

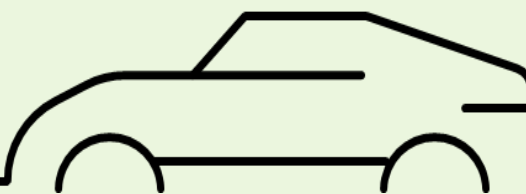


運輸署

Transport Department

Environmental Report

2023



FOREWORD

The Transport Department is fully committed to environmental protection. We have been working whole-heartedly to improve air quality by taking proactive measures to mitigate the air pollution generated from our transport system. We have also exerted influence over our business partners in the transport sector, for example, franchised bus, public light bus and taxi operators, to encourage them to join us in pursuing the wide range of measures aimed at protecting the environment.

We will continue to strive for achievement of our Departmental Vision, viz. *“we will provide the world’s best transport system which is safe, reliable, efficient, **environmentally friendly** and satisfying to both users and operators”*. In this issue of our Environmental Report we aim to advise the readers what have been done in 2023 by or through the Transport Department to improve the quality of our living environment.



ABOUT THIS REPORT

This Environmental Report covers the period from 1 January 2023 to 31 December 2023. It is published in electronic version on our web site for the sake of reducing paper consumption. Its target readers are members of the general public. The readers will be informed of the business of our Department, the efforts we have made and the measures we have taken to protect the environment.

Any suggestions or comments on this report are most welcome and can be emailed to tdenq@td.gov.hk.



ABOUT TRANSPORT DEPARTMENT

Our Department is responsible for the implementation of the Government's transport policy under the following 5 programme areas:

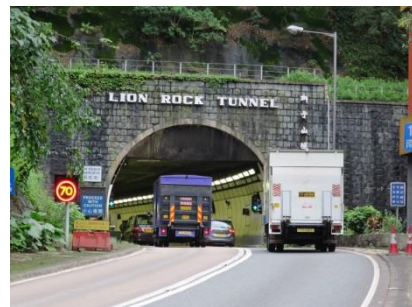
- (i) Planning and Development;
- (ii) Licensing of Vehicles and Drivers;
- (iii) District Traffic and Transport Services;
- (iv) Management of Transport Services; and
- (v) Transport Services for People with Disabilities.

Our headquarters are located in the South Tower of West Kowloon Government Offices in Yau Ma Tei. We also have some 20 sub-offices accommodated in other government offices or private commercial buildings. As at the end of 2023, we had an establishment of 36 directorate posts and 1,878 non-directorate posts. In our daily business, we manage or operate the following main types of facilities:

- (i) public transport interchanges/termini;
- (ii) vehicle inspection centres;
- (iii) driving test centres;
- (iv) traffic lights;
- (v) escalators;
- (vi) intelligent transport systems; and
- (vii) roads and pedestrian facilities.



Besides other government departments, our business partners include the operators of franchised and non-franchised buses, tram, taxi, ferry and public light buses. We also run maintenance, operation and management contracts with the various tunnel and Government carpark operators.



ENVIRONMENTAL GOAL

Our environmental goal is to provide an environmentally friendly transport system in Hong Kong.



ENVIRONMENTAL POLICY

We are committed to providing a transport system in an environmentally acceptable manner to align with the sustainable development of Hong Kong.

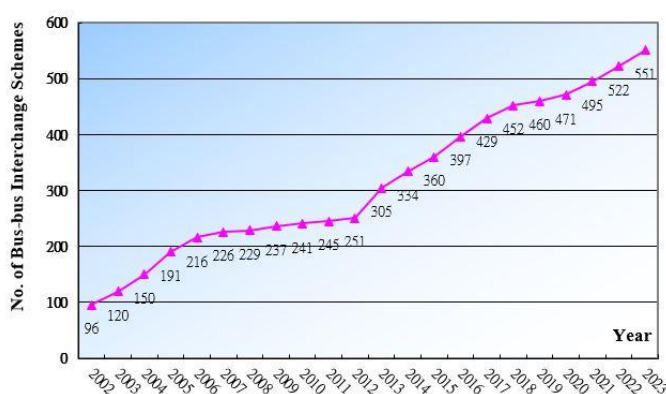
ENVIRONMENTAL OBJECTIVES

Environmental Objective No. 1 - Reduction in Vehicular Traffic

In managing the public transport system, we coordinate the roles played by the various public transport modes, including the rail, bus, tram, public light bus, taxi, ferry etc., so as to achieve the highest possible overall efficiency. This includes rationalizing public transport services to improve accessibility whilst avoiding duplication and raising the level of service to improve attractiveness. In the end, it helps to reduce vehicular traffic and mitigate air pollution. With these benefits in mind, we made our best efforts to enhance the efficiency of the transport system in the following ways:

(i) Implementation of public transport interchange schemes

The introduction of interchange schemes enables passengers to make the most efficient use of the transport system across different modes. They include bus-rail interchange, green minibus-rail interchange, taxi-rail interchange, green minibus-bus interchange, tramway-bus interchange and bus-bus interchange schemes. The numbers of bus-bus interchange schemes implemented since 2002 are shown in the graph on the right.

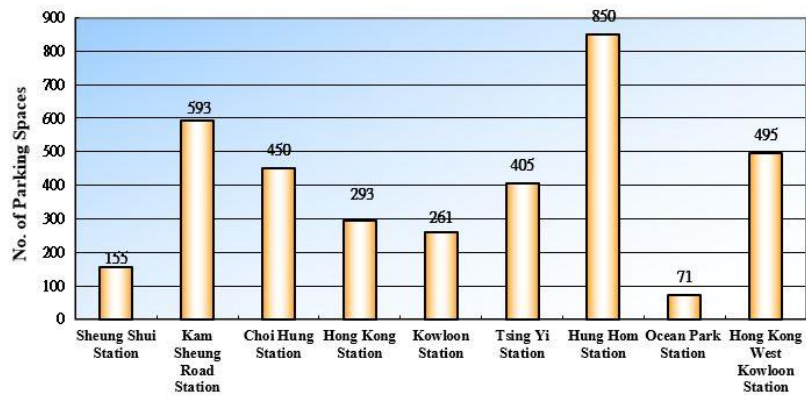


(ii) Rationalization of bus routes and stops

This process includes amalgamation, truncation and modification of bus routes, re-location of bus stops and adjustment of bus schedules to match the prevailing passenger demands. The resulting arrangements can help to reduce traffic congestion. Between 2014 and 2023, the cumulative reduction of the number of bus trips in the busy corridors in Central, Causeway Bay and Yau Tsim Mong was 6,762.

