

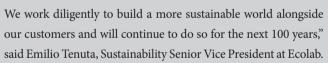
# ECOLAB CELEBRATES 100 YEARS AND STRENGTHENS ITS SUSTAINABILITY JOURNEY

Comprehensive portfolio of products and services based on conscious management contributes to the circular and low-carbon economy

BY CAROLINE MARTIN Special for *O Papel* 

pon reaching its 100<sup>th</sup> anniversary in 2023, Ecolab, global leader in water, hygiene, and infection prevention technologies and services, reaffirms its commitment to sustainable development and charts its future trajectory by actively contributing to the low-carbon economy. "While people may perceive sustainability and ESG as modern business initiatives, such is not the case at Ecolab. Sustainability is embedded in our DNA: for 100 years, we've been dedicated to protecting what is vital. Our journey includes a longstanding commitment to making the world a better place, balancing sustainability and business success since 1923.





The company currently has 47,000 employees, serving nearly 3 million customers across 40 industrial segments—including the pulp and paper industry, one of Ecolab's main business divisions-in over 170 countries. "In 2022, we helped our customers save 219 billion gallons of water, having supplied safe food to 1.4 billion people, sanitized 57 billion hands, and prevented the emission of 3.6 million metric tons of greenhouse gases (GHGs). One thing that has been fundamental to our sustainability success is the unwavering focus on solutions that drive operational efficiency and financial results for our customers while using less water and energy," said Tenuta, underscoring how sustainability is intrinsically linked to Ecolab's operations.



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Further exposing how Ecolab's work makes significant contributions on various fronts, Tenuta says that the intersection of water, climate, and nature is impacting businesses and their supply chains. "Ecolab offers solutions that address these issues in an interconnected way, helping customers reduce water usage which, in turn, translates into energy saving. When global water processes are optimized, energy use and greenhouse gas emissions are reduced. Operational water management, coupled with nature-based solutions, can help address emerging environmental trends impacting businesses. Our efforts to achieve a positive water impact for our customers' operations, as well as our own, are key to unlocking business opportunities related to climate, water, and nature."

"Our company's purpose is linked to the ESG pillars (Environmental, Social, and Governance), as we focus on caring for the climate, health, food, and water. We put this into practice not only in our operations but also in the products and services we offer to our customers," said Thais Gervasio, Ecolab Brazil's CEO, saying that the company's future competitiveness is based on a strategic plan focused on strengthening sustainability.

The company recently joined the United Nations Global Compact's Business Ambition for 1.5°C program, committing to reduce its scope 1 and 2 total greenhouse gas emissions by 50% by 2030 and achieve zero emissions across its supply chain by 2050. Other environmental targets established in partnership with its customers is the conservation of 300 billion gallons of



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water, equivalent to the annual freshwater needs of 1 billion people.

The progress of these targets is continuously measured to ensure adherence to the timeframe and see that the company remains on track. All of our Corporate Sustainability reports and climate data are audited by independent third parties. "The circular economy has emerged as a management trend in various sectors. We believe that the future competitiveness agenda of companies will include this theme, as it has been guiding ours," said Thaís.

Initiatives like Ecolab's Water for Climate™ program already stand out for their significant impact on reducing water and energy for customers. Geared to help businesses tackle the increasing impacts of the energy crisis, climate change, and water scarcity, this program was conceived to address these challenges by providing integrated solutions such as auditing, consulting, engineering,

advanced chemicals, and digital technologies that help reduce, reuse, and recycle water in companies.

The Smart Water Navigator program uses a proven four-step process to increase resilience across all levels of an organization through smart water management. "It tells companies the performance of their operational units compared to industry best practices in water management. The tool also positions each facility on a Water Maturity Curve and generates a sector-specific and location-specific guide with actions to help companies develop sustainable and intelligent water management practices to reach their next level on the Maturity Curve," said Thaís, emphasizing that the Smart Water Navigator can be used by companies in all sectors and complements the Water Risk Monetizer tool previously launched by Ecolab to help companies understand the actual value of water for their businesses.

