## PERFORMANCE IN THE ENVIRONMENTAL SPHERE

Our initiatives in this pillar focus on our goals related to net zero (scopes 1 & 2 and value chain); circularity, and water.



## Net zero throughout the value chain

In our decarbonization strategy, we are committed to relying on 100 percent renewable energy in our production and distribution centers by 2023, to be net zero in our scopes 1 & 2 greenhouse gas (GHG) emissions by 2030, and to achieve a 30 percent absolute reduction in GHG emissions throughout the value chain, reaching net zero in the value chain by 2040.

## OUR TARGETS TO ACHIEVE A

CO<sub>2</sub> emission reduction in the value chain by 2030

and to be net zero throughout the value chain by 2040 were submitted to the Science Based Target initiative (SBTi), a global initiative that sets and promotes best practices aimed at establishing environmental targets to be achieved based on science.

Our emissions in the beer production value chain are currently distributed as follows:

### Emissions in the value chain



of Scopes 1 & 2

Own production of electricity and thermal energy
Acquisition of electricity and thermal energy from third
parties

4.5%

of Scope 3

95.5%

Activities not owned or directly controlled by the company, but which directly impact the value chain

## Our carbon footprint

(million tons of CO<sub>2</sub> eq)

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		2022
Carbon footprint		1.65
Scopes 1 & 2	Production	0.07
Scopes 1 & 2	Logistics	0.01
Total scopes 1 & 2		0.08
Scope 3	Agriculture	0.42
Scope 3	Processing	0.06
Scope 3	Package	0.75
Scope 3	Production	0.03
Scope 3	Logistics	0.30
Scope 3	Refrigeration	0.01
Total scope 3		1.57

To reduce our scopes 1 & 2 emissions in production and logistics, we are investing in renewable thermal and electrical energy in our factories and distribution centers, as well as in electric trucks and forklifts.

As for scope 3 emissions, which represent a challenge because they are beyond our direct management, our initiatives include encouraging low carbon farming for raw material producers, increasing returnables and post-consumer recycling in packaging, efficient fuel consumption, as well as new modes of transportation in logistics and distributed generation of renewable energy for customers in the refrigeration stage – such as Heineken® brand's Green Your City project.

### **Net Zero Ambition Movement**

In 2002, we joined the strategy of the Global Compact Ambition 2030, and one of the commitments we assumed under it was with the Net Zero Ambition Movement. This is an initiative aimed to accelerate companies that are part of the Global Compact in Brazil to set solid, ambitious science-based commitments to reduce net GHG emissions. We intend to help reduce 2 gigatons of CO<sub>2</sub> and accumulated emissions by 2030 in Brazil.





### **LEARN MORE ABOUT OUR PROJECTS**

**Brewing the Future:** This is a program launched in early 2023 to drive sustainability in the value chain and support our most representative suppliers in scope 3 emissions – farmers and packaging partners – in developing a decarbonization plan for their businesses, focusing mainly on renewable energy sources and on the recognition of the best practices.

**Low Carbon Farming:** In this pilot project, conducted with the global HEINEKEN Group in other countries since 2020, we selected our four main raw material suppliers (malt and corn) in Brazil to work together on the best practices in the field. Our objective is to contribute to decreasing carbon emissions based on regenerative agriculture practices.

**Power Sources in Factories:** At the 12 factories, we already have 100 percent renewable electricity coming from the agreement (PPA) with  $\hat{O}$ mega Energia, which will result in a decrease of approximately 475,000 tons of  $CO_2$  in ten years. In logistics operations, we have four distribution centers supplied with renewable energy, and the plan is to reach 100 percent of the centers by early next year.

Renewable Energy-Fired Boilers: We are completing the installation of biomass-fired boilers in our factories to replace the fossil fuel-fired ones. Six plants have already been fitted with this feature: Alagoinhas (BA), Alexânia (GO), Araraquara (SP), Caxias (MA), Itu (SP), and Ponta Grossa (PR). The Benevides (PA), Igrejinhas (RS), and Igarassu (PE) plants are in the process of implementation and will be biomass-fired early next year.

At the plants in Pacatuba (CE) and Jacareí (SP), we are acquiring renewable energy certificates (GAS-RECs) provided by local gas distributors that will be retired in 2024, and from 2025, we will work on acquiring a renewable fuel, bringing a permanent solution to these two breweries.

**Logistics and Distribution:** We rely on electric trucks and forklift trucks to reduce emissions in logistics and distribution.





We currently have 11 electric trucks and, by 2025, we plan to increase this fleet by 10 trucks per year and to replace all of our forklift trucks with electric models.

Another initiative is product transportation mode diversification: In 2022, we reached 10 percent of our routes using coastal shipping, thus significantly reducing the number of trips to deliver products and, as a result, slashing emissions. Additionally, we included the rail mode among the plants in Itu, Jacareí, Araraquara, Mato Grosso, and Goiás. We are also working to have 100 percent renewable energy in distribution centers by the end of 2023. A few units already have a distributed generation contract in place with a company operating on the market, and we are completing the implementation plan for the other centers.

