees for participating in social actions, with prizes at the end of the year.

The commitment of the employees was remarkable. About 60 volunteers dedicated approximately 70 hours to various initiatives, such as blood donation campaigns, cooking oil collection, and coat drives. This effort resulted in significant impacts.



**The collection of plastic caps was a success at Chemyunion, totaling over 100 kg, which were donated to Tampets, a social project supporting animal welfare, enabling the neutering of cats.**

**More than 278 people were directly benefited, and approximately another 1000 indirectly, through donations of 70 kg of food and 22 hair locks to GPACI, the Research and Assistance Group for Childhood Cancer.**

Visits to Lar São Vicente de Paula, a philanthropic entity that houses elderly people from Sorocaba and the region, provided special moments for nearly 200 people, including residents and staff, through breakfast and a heartwarming Christmas choir. Additionally, this partnership collected 750 adult diapers and over 1000 fiscal receipts, which were converted into financial assistance for the institution. Adilson Viana, coordinator of the Nota Fiscal Paulista campaign at Lar São Vicente de Paula in Sorocaba, "thanked Chemyunion for the campaign, which aims to help maintain the home and provide a better quality of life for the 96 elderly residents today."

The social commitment extended to sponsoring children from Lar Bethel, an institutional shelter service for children and adolescents (SAICA) at risk. We collected 59 sets of clothes for 26 children, in addition to an afternoon full of games and a pizza party, resulting in moments of pure fun and happiness.

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Daiane Kozaka, a psychologist at the institution, reflected on the joint work: “In 2023, SAICA Bethel (Institutional Shelter Service for Children and Adolescents) was fortunate to have Chemyunion employees at various meetings at the institution. Besides the emotional encounters involving playful activities, shared meals, and individualized gift-giving, the volunteers contributed to fulfilling the right to Community Living as provided by law (ECA, 1990). The actions throughout the year were not limited to just one meeting, thereby significantly strengthening community bonds.

**We at Bethel Casas Lares thank each employee who sensitively and committedly donated quality time and affection to our children and adolescents.”**



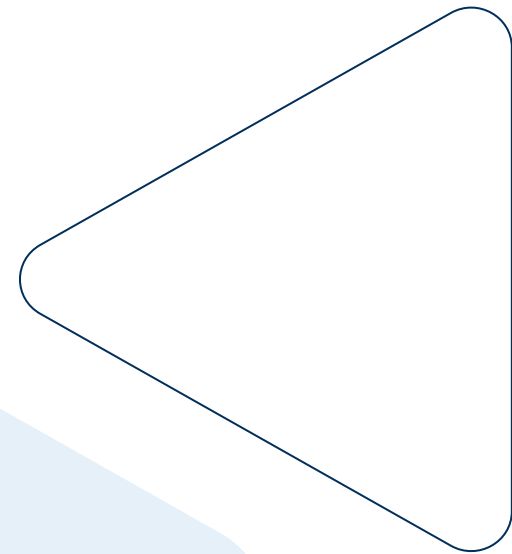
VISIT OF STUDENTS FROM CEAP (CENTRO EDUCACIONAL ASSISTENCIAL PROFISSIONALIZANTE)

Throughout the year, Chemyunion promoted various educational initiatives, opening its doors to nearly 150 students from different institutions, providing them with a practical view of the chemical industry. Pharmacy students from Centro Universitário Sudoeste Paulista (Avaré) and Universidade de Sorocaba – UNISO (Sorocaba), chemistry students from ETEC Fernando Prestes de Sorocaba, and students from CEAP (Educational and Professional Assistance Center) participated in these visits. These activities allowed students to closely

observe the company's operations and sustainability practices. Luiz Vinicius dos Santos, Social Development Analyst at CEAP, expressed his gratitude for the opportunity. “The partnership established with Chemyunion in 2023 was a notable success. Each year, we see greater closeness and involvement with the joint project (CEAP and Chemyunion). In particular, in 2023, we visited the Chemyunion factory, providing young people with a spectacular opportunity to learn more about the company and its facilities. The experience was unique, culminating in the

production of a cream by the young people. Additionally, we had the valuable sponsorship of Chemyunion at our innovation and science fair - FeCEAP, where Chemyunion annually participates, contributing not only to offering quality and personalized education to young people but also to creating an impactful event in the community.”