"In working with industries. governments, NGOs, and other stakeholders, Ecolab acts as a convener, addressing some of the most pressing challenges surrounding the climate and water crises. In 2020, for example, the company co-founded the Water Resilience Coalition, a CEO-led coalition focused on raising awareness and taking actions in relation to the water crisis. The important thing is the positive impact we're making by helping our clients achieve their bold business and sustainability goals," said Tenuta.

According to Ecolab's Sustainability Senior Vice President, the Water Resilience Coalition identified that the 150 largest corporations worldwide, along with their supply chains, can positively impact one-third of the world's freshwater usage by making a serious and assertive commitment to reducing consumption. "It's an incredible statistic, underscoring why companies need to collaborate to avert water scarcity. While the Water Resilience Coalition has a tremendous positive impact, it showcases a broader concept: sustainability goals cannot be achieved by a single company alone. It's imperative to work collectively to achieve scaled results, especially in higher-risk watershed basins."

Achieving sustainability goals while simultaneously growing the business and creating value for stakeholders is a challenging journey, acknowledges Tenuta. However, he assures that it can be done. "First and foremost, companies need to cultivate a culture that enables them to achieve and operationalize ambitious sustainability goals. It's also crucial to establish an unwavering commitment from senior leadership, be aligned with the business strategy, and leave the organization prepared to take



The strengthening of this partnership occurs through Ecolab's team presence and close collaboration with customers in the pursuit of innovative and customized solutions

action," said the executive. "Fortunately, at Ecolab, our CEO and leadership team are committed to supporting us on the sustainability journey, which is paramount for success. What also helps engage leaders is understanding the implications for our business strategy in terms of risks and opportunities. If we don't address the challenges posed by water scarcity, climate change, and nature, we cannot continue to succeed and grow," said Tenuta.

#### Solid partnership with pulp and paper makers

In tandem with our own efforts, Ecolab's commitments demonstrate that the company is a trusted partner in helping its customers take action against climate change. "Our solutions not only create value for pulp and

paper manufacturers but also represent sustainable applications that align with ESG principles," said Alexandre Ceron, Brazil Pulp and Paper director.

The strengthening of this partnership **Ecolab's** occurs through team presence and close collaboration with customers in the pursuit of innovative customized solutions, which and work is supported by the Research, Development, and Engineering Center located in Campinas (SP), and digital technologies that allow for monitoring and quick decision-making. "We also have a team of seasoned experts. The value created from process improvements and optimizations, combined with all other actions, builds the necessary trust for us to master challenges together and meet the needs of the paper and pulp market" said Ceron.

Based on the premise that customer challenges are Ecolab's own challenges, the company works several fronts to achieve common goals and objectives. Successful examples, according to Ceron, include partnerships resulting in Total Cost of Ownership (TCO) projects, where solutions developed alongside customers lead to increased productivity, better quality, cost and resource optimization, preservation of vital resources, and reduced fossil fuel consumption. "Furthermore, by using digital tools and technical experts, we're able to monitor and support the main needs online of our market. We also have the backing of our Research and Development Center, where integrated, direct and customized innovations and solutions are collaboratively developed to create even more value and maximize gains."



Ecolab's Research, Development, and Engineering Center located in Campinas (SP) is dedicated to innovations in the pulp and paper industry

In practice, cutting-edge technologies tailored for the pulp and paper industry result in improved water circuit closure, reduced fossil fuel usage, decreased greenhouse gas emissions, optimized chemical dosing, enhanced finished product quality, among other factors. Coupled with digital solutions, these technologies allow for greater online control (24 hours/day, 365 days/year), visibility, and measurement to safeguard people and vital resources, while complying with all required legislation and certifications for production processes.

According to Ceron's context, Ecolab's Pulp and Paper division maintains local representations in Latin America's main producing countries. "Our processes, technologies, and experts in the pulp, brown paper, tissue, and printing segments collaborate with customers to identify innovations and continuous improvements that impact their key performance indicators, safely boosting productivity, finished product quality, and operational outcomes," he said.

Within Ecolab's global portfolio, the Pulp and Paper division accounts for about 10% of sales revenue and boasts a diverse team of professionals, including

salespeople, specialists, engineers, and service technicians with the objective of creating value and driving market growth. "In 2020, with the pandemic, our entire segment faced uncertain and challenging times. However, despite all adversities



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that stemmed from the crisis, we were committed to being present, ensuring uninterrupted supply-chain operations, developing new technologies, and actively seeking daily solutions to address customer operation challenges, including remote digital solutions," said Ceron.