(iii) Provision of park-and-ride (PnR) facilities

These facilities are carpark provided near railway stations. People can shorten their private car trips and switch to the rail for the major part of their journeys. The numbers of parking spaces provided in some PnR facilities are shown in the graph below.



(iv) Fostering bicycle-friendly environment

We aim to enable the public to use bicycles for recreational or short-distance commuting purposes, thereby reducing the use of mechanized transport. Where road safety considerations and circumstances permit, we would explore the feasibility to enhance our cycle tracks network and cycle parking facilities in the New Territories, as well as to provide comprehensive cycling facilities in



new development areas and new towns under the collaboration with other departments. As at the end 2023, there are a total of about 250km long of cycle tracks and a total of about 41,500 cycle parking spaces managed by our Department in Hong Kong.

Environmental Objective No. 2 – Reduction of Vehicular Emissions

We have been implementing the following series of measures to reduce vehicle emissions so as to better protect public health. Between 2013 and 2023, the concentrations of major air pollutants recorded at the roadside air quality monitoring stations have been on a declining trend: the annual average concentrations of respirable suspended particulates (RSP/PM10), fine suspended particulates (FSP/PM2.5), nitrogen dioxide (NO₂), and sulphur dioxide (SO₂) have dropped by 44%, 46%, 45% and 55% respectively.

(i) Tightening vehicle emission standards for motor vehicles

Tightened the emission standards for first registered diesel private cars and motorcycles to California LEV III from October 2017 and Euro 4 from October 2020 respectively. From April 2019 to March 2021, tightened the emission standards for first-time registered light bus (design weight of more than 3.5 tonnes) and buses to Euro VI On Board Diagnostic OBD C. Besides, the Government launched an incentive cum regulatory programme in October 2020 to progressively phase out some 40,000 Euro IV Diesel Commercial Vehicles (DCVs) by the end of 2027 and offers ex-gratia payment to eligible vehicle owners whose DCVs are required to be phased out.

(ii) Reducing emissions from franchised buses

In order to reduce emissions from the franchised buses, the Government conducted a trial of retrofitting Euro V bus models with enhanced selective catalytic reduction systems (SCR) so as to review the technical feasibility of the retrofit as well as the emission reduction performance of the enhanced SCR systems under the local driving and operation conditions.



Subject to the outcome for the trial and resources required, the Government would consider installing relevant emission

reduction devices onto other eligible buses.

(iii) Franchised bus low emission zones (FBLEZs)

The emission requirements of franchised buses plying through the FBLEZs in Central, Causeway Bay and Mong Kok were tightened to Euro V from 31 December 2019. The franchised bus companies have been regularly reporting to the Environmental Protection Department and Transport Department regarding the deployment of buses to the FBLEZs.

(iv) All private cars, taxis, light buses, goods vehicles, buses and special purpose vehicles

We required them to pass smoke or emission tests during their annual inspection.

Smoke Test



Environmental Objective No. 3 - Use of Alternative Fuel Vehicles to replace Diesel Vehicles

To continuously improve roadside air quality, the Government implemented a series of measures and ex-gratia payment schemes to phase out old diesel commercial vehicles. Besides, we took part jointly with other Government departments in the promotion of “cleaner” fuel such as liquefied petroleum gas (LPG), hydrogen or electricity in place of diesel. Our efforts include the implementation of the following:

(i) Conversion of diesel taxis to LPG taxis and introduction of alternate fuel

As at the end of 2023, about 99% (i.e. 18,135 Nos.) of the taxis were LPG taxis. Hybrid taxis have started serving Hong Kong since 2013. In addition, the trial on new generation pure electric taxis (“e-taxis”) commenced in September 2022. We also facilitate the Environmental and Ecology Bureau (EEB) to promote the popularization of e-taxis, by identifying suitable existing taxi



stands for setting up quick charging facilities to promote wider use of e-taxis.

(ii) Set-up of LPG Refilling Stations

We worked jointly with other departments to facilitate the setting up of LPG refilling stations at convenient locations. Up to end 2023, there were a total of 70 LPG refilling stations in Hong Kong.

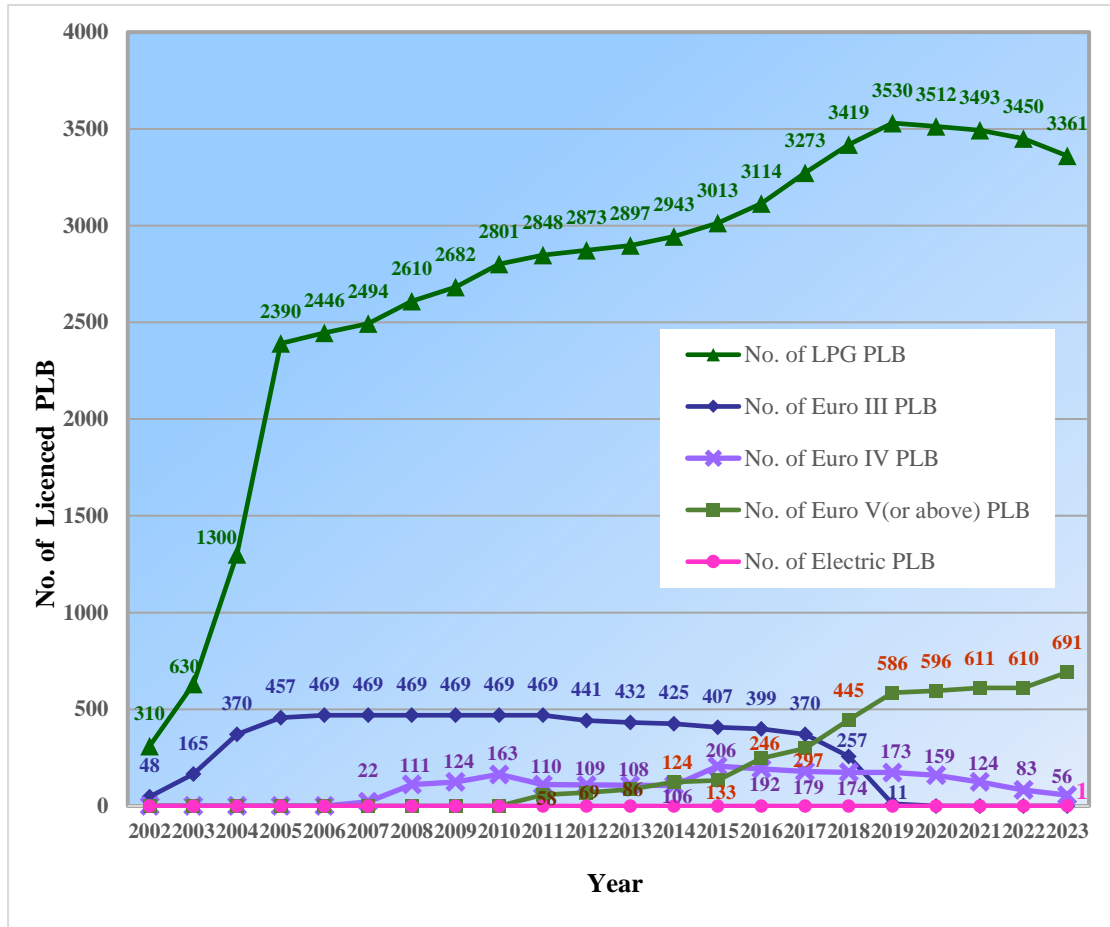
(iii) Phasing out old diesel commercial vehicles (DCV)