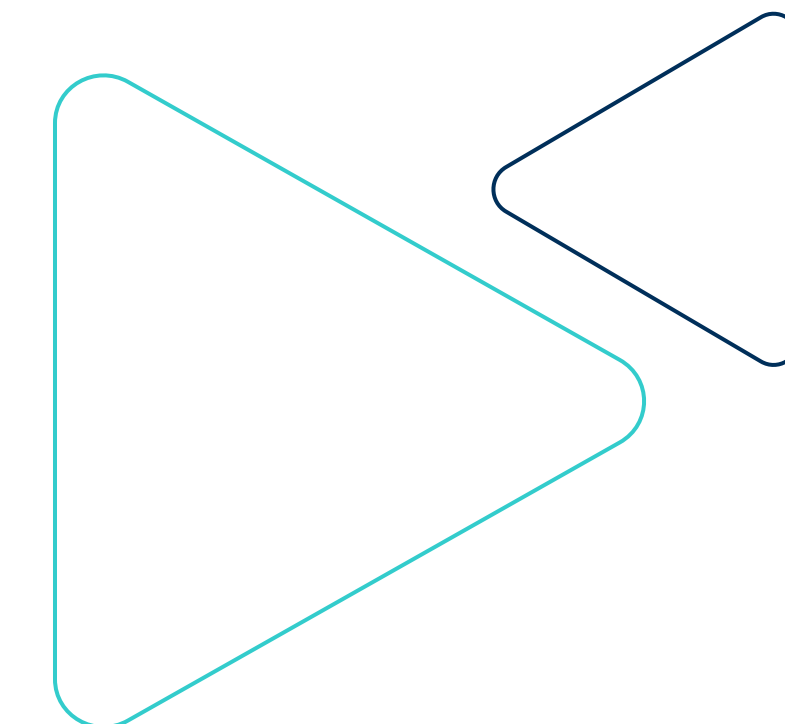




In 2023, Chemyunion invested approximately R\$25,000.00 in social projects, demonstrating its financial commitment to the community. Évellyn Lima Juriaans, a researcher in the Application Laboratory and member of Chemyunidos, highlights her enriching experience.



“Experiencing the positive impact of these projects on so many people's lives brought indescribable satisfaction. The opportunity to share moments of joy with the elderly at Lar São Vicente de Paula, to provide fun and care for the children at Lar Bethel, and to see the enthusiasm in the eyes of the CEAP youth during the visit to Chemyunion are experiences that touch the heart. 'Gaming for Good' not only united employees for noble causes but also highlighted the transformative power of small gestures. Being part of Chemyunion's social commitment is an exciting journey, full of meaning and positive community impact. I look forward to contributing even more next year, strengthening bonds and promoting significant changes.”



For 2024, Chemyunion plans to maintain the success of "Gaming for Good," adding collaborative social actions with the environmental team in the sustainability area.

# Healthy and Well-Being

## Commitment and care for people

The health and well-being of our employees are fundamental to the success and sustainability of any organization. An organizational culture that values health and well-being creates a pleasant environment and encourages cooperation among team members. We understand that employees who feel supported in their health and well-being generally have higher engagement and job satisfaction.

Chemyunion is dedicated to innovation and always seeks partners and ideas to maintain a healthy, light, and attractive environment. In addition to our existing amenities, such as a game room, zen space, massage room, and contemplation area, in 2023, we initiated a partnership with C4 Life, which offers psychological, legal, and financial assistance to employees and their dependents, with 24-hour online service.

We invest in promoting the physical and mental health of our employees, and in 2023, we implemented workplace exercise practices. We conducted 792 classes focused on stretching and relaxation, contributing to flexibility and corporate well-being. Additionally, we reinforced safety information during the classes weekly.