Ecolab Brazil's CEO highlights the company's philosophy of 'one field, one customer, one company, which means that 'each customer is unique, and we work in an integrated manner to serve them. To ensure unique and integrated service, Thais explains that the company's 12 business divisions operate in synergy. "Through our digital technology and thousands of customer visits across all the sectors we do business, we gain first-hand knowledge of the challenges that businesses face. This knowledge guides our innovation process, which combines chemistry, digital technology, data analysis, and service to deliver exponential value to customers," she said.

### Caring for the health of people, the planet, and business guides future actions

Thais points out that the strategic plan for the coming decades begins with the continuous purpose of caring for people's health, the planet, and business. "This is why we have our impact goals for 2030 and work diligently to achieve them. We aim to continue increasing the positive impact on our customers, accelerate efforts in our own operations, expand our sustainability approach, develop our talents, and further evolve in our journey to have an increasingly diverse and inclusive Ecolab, always prioritizing the safety of our people and customers."

Also starting from the principle that the circular economy will guide the competitiveness agenda of companies in various sectors, Ecolab remains committed to promoting innovative business models and technologies that help the new economic model to develop.

"Our solutions promote greater cost savings and operational efficiency, which are the industry's main drivers, and also deliver consistent environmental benefits. Moreover, there is no resource with more circular potential than water. We are aware that this important input can no longer be considered a cheap commodity to use and dispose of. Instead, it should be valued as a reusable asset and a driver of growth," said Thais, pointing out that the company has sponsored for five years The Circulars Awards, the world's leading circular economy awards program, led by the World Economic Forum and the Global Shapers Community, in collaboration with Accenture Strategy.

According to Ecolab's CEO in Brazil, the upcoming years are a crucial moment not only to make a positive impact but also to set an example of sustainability leadership, contemplating the entire ESG agenda. "Ecolab's goals for the coming years are focused on the change



By 2030, Ecolab will reduce water impact per production unit by 40% companywide; restore more than 50% of the total volume of water withdrawal in high-risk areas, and obtain international certification for the Alliance for Water Stewardship (AWS) standard in high-risk river basins

## Company history reveals a competitive multifaceted origin

he company founded in the United States today has of 47,000 employees and serves over 3 million customers worldwide. "Ecolab offers comprehensive solutions and services, specific expertise, and local service to promote food safety, maintain clean environments, optimize water and energy usage, and improve operational efficiency for customers in the food, healthcare, energy, hospitality, and industrial sectors in more than 170 countries worldwide. With its purpose of protecting people and vital resources, sustainability is the strategic driver for all its solutions, services, and technologies," said

Thaís Gervasio, Ecolab Brazil's CEO, regarding the company's extensive range of operations.

The company's journey began in 1923 in Minnesota when its founder, M.J. Osborn, foresaw a society in which eating or sleeping away from home would be a common thing. His vision and boldness resulted in the Economics Laboratory (EL), a small firm dedicated to manufacturing cleaning chemicals. Despite the strong recession that devastated the United States over the following decade, the company expanded to other American states. In the post-war period, it initiated a strong international expansion process which started in 1956 with the opening of a subsidiary in Sweden.



The Suzano unit (SP) is responsible for producing solutions for water treatment and the pulp and paper industry

Ecolab's arrival in Brazil occurred in 1960 when it began operating through a partnership with a Brazilian company called Magnus Soilax. In the 1970s, when Ecolab was already active in 40 international markets, the Institutional division began expanding its portfolio with laundry and dishwashing products. This decade also marked the beginning of its journey in sustainability, developing products focused on natural resource preservation, synthetic material reuse, and food waste reduction.

In the 1980s, the company saw that it could offer more complete services and products to its customers, satisfying a broader range of cleaning and sanitation needs. This idea gave rise to the strategy 'Circle the Customer, Circle the Globe', leading to the creation of two new divisions: Pest Elimination and Textile Care. The company also introduced patented solid concentrates that offered high performance, safety, and ease of use. Originally developed for dishwashing, the solids technology was later adopted for other areas, including laundry, professional hygiene, food processing, and water treatment. It was in this decade, 1986 to be exact, that the company officially became known as Ecolab. In Brazil, it began operating with an administrative office in São Paulo (SP).