To continue improving the roadside air quality, further to the phasing out of 80 000 pre-Euro IV DCVs, the Government launched in October 2020 the programme for phasing out Euro IV DCVs (“the Programme”) to progressively phase out about 40 000 Euro IV DCVs by the end of 2027, among which about 22,000 DCVs have been phased out by the end of 2023. With the Programme, the high polluting DCVs have been removing from the road gradually. Besides, newer DCVs have a service life limit of 15 years, ensuring that the DCVs will be phased out in due course.

(iv) Pilot scheme for electric Public Light Buses

We facilitate the EPD to implement the pilot scheme for electric Public Light Buses (“e-PLB”), including providing operational advices for identifying suitable PLB terminus or public transport interchanges (“PTIs”), and conducting site visit to confirm the electricity supply and suitability of installation and operation of charging facilities at the concerned terminus or PTIs.

As at end of 2023, there were 3,361 licensed LPG PLBs, 56 licensed Euro IV diesel PLBs, and 691 licensed EuroV or above diesel PLBs and 1 licensed electric PLB. The numbers of licensed LPG PLB, Euro III, IV, V (or above) diesel PLBs and electric PLB since 2002 are shown in the graph below.



(v) **Trial of Hydrogen Fuel Cell (HFC) Double-decked buses and heavy vehicles**

The Chief Executive's 2022 Policy Address mentioned to progressively commence trials of HFC double-decked buses and heavy vehicles in 2023, and formulate the long-term strategies for the application of hydrogen energy in road transport by 2025. To keep pace with the development trend of hydrogen fuel adoption, the HKSAR Government set up the Inter-departmental Working Group on Using Hydrogen as Fuel (the Working Group) in 2022, to coordinate preparation works of bureaux/departments for using hydrogen as fuel locally, with a view to encouraging local adoption of hydrogen energy. The Transport Department is a member of the Working Group and provide advice on the assessment of HFC vehicle safety. The first key task of the Working Group is to progressively commence the trials of HFC double-decked buses and heavy vehicles in phases, taking local circumstances into account. The Working Group will review and assess applications of trial projects, and advise on aspects such as safety and planning, in order to aid the relevant trades to commence their

trials early. According to the current plans, the first HFC double-decked bus will commence passenger service in February 2024.

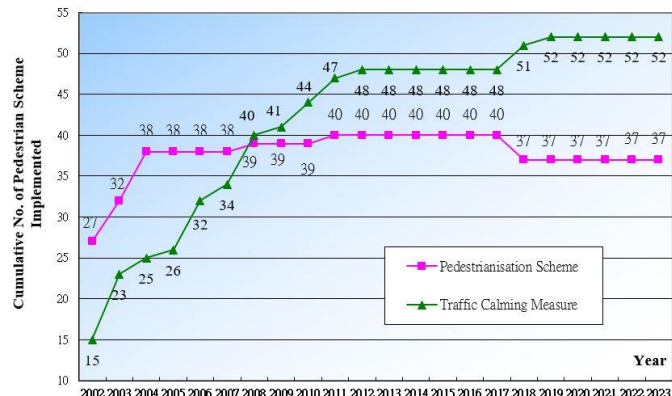
(vi) Introduction of electric buses

Since 2015, the Government has fully subsidised franchised bus companies (FBCs) to purchase a total of 36 electric single-deck buses and related charging facilities for trial on a number of routes, with a view to assessing their operational performance under local road circumstances. With the experience accumulated in the trials, currently some FBCs have been progressively introducing electric double-deck buses at their own cost.

The first electric double-deck bus in Hong Kong has already commenced passenger service trials starting from mid-2022. Preliminary results showed stable operational performance of the bus. In this connection, FBCs progressively deployed more electric double-deck buses for commence operations in 2023. The Government also provides policy support for FBCs to set up charging facilities in new and existing bus depots.

Environmental Objective No. 4 - Pedestrian & Traffic Calming Schemes

These schemes have been recognized by the public since we first introduced them to busy areas like Causeway Bay in 2000. The cumulative numbers of pedestrian schemes implemented since 2002 are shown in the graph on the right.



