ESG Review

ENVIRONMENTAL SUSTAINABILITY

As a responsible corporate citizen, HEINEKEN Malaysia acknowledges the environmental risks posed by climate change and resource scarcity, including high energy and water consumption. In response, we adhere to the highest environmental responsibility standards, ensuring our sustainability claims are substantiated by credible and verifiable data. Our BaBW 2030 ambition guides our efforts with clear, measurable goals to reduce our environmental impact. Through this, we aim to brew responsibly and contribute to a more resilient future.

Material Sustainability Matters

- 3 Climate Resilience and Energy Efficiency
- 5 Water Stewardship
- 12 Waste and Effluent Management
- 16 Resource Use

ESG Pillars and Ambition Areas

- Reach Net Zero Carbon
- Maximise Circularity
- Towards Healthy Watersheds and Nature

Key Highlights

100%
renewable electricity since March 2022 through TNB GET programme

36%
reduction in Scope 1 and Scope 2 emissions in production vs FY2022 baseline

29%
improvement in water consumption vs 2014 baseline

Fully recycled and upcycled
our production waste since FY2017

3,500
mono-perc solar panels installed on roof of the Sungei Way Brewery

209 %
water balanced via water stewardship projects

ESG Review

NET ZERO CARBON

Our Ambition: We aim to achieve net zero emissions in Scopes 1 and 2 by 2030 and fully advance Scope 3 initiatives towards net zero by 2040.

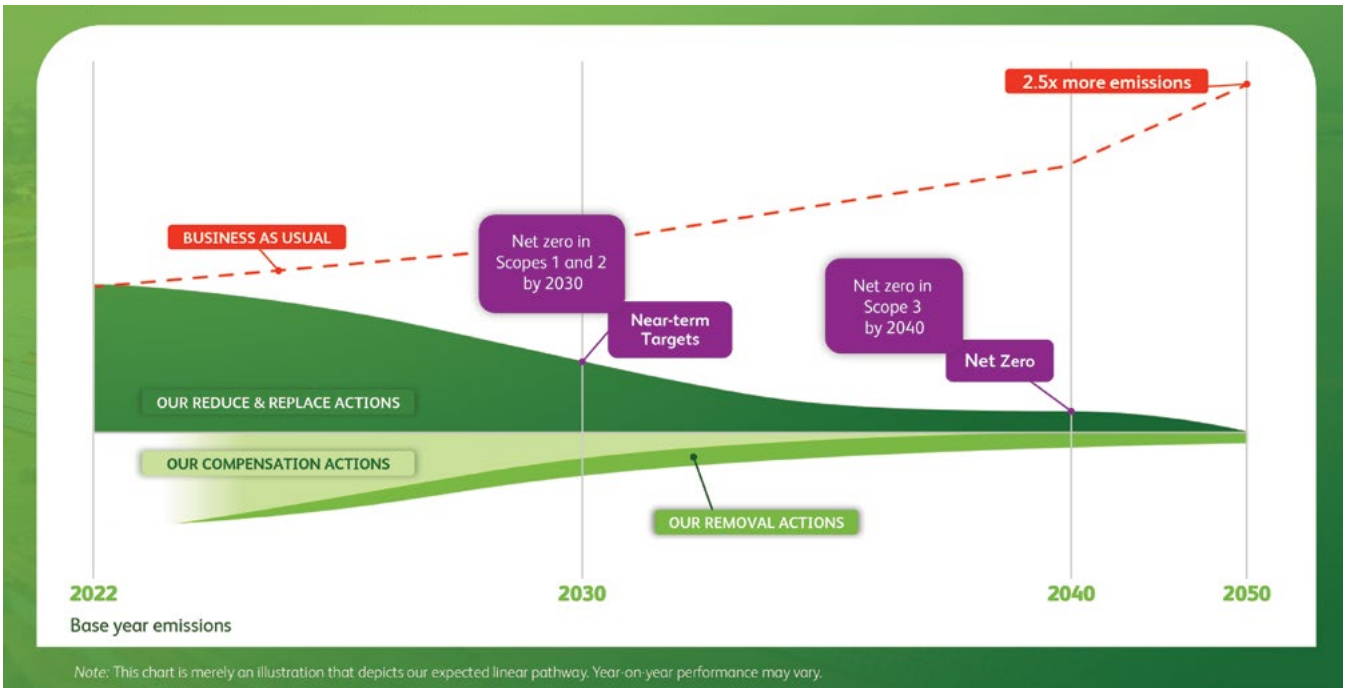
Our Roadmap to Net Zero

HEINEKEN Global's BaBW strategy sets out both short and long-term approaches to achieving net zero emissions across the entire value chain. Our target is to achieve net zero emissions in Scopes 1 and 2 by 2030 and fully advance Scope 3 initiatives towards net zero by 2040, relative to our 2022 baseline year.

Our strategy to reach net zero across our value chain is built on the four Rs: reduce, replace, remove and report. This involves transitioning from fossil fuels to renewable energy across our operations and value chain. We have set long-term and near-term targets to achieve this, approved by the SBTi. This ambition aligns with the 1.5°C global temperature limit in the Paris Agreement.

Our Net Zero Glidepath

2030 – Net zero in Scope 1 and 2 | 2040 – Net zero in Scope 3



Our Strategic Pillars

OUR NET ZERO ROADMAP IS ALL ABOUT THE 4 R'S

Reduce **Replace** **Remove** **Report**

Process Optimisation for Increased Energy Efficiency

HEINEKEN Malaysia has implemented various energy-saving initiatives, including utility upgrades, process improvements and plant upgrades, resulting in a 1 kWh/hl reduction in cooling plant electricity consumption. Key measures include installing insulation on steam boilers and fermentation tanks, investing in energy-efficient refrigeration and adding a heat recovery system in the brewhouse. These are complemented by process optimisations such as reducing evaporation rates, enhancing clean-in-place efficiency and improving condensate return rates to maximise energy efficiency across our operations.