In the early 1990s, Ecolab established a strategic partnership with German company Henkel, resulting in a stronger, more profitable position in the European continent. In the years that followed, the company ventured into new market segments by offering new services that led to the creation of other divisions like Quick Service Restaurants and Water Treatment.

Jumping to 2006, another significant milestone occurred in Brazil: the company consolidated its manufacturing operations in Barueri (SP). Then, in 2011, a major move took place with the merger with Nalco, a global reference in water treatment. That same year, Ecolab made strategic moves and local acquisitions, including Insetcenter, a pest control company, and Econ, a professional hygiene and cleaning products company. Additionally, in 2011, the global merger with Nalco was finalized, forming Nalco Water, an Ecolab company.

In 2013, Ecolab announced its acquisition of Champion Technologies, a company operating in the energy, oil and gas markets, which led to the formation of a new company, Nalco Champion, operating in Brazil with two offices: Rio de Janeiro (RJ) and Macaé (RJ). In 2016, Ecolab announced the opening of its new administrative center in Brazil, home of Nalco Water's regional office for Latin America, located in São Paulo. The following year, Ecolab announced the Laboratoires Anios acquisition, the European leader in healthcare present in 80+ countries. In Brazil, the operational unit in Franca (SP), which produces equipment for endoscope hygiene, reprocessing, and storage, was incorporated into Ecolab's portfolio through this acquisition.

More recently, in 2021, Ecolab announced the global acquisition of Purolite, which provides solutions to the pharmaceutical, energy, mining, food and beverage sectors. This initiative is part of Ecolab's strategy to expand its presence into sectors that complement its operations, such as advanced microelectronics polishing, ultrapurification of water in nuclear energy, flavor enhancement in food and beverages, extraction of cutting-edge precious metals like lithium for EV batteries, as well as the production of hydrogen fuel cells.

that the company intends to create for itself, communities, customers, and society," she said.

In terms of internal goals related to water, she points out that by 2030, Ecolab will reduce the water impact per production unit by 40% companywide; restore more than 50% of the total volume of water withdrawal in highrisk areas, and obtain international certification for the Alliance for Water Stewardship (AWS) standard in highrisk river basins. In Brazil, the Suzano and Barueri plants, both located in the state of São Paulo, recently obtained AWS certification, confirming their best practices in water management.

In the governance field, Ecolab was elected for the 17<sup>th</sup> consecutive year as one of the world's most ethical companies by Ethisphere Institute. "We

are also signatories of Ethos Institute's Business Pact for Integrity and Against Corruption. These recognitions reflect the seriousness and consistency of our compliance programs as well as the strength of our Code of Conduct. All employees worldwide undergo training annually on the company's Code of Conduct and can at any time and in complete anonymity report their concerns through the Whistleblower Channel," said Thaís.

The focus on education permeates the social pillar through a partnership with UWB (United Way Brazil). "We sponsor the Born Learning Program, focused on early childhood, and Competencies for Life, dedicated to qualifying and preparing youngsters for the job market. We also support initiatives in culture, such as Cine Solar, and in citizenship

development through sports. In the latter, we partner with Emaús Institute in Suzano," said Ecolab Brazil's CEO.

### Digital innovations driving process improvements

"The advancements enabled by Industry 4.0 concepts and other aspects related to digital transformation have been changing the reality of the forest base sector through the availability of data. Ecolab operates in line with the latest trends, as described by Luis Gustavo Pereira, Global Senior Vice President and General Manager of Ecolab's Pulp and Paper division. "We leverage process data to optimize applications and generate results for our customers. Our solutions include monitoring, advanced analytics, process automation, and control technology



Ecolab strongly believes in the paper industry's digitalization and invests heavily in the automation of its processes



Ternes: "The relentless pursuit of making a positive impact in our customer and partner processes is what drives us to continually improve our work in the pulp and paper market"

to help our customers maximize the performance of their operations."