Before improvement



After improvement

Traffic Calming Street: Jaffe Road (near O'Brien Road)

Environmental Objective No. 5 - Enhancing Walkability

Fostering "Walk in HK"

The Government has been promoting "Walk in HK" with a view to encouraging people to walk more and ride less. Promoting walkability is not only a key element in the Government's effort to combat climate change, but will also help encourage a healthy lifestyle, strengthen community interaction and build an age-friendly environment. To develop Hong Kong into a walkable city, we formulated the overall walkability strategy for Hong Kong in December 2020. The strategy enshrines the value of placing high priority on pedestrians in transport planning, fosters a pedestrian-friendly environment, and promotes walking as a form of sustainable urban mobility to bring about transport, social, environmental, economic and health benefits. After testing out new initiatives for walkability enhancement measures, we plan to bring them forward for territory-wide application along the four pillars of walkability, namely "Make it smart", "Make it connected", "Make it enjoyable" and "Make it safe". Besides, we have

developed a pedestrian planning framework, which integrates traffic, transport, land use and development projects. We have sought opportunity to apply the pedestrian planning framework for pedestrian planning in collaboration with relevant departments in the planning of new development areas and in suitable built-up areas.

(i) “Make it smart”

To “make it smart” by providing user-friendly information on walking routes, we implemented a pilot pedestrian wayfinding signage system in Tsim Sha Tsui in July 2018, with reference to overseas experiences, providing legible and consistent pedestrian information to facilitate better pedestrian route planning and to make pedestrian journey smart. We developed a new pedestrian wayfinding system having regard to the experience gained from the pilot system. We are reviewing the strategy for territory-wide implementation of the system.

(ii) “Make it connected”

To “make it connected” by enhancing the pedestrian networks, we are endeavouring to take forward initiatives to provide a continuous east-west walkway from Wan Chai to Sheung Wan through effective linkages between the existing walkway systems in Central, Admiralty and Wan Chai, which include the footpath widening on Jaffe Road between Tonnochy Road and Canal Road West and possible provision of a pedestrian-friendly link between Admiralty and Wan Chai Government Offices redevelopment. Moreover, we continued taking forward various hillside escalator links and elevator systems (HEL) projects. On the basis of the revised assessment mechanism, we conducted proposal prioritisation with the support obtained from local consultations, we are implementing the selected priority projects in an orderly manner. We will keep examining how to use public resources more effectively and the cost effectiveness of works projects, while keep reviewing the priority of projects under planning in light of the latest developments, including policy development and financial situation of the Government, etc., and will adjust the implementation schedule as appropriate.

(iii) “Make it enjoyable”

To “make it enjoyable” by making walking a pleasant experience, about 2,000 non-essential traffic signs and 26km of pedestrian railings in the territory were removed as at the end 2023 to reclaim space for pedestrians at ground level. Furthermore, we have been taking forward the provision of covers to walkways connecting to public hospitals, and embarked on a plan to provide covers to walkways nominated by the 18 District Councils. We also reviewed and

relaxed relevant criteria set in the Transport Planning and Design Manual for provision of covers to walkways.

(iv) “Make it safe”

To “make it safe” by providing a safe and quality pedestrian environment, we implemented trials of low speed limit zone in 2020 and raised crossing with colour dressing in 2021 at Wai Chi Street, Sham Shui Po to further calm the traffic, thus enhancing pedestrian safety. We further implemented low speed limit zones in various streets, including Tong Yam Street in Sham Shui Po, Muk Hung Street in Kowloon City, On Shun Street and Po Shu Lane in Yuen Long, a section of Man Lai Road in Shatin, and sections of Tai Hong Street and Lei King Road in Eastern, progressively from end 2022. We would review and update the relevant planning standards and design in relation to pedestrian environment and facilities. Examples include enhanced standards for footway widths, pedestrian crossing facilities, and traffic calming street design, etc.

We will continue to work towards the aim of enhancing the walkability of our city for Hong Kong people to commute, connect and enjoy, making walking an integral part of Hong Kong as a sustainable city.

Environmental Objective No. 6 - Efficient Use of Road Space through Application of Advanced Technologies

We aim to reduce the journey times of motorists, and hence the consumption of vehicle fuel and emission of air pollutants from vehicles, through the enhancement of the efficiency of the transport network by promoting the application of intelligent transport systems in the following aspects:

(i) Provision of Transport Information through Internet and Mobile Applications

We have been providing traffic and transport information through the Internet on our Homepage for the motorists and passengers to plan their journeys and make better use of the road network and public transport services.

In July 2018, we launched an integrated mobile application "HKeMobility" to replace TD's 3 previous mobile applications, viz. "Hong Kong eRouting", "Hong Kong eTransport" and "eTraffic News". In March 2021, we enhanced the user interface of the "HKeMobility" mobile application with personalised traffic and public transport information. Public can conveniently and swiftly

search for routes, journey time and fares of different transportation modes and obtain real-time traffic news which facilitate commuting and route planning by the public. The traffic and transport information was also disseminated to the public through DATA.GOV.HK.

As at the end of 2023, the accumulated no. of download of “HKeMobility” was over 2.6 million and the average daily hit rate in Year 2023 was about 144,000.



HKeMobility Mobile Application

(ii) **Dissemination of Real-time Traffic Information on Roads**

To enhance smooth traffic flow and alleviate traffic congestion, we provided efficient traffic monitoring and incident management by installation of traffic control and surveillance (TCS) facilities in tunnels and Tsing Ma Control Area, Tsing Sha Control Area, Kong Sham Western Highway, Tuen Mun Road, Tolo Highway, Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road, Tuen Mun-Chek Lap Kok Link and Cross Bay Link. Real-time traffic information was provided to motorists via the TCS facilities, such as variable message signs, lane control signals, etc.



Journey Time Indication System



Speed Map Panel

To facilitate the public to plan their journeys and select suitable routes or transport modes, we provided Journey Time Indication System (JTIS) at major divergent points towards the three cross-harbour tunnels to show the journey times from the specific divergent points to the exit portals of various cross-harbour tunnels. We also provided Speed Map Panels (SMP) and JTIS at critical divergent points of strategic routes in the New Territories to show the real-time traffic conditions on the roads ahead towards Kowloon. As at the end of 2023, there were 29 sets of JTIS and 5 sets of SMP in Hong Kong in operation.

We have developed a Traffic and Incident Management System (TIMS) to enhance the efficiency and effectiveness in managing traffic and transport incidents and in disseminating traffic and transport information to the public. The TIMS was commissioned in 2017. With the benefit of more real-time traffic information, motorists can better plan their journeys ahead to avoid traffic congestion, thus effectively reducing their journey times.

