

SUSTAINABILITY REPORT

Caring for the Environment

We are driving into a new, greener era with our eco-friendly bus fleet and a range of other sustainable innovations and technologies. We aim to become a carbon-neutral bus operator, setting a new industry standard in Hong Kong.



SUSTAINABLE DEVELOPMENT GOALS



3 GOOD HEALTH AND WELL-BEING

Good Health and Well-being



6 CLEAN WATER AND SANITATION

Clean Water and Sanitation



7 AFFORDABLE AND CLEAN ENERGY

Affordable and Clean Energy



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Industry, Innovation and Infrastructure



11 SUSTAINABLE CITIES AND COMMUNITIES

Sustainable Cities and Communities



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Responsible Consumption and Production



13 CLIMATE ACTION

Climate Action





▲ KMB has introduced Hong Kong's highest-capacity electric double-decker bus on cross-harbour routes, offering eco-friendly travel experiences for Hong Kong Island residents

Environmental Policy

We recognise the inherent environmental impacts of our bus services and are committed to mitigating them in the following ways:

- Preventing pollution and enhancing environmental performance through the establishment and achievement of objectives and targets;
- Conserving resources by reducing waste at source, and promoting recycling and reuse;
- Minimising and controlling bus emissions through effective control measures and professional repair and maintenance services;
- Reducing our environmental footprint and combating climate change;
- Raising staff environmental awareness by providing training aligned with our environmental policy, objectives and targets, and helping them understand the potential environmental impacts of our operations;
- Communicating our environmental policy and requirements to suppliers and making the policy publicly available;
- Responding promptly to environmental enquiries and ensuring effective internal communication on environmental issues; and
- Ensuring compliance with all applicable local environmental legislation and other relevant requirements.

Environmental Management

KMB has achieved ISO 14001 certification for the environmental management systems implemented at its two largest depots. KMB's four major depots and LWB's depot are subject to quarterly surveillance audits to ensure compliance with a set of stringent environmental management standards. Environmental working groups have been set up to manage environmental issues and ensure the effective implementation of the ISO systems. Under the guidance of Senior Management, the Engineering Team is adopting innovative technologies for both bus fleets and operations.



▲ The maiden voyage of Hong Kong's highest-capacity electric double-decker bus attracted a large number of locals and received positive feedback

SUSTAINABILITY REPORT

Our Environmental Targets

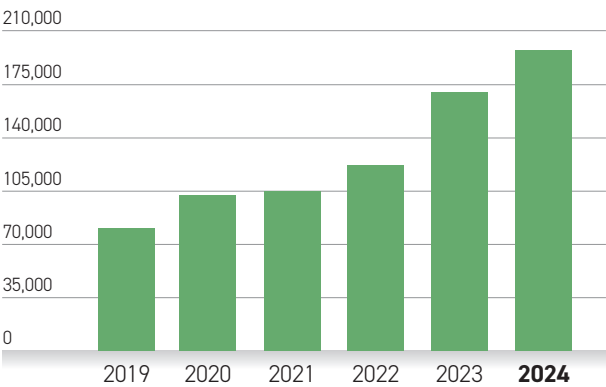
In 2023, TIH appointed an external consultant to review the environmental performance of the Group. To move forward, the Board has already established new Environmental Targets for the period from FY2024 to FY2028. We have ensured consistency in our targets by once again using FY2019 as the baseline year. Additionally, we have expanded the scope to include Hong Kong Franchised Public Bus Operations, Hong Kong Non-franchised Transport Operations and Property Holdings and Development, incorporating six modified environmental targets that specifically address diesel consumption (Scope 1), electricity consumption (related to property/real estate operations only) (Scope 2), GHG emissions (Scopes 1 & 2), Water consumption, solid chemical waste (hazardous), and metal waste (non-hazardous).

The environmental targets for key performance indicators in FY2024 yielded an overall positive result. The Company will monitor all aspects of its operations and implement effective measures to control energy consumption and reduce waste, minimising greenhouse gas emissions in both Scopes 1 & 2.