## We invested in training and events, WITH 1,404 HOURS DEDICATED TO HEALTH AND SAFETY

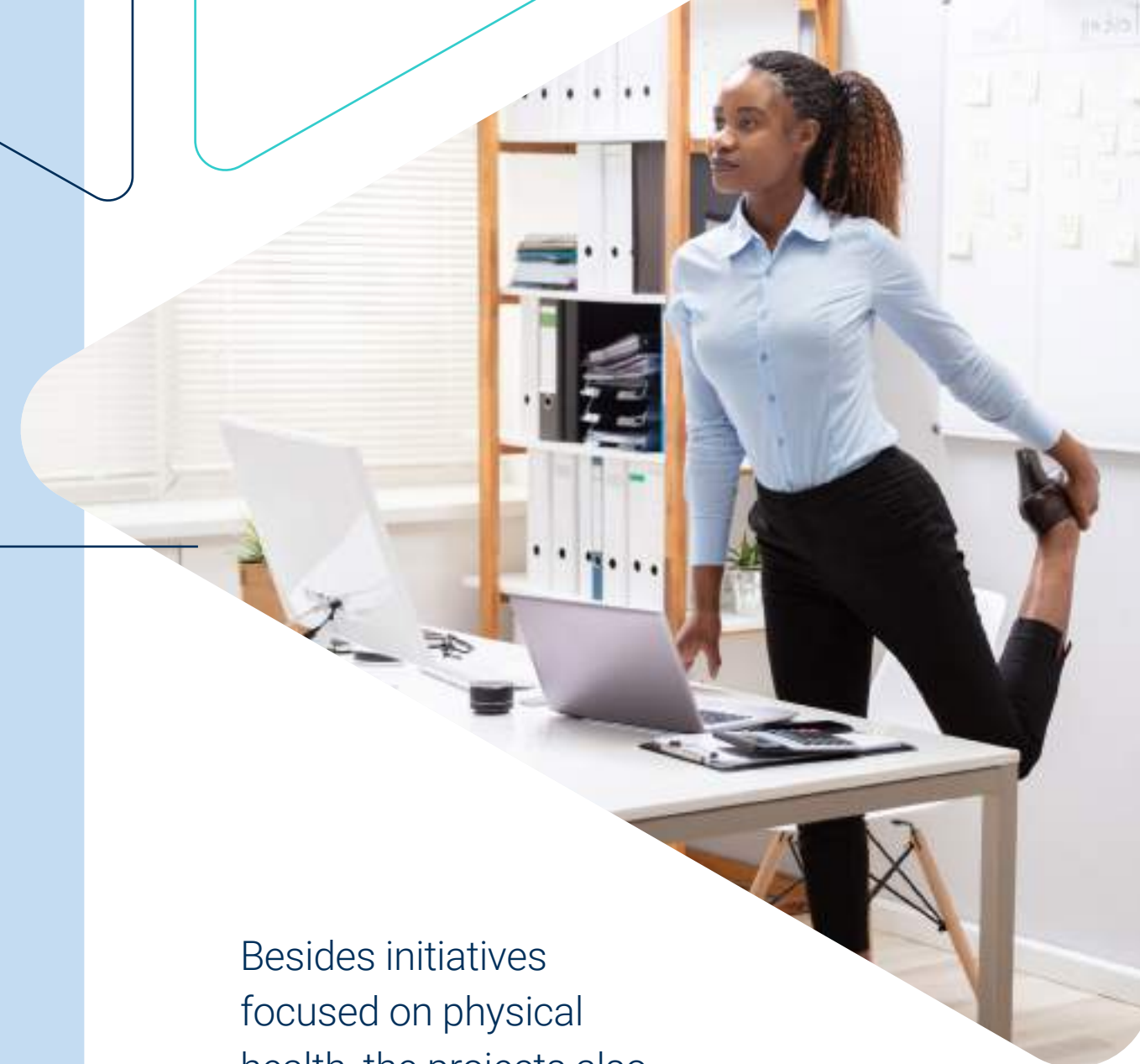
to ensure the prevention of accidents and occupational diseases. We also ran communication campaigns.

We value the life, health, and safety of our employees, so we promote a culture of safe behavior, with communication being fundamental to this process. We highlight that 100% of employees actively participated in health and safety management through various communication channels, the Internal Commission for Accident Prevention, and the Emergency Brigade, which played key roles in identifying and mapping risks and opportunities for improvement. As a result, in 2023, we achieved

 **2,921 DAYS WITHOUT ACCIDENTS** leading to time off.

Besides initiatives focused on physical health, the projects also prioritize sustainability, safety, and employee well-being. In 2023, we completed the coverings for the lake deck, providing an additional space for rest and connection with nature during breaks and free time.