Since March 2011, we have been disseminating real-time traffic data for free download and value-added re-use by the public through DATA.GOV.HK. We completed the installation of about 1,200 traffic detectors on strategic routes and major roads in 2020 to enhance the coverage of real-time traffic information.

(iii) Operation of Area Traffic Control (ATC) Systems

The Area Traffic Control (ATC) system optimises the utilisation of road capacity, minimizes traffic delay and reduces the journey time of road users through optimization of traffic signals. Due to better coordination of traffic signals resulting in less stop and start activities, fuel consumption and emissions of vehicles are also reduced. As at the end of 2023, out of the 1,997 road junctions operating with traffic signals in the territory, 1,970 were under the control of ATC system.



(iv) “HKeToll” - Free-Flow Tolling System

"HKeToll" is one of the latest smart mobility initiatives as promulgated in the Hong Kong Smart City Blueprint, aimed at utilising technology to enhance the overall efficiency of the transport system in Hong Kong. This initiative does not require the construction of new roadside structure, replaced the traditional manual and automatic toll booths, allowing motorists to pay tunnel tolls without having to stop at toll booths.

The "HKeToll" service is mainly composed of the “HKeToll system” and “Toll Tag”. By using Radio Frequency Identification (RFID) technology, with the support of Automatic Number Plate Recognition technology and Lidar, the system can read the unpowered Toll Tags affixed on the windscreen of the vehicle and tolls can be deducted from the pre-set toll payment accounts automatically.

Since its launch on May 7, 2023, the number of vehicle tags issued by "HKeToll" has covered over 99% of registered vehicles in Hong Kong. Currently, "HKeToll" has been implemented smoothly at all government tolled tunnels and the Tsing Sha Control Area, becoming the primary toll collection system for all vehicles passing through tunnels.

(v) **Time-varying tolls at government tolled tunnels**

“Time-varying tolls” were introduced to private cars and motorcycles using three Road Harbour Crossings (RHCs) in December 2023. It has induced some drivers to switch to other transport modes during the peak time slots or adjust their schedules to use the tunnels during the normal or off-peak time slots. This, coupled with the narrowed toll differentials among the three RHCs during the peak time slots, has rationalised the cross-harbour traffic and better utilised the capacity of the RHCs. The traffic congestion at the Cross-Harbour Tunnel and Eastern Harbour Crossing has been alleviated, as evidenced by the shorter traffic queues and higher travelling speeds on the roads leading to the tunnels. The non-cross-harbour traffic near the portals of the RHCs has also significantly improved due to the alleviated congestion. Meanwhile, the uniform tolls during the normal and off-peak time slots for private cars and motorcycles, as well as the all-day fixed and uniform tolls for taxis and other commercial vehicles across the RHCs, have encouraged drivers to choose the most convenient tunnel for their destination, minimising unnecessary detours.

Environmental Objective No. 7 - Saving Electricity and Maintaining Good Indoor Air Quality at our Facilities

Saving Electricity at our Facilities

Our facilities that have major consumption of electricity are broadly divided into 3 categories for the sake of formulating our electricity saving measures:

(i) Category 1 including all our offices, vehicle inspection centres, and driving test centres

We adopted green office management to reduce electricity consumption in this category of facilities.



Transport Department
Vehicle Examination
Complex

(ii) Category 2 including traffic lights, CCTVs, variable message signs, intelligent transport systems and journey time indication systems, etc, that are in operation round the clock for the purpose of regulating and monitoring road traffic

To reduce power consumption, light emitting diode (LED) lights were adopted in this category of road traffic facilities.



(iii) Category 3 including escalators and public transport interchanges/terminus that serve pedestrians and public transport passengers

There is room for energy-saving but we have to strike a balance between the saving of electricity and the service to the public. The measures adopted to reduce electricity consumption by the facilities in this category include the following:



- Turning off escalators at the end of the operating period
- Turning off the ventilation and part of the lighting of the public transport interchanges/termini as soon as the public transport services cease every night
- Using lighting of low power consumption rating
- Maintaining the ventilation systems properly for them to work efficiently in respect of power consumption

The situation of electricity consumption of the above category 1¹ and 3 facilities since 2010 is shown in the following table:

Year	2010	2011	2012	2013	2014	2015
Electricity consumed (kWh)	3,326,832	3,186,493	2,986,255	2,652,430	2,776,030	2,716,586
Year	2016	2017	2018	2019	2020	2021
Electricity consumed (kWh)	2,787,039	3,037,216	2,725,799	2,558,874	2,586,834	5,662,572
Year	2022	2023				
Electricity consumed (kWh)	5,711,139	6,383,995				

¹ Excluding electricity consumption in joint-user government buildings which are reported by the Government Property Agency

Maintaining Good Indoor Air Quality at our Facilities

In 2003, EPD launched the Indoor Air Quality (IAQ) Certification Scheme to promote and commend good IAQ management practice.

The following eligible premises of TD have joined the IAQ Certification Scheme and obtained a “Good/Excellent” class of indoor air quality in 2023:

1. Queensway Government Offices, 66 Queensway, Hong Kong
2. Harbour Building, 38 Pier Road, Central, Hong Kong
3. Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong
4. Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong
5. Central-Wan Chai Bypass Tunnel Administration Building, Oil Street, North Point, Hong Kong
6. Aberdeen Tunnel Administration Building, Aberdeen Tunnel Administration Building, Wong Chuk Hang, Hong Kong
7. Cheung Sha Wan Government Offices, 303 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon
8. Mongkok Government Offices, Kowloon, 30 Luen Wan Street, Mong Kok, Kowloon
9. West Kowloon Government Offices South Tower, 11 Hoi Ting Road, Yau Ma Tei, Kowloon
10. Cross Harbour Tunnel Administration Building, Cross Harbour Tunnel, Hung Hom, Kowloon
11. Kai Tak Tunnel Administration Building, Kai Tak Tunnel, Kowloon City, Kowloon
12. Kowloon East Government Offices, 12 Lei Yue Mun Road, Kwun Tong, Kowloon
13. Eastern Harbour Crossing Administration Building, New Kowloon Inland Lot 6047, Cha Kwo Ling East, Kwun Tong, Kowloon
14. Tseung Kwan O – Lam Tin Tunnel Administration Building, Lam Tin, Kowloon
15. Lung Shan Tunnel and Cheung Shan Tunnel Administration Building, Wo Keng Shan Road, Ta Kwu Ling, New Territories
16. North District Government Offices, 3 Pik Fung Road, Fanling, New Territories
17. Administration Building, Scenic Hill Tunnel and Airport Tunnel, 38 Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road, Lantau Island, New Territories
18. Tuen Mun Chek Lap Kok Tunnel Administration Building, 1 Ho Wo Street, Tuen Mun, New Territories
19. Tuen Mun Chek Lap Kok Tunnel Main Control Building, 20 Tuen Mun Chek Lap