Safety has always been the Group’s top priority. To uphold high safety standards in our public transportation services, the Group has implemented various measures, including the adoption of technology to monitor the performance of bus systems and components, and timely replacement of bus parts to minimise the risk of mechanical failures, all of which are aimed at ensuring driving safety across both our franchised and non-franchised bus operations. A key indicator of our safety performance is mechanical reliability—measured as the average distance a bus operates before experiencing a breakdown with passengers onboard. This metric improved dramatically from 74,914 km:1 in 2019 to 187,932 km:1 in 2024. We achieved this substantial improvement by implementing

more frequent and comprehensive maintenance protocols, including the proactive replacement of metal components before they reached failure thresholds. While these essential safety improvements have delivered excellent results, they have inevitably led to an increase in metal waste. Additionally, the adjustment of our electric vehicle deployment plan to align with the Government’s policy, further contributed to the rise in metal waste during FY2024. Furthermore, our service level and operating kilometres have reduced compared to FY2019 due to post-pandemic changes in people’s travel patterns together with the expansion of the railway network. The ESG Task Force is reviewing our environmental targets and sustainability performance in operations, maintenance work and procurement, while also implementing upcycling programmes with an aim to achieve our environmental targets.

Mechanical Reliability - KMB & LWB



Note: Mechanical reliability refers to the average number of kilometres a bus operates before it experiences one mechanical breakdown on the road with passengers on board.

Environmental Targets for Key Performance Indicators by FY2028

(Baseline: FY2019)

GHG Emissions (Scopes 1 & 2)

tCO₂e (Absolute)

-11% Progress by FY2024: -11%

tCO₂e/million km (Intensity)

-13% Progress by FY2024: -6%

Metal Waste (Non-hazardous)

kg/million km (Intensity)

-7% Progress by FY2024: 29%

Solid Chemical Waste (Hazardous)

kg/million km (Intensity)

-13% Progress by FY2024: -6%

Diesel Consumption (Scope 1)

GJ/million km (Intensity)

-13% Progress by FY2024: -5%

Electricity Consumption

(Related to Property/Real Estate Operations only) (Scope 2)

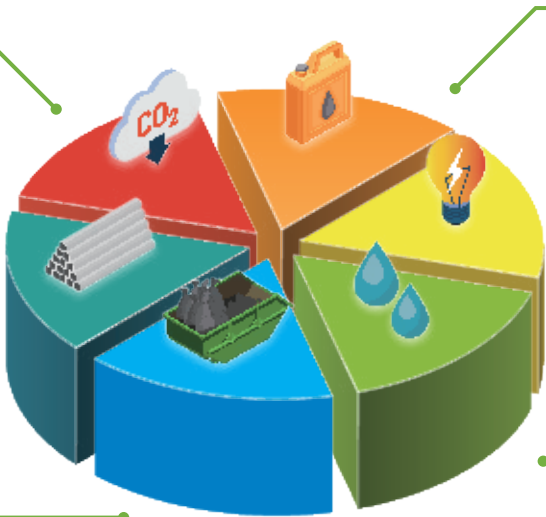
kWh/m² (Intensity)

-35% Progress by FY2024: -49%

Water Consumption

m³/no. of buses (Intensity)

-34% Progress by FY2024: -30%



Green Finance

In 2024, the Group executed its first placement of sustainable deposits while maintaining available green loan and sustainability-linked loan facilities totalling HK\$3,800 million. This amount represents over 50% of our overall available loan facilities, highlighting our commitment to advancing Hong Kong's path towards achieving zero emissions through effective green finance.

We have established key sustainability performance targets aimed at reducing greenhouse gas emissions from our buses, increasing green procurement practices, and enhancing average training hours for employees. Moving forward, TIH Group will continue to identify suitable financing solutions that will drive Hong Kong's transportation industry into a new era of sustainability.

Greenhouse Gas Emissions Reduction

KMB and LWB strive to explore renewable energy and zero-emission technologies, demonstrating our determination to introduce green public transport in Hong Kong. Highlighting the significance of the Government's policy to achieve carbon neutrality by 2050, KMB and LWB have rolled out an electrification roadmap. In the long run, KMB aims to deploy new energy buses in its entire fleet to help transform Hong Kong into a green city.

Environmental Bus Fleet

We invest in eco-friendly buses that meet the strict exhaust emission standards of the European Council of Environmental Ministers to create a better environment and minimise climate-related impacts.

At the end of 2024, the KMB fleet comprised 855 Euro VI buses (including three Euro VI diesel-electric hybrid buses), 2,922 Euro V buses, and 70 battery-electric buses. The LWB fleet consisted of 158 Euro VI buses, 116 Euro V buses and four battery-electric buses, while the Sun Bus fleet comprised 184 Euro VI buses and 174 Euro V buses.

The new electric double-deckers are zero-emission buses that meet the latest KMB standards. They are equipped with solar panel systems, provide free 5G Wi-Fi internet connection services and include an upper-deck occupancy monitoring system. The majority of these buses have been deployed on routes that pass through busy corridors to improve roadside air quality in high-traffic areas.