"Ecolab strongly believes in the paper industry's digitalization invests heavily in the automation of its processes. Today, we have a wide range of equipment providing real-time data from our applications, alongside their impact on customer processes. We have a data center located in India that monitors critical process indicators 24/7, providing constant information about performance. We also have a cutting-edge platform called ECOLAB 3DTM, which provides us a clear and accurate view of process data. Through the extensive use of our online automation equipment, we lend predictability and proactivity to the pulp and paper manufacturing process, indicating proactive actions that can both improve processes and prevent losses by detecting issues in advance," said Daniel Ternes, Strategic Leader of Ecolab's Pulp and Paper business for Latin America, citing a few practical examples.

"One of the technologies currently available is the Pulp Wash Intelligence program, which uses customer data

and apps to feed an analytical model. "The program allows us to manage the dosage of our chemical products and optimize wash water, consequently leading to energy savings. The Yankee Operations Intelligence, in turn, is a solution for the tissue segment, where we use vibration data and internal insights to help optimize Yankee Dryer operations," said Pereira.

Focusing on the relevance of human

capital in delivering services with embedded cutting-edge technology, Pereira says that the Sales and Services engineers, as well as the company's technical consultants, play a key role in the successful delivery of value to customers. "This is achieved through a disciplined process of understanding our customers' key business drivers and then working together to come up with solutions, including digital innovations, to drive improvements in key processes."

"Ecolab supports its professionals through a robust training process with both virtual and in-person components, and annual updates. "We train our teams not only on the technical components of the business but also on how to connect and build trust with customers. We are a people-oriented company with a focus on customer relationships, supported by strong digital capabilities to enhance the value we deliver to customers every day," said Pereira, Global Senior Vice President and General Manager of the Pulp and Paper division.

In analyzing developments projected for the coming years, Pereira indicates



Pereira: "Our solutions include monitoring, advanced analytics, process automation, and control technology to help our customers maximize the performance of their operations"

that the forest base industry is in a phase of preparing itself for a promising future. "The sustainability of fiber-based packaging, combined with the emergence of bio-based materials, positions the forest industry as a major partner in the ongoing transformation toward a more sustainable economy. In the short term, fiber-based packaging will continue to replace disposable plastics, while in the long term, sustainable barrier and coating technologies will help drive the use of fiber in new markets. Bio-based materials are just beginning to gain momentum, facing a future that aims to maximize wood resources."

Pereira believes that achieving these short and long-term results calls for more strategic relationships throughout the value chain. "Suppliers with a deeper understanding of customer needs and outcomes will be better positioned to drive industry advancement in these new markets," he said.

"The forest base industry is experiencing a moment of great opportunity. As

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an industry with a positive carbon footprint, being highly biodegradable, and recyclable, use of its products is showing increasing demand. This surge in demand is already having a positive impact on suppliers, broadening the range of possibilities and driving investments in R&D," said Ternes, emphasizing that continuing to allocate funds into new developments is crucial to keep pace with the sector's evolving demands.

"In collaboration with our customers, we have challenged ourselves to go beyond the conventional and invested heavily in alternatives that support new uses of pulp fiber. Another indispensable aspect is continuing to invest in our people. Only through this combination can we maintain the level of expertise necessary to help our customers master their future challenges. We believe our competitiveness is directly linked to our ability to create and share value. The relentless pursuit of making a positive impact in our customer and partner processes is what drives us to continually improve our work in the pulp and paper market," said Ternes, Strategic Leader of Ecolab's Pulp and Paper business for Latin America.

### **Ecolab in Brazil**

Ecolab started operating in Brazil in 1960 and now caters to more than 20,000 customers nationwide. These figures reflect the competitive performance of the global leader in water, hygiene, and infection prevention technologies and services in Brazil:

- More than 1,600 employees
- Three production facilities: Suzano, Franca and Barueri (SP)
- Two offices: São Paulo and Campinas (SP)
- Three distribution centers: Jaboatão dos Guararapes (PE), Lauro de Freitas (BA) and Cachoeirinha (RS)
- . One Research, Development and Engineering/Innovation Center for all of Latin America: Campinas (SP)
- More than 800 Sales and Services representatives
- Ten business markets: Foodservice; Retail; Hospitality; Healthcare and Life Sciences; Buildings and Installations; Commercial Laundry; Food and Beverage; Industry; Pulp and Paper, and Mining