- Kok Tunnel Road, Tuen Mun, New Territories
20. Transport Department Vehicle Examination Complex, 18 Sai Tso Wan Road, Tsing Yi, New Territories
 21. Tsing Sha Control Area – Nam Wan Administration Building, 16 Sai Tso Wan Road, Tsing Yi, New Territories
 22. Tsing Sha Control Area – Shatin Administration Building, 668 Tsing Sha Highway, Shatin, New Territories
 23. Sha Tin Government Offices, 1 Sheung Wo Che Road, Shatin, New Territories
 24. Lion Rock Tunnel Administration Building, Lion Rock Tunnel, Sha Tin, New Territories
 25. Tate's Cairn Tunnel Administration Building, Siu Lek Yuen Road, Shatin, New Territories
 26. Grand Central Plaza Tower II, 138 Shatin Rural Committee Road, Sha Tin, New Territories



 A form for an Indoor Air Quality Certificate (Good Class). The form is titled 'Indoor Air Quality Certificate (Good Class)' and '室內空氣質素檢定證書 (良好級)'. It includes fields for 'Valid period' (有效期), 'Name of building' (建築物名稱), 'Address' (地址), and 'Certified location(s)' (已檢定地點). There is a section for the 'Approved HKIAS IAQ Signatory' (獲准HKIAS IAQ簽署人員) with fields for Name (姓名), IAQ Certificate Issuing Body (室內空氣質素證書發證機構), Signature (簽署), Date of issue (簽發日期), and Certificate No. (證書編號). The form also contains a declaration: 'I hereby certify that the indoor air quality of the following location(s) has fully complied with the Good Class of the Indoor Air Quality Objectives.' and a note: '(This certificate is issued based on the results of the HKIAS endorsed inspection report no. ... 此證書是根據香港檢驗機構認可的檢驗報告編號 ... 所得之結果發出)'. At the bottom, it mentions the 'Indoor Air Quality Certification Scheme for Offices and Public Places' and the 'Indoor Air Quality Information Centre'.

Environmental Objective No. 8 - Green Office Management

We always keep abreast of the green practices recommended by the Environmental Protection Department and Electrical & Mechanical Services Department and introduce them to our offices whenever appropriate. Our aim is to reduce paper and electricity consumption as far as possible and to use recycled materials as much as possible. The latest green office practices adopted by us are summarized below.

Paper-reduction Measures

- Sharing documents via the Local Area Network and the Internet by uploading reports, circulars and other documents on the Transport Department Intranet and Internet website
- Using e-mails and e-memos within the department and, as far as practicable, when communicating with other departments and the public
- Reducing the font size of the letters and characters, and the line spacing for drafting, and preview of documents before final print
- Issuing tender documents in electronic format
- Printing and photocopying on both sides of paper and on used paper
- Re-using envelopes and loose-minute jackets
- Sending unclassified documents without using envelopes
- Sending electronic seasonal greeting cards
- Sending no originals when these are sent by fax
- Using no covering sheets when documents are faxed
- Using electronic devices to carry departmental publications and consultancy study reports instead of hard copies
- Monitoring the quantity of paper consumed
- Adopting e-Filing system where appropriate



The situation of paper consumption since 2010 is shown in the following table:

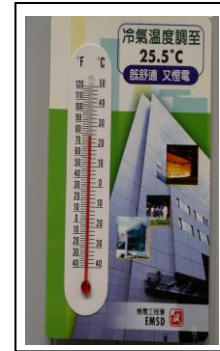
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
A4 Paper equivalent (reams)	27,477	29,464	28,426	28,732	28,804	32,615	28,731	30,982	34,076	30,910	29,854	35,158	34,069	36,025

Energy-saving Measures

- Monitoring and promoting energy-saving measures (e.g. switching off air-conditioning units, computers, etc.) by designated staff
- Setting the air conditioning temperature to 25.5°C in the summer months
- Reminding all staff to switch off lights when not in office



- Turning off unnecessary lighting when the area is not in use and affixing “Save Energy” stickers near switches to remind staff to save energy
- Turning off some air-conditioning units when the occupancy is low (e.g. after normal office-hours)
- Reminding all staff to set all computers and office equipment to energy-saving mode during office hours and to turn them off after use
- Adopting an open plan office concept through the use of half-glass walls to allow light to pass through when designing the layout of a new office
- Using T8 fluorescent lamps to replace T10 fluorescent lamps for energy saving
- Promoting walking up and down the floors instead of using lifts



Recycling Measures

- Providing green boxes for the collection of waste paper and arranging with recyclers to collect waste paper for recycling
- Collecting used printer toner cartridges for recycling
- Promoting the use of recycled paper

Other Measures

- Practising no-smoking policy within all our offices



Environmental Objective No. 9 - Staff Awareness

We strive to develop a green culture within the Department and promote environmental consciousness. To this end we arranged colleagues to attend relevant seminars and programmes on environmental protection, and uploaded relevant information to our intranet for colleagues' reference.

ENVIRONMENTAL ACHIEVEMENTS IN 2023

The progress/achievements versus the targets for 2023 are summarized in the following table.