To promote integration and engagement among our employees, we created the **"Coffee with the President"** program, a monthly meeting offering the opportunity to enjoy a pleasant breakfast and interesting conversation with our CEO. The **"Connect Talks"** program encourages integration between departments and the dissemination of company values, promoting organizational evolution, business conduct guidelines, and corporate influence for our employees.





## Commitment to People

The year was marked by solid growth and stability at Chemyunion, which has a diverse team of over 294 employees spread across seven countries, including 260 permanent employees, 6 temporary employees, 13 interns, 15 outsourced workers, and approximately 400 service providers. The consistency in the number of employees throughout the year and full coverage by collective bargaining agreements reflect the company's commitment to team stability and well-being.

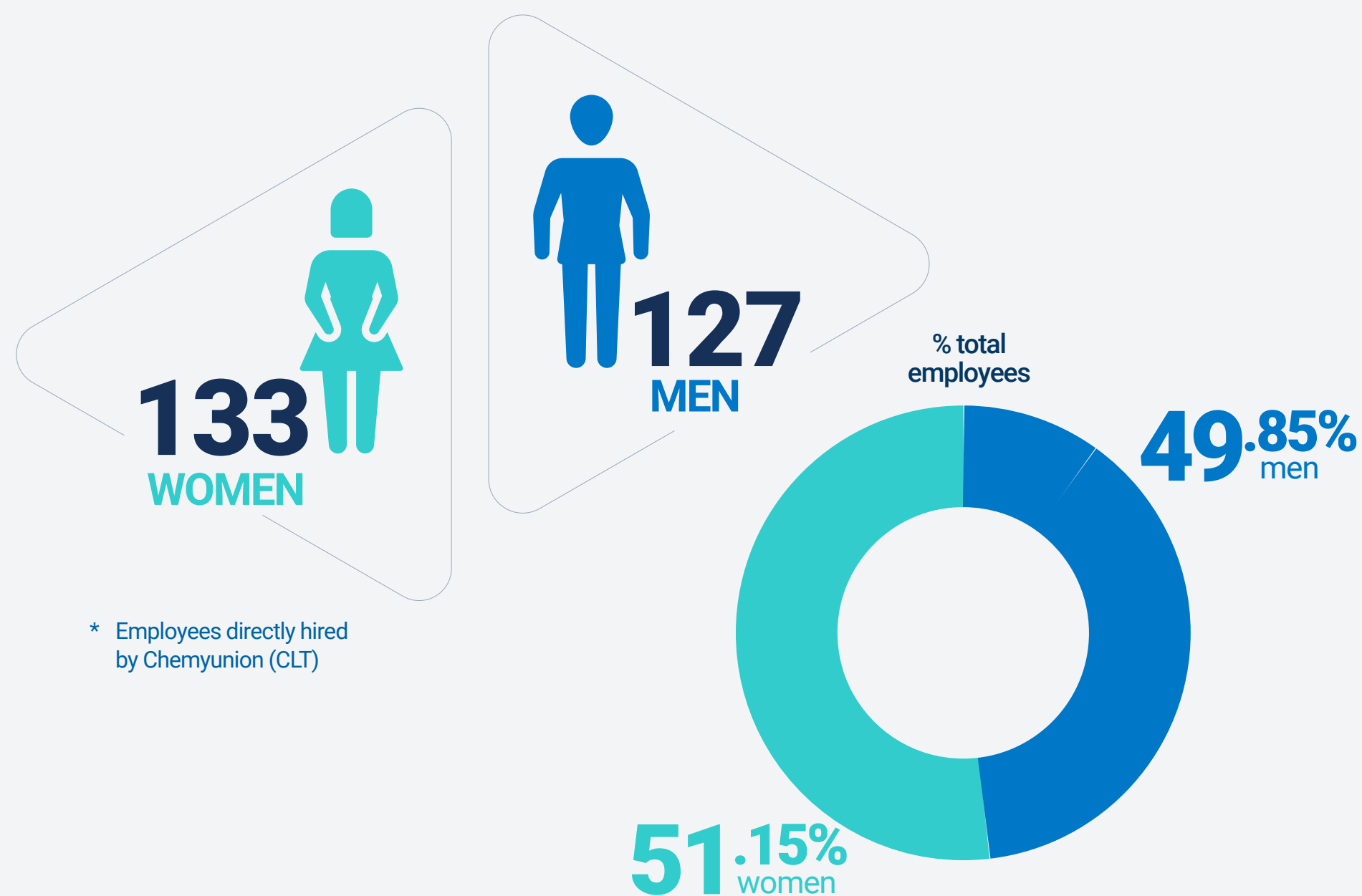
For us, attention to human and labor rights is fundamental and is reflected in our careful approach to hiring outsourced workers, temporary employees, interns, and service providers. We require third-party companies to comply with our guidelines, maintain transparent processes, and adhere to strict documentation requirements, reinforcing our commitment to ensuring human and labor rights, as well as occupational safety and health standards.