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Enhancing Scope 3 ESG Engagement with Suppliers and Business Partners

We have engaged with our key suppliers and business partners to strengthen our collective focus towards ESG principles. With the support of our Procurement team and in partnership with the United Nations Global Compact Network Malaysia and Brunei (UNGCMYB), we rolled out the ESG Start dashboard to provide suppliers with access to maturity assessments and e-learning modules, equipping them with the necessary resources to strengthen their ESG practices while also contributing to our Scope 3 disclosures. This session aimed to deepen our suppliers' understanding of ESG principles and enhance their preparedness for compliance with ESG standards. It also enables us to effectively report on our Scope 3 engagement with suppliers and business partners.





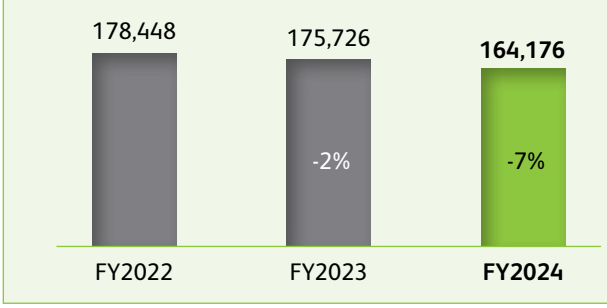
RENEWABLE ENERGY INTEGRATION

- Installed 3,500 mono-perc solar panels on Sungei Way Brewery roof, covering 9,044m² with a 2,600 MWh capacity.
- We subscribed to the GET programme with TNB, reducing emissions from our electricity usage.

Energy Management

In FY2024, HEINEKEN Malaysia's total energy consumption is recorded at 164,176 GJ. 62% of the total energy consumption stemmed from natural gas usage followed by 35% from procured electricity for the production process at the brewery. The remaining are from non-production processes at the office and company-owned vehicles. In FY2024, we recorded a reduction of 7% in total energy consumption compared to FY2023.

Total Energy Consumption (GJ)



Note: Three years of energy data have been disclosed.

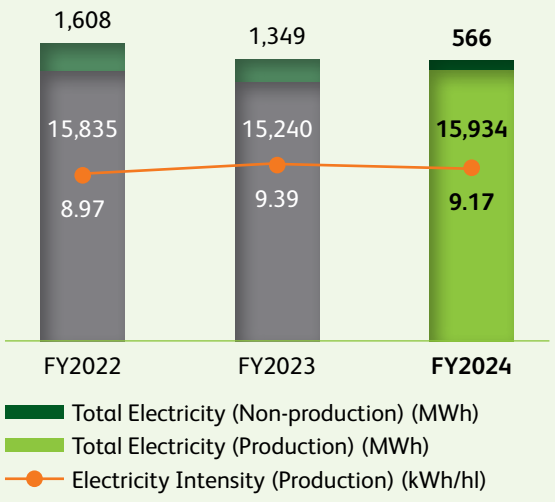
ESG Review

Breakdown by Type of Energy Consumption

Procured Electricity

In FY2024, our procured electricity data accounts for consumption at both the brewery and the office. HEINEKEN Malaysia's total electricity consumption in FY2024 amounted to 16,500 MWh, where 97% was attributed to the production at the brewery. This marks a 1% decrease compared to our electricity consumption of 16,589 MWh in FY2023. Our electricity consumption for production decreased by 5% in FY2024, aided by the installation of mono-perc solar panels on our brewery roof.

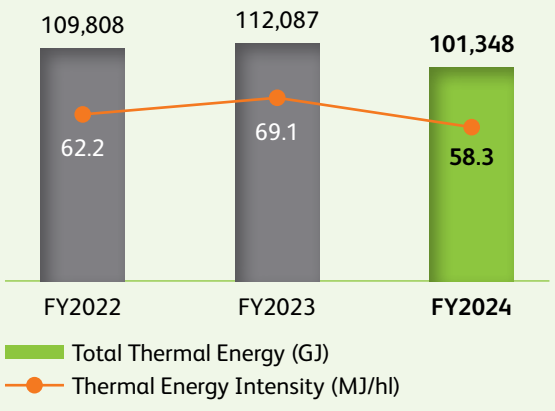
Electricity Consumption



Thermal Energy

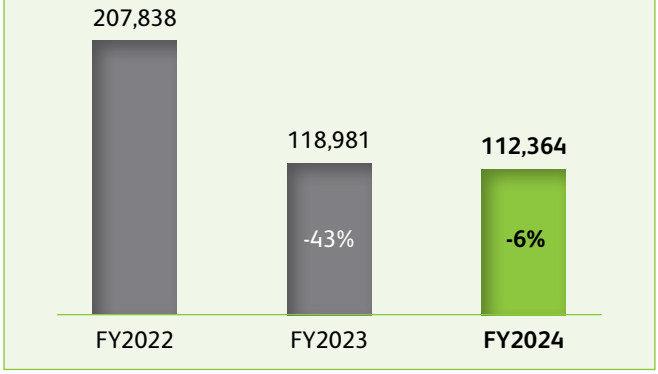
The primary sources of thermal energy for our production processes are natural gas, supplemented by biogas generated from our wastewater treatment plant which provides a renewable energy source. In FY2024, we recorded 101,348 GJ of natural gas consumption with an intensity of 58.3 MJ/hl. Compared to FY2023, our natural gas consumption has decreased by 10%.

Non-Renewable Thermal Energy (Natural Gas)



For biogas consumption, we generated 112,364 m^3 of biogas this year. A decrease of 6% in FY2024 was observed. By reducing water consumption across our production processes, we not only minimised overall water usage but also decreased the load on our wastewater treatment plant. This led to a lower volume of wastewater to be processed, which directly impacted the amount of biogas generated from the treatment plant, as less biogas was needed to handle the reduced load.

