

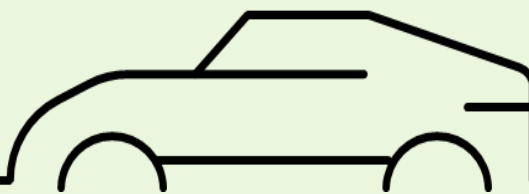


運輸署

Transport Department

Environmental Report

2021



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 2021 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 2021 to 31 December 2021. 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 sent 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 2021, we had an establishment of 35 directorate posts and 1,867 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.

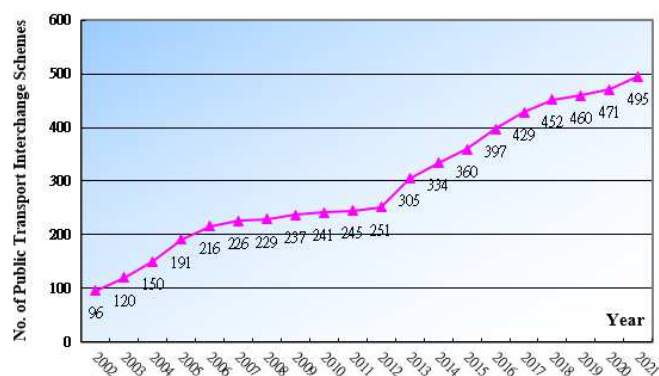
ENVIRONMENTAL OBJECTIVES

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.

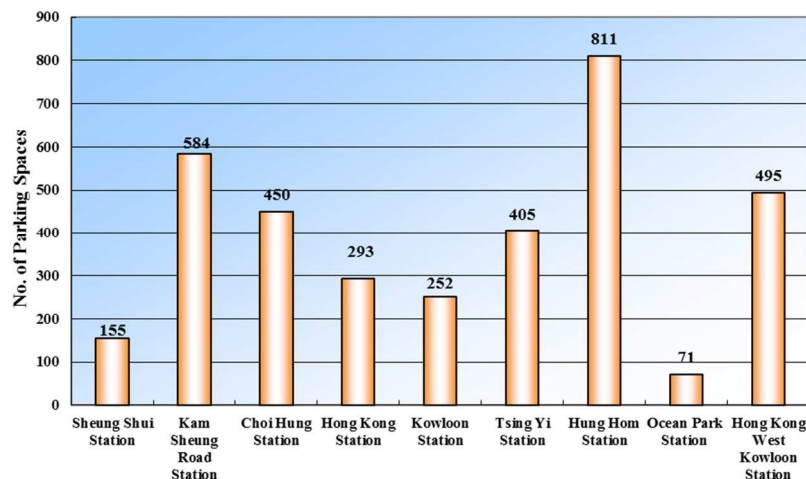


(ii) Rationalization of bus routes and stops

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 2012 and 2021, the cumulative reduction of the number of bus trips in the busy corridors in Central, Causeway Bay and Yau Tsim Mong was 6,326.

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

These facilities are car parks 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 2021, there are a total of about 240km long of cycle tracks and a total of about 40,300 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 2011 and 2021, 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), fine suspended particulates (FSP), nitrogen dioxide (NO₂), and sulphur dioxide (SO₂) have dropped by 46%, 47%, 43% and 58% 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, and for first registered light buses (with a design weight of more than 3.5 tonnes) and buses (with a design weight of not more than 9 tonnes) to Euro VI from 1 March 2021, and launched an incentive cum regulatory scheme in October 2020 to progressively phase out some 40,000 Euro IV Diesel Commercial Vehicles (DCVs) by end 2027. \$7.1 billion was set aside for ex-gratia payment to assist the affected vehicle owners.

(ii) Reducing emissions from franchised buses

In order to reduce emissions from the franchised buses, the Government is preparing 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.