As of the end of 2024, this largest new energy bus fleet in Hong Kong, comprising 74 battery-powered electric buses and three diesel-electric hybrid buses, has traversed a cumulative distance of five million kilometres, reducing carbon emissions by 8,000 tonnes, equivalent to the yearly emissions of over 1,700 individuals.

We have been replacing older bus models with the latest and more energy-efficient ones to enhance the longevity and environmental performance of our bus fleet, working toward zero emissions. The KMB bus fleet has an average age of 8.3 years, while LWB bus fleet is 5.2 years and the Sun Bus fleet is 6.6 years.

Other environmental facilities within KMB and LWB's bus fleets, depots and other premises:

- KMB has installed heat insulation boards on the roofs of about 70 operation kiosks at open-air bus termini, helping to minimise solar heat absorption, thereby reducing the workload of air-conditioners and promoting energy saving;
- The scheme to retrofit our bus fleet with lower-powered LED strips, aimed at creating a softer and more comfortable travel environment for passengers compared to the previous LED lighting, has been successfully completed and is now a standard feature on newly purchased buses. This initiative contributes to an annual reduction of 5,600 tonnes of carbon emissions from buses. The old LED light strips are dismantled and repurposed for lighting at bus depots and bus stops, producing no additional waste during the retrofitting process;
- KMB, LWB and Sun Bus diesel buses use near-zero sulphur diesel, upgrade older buses by retrofitting exhaust treatment devices such as diesel oxidation catalysts, diesel particulate filters, and selective catalytic reduction units; and
- KMB, LWB and Sun Bus have introduced electric patrol cars as backup support and set up electricity-recharging facilities at their main depots.

SUSTAINABILITY REPORT

Application on Renewable Energy

KMB and LWB have introduced third-generation solar panels on double-deckers to reduce the air temperature inside the bus compartment and supply power to electronic devices in the compartment, thereby reducing fuel consumption. About 30,000 solar panels are installed on buses, at depots and bus stops. Up to 13 million kilowatt-hours (kWh) of electricity will be generated annually, equivalent to the annual electricity consumption of around 4,000 households in Hong Kong, reducing about 9,100 tonnes of carbon emissions. As two franchised bus companies equipped with the largest solar panel systems in Hong Kong, KMB and LWB aim to lead the public transport industry toward a new greener era and promote carbon neutrality.

KMB has installed foldable solar panels on the roofs of three bus depots to generate electricity for water boilers. This setup can supply approximately 1,000 litres of hot water at 55°C per day for our staff members to use for showering.

CO₂ Concentration Checks

Each year, 80 KMB buses and 15 LWB buses from passenger-intensive routes are selected for data logger measurements of indoor CO₂ concentration. Our buses generally demonstrate compliance with the requirements.

Energy Saving

KMB and LWB take all practicable measures to reduce resource consumption and streamline waste disposal procedures. We handle and dispose of all materials responsibly in full compliance with applicable laws and regulations, ensuring that no risks are posed to human health or the environment.