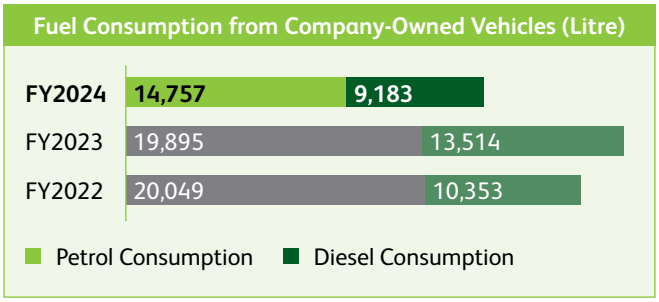
Renewable Thermal Energy (Biogas) (m^3)



Fuel Consumed by Company-Owned Vehicles

Since FY2022, we have tracked fuel consumption from company-owned vehicles, including petrol and diesel. In FY2024, total fuel consumption was 23,940 litres, with 62% from petrol and 38% from diesel. Compared to FY2023, fuel consumption decreased by 28%.

Fuel Consumption from Company-Owned Vehicles (Litre)



Total Greenhouse Gas (GHG) Emissions

In FY2024, HEINEKEN Malaysia's total GHG emissions were 6,873 tCO_2e, with 84% from Scope 1, including thermal energy, refrigerants and fuel consumption from company-owned vehicles. We achieved zero Scope 2 emissions through a 100% transition to renewable electricity. Additionally, our mono-perc solar panels have contributed to an emissions reduction of 736 tCO_2e from July to December 2024. Our Scope 3 emissions, covering employee commute and business travel, accounted for 16% of the total emissions.

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	FY2022	FY2023	FY2024
Scope 1 emissions (tCO_2e) *(natural gas, refrigerants and company-owned vehicles)*	7,810	6,375	5,743
Scope 2 emissions (tCO_2e) *(procured electricity in production and non-production)*	11,146	10,600	10,543
Scope 2 emissions reduction (tCO_2e) *(through procured electricity from GET programme)*	(9,736)	(10,600)	(10,543)
Scope 2 emissions reduction (tCO_2e) *(through solar panel installation in FY2024)*	N/A	N/A	(736)
Total Scope 1 and 2 GHG Emissions (tCO_2e)	**9,220**	**6,375**	**5,743**
Scope 3 emissions (tCO_2e) *(employee commute and business travel)*	N/A	**1,310**	**1,130**
Total GHG Emissions (tCO_2e)	**9,220**	**7,685**	**6,873**

Notes:

i. FY2022's emissions expanded to include Scope 1 emissions from production and company-owned vehicles, in addition to Scope 2 emissions from production and office activities.

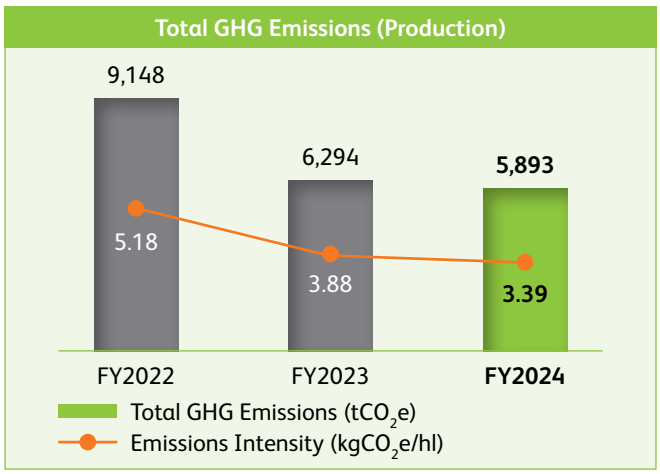
ii. Emissions for FY2023 and FY2024 encompass Scope 1 emissions from production and company-owned vehicles, Scope 2 emissions from production and office operation and the inclusion of Scope 3 emissions from business travel (both land and air).

iii. Total GHG emissions data presented in HEINEKEN Malaysia's Annual Report 2022 is only inclusive of Scopes 1 and 2 for production only.

iv. Three years of total GHG emissions data for all operations have been disclosed, applying the Operational Control consolidation method.

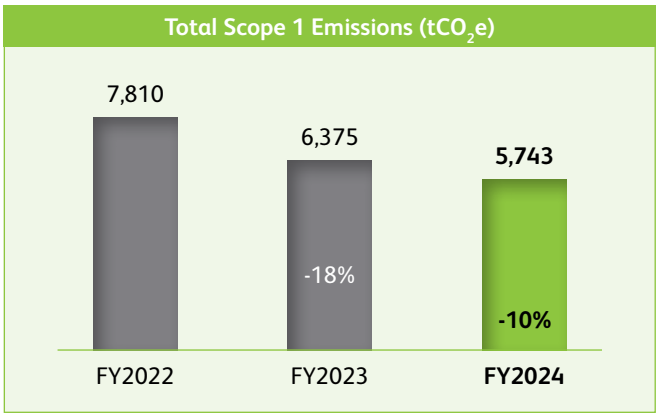
Total GHG Emissions from Production

Our GHG emissions from production include those from natural gas consumption, refrigerants, signboards and purchased electricity for use at the brewery. Our total carbon emissions have decreased by 36% since our FY2022 baseline, recording at 3.39 $kgCO_2e$/hl. This reduction is attributed to the Group's complete transition to renewable electricity since March 2022 and the mono-perc solar panels installation on Sungei Way Brewery roof which has been operational since July 2024.



Direct Scope 1 Emissions

The Group's Scope 1 emissions primarily stem from natural gas usage and refrigerants in production processes. In FY2024, total Scope 1 emissions amounted to 5,743 tCO_2e, marking a 10% decrease compared to 6,375 tCO_2e in FY2023. In comparison with our FY2022 baseline, a 26% reduction in Scope 1 emissions has also been recorded, reflecting ongoing improvements in operational efficiency.



Indirect Scope 2 Emissions

The Group's Scope 2 emissions are primarily consumed in both production and non-production activities at the headquarters office in Sungei Way Brewery. Since March 2022, we have subscribed to TNB's GET Programme which mitigated all Scope 2 emissions, where 100% of our electricity was sourced from renewable sources, resulting in zero Scope 2 emissions recorded for FY2023 and FY2024.