Efficient data and information management is our priority, using specialized software for payroll control, benefits management, hiring, training, and recruitment, demonstrating the company's commitment to optimizing processes and ensuring reliability and transparency. Reports with indicators are monitored by senior management and reflect the continuous pursuit of a strategic approach where data-driven decision-making is paramount.

Chemyunion reinforces its commitment to organizational growth and the promotion of a sustainable, ethical work environment that values integrity and the rights of all employees. These collective efforts solidify our company as a reference in responsible and inclusive management practices.

## Gender Equity

Promoting gender equity is a crucial aspect of broader diversity and inclusion efforts. We recognize gender equity as the equality of rights, opportunities, and responsibilities among people of different genders, ensuring that men and women have access to and enjoy the same benefits in society. We encourage and seek more diverse teams, resulting in 2023 with 51% of women making up the total workforce, showing that our efforts for gender equity are yielding positive results.



\* Employees directly hired by Chemyunion (CLT)

We believe that gender equity goes far beyond including women in the industry. It involves promoting social justice, eliminating gender stereotypes, biases, and discriminatory practices. Therefore, we work to create a safe space for the professional and personal development of women. Additionally, gender equity recognizes that the needs, interests, and aspirations of men and women can differ and seeks to create fair conditions that consider these differences, ensuring that both genders have equal opportunities to reach their full potential.

Promoting gender equity benefits individuals and contributes to building more just, inclusive, and sustainable societies.



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## Education

Education is a crucial pillar for social, cultural, economic, and environmental advancement. It plays a fundamental role in forming conscious citizens capable of contributing to the progress and sustainability of their communities. Socially, education is essential to promote equality and reduce socioeconomic disparities, providing equitable opportunities and contributing to building more just and inclusive societies.

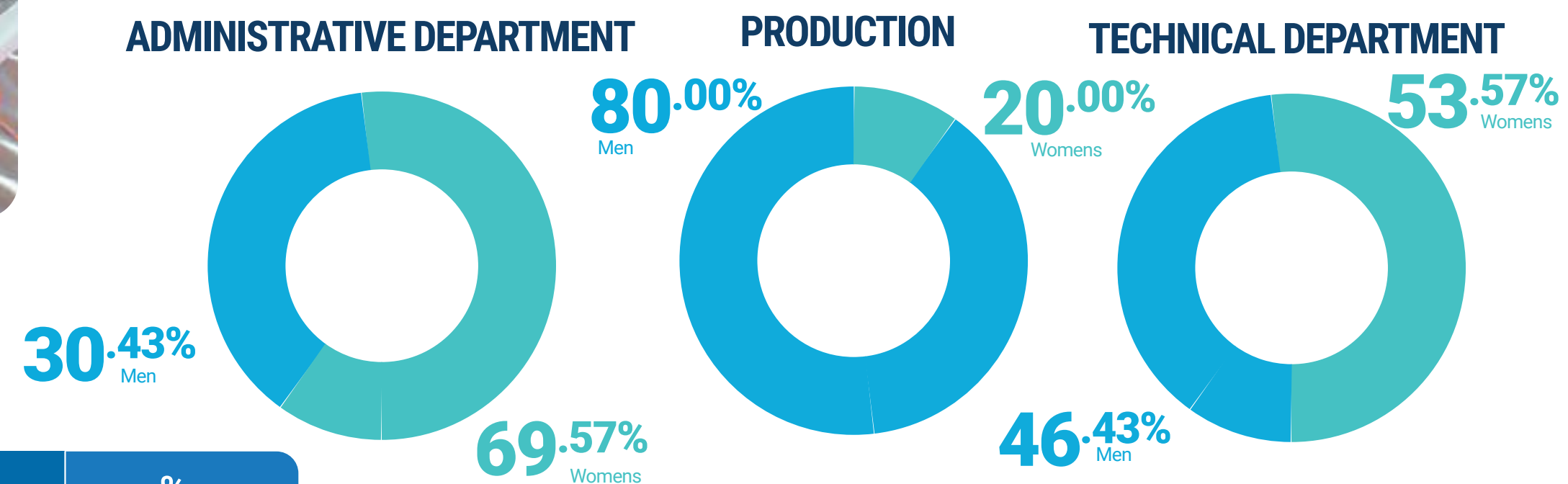
Chemyunion is dedicated to maximizing the efficiency of our employees by supporting their personal and professional development. We offer incentives for technical courses, languages, undergraduate and graduate studies through partial reimbursement of costs associated with these courses in various fields of knowledge. This support reflects our commitment to continuous learning and the constant growth of our team.

