

## »»» Safety First

Safety is our number one priority and we continue to invest heavily in improving the safety of our bus operations.





KMB and LWB are committing to safety performance

## Safety Policy

The KMB and LWB Safety Policy is dedicated on a commitment made by all employees to provide a safe and healthy environment for everyone who may be affected by our work activities. It is our objective to minimise the risk of injury and ill-health.

Safety is an absolute pre-requisite in everything we do and is an integral part of our business strategy. Employees at all levels are required to comply with all legal requirements and other requirements applicable to our work activities. We consult our employees by engaging them in our safety management system. We shall continue to maintain our safety risks at as low a level as reasonably practicable and strive for continual improvement in safety performance.

## Safety Committees

Safety Committees are responsible for ensuring that information about Occupational Safety and Health risks, trends and policies are adequately communicated up and down the chain of command. Meetings of the Working Committee for Safety are held to discuss safety issues at the corporate level. Meetings of Departmental Safety Committees, Maintenance Safety Committees and Operations Safety Committees are held at the local level to discuss safety issues relating to departments and sections. Departmental Safety Committees may vary the frequency of their meetings in accordance with the scale of their local safety risks.

## Safety Management

We are dedicated to committing occupational health and safety and fully comply with the Occupational Safety and Health Ordinance and the Factories and Industrial Undertakings Ordinance (Chapter 509 and 59, Laws of Hong Kong). KMB adopts ISO45001:2018 Occupational Health and Safety Management System to promote further 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 reliability and operational capability. 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. In 2020, the mechanical reliability of KMB's bus fleet was 94,551 km: 1, while LWB's bus fleet was 116,421 km: 1. Operational capability refers to the ratio of actual to scheduled departures during the peak hours of 7:00 a.m. to 9:00 a.m. across the bus network. In 2020, KMB and LWB attained an operational capability of 93.96% and 99.60% respectively.

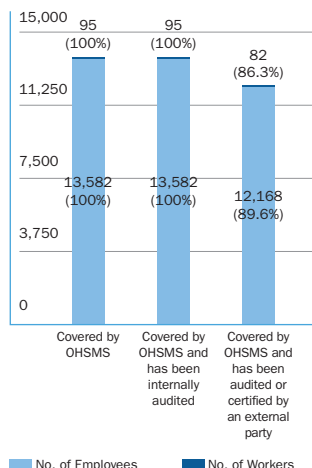


KMB and LWB offer professional maintenance training to provide safe and quality bus service



## The number and the percentage of staff and workers covered by our occupational health and safety management system (OHSMS)

(as at 31 December 2020)



## Operational Excellence

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

## Risk Assessment

Risk assessments are critically conducted by managerial staff together with the relevant workers before the commencement of work. Both the working environment and staff working behaviour are checked during safety inspections and safety audits to ensure compliance with the legal requirements, the in-house safety rules and the best practices of the industry. We adopt the Plan-Do-Check-Act cycle to ensure continual improvement.

## Bus Safety Facilities and Maintenance

A number of technological devices, including speed limiting devices and the telematics system, have been incorporated 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 random checks by the Transport Department of the HKSAR Government.



The GreenRoad system provides instant feedback to bus captains through an online platform to enhance their driving performance





The professional maintenance team and high-quality safety measures bring a safe and comfortable journey to passengers

## Latest Bus Safety Measures

### GreenRoad System

KMB and LWB have become the first franchised bus companies to introduce the GreenRoad system in Hong Kong. The system will detect up to 150 bus driving dynamics and provide real-time feedback and suggestions with ratings to the driver. When the risk is lower, the value is lower, which means the driver's driving behaviour is safer. The platform will also display the ranking of the driver's safety driving performance for the captain's future reference.

### Electronic Rear-view Mirrors

Electrical rear-view mirrors have been attached on 2,573 buses to enable rear-view mirror adjustment and ensure driving safety. The bus captain can now use the button on the panel to easily adjust the rear-view mirrors, minimising the risks of incorrect posture or excessive force when adjusting the mirrors manually because of the bus height.