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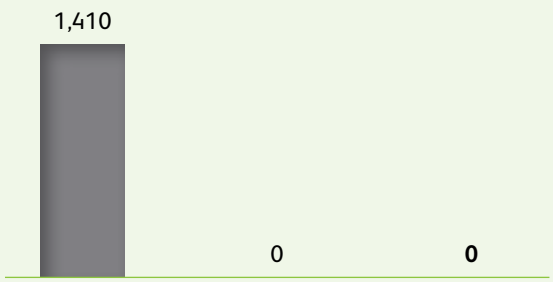
Additionally, the 3,500 mono-perc solar panels installed on the Sungei Way Brewery roof, with a total capacity of 2,600 MWh further reduced 736 tCO_2e from the period of July 2024 till December 2024. The mono-perc solar panels are fully operational since July 2024 which accounts for 7% of the total electricity consumption of the brewery.

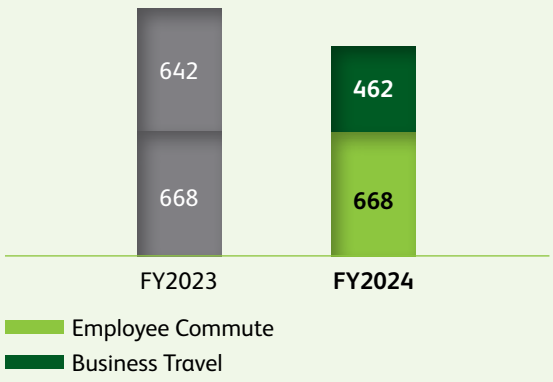
Total Scope 2 Emissions (tCO_2e)



Other Indirect Scope 3 Emissions

Our total Scope 3 emissions for FY2024 amounted to 1,130 tCO_2e. Specifically, our emissions from business travel amounted to 462 tCO_2e, with 668 tCO_2e attributed to employee commute. Our emissions from employee commute represent the entire workforce at HEINEKEN Malaysia (526 employees). We have utilised an average-based methodology to estimate these emissions, drawing insights from a survey conducted by Heineken N.V. in FY2023, categorised by the Asia Pacific (APAC) region.

Scope 3 Emissions (tCO_2e)



MAXIMISE CIRCULARITY

Our Ambition: We aim to reach zero waste to landfill by 2025 at our production site, advancing circularity by repurposing, recycling and transforming waste into valuable resources, contributing to a closed-loop value chain.

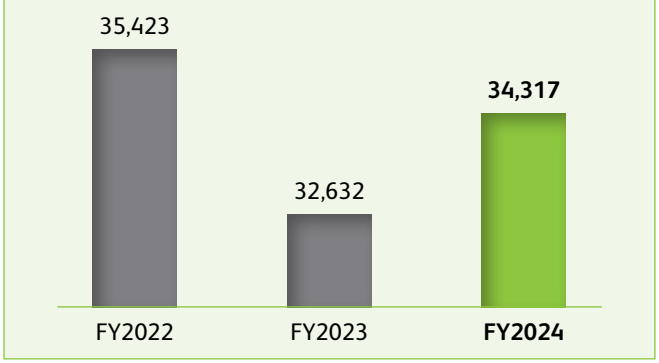
Waste and Effluent Management

HEINEKEN Malaysia places great importance on effective waste management to minimise environmental impact and optimise cost efficiency. The majority of our waste consists of biodegradable byproducts such as spent grain, yeast and kieselguhr, which have commercial value from reuse in other industrial applications.

We prioritise the reuse of brewery by-products, such as spent grain and yeast, while enhancing recycling initiatives to improve resource efficiency. During the reporting year, the Group incurred no environmental fines or penalties.

Total Waste Generated

Total Waste Generated (tonnes)



Note: The total waste generated covers 100% of our operations.

Generated
34,317 tonnes of waste

RM2.20 million
revenue generated

Fully recycled and upcycled
our production waste

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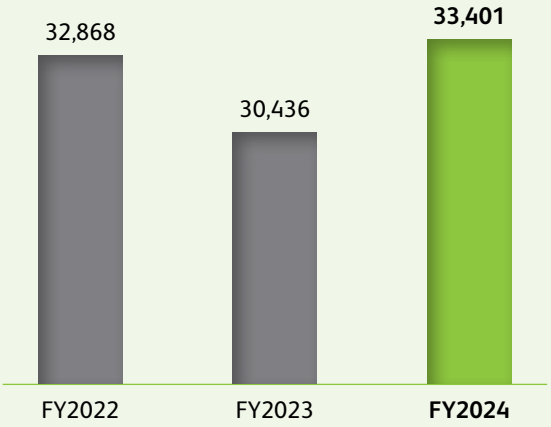
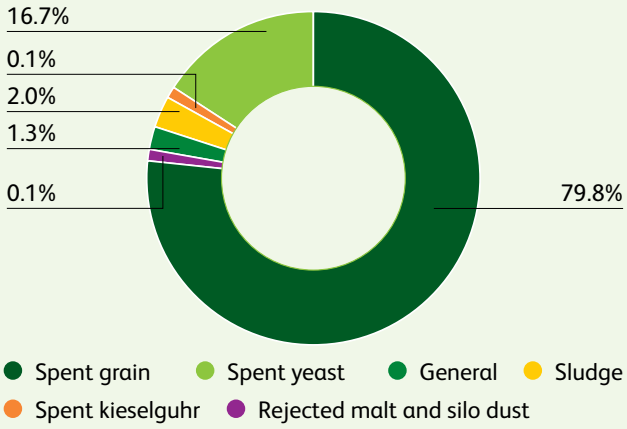
Organic Waste Management

In FY2024, we produced a total of 33,401 tonnes of organic waste with spent grain accounting for 79.8% of the organic waste.

Organic Waste Generated (tonnes)



Breakdown of Organic Waste Generated



TURNING WASTE INTO VALUE

A majority of our organic waste streams, encompassing spent grain, yeast and kieselguhr, have inherent biodegradability and considerable commercial potential. We collaborate with external partners to repurpose these by-products through bioconversion processes, generating valuable materials for a range of industries.