## **CIRCULARITY**

We intend to reach 100 percent packaging circularity in the Bars and Restaurants channel, and 100 percent plastic circularity by 2025. To achieve these goals, we sponsor, support, and develop actions that encourage the circularity of materials, especially in the glass chain. With own initiatives or in collaborations with other institutions, in addition to material recovery, these projects seek to generate social gains by means of the productive inclusion of waste pickers.

**Heineken® Returnables:** In early 2023, the traditional Heineken® long neck bottles got a returnable version in bars and restaurants in the main cities of southern Brazil. The proposal is to reach 90 percent of such establishments in the region by the end of the year. With this innovation, the Heineken® returnable long neck bottle will produce 18 times less waste and emit 6 times less CO<sub>2</sub> when compared to its discardable version. With this initiative, the bottle returns to our factories and undergoes quality control for rebottling, creating a sustainable and continuous cycle. The idea is to gradually expand to other regions.

"Recicleiros" (Recyclers): The "Recicleiros" (Recyclers) concept is to bring a circular economy to a municipality along with high-impact and economically feasible inclusive recycling. The program seeks to operate in coordination with the public authorities, supporting the establishment and structuring of selective collection in the municipality, with picker cooperatives and associations in the implementation and improvement of the recycling centers, and with the society in socioenvironmental education, making the population aware of the importance of waste management.

### Presence in 13 cities, from 11 Brazilian states

	Current*	Foreseen 2032
Total recycled (tons)	7,300	460,000
Total population served	923,000	3 million
Jobs	268	3,000

\*Total recycled by 03/31/2023.

"Recupera" (Recover) – Pragma: Under this structuring initiative, our participation seeks to suport reverse packaging logistics actions, developing the recycling chain with investments in waste picker cooperatives and associations in 100 percent of the Brazilian states and in the Federal District.

Over **600** partner companies

Performance in 196 municipalities

**255** waste picker organizations

More than **6,7 mil** waste pickers



Glass is Good I "Ecogesto" (Ecogesture) – Abrabe: These are projects led by the Brazilian Beverage Association (Abrabe) that are aimed at its members meeting legal obligations related to reverse logistics.

- Glass is Good: Working directly in bars, restaurants, nightclubs, condominiums, businesses, and events in the main cities of the states of São Paulo, Pernambuco, Ceará, Rio Grande do Norte, Minas Gerais, Rio de Janeiro, and the Federal District, it operates the glass reverse logistics system with training, sorting, storage, and recycling. In addition, the materials that arrive at the cooperatives create jobs and income, with productive inclusion and a positive social impact.
- Ecogesto (Ecogesture): This initiative is based on two work fronts, one focused on supporting waste picker cooperatives and associations, and the other related to environmental education for the population as a way to encourage the proper disposal of waste. This initiative also includes the installation of Voluntary Delivery Points (VDPs) for recyclable packaging, and is done together with public authorities and connected to the work of cooperatives.

**So+ma Vantagens (Adding Advantages):** A collaboration between the HEINEKEN Group and the company So+ma since 2017, this initiative seeks to ensure the proper disposal of recyclable waste using a reward mechanism based on a scoring system. People can deliver their materials at recyclables collection points throughout Salvador (BA),

being compensated with points that can be exchanged for rewards such as local services, courses, training, and basic food basket items. It is also possible to direct the benefit to a social institution registered in the project. In addition, the collected waste is shipped to local cooperatives, thus adding income to these organizations. The program has already impacted **more than 6,000** families.

## "Incriveis" (Incredibles)

**Hub:** An initiative made up of several businesses, among which the HEINEKEN Group, which work together in pursuit of prototyping a 100 percent circular territory with a focus on packaging. Initiated in the city of Telêmaco Borba (PR), the project is currently in transition to another territory.





## "Volte Sempre" (Come Back Em 2022: Soon) Program: The project

got underway in 2018, in São Paulo, in a collaboration with glass packaging producer Owens Illinois and machine maker Sap Group, with machines installed in supermarkets and condominiums to collect and crush disposable glass packages. With each package deposited, the program participant earns a "Ponto Caco" (Cullet Point), which can be exchanged for cashback for new purchases. The initiative also got a pilot version in the State of Minas Gerais, in Belo Horizonte and Nova Lima, with nine collection machines spread in supermarkets, bars, and residential condominiums.

In July 2022, "Volte Sempre" (Come Back Soon) became part of the Green Your City platform - the cause of the Heineken® brand - and spread to other cities, such as Rio de Janeiro (RJ), Brasília (DF), Goiânia (GO), and Salvador (BA). Implementing this program on a national scale is a big step for Heineken<sup>®</sup>, as it means bringing consumers closer to glass recycling, creating yet another way for them to understand, view, and practice circularity. Making our production chain even more sustainable is part of the brand's mission to contribute to greener cities.