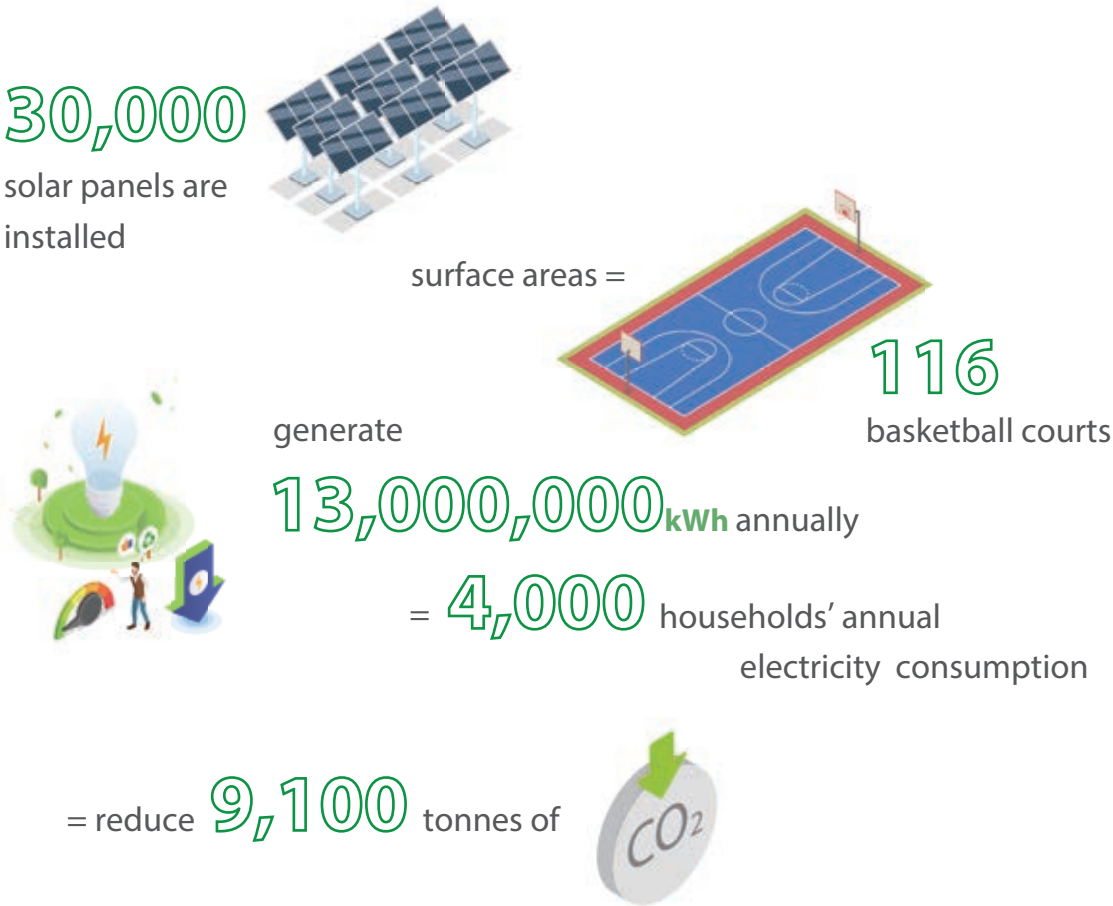
Fuel

To reduce fuel consumption, a number of measures have been adopted throughout the KMB and LWB bus fleets and across all operations:

- The aircraft-style “Posilock” fuel filling system is used to refuel buses;
- Ambient sensors are installed on air-conditioned buses to reduce unnecessary cooling;
- The use of synthetic gearbox oil extends oil drain intervals, reducing waste oil by 80%; and
- The mileage-based oil change scheme reduces engine oil consumption and waste oil by 40%.

Sun Bus also uses Biodiesel B5 for some of its services. Biodiesel B5, the most commonly used renewable fuel in Hong Kong, is produced from animal fat, vegetable oil and other oil through different chemical processes.

Application on Renewable Energy – KMB and LWB



Electricity

We continue to explore environmentally friendly initiatives and invest in the latest technologies to minimise energy use and reduce greenhouse gas emissions.

In addition to our one-off LED light replacement and continuous housekeeping measures, we have dynamically adjusted our electricity consumption pattern in accordance with the latest operation scales, including the adjustment of illumination time for parking depots and the optimisation of equipment supporting our facilities' operations.



▲ KMB has retrofitted its fleet with low-wattage LED strips, creating a more relaxing and comfortable interior for passengers while also reducing power consumption and carbon emissions

Green Measures in the Office

The green office concept drives both the design and renovation of our premises. We run our air-conditioning systems at 25.5°C, echoing the Government's Action Blue Sky Campaign by saving energy. Operating hours have also been rearranged to reduce energy waste during non-office hours. High-efficiency air conditioning units are installed in all newly renovated offices. We ensure that recycling arrangements are in place for used toners and papers, and plastic materials, and that regular efforts are maintained to promote good housekeeping practices among all staff members for energy saving.



▲ KMB collaborated with Hong Chi Association to design green office tips that remind employees to conserve energy

Waste Reduction

KMB and LWB are committed to good waste management through responsible storage and disposal of waste, recycling and reusing resources whenever feasible. Significant types of waste generated in our operations are reported as follows:

Wastewater

As responsible corporate citizens, KMB and LWB are committed to reducing water consumption and properly treating effluents before discharge. Our depots are equipped with nine automatic wastewater treatment systems handling 400 cubic metres per day. Water used for bus washing was collected and recycled, reducing total water consumption at depots by around 4%. Rainwater collection and water recycling systems have been introduced at some of our satellite depots.



▲ LWB has introduced a rainwater collection system at its Siu Ho Wan Depot which, along with the water recycling system, further reduces on-site water consumption

Tyres and Metals

Used KMB and LWB tyres are retreaded by appointed contractors, and waste metals are sent to recycling companies.