### Tree Guard

Trees growing close to the road may be a hazard to vehicles and passengers. The use of tree guards can protect the bus windscreen and body from damage caused by branches and twigs. The tree guard design has been upgraded to have vertical bars on both sides and a crossbar to strengthen protection. KMB has taken the lead to install tree guards for the safety of 336 ADL Enviro 400 buses and Enviro 500 buses which mainly serve rural routes. More tree guards will be installed in phases.

### Drowsiness Monitoring System ("DMS")

The DMS is installed on all LWB buses to monitor the status of bus captains when they are driving. This device, which is mounted on the dashboard, uses image-processing and advanced facial recognition technology to detect the level of alertness of a driver. Early audio and vibration warnings will be activated when "fatigue" or "micro-sleep" is detected.

### Advanced Driver Assistance System ("ADAS")

The ADAS is installed on all LWB buses to monitor the road condition in front of a moving bus. The device is installed on the lower saloon windscreen and uses image-processing technology to detect the presence of different objects on the road and the corresponding distance. Early audio and vibration warnings will be activated when "unsafe" conditions are detected.



More tree guards will be installed to protect the bus windscreen and body from branches and twigs

### Safety Belts

KMB and LWB have requested bus manufacturers to install 3-point safety belts on all seats as a standard feature for new buses. Currently, more than 600 new buses are fully equipped with seat belts on both decks. As for buses currently in service and running on long-haul or expressway routes, 3-point safety belts will be installed on all upper-deck seats in phases.



The ESP helps reduce the risk of bus skidding when cornering

### Electronic Stability Programme ("ESP")

The ESP is an important safety feature, which reduces the risk of bus skidding or overturning when cornering or operating on a slippery road surface. To safeguard road safety, all new Euro VI buses will be equipped with the ESP. The first batch of these buses was deployed in 2019.

### Parking Sensor

KMB and LWB have installed parking sensors on more than 1,100 buses. The system will alert the driver if the bus is nearing obstacles when reversing. With a camera system, bus captains can monitor the real-time situation through the screen in the driving cab.

### Surveillance Cameras and Data Protection

Surveillance cameras, including forward-looking cameras, to monitor road and saloon condition, have been standard features on all new buses since 2015. At the end of 2020, surveillance cameras were installed on all KMB and LWB buses. The cameras protect the interests of bus captains in the event of police investigations or legal proceedings.


Attaching great importance to personal data protection, the Group has established working instruction guidelines to prevent inappropriate disclosure of personal data. Stickers are posted on all buses equipped with a CCTV system to inform bus passengers and bus captains of their presence and purpose. Authorised persons will access recordings from CCTV cameras only for security and incident investigation purposes. The recorded data is controlled by management and will only be accessed, copied or viewed following management approval in accordance with the governing procedures.

3-point safety belts on all seats have become a standard measure for new buses








 We provide comprehensive training to bus captains to ensure that their performance meets professional standards

## Public Safety Awareness Programme

KMB and LWB attach great importance to enhancing bus safety performance and use different channels to boost public awareness of safety issues. A series of safety messages, broadcast on the Bus Stop Announcement System in Cantonese, English and Putonghua, reminds passengers to hold the handrail at all times. We have put on safety stickers, such as “Hold the handrail” and “Fasten seatbelt” on our buses. This message is also periodically conveyed via App1933 and on KMB’s Facebook page.

## Bus Captain Safety Training

The Bus Captain Training School provides comprehensive basic training to all new bus captains, including a safe driving mind-set, bus manoeuvring skills and bus route knowledge. The school also offers a series of training courses for in-service bus captains, including route training, remedial training, bus type training and refresher training. Bus captains may upgrade their driving skills and enhance their safety awareness.