Objectives	2023 Targets	Progress & Achievements
Reduction in Vehicular Traffic	(i) To continue the existing bus-rail interchange schemes (ii) To continue the existing GMB-rail interchange schemes (iii) To continue the existing taxi-rail interchange schemes (iv) To rationalize more bus routes in busy area and on busy road	(i) The details of bus-rail interchange schemes are as follows: <ul style="list-style-type: none"> • Passengers travelling on Tung Chung Line using adult Octopus were offered \$1 fare discount for interchanging with NLB routes 37, 37H, 37P, 37M, 38, 38X, 39M, N37 and N38 at Tung Chung Station or vice versa; • Passengers travelling on Disneyland Resort Line or Tung Chung Line using adult Octopus were offered \$1 fare discount for interchanging with CTB route B5 at Disneyland Resort or Sunny Bay Stations or vice versa; • Passengers travelling on East Rail Line were offered free interchange with² MTR feeder bus routes K12, K14, K17 and K18 which were operated by KMB at Tai Po Market Station or vice versa³;

² Except Sundays and Public Holidays

³ MTRCL offers free interchange on MTR Bus routes for Tuen Ma Line and Light Rail passengers in North-west Transit Service Area at the moment.

Objectives	2023 Targets	Progress & Achievements
		<ul style="list-style-type: none"> • Passengers travelling on East Rail Line using adult Octopus were offered \$1.0 fare discount for interchanging with KMB route 78A at Fanling Station and interchange with CTB routes 56 and 56A at Sheung Shui Station or vice versa. Besides, passengers travelling on East Rail Line using adult Octopus passengers were offered \$2 fare discount for interchanging with CTB routes 1M and 25A at Exhibition Centre Station or vice versa; and • Passengers travelling on Tuen Ma Line using adult Octopus were offered \$0.6 fare discount for interchanging with CTB routes 22 and 22M at Kai Tak or Sung Wong Toi Stations or vice versa. Besides, passengers travelling on Tuen Ma Line using adult Octopus were offered \$1 fare discount for interchanging with CTB routes E23 and E23A at Sung Wong Toi Station or vice versa. <p>(ii) The details of GMB-rail interchange schemes are as follows:</p> <ul style="list-style-type: none"> • Passengers using Octopus were offered fare discount ranging from \$0.5 to \$3.0 for interchanging between all GMB routes and MTR.

Objectives	2023 Targets	Progress & Achievements
		<p>(iii) The details of taxi-rail interchange schemes are as follows:</p> <ul style="list-style-type: none"> • From 16 December 2022 to 30 November 2023 and from 8 December 2023 to 20 June 2024, taxi passengers were offered 30% fare discount on Airport Express by booking taxi on the designated taxi hailing platform to Hong Kong, Kowloon or Tsing Yi Stations.; and • During the aforementioned period, passengers were offered a taxi fare rebate equivalent to 30% of the Airport Express ticket fare by purchasing the Airport Express ticket from Airport to urban direction at the original price on the designated taxi hailing platform, and then take taxi to transfer to the destination. <p>(iv) Between 2014 and 2023, the cumulative reduction of the number of bus trips in the busy corridors in Central, Causeway Bay and Yau Tsim Mong was 6,762.</p>
Reduction of Vehicular Emissions	(i) In the ex-gratia payment scheme to phase out Euro IV Diesel Commercial Vehicles, about 6,500 vehicles of this category are expected to be phased out within 2023.	(i) The Government announced on 17 April 2023 the special arrangement to extend the deadline for ex-gratia payment application for phasing out Euro IV diesel commercial vehicles first registered in 2008 for one year from 31

Objectives	2023 Targets	Progress & Achievements
		December 2023 to 31 December 2024. Some vehicles owners postponed their phase out plan to 2024. About 5,900 concerned vehicles were phased out in 2023.
Use of Alternative Fuel Vehicles to Replace Old Diesel Vehicles	(i) To continue to encourage more owners to have their diesel Public Light Buses converted to LPG, Euro V or above, or electric ones	(i) As at the end of 2023, there were 3,361 licensed LPG, 56 licensed Euro IV, 691 licensed Euro V or above PLBs and 1 licensed electric PLB.
Use of New Energy	(i) To promote the use of new energy in private cars and commercial vehicles (ii) To take part in the Inter-departmental Working Group on Using Hydrogen as Fuel to promote the development of hydrogen transport. (iii) To take forward the trial of hybrid ferries under the Vessel Subsidy Scheme	(i) In order to facilitate the import of electric vehicles in Hong Kong, TD issued revised guidelines on “Vehicle Construction Approval Requirements for Electric Vehicles” in May 2023 to establish technical requirements for electric vehicles in Hong Kong. Moreover, to facilitate the parallel/individual imported electric vehicles model to be imported to Hong Kong, TD arranged facilitation measure for the trade to introduce electric vehicles in bulk on one hand and to ensure such electric vehicles are in compliance with relevant technical requirements on the other hand. (ii) The number of registered electric vehicles increased significantly in recent years, which has grown by more than 4 times in 4 years, from about 14,000 in 2019 to over 76,000 in 2023.

Objectives	2023 Targets	Progress & Achievements
		<p>(iii) The Government has set up the Inter-departmental Working Group on Using Hydrogen as Fuel in 2022 to coordinate preparation works of bureaux/departments for using hydrogen as fuel locally. Transport Department assists in encouraging local adoption of hydrogen energy, and provided advice on the assessment of hydrogen fuel cell vehicle safety.</p> <p>(iv) Under Phase I of the Vessel Subsidy Scheme, the two operators of ferry services for outlying islands signed the shipbuilding contracts with the shipbuilders in mid-2022 to procure four hybrid vessels for trial starting from Q4 2024 the earliest.</p>
Pedestrian Schemes	(i) To explore opportunities for the implementation of traffic calming schemes to meet public needs	(i) The Administration continued to look for opportunities to improve overall pedestrian environment.
Enhancing Walkability	<p>(i) To continue identify suitable locations for territory-wide application of walkability enhancement measures</p> <p>(ii) To continue the implementation of provision of covers to walkways connecting public hospitals and other selected walkways</p>	<p>(i) Target achieved. Walkability enhancement measures are being implemented progressively at the identified suitable locations.</p> <p>(ii) Construction of ten walkway covers, where were nominated by District Councils, were completed. Construction work of the walkway covers for 5 public hospitals are in progress.</p>

