

Safety First



Safety is in everything we do. It is our highest priority and an integral part of our business strategy. We strive to raise our safety standards and performance and continue to invest heavily in improving the safety of our bus operations.





Good Health and Well-Being

Safety Policy

The KMB and LWB Safety Policy ensures that injury and health risks are minimised to provide a safe and healthy environment for our employees and the public.

All our employees are required to comply with all legal requirements applicable to our operations, and we regularly consult employees to identify opportunities for improvement in our safety management system.

Safety Committees

Safety Committees oversee internal communication on occupational safety and health information, including risks, trends and policies. All Safety Committees meet regularly to discuss safety issues at different levels across the Company. The Working Committee for Safety oversees safety issues at the corporate level, while Departmental Safety Committees, Maintenance Safety Committees and Operations Safety Committees are responsible for safety issues relating to departments and sections. Departmental Safety Committees may vary the frequency of meetings depending on the scale of departmental safety risks.

Safety Management

We are dedicated to advancing occupational health and safety. We fully comply with the Occupational Safety and Health Ordinance and the Factories and Industrial Undertakings Ordinance (Chapters 509 and 59, Laws of Hong Kong). KMB adopts ISO45001:2018 Occupational Health and Safety Management System to promote continuous improvement of safety performance in all aspects of our business, including bus maintenance and design upgrades.

The key benchmarks of our operational performance are mechanical reliability¹ and operational capability². In 2022, the mechanical reliability of KMB's bus fleet was 109,094 km: 1, while LWB's bus fleet was 249,086 km: 1. In 2022, KMB and LWB attained an operational capability of 103.08% and 101.70% respectively.

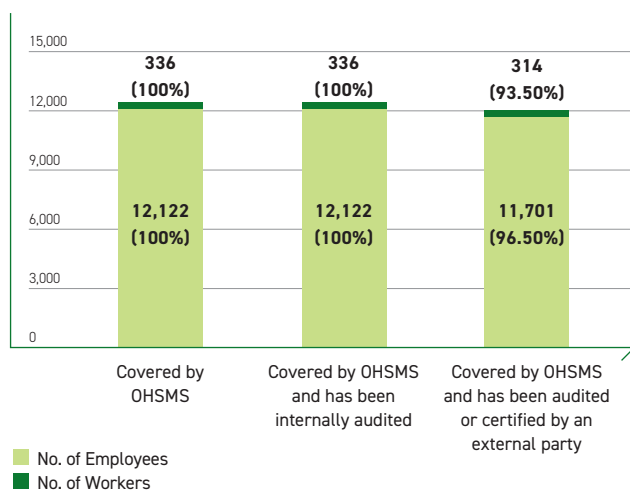
Operational Excellence

KMB and LWB are ISO9001 certified for their Quality Management Systems. Both companies have been accredited with the latest version of ISO9001, demonstrating our commitment to achieving up-to-date operational and service standards.

Safety Statistics

The number and the percentage of staff and workers covered by our Occupational Health and Safety Management System (OHSMS) are tabulated as follows:

As of 31 December 2022



¹ 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.

² Operational capability refers to the ratio of actual to scheduled departures in the peak direction during the peak hours of 7:00 a.m. to 9:00 a.m. across the bus network.



▲► The professional and reliable maintenance teams of KMB and LWB help bring a safe and comfortable journey to passengers

Risk Assessment

Rigorous risk assessments are conducted by managerial staff together with the relevant workers before discharging work duties. We ensure that both the working environment and staff performance comply with legal requirements, in-house safety rules, and industry best practices during safety inspections and safety audits. Our Plan-Do-Check-Act management approach also helps drive continuous improvement in safety performance.

Bus Safety Facilities and Maintenance

A number of technological devices, including speed-limiting devices and telematics systems, have been installed on buses to improve safety and record operational data. All KMB and LWB buses undergo an ISO-certified maintenance regime, comprising daily and monthly servicing, a semi-annual minor dock and an annual road-worthiness inspection, as well as spot checks from the Transport Department of the Hong Kong SAR Government.

Latest Bus Safety Measures GreenRoad System

KMB and LWB are the first franchised bus companies to introduce the GreenRoad System in Hong Kong. In 2022, KMB extended the installation of the GreenRoad System to our company vehicles (apart from buses) to widely promote the concept of green and safe driving across the whole company. Each bus captain and company vehicle driver has been given an electronic key with Radio Frequency Identification Technology ("RFID") that allows for the identification of who is driving the bus or company vehicle. The system monitors over 150 driving dynamics and gives real-time feedback and

rating to bus captains and drivers to help them remain vigilant on the road. Engine idling time is recorded, and bus captains and drivers are reminded to switch off the engines, thereby promoting a culture of environmental consciousness and health.

Through analysing the data collected by the system, the Company is able to identify the common types and locations of undesirable driving behaviours of bus captains and drivers, and customise training materials, such as tips on paying attention to routes, teaching videos, and driving improvement courses, to help bus captains and drivers improve their driving skills and performance. The system also gives instant feedback to bus captains and drivers through an online portal and app to enhance their driving performance.

The average accident rate of the fleet has decreased by about 19.85%, and more than 86.50% of bus captains have achieved a satisfactory safety level since the implementation of GreenRoad. Apart from giving monthly award to more than 70.00% of bus captains, a total of 100 bus captains were granted the grand Annual GreenRoad Outstanding Awards as a commendation for their outstanding driving performance.