In 2020, the bus captain training programmes were revamped with course content and materials restructured. To further enhance and consolidate the driving manner and safety awareness of bus captains with 0 – 4 years of service, yearly refresher training has been introduced. The module for preventing passengers from “losing balance” has been enhanced in both Basic Training and Remedial Training to strengthen bus captains’ sense of caring for passengers and smooth driving. We have re-designed and developed training on “bus tyre checking” and “handling of bus tyre on smoke/fire” across all training sessions in order to draw bus captains’ attention to the importance of keeping the bus tyres in good condition while driving. Aiming at preventing accidents of hitting stationary objects, we have been conducting “Safety Talks” at different bus termini.

# Fighting the Epidemic Together

## January

- Stepped up compartment cleaning and the promotion of public health
- Provided non-contact infrared thermometers at depots
- Provided masks and hand sanitiser gel at bus termini
- Launched “COVID-19 Information Kiosks” on the KMB Staff Web
- Set up a notification mechanism and procedures, with inter-departmental efforts in prompt follow-up of cases



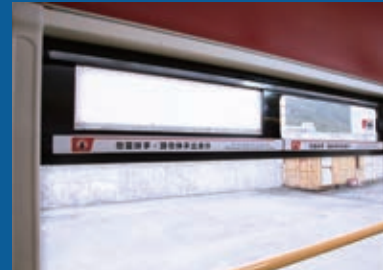
## February

- Adopted the Nano-Photocatalyst Technology to step up compartment cleaning
- Installed disinfection carpets and provided hand sanitiser gel in the bus compartment
- Strengthened the compartment broadcast



## March

- Installed a cleanroom and set up a production line for surgical masks in Hong Kong
- Introduced ventilation windows on some buses



## April

- The ISO14644-1 Class 8 Cleanroom commenced its operation
- Distributed drinks to boost the frontline staff morale



## May

- Provided Self-produced masks to staff
- Organised the “Pandemic Prevention Materials Online Market” to give staff convenience
- Launched a series of public health promotion



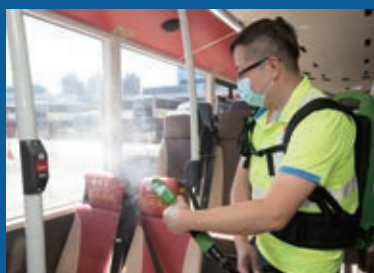
## June

- Introduced mask vending machines
- Guaranteed to keep the price of the KMB Mask unchanged under the situation of mask shortage
- Adopted the second-round Nano-Photocatalyst Technology to step up compartment cleaning
- Free KMB Masks for passengers who purchased the KMB Monthly Pass
- Provided deep throat saliva specimen collection packs for bus captains and outdoor staff

The year 2020 was overshadowed by the Coronavirus pandemic. Facing the unprecedented challenge, we considered the health of staff members and passengers our top priority. With demonstrated professionalism, the frontline staff adhered to their obligations and the back office provided full support. As part of our infection control measures, we aimed to offer clean compartments, bring safe and enjoyable travel experiences to passengers, and overcome the challenges together with the citizens during the difficult times.

## July

- Introduced the Long-lasting Smart Coating Technology to disinfect the bus fleet
- Free KMB Masks for other local companies to express our support
- Set up partitions at staff canteens, pantries and duty dispatch office, etc. with a temporary lunch area at depots



## August

- Distributed face masks to subdivided unit households, the homeless and the disabled
- Donated pandemic care packs to voluntary organisations
- KMB Masks were certified with ASTM Level 1



## September

- Introduced the junior version of KMB Masks
- Provided masks for students on the first school day



## October

- Distributed healthy food to cheer frontline employees up



## November

- Introduced the kid size of KMB Masks
- KMB Masks were certified with ASTM Level 2
- The "LeaveHomeSafe" QR code was made available at approximately 200 bus termini and interchanges



## December

- Launched the "1-Dollar-1-Mask" to help passengers fight the epidemic



## Mask Production Line Working Around the Clock to Protect the Community



As the coronavirus broke out at the beginning of the year, prevention supplies were in shortage. We took action promptly by setting up a cleanroom and a local production line for surgical masks in Hong Kong. KMB and LWB became the first franchised bus companies to provide self-produced surgical masks to the frontline and back office employees. The KMB Masks production line operates every day to ensure a stable supply of three sizes of ASTM Level 2 (American Society for Testing and Materials Level 2 standard) certified masks. In addition to providing comprehensive protection for our employees, we added retail locations and vending machines in multiple districts to facilitate mask purchase. We also offered surgical masks to passengers through various promotion schemes. We donate masks to a number of voluntary organisations to assist subdivided unit households, the homeless and the disabled in relieving their financial pressure.