Objectives	2023 Targets	Progress & Achievements
Efficient Use of Road Space through Application of Advanced Technologies	<ul style="list-style-type: none"> (i) To launch a new version of the “HKeMobility” application (ii) To continue the collection and dissemination of real-time traffic data through HKeMobility and DATA.GOV.HK for free download and value-added re-use by the public (iii) To operate, maintain and enhance the Traffic and Incident Management System (iv) To conduct survey to gauge the performance of Area Traffic Control Systems and identify improvements if appropriate (v) To complete the installation of Journey Time Indication Systems (vi) To progressively implement the Free-Flow Tolling System at government tolled tunnels and the Tsing Sha Control Area (vii) To study on “time varying tolls” (previously named “congestion charging”) at government tolled tunnels 	<ul style="list-style-type: none"> (i) Target achieved. (ii) Target achieved, collection and dissemination of real-time traffic data to be continued. (iii) Target achieved. (iv) Car journey time surveys were conducted in the 3rd and 4th quarters and local improvements have been carried out if necessary. (v) Target achieved. (vi) The Free-Flow Tolling System has been implemented at all government tolled tunnels and the Tsing Sha Control Area in 2023. (vii) “Time-varying tolls” were implemented at the three road harbor crossings (RHCs) on 17 December 2023.
Saving Electricity and Maintaining Good Indoor	<ul style="list-style-type: none"> (i) To contain the electricity consumption of our non-office facilities to the level of 2022 as far as 	<ul style="list-style-type: none"> (i) Electricity consumption of our non-office facilities in 2023 was 1.85 million kWh, i.e., comparable to the

Objectives	2023 Targets	Progress & Achievements
Air Quality at our facilities	<p>possible.</p> <p>(ii) To contain the electricity consumption of our office facilities⁴ to the level of 2022 as far as possible.</p> <p>(iii) To maintain a “Good/Excellent” class of indoor air quality at our premises eligible to join the IAQ Certification Scheme.</p>	<p>consumption in 2022.</p> <p>(ii) Electricity consumption of our office facilities in 2023 was 4.53 million kWh, showing an increase of 15% as compared with the consumption in 2022. The rise in electricity consumption was attributed to the following :-</p> <ul style="list-style-type: none"> • Commissioning and operating of the mega Transport Department Vehicle Examination Complex (TDVEC) in Tsing Yi. The TDVEC is a multi-storey facility specifically designed for vehicle examinations. In addition to providing of extra inspection lanes, it incorporates state-of-the-art facilities such as dynamometers, a tilt test platform, a brake test lane, and a parking brake test ramp, etc. These enhancements were necessary to accommodate the growing demand for vehicle examination due to the increased number of vehicles. Consequently, the operational requirements of the TDVEC led to higher electricity consumption. • Extended services of the driving test centers. <p>(iii) Target achieved.</p>

⁴ Excluding electricity consumption in joint-user government buildings which are reported by the Government Property Agency.

Objectives	2023 Targets	Progress & Achievements
Green Office Management	(i) To continue with the green office management practices (ii) To contain the paper consumption to the level of 2022 (iii) To maintain the use of recycle paper to 60% or above of paper consumption	(i) Target achieved, green office management practices to be continued. (ii) Paper consumption in 2023 has increased by 5.3% as compared to the consumption in 2022. (iii) Target achieved, recycle paper contributes 84% of total paper consumption.
Staff Awareness	(i) To enhance staff awareness in related aspects through training and self-learning.	(i) Relevant seminars and programmes on environmental protection were arranged for colleagues. (ii) Relevant information was uploaded to intranet for colleagues' reference.

OUR 2024 OBJECTIVES & TARGETS

Objectives	Targets
Reduction in Vehicular Traffic	<ul style="list-style-type: none"> (i) To continue the existing bus-rail interchange schemes (ii) To continue the existing GMB-rail interchange schemes (iii) To continue the existing taxi-rail interchange schemes (iv) To rationalize more bus routes in busy areas and on busy roads
Reduction of Vehicular Emissions	<ul style="list-style-type: none"> (i) In the ex-gratia payment scheme to phase out Euro IV DCVs, about 6,800 concerned vehicles are expected to be phased out within 2024.
Use of Alternative Fuel Vehicles to Replace Old Diesel Vehicles	<ul style="list-style-type: none"> (i) To continue to encourage more owners to have their old diesel vehicles converted to alternative fuel vehicles
Use of New Energy	<ul style="list-style-type: none"> (i) To promote the use of new energy in private cars and commercial vehicles (ii) To take part in the Inter-departmental Working Group on Using Hydrogen as Fuel to promote the development of hydrogen transport (iii) To take forward the trial of hybrid ferries under the Vessel Subsidy Scheme
Pedestrian Schemes	<ul style="list-style-type: none"> (i) To explore opportunities for the implementation of traffic calming schemes to meet public needs
Enhancing Walkability	<ul style="list-style-type: none"> (i) To continue identifying suitable locations for territory-wide application of walkability enhancement measures (ii) To continue the implementation of provision of covers to walkways connecting public hospitals and other

Objectives	Targets
	selected walkways
Efficient Use of Road Space through Application of Advanced Technologies	<ul style="list-style-type: none"> (i) To continue enhancing the User Interface (UI) / User Experience (UX) of the “HKeMobility” application (ii) To continue the collection and dissemination of real-time traffic data through HKeMobility and DATA.GOV.HK for free download and value-added re-use by the public (iii) To operate, maintain and enhance the Traffic and Incident Management System (iv) To conduct survey to gauge the performance of Area Traffic Control Systems and identify improvements if appropriate (v) To operate and maintain the Journey Time Indication System and Speed Map Panel System (vi) The Government will implement the Free-Flow Tolling System at the Tai Lam Tunnel upon the takeover in May 2025. (vii) To study on toll adjustment for Tai Lam Tunnel
Saving Electricity and Maintaining Good Indoor Air Quality at our Facilities	<ul style="list-style-type: none"> (i) To contain the electricity consumption of our non-office facilities to the level of 2023 as far as possible. (ii) To contain the electricity consumption of our office facilities to the level of 2023 as far as possible. (iii) To maintain a “Good/Excellent” class of indoor air quality at our premises which are eligible to join the IAQ Certification Scheme.

Objectives	Targets
Green Office Management	<ul style="list-style-type: none"> (i) To continue with the green office management practices. (ii) To contain the paper consumption to the level of 2023. (iii) To maintain the use of recycle paper to 60% or above of total paper consumption.
Staff Awareness	<ul style="list-style-type: none"> (i) To enhance staff awareness in related aspects through training and self-learning.