WASTE TO ENERGY

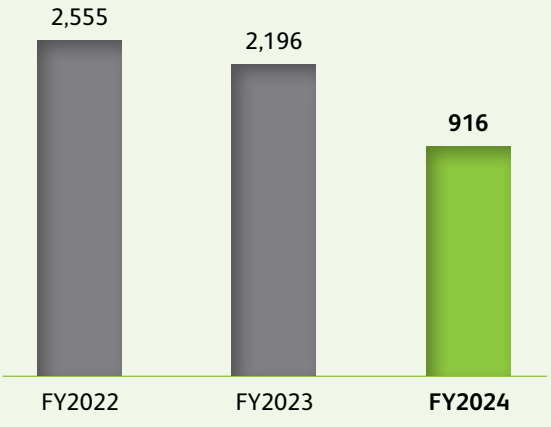
Wastewater is transformed into a valuable resource for biogas production via anaerobic digestion, thereby reducing our reliance on fossil fuels within the brewing process. As part of our ongoing ambition towards sustainability, we actively explore innovative technologies for converting organic waste into biogas.

Inorganic Waste Management

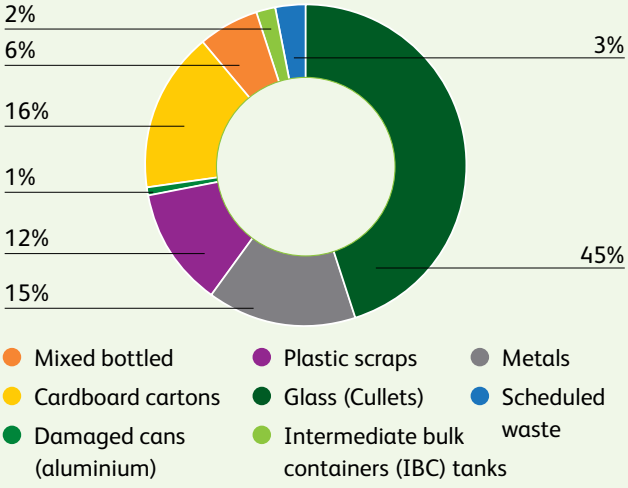
Our inorganic waste stream consists of a range of materials such as cardboard, glass, metals, plastics, damaged aluminium cans, intermediate bulk containers (IBC) tanks and scheduled waste. Our brewery produces minimal scheduled waste, and it is handled by a licensed contractor. To support effective waste segregation, we provide dedicated bins in cafés, office spaces and pantries, allowing staff to separate food waste, packaging and other types of waste.

In FY2024, we produced a total of 916 tonnes of inorganic waste, where 45% of our inorganic waste consisted of glass.

Inorganic Waste Generated (tonnes)



Breakdown of Inorganic Waste Generated



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Packaging Material

HEINEKEN Malaysia is proud to announce that through a strategic partnership aimed at advancing sustainability in secondary packaging, we introduced prem collars in our secondary packaging material. We are replacing plastic shrink wraps in all locally brewed multi-can secondary packaging with a paper-cardboard prem collar. Prem collar, a type of paperboard packaging made from renewable materials that is used to hold cans, offers an alternative to traditional shrink wrap.

Through this innovative initiative, we are taking steps to reduce single-use plastic from our secondary packaging. This initiative is also expected to reduce approximately 108 tonnes of single-use plastic from the packaging from the period of September 2023 to December 2024.

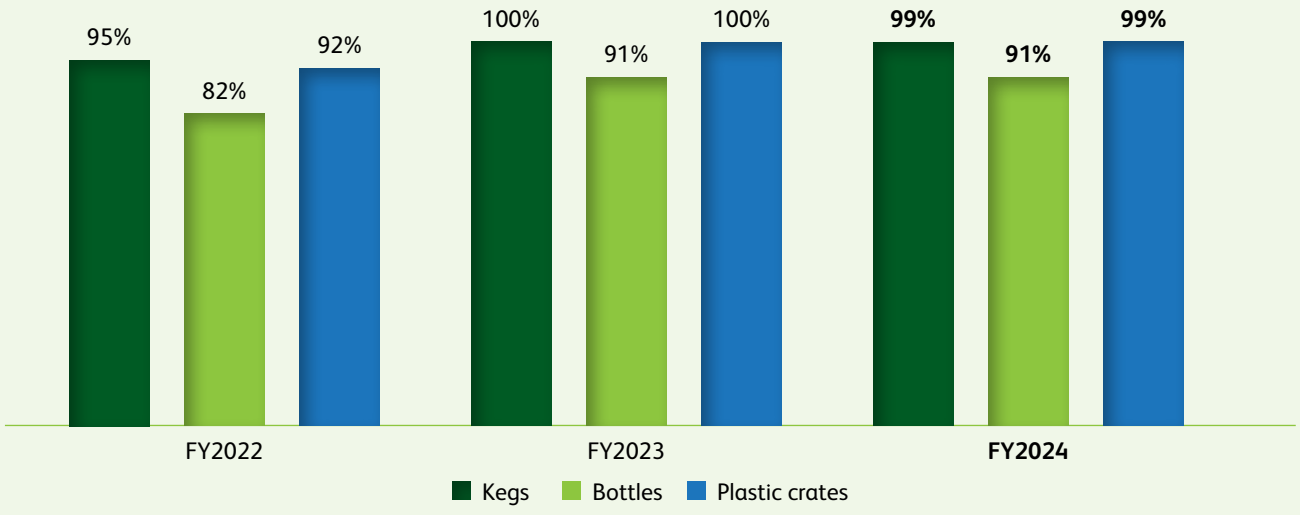
Reduced
approximately 108 tonnes
of plastic from packaging

Resource Use

Our approach emphasises reduction, reuse and recycling across kegs, bottles and crates. By embracing a circular packaging model, we minimise our reliance on finite resources.

In FY2024, the returned kegs, bottles and plastic crates, which are collected from the on-trade outlets in Peninsular Malaysia, are at 99%, 91% and 99% respectively. FY2024 presents a unique challenge due to the seasonal peak periods in January and December, which are two key months for stock build-up. During these peak periods, the returnable packaging materials are typically delayed as customers accumulate stock to meet demand. These seasonal driven returnable patterns provide a great opportunity to refine and optimise logistics processes. By understanding and anticipating these patterns, we can improve forecasting, enhance supply chain efficiency, whilst ensuring our packaging returns remain consistent and contribute to a more sustainable circular economy to advance our sustainability goals.