(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) 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 2021, about 99% (i.e. 18,160 Nos.) of the taxis were LPG taxis. Hybrid taxis have started serving Hong Kong since 2013. In addition, we facilitate the Environmental Protection Department (EPD) to implement trial scheme of electric taxis (“e-taxis”), including identifying suitable taxi stands for setting up 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 2021, there were a total of 70 LPG refilling stations in Hong Kong.

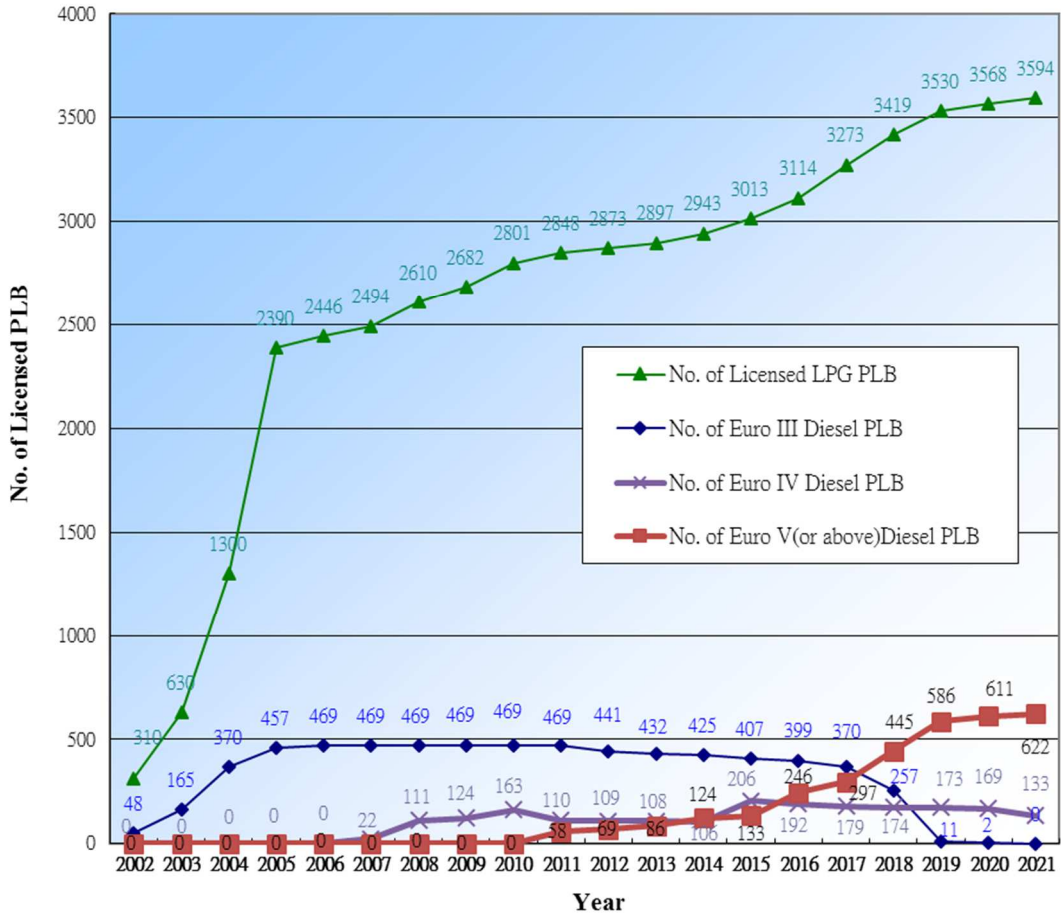
(iii) Phasing out old diesel commercial vehicles (DCV)

Further to the phasing out of 80 000 pre-Euro IV (i.e. Pre-Euro, Euro I, Euro II and Euro III) DCVs, the Government is progressively phasing out about 40 000 Euro IV DCVs before end-2027. Upon completion of the programmes, DCVs with high air pollutant emissions will be retired. Newer DCVs have a service life limit of 15 years and hence will be retired in due course.