We invested more than 1,400 hours in enhancement courses. In 2023, 60 employees were included in our study incentive program, with more than 70% for language courses, where 50% of costs and hours are subsidized by the company. For technical courses, undergraduate, specialization, MBA, master's, and doctoral degrees, we cover an average of 43% of the total study costs, varying from 30% to 50%.



TYPE	PEOPLE	H/MONTH	% SUBSIDIZED
Languages	44	416	50
Undergraduate and Graduate	12	720	average is 43% (ranging from 30% to 50%).
Technical	4	304	average is 43% (ranging from 30% to 50%).

In addition to enhancement courses, we strongly believe that training is the best path to achieving efficiency with safety and quality. We have a solid training program for all Chemyunion employees. Last year, we invested more than 2,500 hours in training and development, with 34% conducted by the administrative department, 36% by production, and 30% by the technical department. The charts show how the hours dedicated to internal training and development were distributed.



DEPARTMENT	TOTAL	%
ADMINISTRATIVE	878 hrs	34%
PRODUCTION	933 hrs	36%
TECHNICAL	771 hrs	30%

**Education is an essential foundation for human progress. It empowers individuals, strengthens communities, drives economies, and promotes a deeper understanding of the world, contributing to the comprehensive and sustainable development of society.**

# Interviews

Our sustainability program has been a strategic pillar for cosmetic manufacturers seeking to align their operations with environmental and social responsibility principles. We developed this program to reduce environmental impact, promote ethical practices, and ensure sustainability throughout the entire value chain of cosmetics.

In this context, it is essential to understand how this program is impacting our clients' businesses, especially cosmetic manufacturers facing pressure from increasingly conscious consumers and stringent environmental regulations.

To deepen this understanding, we conducted a series of interviews with our clients who have implemented our sustainability program. These interviews reveal valuable insights into the benefits, challenges, and real impacts that these sustainable practices have brought to their operations. Through these conversations, we explore how cosmetic manufacturers are integrating our solutions into their processes, what significant changes have been observed in terms of efficiency, resource savings, and brand image, and how the commitment to sustainability is driving innovation and competitiveness in the cosmetics sector.



CHEMYUNION

## To what extent have Chemyunion's transparency and communication about sustainable practices influenced your perception and confidence in the brand? How does this reflect in your decision to continue collaborating with the company?

ROBERTH

The brand's commitment is perceived in various positioning fronts, where I can cite the offering of raw materials from renewable and biodegradable sources, as well as internal campaigns encouraging healthy habits for employees and the community where it operates. These actions strengthen our relationship by believing together in building a better collective future for everyone.

CHEMYUNION

## How do you evaluate Chemyunion's contribution to your sustainable initiatives?

ROBERTH

Chemyunion facilitates our search for sustainable inputs, in addition to the guidance we can receive through the excellent quality of research and innovation work, with quality that generates trust.

## What is your view on the impact of Chemyunion's products on your sustainability and social responsibility practices?

We believe that the will and love for the work developed are transforming forces for building a better world to live in. Thus, through this chemical union, we are happy to offer safe and effective products to our customers who perceive the benefits during use. Our vision is to increasingly rely on the brand's professionalism and commitment, which reassures us in our paths.