Percentage of Product Package Returned



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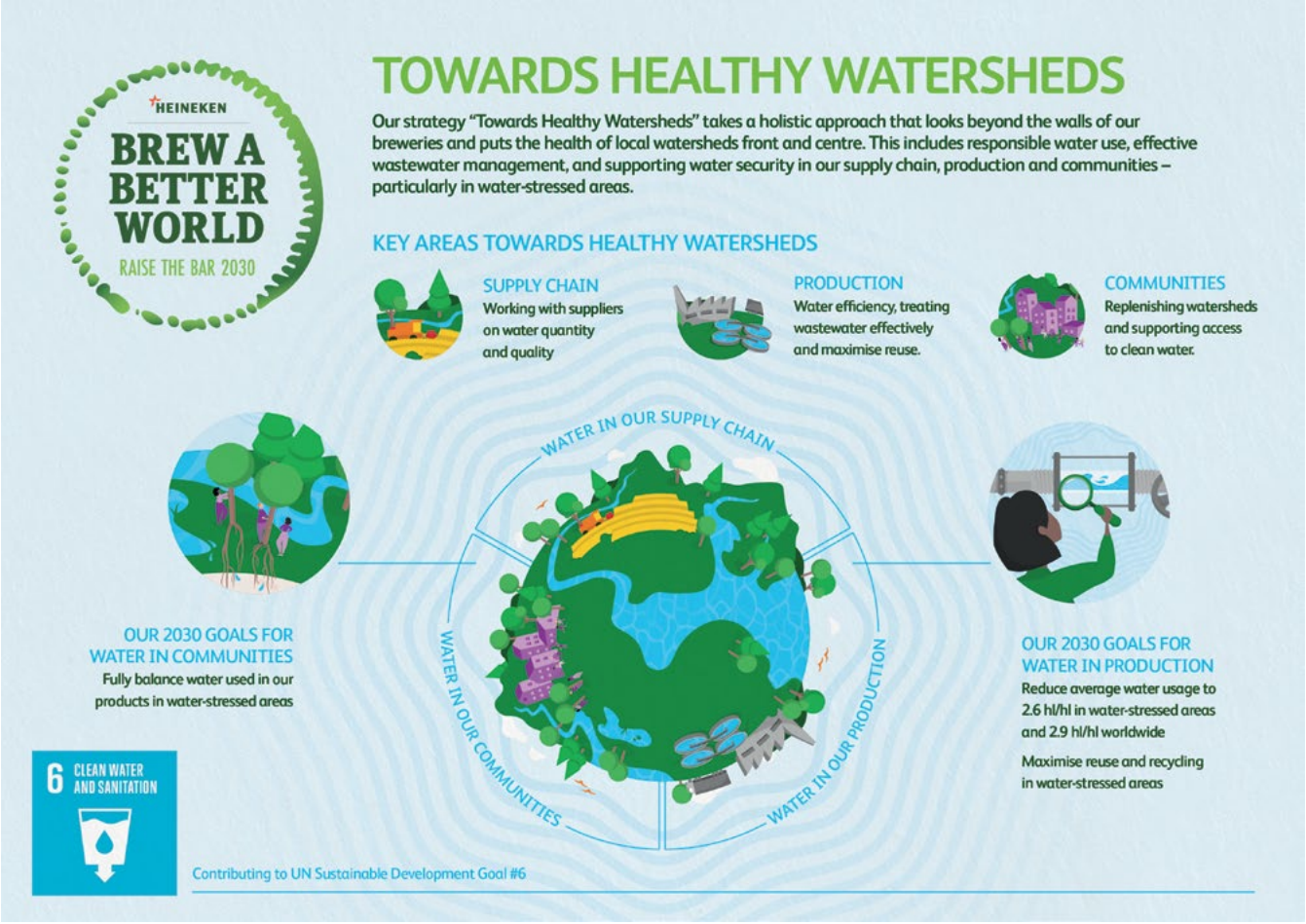
TOWARDS HEALTHY WATERSHEDS AND NATURE

Our Ambition: Our 2030 water strategy, 'Towards healthy watersheds and nature' is designed to create long-term value in our production processes and go beyond our brewery walls to actively support the health and sustainability of local watersheds.

Our 2030 Water Goals



Water is not only essential to our products – it is an important resource that supports all aspects of our operations. We have made water management a core priority, recognising its importance to our business, communities and the environment. This strategy is built on three key pillars: **water in our production, water in our communities** where we operate and **water in our supply chain**.

At HEINEKEN Malaysia, we manage water use in production through a combination of water efficiency improvements, reuse and recycling initiatives and wastewater treatment processes. Our focus is on improving water usage, reusing and recycling water within our operations and promoting best practices beyond our business. We also invest in advanced technologies to improve water management efficiency.

For 2030, we aim to reduce the amount of water we use to produce one litre of our products to 2.6 hl/hl. This target is part of our measurable sustainability goals, which are regularly tracked and reported to ensure we are making progress towards achieving them. All wastewater produced in our brewery is treated to protect the local ecosystem and comply with the Environmental Quality Act 1974 and the Environmental Quality (Industrial Effluent) Regulations 2009 Fifth Schedule (Standard B) by the Department of Environment.

In our communities, we strive to balance the water used in our products through initiatives that incorporate nature-based solutions, including reforestation and rehabilitation projects at our watershed and wastewater discharge. These actions are focused on reducing water loss and improving resilience to climate change impacts.

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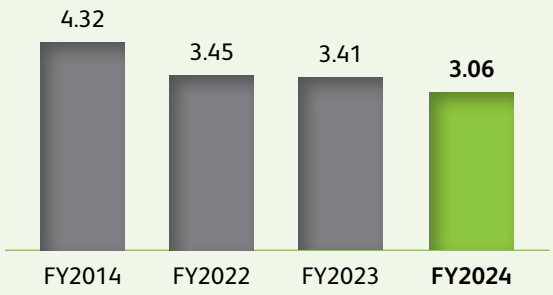
Water In Our Production

To achieve our 2030 goal of reducing water consumption to 2.6 hl/hl, we have upgraded our brewery to reduce our water consumption. To further enhance our efforts, the integration of flow metres enables precise monitoring and optimisation of recycling processes, improving overall resource efficiency.