In a circular economy action, 100 percent of the glass collected by means of these machines goes to local cooperatives, which revert them to income by selling it to the glass industry.



tons of glass collected



glass packages collected



active customers in the project



tons of CO, emissions prevented from being dumped into the atmosphere



tons of virgin raw material that were not extracted from the environment



of space saved in landfills

In 2023, we took "Volte Sempre" (Come Back Soon) to bars and restaurants as a solution for these points of sale, which have a high volume of waste generation, especially glass. This front of the program is taking place in the cities of São Paulo, Rio de Janeiro, Belo Horizonte, and Recife, further increasing our presence in the country. Check out more at www.programavoltesempre.com.br.

### **HEALTHY WATERSHEDS**

One of our commitments related to water resources is to ensure water availability in the regions where we have plants, mainly in areas considered to be experiencing water stress (those that we understand have challenges related to water resources). Currently, we are present in two water stress areas – Pacatuba (CE) and Itu (SP). In addition to effluent treatment, we invest in ecological preservation and restoration projects, generating water benefits, and increasing water security in these locations.

# "--AGUA" (MORE WATER) MOVEMENT

By joining the Global Compact 2030 Ambition strategy's "+Água" (More Water) Movement, we commit to having more control, transparency, and actions related to water security, working directly in critical area preservation and reforestation, actions that will help natural water production.



### **LEARN MORE ABOUT OUR PROJECTS**

"Recarrega Ceará" (Recharge Ceará) Project: Based on a 2021 socio-environmental diagnosis conducted in the Pacatuba region, we mapped eight priority areas to implement green infrastructure projects, focusing on the river basins that are related to our plants. In a collaboration with the Avina Foundation and with Giral Ambiental, we built a map of actions that includes degraded area recovery, incentives for agroforestry systems, and rural environmental sanitation, contributing to the protection and conservation of the Gavião, Riachão, and Pacoti reservoirs and to water security.

Aiming to expand the scope of the work even further, the project was submitted to the review of "Floresta Viva" (Live Forest) – a joint initiative between businesses and the National Bank for Economic and Social Development (BNDES) aimed at implementing ecological restoration projects and agroforestry systems in Brazilian biomes. In the context of "Recarrega Ceará" (Recharge Ceará), the partnership aims at recovering and restoring forests in 340 hectares of degraded areas and/or areas that need assisted or artificial intervention. The activities will take place over 48 months and is expected to start in 2023 and end between May and June 2027.

**Collaboration with PepsiCo:** Focusing on the external circularity of water at our factory in Itu (SP), we signed-on a collaboration in which PepsiCo uses, as an auxiliary input in its production process, the water that was previously used in the Heineken® operation and treated for reuse. At the start, we provided PepsiCo with one tanker truck per day, but our goal is to gradually reach a daily water circulation of 300 cubic meters, the equivalent of ten tanker trucks.

**"SOS Mata Atlântica" (SOS Atlantic Forest):** The purpose of this partnership is to implement the Productive Restoration Model at a HEINEKEN Group property located in Itu (SP) and loaned for use to SOS Mata Atlântica. The farm covers an area of some 500 hectares and had 80 percent of its area recovered with the planting of 720,000 trees native to the Atlantic Forest, generating a water benefit of 78,600 cubic meters.







# Structuring of Nurseries in a Collaboration with SOS Mata

**Atlântica:** In line with our sustainability strategy, the installation of the new brewery in Passos (MG) also brings a permanent forest recovery and conservation program to the region, strengthening our collaboration with SOS Mata Atlântica. As part of



this initiative, the HEINEKEN Group will promote local nurseries for the production of native seedlings, which can be used in reforestation and in the ecological restoration of areas with a water function, preferably in the Serra da Canastra National Park or in areas that are strategic for the provision of water to the municipality.

# Bocaina (Water Producer Program) Project: This new project,

formalized in early 2023, will be conducted in partnership with the National Water Agency (ANA) in the region of Passos (MG), where we are installing a new brewery. In the Bocaina stream drainage area, one of the city's two sources of water, farmers will be paid for performing environmental services on their properties, such as ecological restoration and environmental sanitation, thus contributing to the availability of water.

### **OUR ENVIRONMENTAL GOALS**

### **AREA**

### **Net zero**



### **TARGET**

**30%** CO<sub>2</sub> reduction in the value chain by 2030 and net zero by 2040

100% renewable energy by 2023



### **PROGRESS MADE IN 2022**

Due to a change in methodology, the period of 2022 was adopted as the base year for calculating the reduction.

**62.45%** power generation

**69.56%** thermal energy

### **Circularity**



**100%** packaging circularity in the Bars and Restaurants channel, and **100%** plastic circularity by 2025



**40%** packaging circularity in the Bar and Restaurants channel

# Healthy watersheds



**2.6 hl/hl** in breweries in water stress regions by 2030, and **2.9 hl/hl** in other breweries by 2025



**1.5x** water balance in breweries in water stress regions by 2030



3.56 hl/hl of overall result

**5.3%** goal achievement via the SOS Mata Atlântica project in Itu (SP)