Oil and Chemicals

Solid chemical waste is processed and stored by type in designated areas at bus depots before disposal by a registered chemical waste collector at the Government's Chemical Waste Treatment Centre, while waste oil is recycled or disposed of in accordance with the statutory standards. In the reporting period, KMB and LWB have improved the engine oil replacement cycle by changing new engine oil with extended oil drain intervals to reduce solid chemical waste.

Batteries are disposed of by a licensed contractor complying with the instructions of the Environmental Protection Department ("EPD"), with some of them exported to overseas facilities approved by the EPD under the Basel Convention.

SUSTAINABILITY REPORT

Case Study



KMB's New Electric Double-deckers Set Industry Benchmark in Passenger Capacity and New Energy Bus Standards

Green transportation is our way forward. As a prominent player in Hong Kong's transportation industry, KMB takes its responsibility and mission to heart. We aim to be not only a trusted bus service operator but also a pioneer in driving the green transformation of local public transport. With rising public expectations for new energy buses, KMB is tirelessly promoting and expanding electric bus services, making commuting a meaningful action that contributes to a cleaner, low-carbon Hong Kong.

The new generation of electric double-deckers has been warmly welcomed by passengers and the community, receiving unanimous praise since they commenced service. Besides offering steady and quiet rides, these electric buses have been highly acclaimed for their core feature of achieving "zero emissions". KMB primarily collaborates with two electric bus manufacturers — China-based BYD and the UK-based Alexander Dennis. In 2024, KMB launched a new batch of electric double-deckers, the "Alexander Dennis Enviro500EV", specifically designed for Hong Kong by the British manufacturer. Their maiden service on Route 112 attracted crowds eager to experience the ride. To meet Hong Kong's demanding road conditions and operational

requirements, this new batch of electric double-deckers features a custom-built chassis and strategically placed battery compartments under the bus floor, positioned at both the front and rear axle wheel arches to maximise interior space. The lower deck of these buses follows the same layout as traditional double-deckers, with the capacity to accommodate up to 122 passengers, making them the highest-capacity new energy buses in Hong Kong. This service launch also marked the full rollout of two types of new-generation electric double-deckers by KMB, setting a historic precedent.

KMB's electric double-deckers are breaking new ground. They serve several cross-harbour routes, including those connecting Cheung Sha Wan to North Point and Lai Chi Kok to Ap Lei Chau. These electric double-deckers traverse cross-harbour tunnels, reaching the Southern, Central and Western, and Eastern Districts of Hong Kong Island, as well as Wan Chai, marking a new chapter in KMB's new energy bus fleet. Now operating on 40 KMB routes, our electric bus fleet has travelled five million kilometres in total, equivalent to a carbon emission reduction of 8,000 tonnes. KMB has continued to bring green transportation to more local districts, allowing Hong Kong residents to enjoy the benefits



of electric buses while making a positive contribution to improving air quality for all. Our pioneering initiatives have also proven that electric double-deckers are reliable transport options, even on Hong Kong's narrow, winding roads and steep inclines. With a charging time of approximately two hours, these buses can travel up to 300 kilometres, covering nearly 80% of KMB's daily operational needs.

KMB has been investing in electric buses for years, and today, they have become the cornerstone of Hong Kong's green transportation system. Compared to other new energy buses, electric buses offer greater operational stability and a zero emissions feature. These advantages help significantly reduce their environmental impact, embodying the essence of clean energy transportation.

"KMB's electric bus fleet has evolved over the years. Thanks to the tireless efforts of our engineering team, who work closely with bus manufacturers and conduct meticulous research, our electric buses have achieved significant milestones in range and technology in recent years. Today, we are immensely proud to see KMB's 'Electric Green' buses travelling through roads and streets, linking districts with a substantially expanded network of routes and coverage across Hong Kong.

In line with the Hong Kong SAR Government's goal of achieving carbon neutrality by 2050, KMB is actively developing electric buses to reduce the carbon footprint of buses in the city. Electric buses emit no exhaust or pollutants, leaving no trace as they travel each mile.

KMB places a strong emphasis on the battery systems of our electric buses. To enhance the energy efficiency of these buses, the batteries are equipped with a

'water cooling system' and a 'battery management system' to effectively regulate battery temperature and monitor battery conditions, thereby extending battery life. These systems also convert a portion of kinetic energy into electrical energy during deceleration, further improving battery efficiency and reinforcing the concept of eco-friendly buses. I look forward to the expansion of electric buses into more districts in the future, allowing even more passengers to experience the benefits of 'zero-emission' buses first-hand."

Rachel Kwan, KMB Operations Director