In FY2024, we recorded an average water consumption of 3.06 hl per hl of beer produced, a 29% improvement versus the FY2014 baseline year. There was a decreasing pattern seen from previous years, and we continue to strive to meet our BaBW target of reducing average water consumption to 2.6 hl/hl.

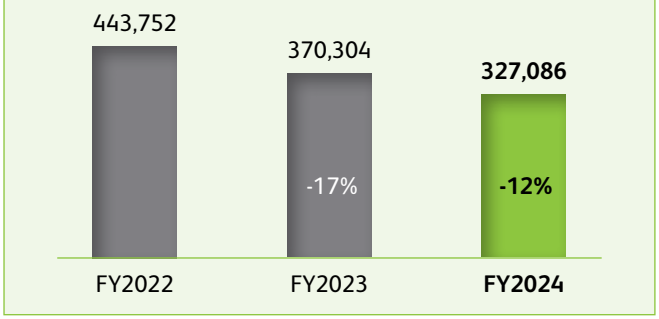
Water Consumption (hl/hl)



Our wastewater treatment plant, with an annual capacity of 780 million litres, ensures full compliance with the Environmental Quality Act 1974 and the Environmental Quality (Industrial Effluent) Regulations 2009 Fifth Schedule (Standard B). Zero incidents of non-compliance with water quality standards and regulations were recorded in the reporting year.

In FY2024, wastewater discharge decreased by 12% compared to FY2023. By implementing more efficient water usage practices, optimising processes and promoting conservation efforts, we were able to lower the volume of water used, which directly contributed to a decrease in wastewater discharge.

Total Effluent Discharged (m^3)



Water In Our Communities

We aim to balance the amount of water used in our products with our local watersheds through investing in water stewardship projects. For every 1 litre of water in our beers and ciders, we target to balance 1.5 litres of water in our watersheds. We have initiated various water conservation projects and remain dedicated to ongoing contributions. Central to these efforts is our flagship initiative, the W.A.T.E.R Project, undertaken in collaboration with the Global Environment Centre and local communities supported by the Government agencies. Spearheaded by the SPARK Foundation, HEINEKEN Malaysia's corporate responsibility arm established in 2007, our endeavours focus on environmental protection and empowering local communities in the areas of water access and food security.

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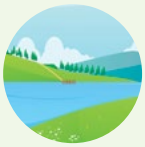
HEINEKEN Malaysia Target:

Balance Volume (m^3) = Water Intake (m^3) – Treated Effluent (m^3)

Balancing amount to be more than water used in our products

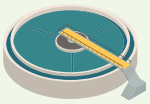
1.5 litre of water is replenished for every 1 litre of product. 0.5 litre accounts for unavoidable losses from evaporation and moisture

Target Water Balancing (1.5 x water used in our products)



Watershed supplies water to communities and industries

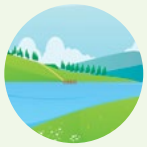
Water consumption for production activities



100% of wastewater treated beyond standards of Department of Environment

WATER PROJECT

Water that goes to our products is replenished through water balancing programme.
1.5 litres of water is replenished for every 1 litre used in our products

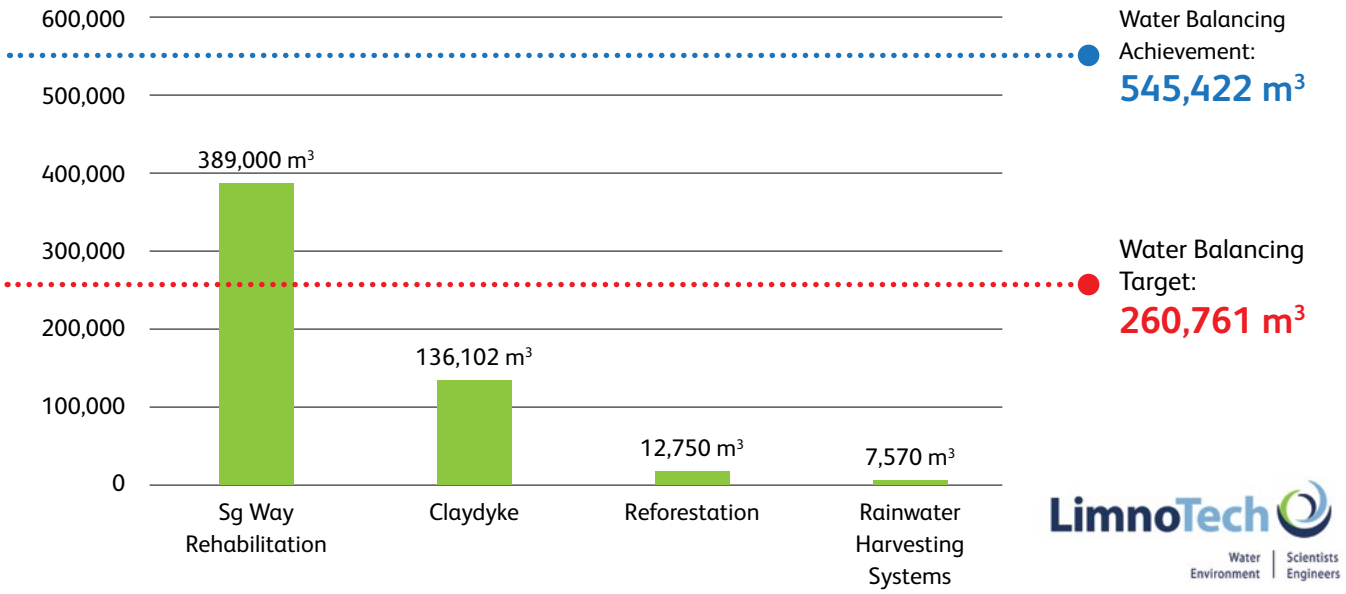


Long-term watershed health protection

Our water balancing volumes are quantified and verified in line with the Volumetric Water Benefit Accounting (VWBA) framework by the World Resources Institute; volumetric benefit evaluation is independently verified by LimnoTech, a leading water sciences and environmental engineering firm based in the United States.