**Roberth Sertorio**

Research and Development Manager





CHEMYUNION

**In your opinion, what is the most notable aspect of Chemyunion's sustainability initiatives? How does this stand out compared to other companies in the sector?**

RENATA

One of the most notable aspects is the company's commitment to sustainable innovation. Investment in research and development of ecologically friendly ingredients with low environmental impact, while maintaining the efficacy and safety of the final products. This stands out compared to other companies in the sector as it demonstrates a genuine commitment to reducing environmental impact without compromising the quality and effectiveness of ingredients.

Additionally, the pursuit of certifications such as ECOCERT and COSMOS reflects Chemyunion's commitment to sustainable ingredients and processes.

CHEMYUNION

**Considering your experience with Chemyunion, how would you describe the impact of the company's products and services on reducing environmental impact and promoting sustainability throughout the value chain?**

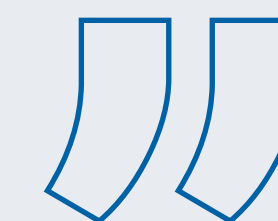
RENATA

I believe Chemyunion stands out for its ability to create innovative active ingredients that are ecologically friendly and have a low environmental impact. These ingredients offer cosmetic companies more sustainable alternatives, reducing the dependence on finite natural resources and mitigating the use of substances harmful to human health and the environment.

**How do you evaluate Chemyunion's performance in pursuing a more sustainable cosmetic industry? Which areas do you believe still need more focus and improvement?**

I see Chemyunion as a very sustainable cosmetic industry; I had the opportunity to visit the factory in Sorocaba and it is clear there is a concern for sustainability. Perhaps it is not an area for improvement, as it is already being done, but continually promoting transparency in the supply chain and continuously reducing the consumption of natural resources and pollutant emissions so that customers can also use this information.

**Renata Ribon de Melo**  
Researcher



# Acknowledgment

## Celebrating our achievements

We express our deepest gratitude to everyone who has been part of our journey in pursuit of innovation and sustainability.

To our employees, who have been an integral part of Chemyunion's journey, we thank you for your commitment and significant contributions to the growth and strengthening of our company, which remains grounded in fundamental values of ethics, transparency, and respect for the environment.

A special recognition goes to the team involved in the preparation of this **Sustainability Report**. Your hard work and tireless dedication are the pillars of this ongoing success.

Through this document, we reaffirm our relentless commitment to evolving in our sustainability goals and actions. We hope this report inspires our stakeholders and everyone around us to commit to practices that promote a more conscious and harmonious future for all forms of life.

We maintain the motivation to continue with good practices and express our deep admiration for the team that transforms our vision into reality every day. Together, we are building a legacy of sustainability and prosperity for future generations.

# Credits

## RESPONSIBLE

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## PREPARED BY

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**Fábio Curcialeiro** | Occupational Safety Technician

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**Maíra Cleto** | Quality Assurance Manager

**Marcelo Golino** | CEO

**Pablo Rodrigues** | Industrial Supervisor

**Raquel Kanashiro** | Environment and Safety Supervisor

**Renata Nunes** | HR Manager

**Wagner Magalhães** | RD&I Officer

## REVISION

**Agência RACE**

**Ana Paula Vilar** | Operations Director

**Chemyunidos committee** | Multidisciplinary Team

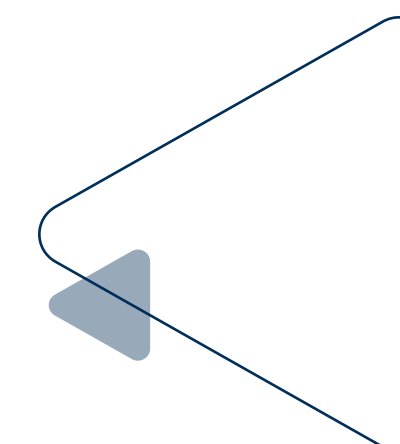
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**Marcelo Golino** | CEO

**Patrícia Moreira** | Global Marketing Director & PC and HC Sales Director for Brazil

## GRAPHIC DESIGN

**Eder Maiela** | Design Specialist



## IMAGES

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