Foldable Wheelchair Armrest

To provide safe and more comfortable barrier-free facilities for wheelchair passengers, KMB introduced two designs of foldable armrest in the wheelchair areas on over 90 buses in 2022. The new armrests not only make wheelchair passengers feel more comfortable on board but can also help prevent wheelchairs from overturning or skidding on the gangway. The new designs have become one of the standard features on every newly purchased bus.



Driving Monitoring System (“DMS”)

This monitoring device, mounted on the dashboard, uses image-processing and advanced facial recognition technology to detect the level of alertness of a driver. Early audio alerts and vibration warnings will be activated when a fatigue or an abnormal situation is detected.



Advanced Driver Assistance System (“ADAS”)

The device is installed on the lower saloon windscreen and uses image-processing technology to detect obstacles on the road and calculate the obstacle distance. Early audio alerts and vibration warnings will be activated when “unsafe” conditions are detected.



Electronic Stability Programme (“ESP”)

The ESP is an important safety feature to prevent a bus from skidding or overturning when cornering or operating on a slippery road surface.



Speed Limiting Retarder (“SLR”)

SLR enhances the speed limiters of our fleets. The current speed limiters cut off fuel supply to the engine when the speed limit is reached. The SLR automatically activates the brakes or retarder to prevent speeding when travelling downhill..



Safety Belts

KMB and LWB have requested bus manufacturers to install 3-point safety belts on all seats as a standard for new buses.



▲ Lam Sai Hung, Secretary for Transport and Logistics (front row, fourth from the left), and Dr. Norman Leung Nai Pang, TIH Chairman (front row, fourth from the right), officiated at the KMB Academy Establishment Ceremony, which marks an important milestone in the development of KMB

KMB Academy

KMB established the KMB Academy ("the Academy") in January 2022, aiming to nurture talents for the bus industry. The Academy provides professional and comprehensive training programmes for franchised bus maintenance personnel and all new bus captains through the "Certificate in Bus Maintenance" and "Certificate in Public Bus (Franchised) Driving" courses, which are respectively recognised at Level Two and Level Three under the Qualifications Framework ("HKQF") in Hong Kong by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications. This title was obtained following the merger between the KMB Bus Captain Training School and KMB Technical Training School. The Academy continues to foster the professional culture in the Bus Captain Training School and Technical Training School and adopts "Mission Safety • Act with Self-discipline" as its motto, emphasising the pivotal role of safety and discipline in the industry.

The "Certificate in Bus Maintenance" for franchised bus maintenance personnel offers knowledge of the mechanical operation and industrial safety. Students will also undergo basic technical training, including engine, drivetrain, chassis, electrical appliances, and air-conditioning, with on-the-job training available in KMB and LWB depots. Other than HKQF Level Two accreditation, graduates will also receive professional bus maintenance certificates recognised by two European bus manufacturer giants, Alexander Dennis Ltd and Volvo Buses, making them semi-skilled workers with a clear promotion ladder through further training. As for the "Certificate in Public Bus (Franchised) Driving", training is planned around building safety consciousness, bus maneuvering skills and bus route/bus type knowledge. In addition to driving, students will also be trained in customer service and emotional management to further enhance their service standards. Before graduation, assessments are conducted by instructors to assure their performance meets the standards of KMB.



◀▲ KMB organises various activities, which include STEM education programmes and Safety Bus visits to schools, to enhance students' understanding of the bus industry and bus safety

The Academy also offers training courses for in-service bus captains and incumbent maintenance staff, including route training, remedial training, bus type training, refresher training, and the latest technology in the bus maintenance industry to improve their driving/maintenance skills and reinforce their safety awareness.

Other than taking care of the training needs of bus maintenance staff and bus captains, the Academy also provides short-term courses and workshops for tertiary institutions covering various topics, aiming to widen students' understanding of the bus industry, business operations and public institutions. For primary and secondary schools, the Academy offers a variety of on-campus STEM education courses and activities in which students can apply interdisciplinary knowledge and cultivate innovative thinking through "hands-on" and "minds-on" activities.

Public Safety Awareness Programme

Passenger safety is equally important to our bus operations. We use different channels to raise public awareness of passenger safety. A series of safety messages are broadcast on the Bus Stop Announcement System in Cantonese, English and Putonghua to remind passengers to hold the handrail at all times. We put up safety stickers on our buses, such as "Hold the handrail" and "Fasten the seatbelt". Our mobile app, App1933, and KMB's Facebook page also periodically communicate educational messages to the public. Passenger safety videos produced by KMB are shown on bus information panels on board and at bus stops to remind passengers that safety comes first.

KMB is dedicated to promoting road and passenger safety. We modified a single-deck bus into a "Safety Bus" with the theme of "Stop, Look, Listen and Give Way" to reach out to the community. Combining learning with playing through motion-sensing games and virtual reality activities inside the compartment, the Safety Bus allows participating students to learn public transport etiquette, such as fastening the seatbelt, holding the handrail, and learning about blind spots of buses. In order to raise awareness of the participants, staff members from the Safety Department are also there to play quiz games and give short talks on road and passenger safety. In 2022, a total of 180 primary students visited the Safety Bus.