In 2024: HEINEKEN Malaysia achieved 209% of our target water balancing volume

2024 Water balancing achievement through Water Stewardship initiatives



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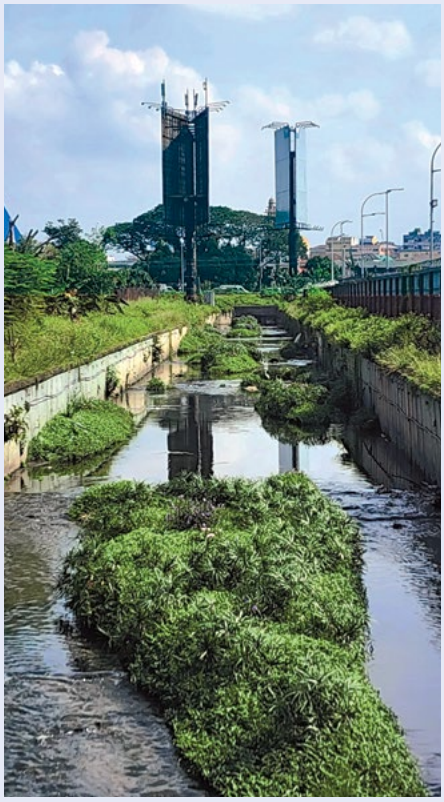
Sungai Way River Rehabilitation



WHERE

Sungai Way river
Petaling Jaya

WHY

Located next to HEINEKEN Malaysia's Sungei Way Brewery, this is where our **treated wastewater is discharged**

WHAT

Transformed water quality
from Class IV-V (extremely polluted) to Class III (suitable for living organisms)

HOW

- Pollution reduction: point source mapping, rubbish traps, solid waste monitoring
- Water quality improvement: food, oil and grease traps systems and biological treatment
- River within river concept - constructed wetlands to improve quality of water in the river

RESULT

- Reduction in pollution
- Improved habitat and biodiversity

VOLUMETRIC WATER BENEFIT
389,000 m^3
(389 million litres)

Clay Dyke for Water Retention

WHERE

Raja Musa Forest Reserve
Hulu Selangor

WHY

Sungai Selangor watershed
as a key water resource

WHAT

Constructed **305-metre clay dyke**
at Raja Musa Forest Reserve

HOW

- Built four to five metres vertical wall of clay below the peat surface to prevent peatland fires by promoting wetter soil conditions
- Blocks water flow from the peatlands into disused mining ponds, effectively raising the water table in the areas upgradient to the dyke

RESULT

- Increase in soil water retention
- Decrease in the risks of peatland fires
- Restoration of peatland, contributing to the long-term sustainability of the watershed
- **ZERO** forest fires since 2019

VOLUMETRIC WATER BENEFIT
136,102 m^3
(136 million litres)

ESG Review

Reforestation of Degraded Peatland

WHERE
Raja Musa Forest Reserve
Hulu Selangor

WHY
Prevent peatland fires
by promoting wetter soil conditions

WHAT
1,800 trees planted
and maintained on three hectares of degraded peatland

HOW
- Open planting techniques
- Cleared invasive weeds and plants

RESULT
- Prevent further degradation of the peat
- Increased soil water retention

VOLUMETRIC WATER BENEFIT
12,750 m^3
(12.7 million litres)

Rainwater Harvesting for Local Communities

WHERE
Klang Valley

WHY
Help communities
obtain access to alternative water sources to reduce reliance on treated water

WHAT
33 Rainwater Harvesting Systems
consists of an interconnected rooftop area that serves as a catchment for the rainwater and storage tanks to collect and store rainwater

HOW
- The rainwater collected serves as non-potable water supply including cleaning, landscaping and irrigation
- Increase water availability in the local community to reduce wastage on treated water and stress on our water resources

RESULT
- Reduced demands on treated water source
- Rainwater harvesting systems are linked to 12 community farming projects which help in supplementing income and food

VOLUMETRIC WATER BENEFIT
7,570 m^3
(7.5 million litres)

ESG Review

Our Progress Against BaBW 2030 Ambitions

Environmental Sustainability

Ambition Areas	Our BaBW Global Ambitions	Our FY2024 Progress
Net Zero Carbon	▪ Reach net zero across our value chain by 2040[1] ▪ Reach net zero in Scopes 1 and 2 by 2030[2] ▪ Reduce Scope 3 FLAG (forest, land and agriculture) emissions by 30% and non-FLAG by 25% by 2030 [1] *100% of our Scopes 1, 2 and 3 GHG emissions.* [2] *100% of our Scopes 1 and 2 GHG emissions.*	▪ Reduced 36% of carbon emissions (Scopes 1 and 2) in production vs 2022 baseline ▪ 100% renewable electricity via TNB GET programme ▪ 3,500 mono-perc solar panels with a total capacity of 2,600 MWh installed and operational since July 2024 ▪ Engaged 36 business partners on Scope 3 reporting
Maximise Circularity	▪ Zero waste to landfill for all production sites by 2025 ▪ Turn waste into value and close material loops throughout the value chain	▪ Fully recycled and upcycled our production waste since 2017
Towards Healthy Watersheds and Nature	▪ Reduce average water usage to 2.6 hl/hl in water-stressed areas by 2030 ▪ Fully balance[3] water used in our products in water-stressed areas by 2030 [3] *For every 1 litre of water in our products, we aim to balance 1.5 litres of water through water stewardship projects.* ▪ Maximise reuse and recycling in water-stressed areas by 2030	▪ Improved water consumption by 29% vs 2014 baseline year ▪ 3.06 hl water consumed per hl of beer ▪ 209% water balanced in 2024 ▪ Treated wastewater is collected and reused for general cleaning and gardening purposes ▪ 100% of wastewater treated beyond the standards required by the Department of Environment

Note: A comprehensive set of environmental data in compliance with Bursa Malaysia's sustainability reporting requirements can be referred to the Performance Data Table on page 99.