“As a hearing-impaired person I am not afraid of the hard work. Mask production is very meaningful to me and I am very pleased to be involved because it can effectively help protect the health of Hong Kong people. The factory staff help one another and my colleagues often take care of me. They are willing to use words and body language instead of speaking to communicate so that I can easily adapt to the working environment.”

Chan Lai Dong, Worker of the mask factory

# Fighting the Coronavirus in Bus Compartments with Local Technology

To allow passengers to travel safely, we worked hard to find safe and reliable anti-pandemic technology suitable for public transportation, aiming to provide clean compartments for the public and our employees. KMB and LWB became the first franchised bus companies to adopt the local “Nano-Photocatalyst Technology” and “Long-lasting Smart Coating Technology” in enhancing compartment cleaning. At the same time, we adopted other infection control measures, including the provision of hand sanitiser dispensers in bus compartments and disinfection carpets at the boarding point as well as retrofitted bus window vents to enhance natural ventilation.



“ When SARS struck Hong Kong in 2003, people kept using diluted bleach for cleaning. In fact, the bleach loses its sterilising function as it evaporates. Even if sterilisation is done every two hours, it cannot effectively prevent the spread of the virus. Given the high traffic of public transport, lasting disinfection on the surface is very important for infection control, which inspired us to develop a less volatile “Long-lasting Smart Coating Technology” adopted by KMB and LWB. I am gratified by the great help of the laboratory research. ”

**Dr. Joseph Kwan, Adjunct Professor at the Division of Environment & Sustainability, The Hong Kong University of Science and Technology**

## Frontline Staff

### Value Passengers' Safety



All frontline staff and back office employees serve with professionalism despite adversity. Putting passengers' safety first, our departments keep an eye on the pandemic development and take corresponding measures efficiently. In terms of operations, we flexibly adjust our headways in line with the government's prevention and control measure and passengers' demand. Externally, we disseminate messages both online and offline, with media briefings on infection control to maintain high transparency. We maintain effective communication with the public and work to strengthen health education.



“ I keep cleaning every nook and corner of the bus compartment following the sweeping, wiping and mopping steps. I clean the whole bus, from windows, armrests, and stop buttons to the gap between seats. Now there are different kinds of antiseptic products. KMB is prompt in providing equipment for our work. Although our workload is heavy and we have to grasp the time to clean the bus properly, it is important to offer the staff and passengers a clean, safe and comfortable environment in the compartment. Despite the hard work, I feel reassured when everyone is safe. ”

Wong Siu Lin, Cleaner



## Stringent Infection Control Measures Strengthen Protection for Employees

We implement strict infection control measures and internal guidelines, including temperature screening for all employees before they start working every day, and providing surgical masks for them to wear when performing duties. There is also a notification mechanism that requires employees to report COVID-19 cases to be followed up by the Inter-departmental Emergency Response Unit. All premises and buses concerned will be disinfected. Moreover, we added “COVID-19 Information Kiosks” to increase the transparency of pandemic information.



“ I always pay attention to passengers’ need. There are passengers boarding the bus in a hurry without wearing a mask. I usually have some spare masks with me, so I can help by giving them a mask to continue their journey. Actually most passengers follow the rule with a mask on. Even when there is any difficult passenger, I tend to gently remind them to protect themselves and others by wearing a mask properly before boarding. In most cases they are willing to cooperate. ”

Tang Shun Ling, Bus Captain