(iv) Incentive scheme for phasing out Euro IV diesel Public Light Buses and pilot scheme for electric Public Light Buses

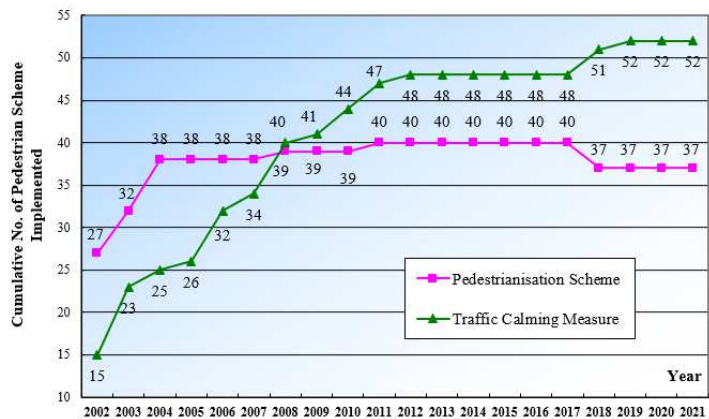
In October 2020, the Administration launched an ex-gratia payment scheme to phase out Euro IV diesel public light buses (PLBs). Eligible PLB owners can use the ex-gratia payment for buying new vehicles. Moreover, we facilitate the EPD to implement the pilot scheme for electric Public Light Buses (“e-PLB”), 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 of charging facilities at the concerned terminus or PTIs.

As at end of 2021, there were 3,594 licensed LPG PLBs, 133 licensed Euro IV diesel PLBs, and 622 licensed EuroV or above diesel PLBs. The numbers of licensed LPG PLB, Euro III, IV and V (or above) diesel PLBs since 2002 are shown in the graph below.



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 were developing a new pedestrian wayfinding system having regard to the experience gained from the pilot 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 provision of a possible walkway 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 assessment for 114 new HEL proposals which were received up to Q3 2017, through a due process for initial screening and proposals prioritisation. We would implement the priority projects selected according to the revised assessment mechanism after local consultation.

(iii) “Make it enjoyable”

To “make it enjoyable” by making walking a pleasant experience, about 390 non-essential traffic signs and 22km of pedestrian railings in the territory were removed as at the end 2021 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 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.

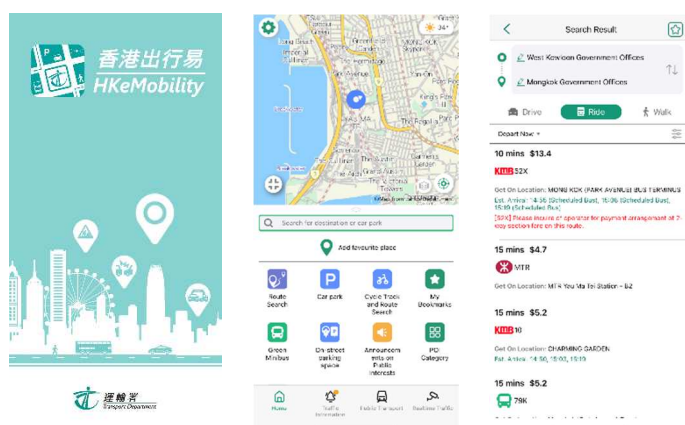
Environmental Objective No. 6 - Efficient Use of Road Space through Application of Advanced Technologies

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 2021, the accumulated no. of download of "HKeMobility" was over 2.6 million and the average daily hit rate was about 50,000.



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 and Tuen Mun-Chek Lap Kok 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 2021, there were 17 sets of JTIS and 5 sets of SMP in Hong Kong in operation. Installation of additional 11 sets of JTIS before

the critical divergent points at major roads over the territory was in progress for completion by end 2022.

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 1200 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 2021, out of the 1,961 road junctions operating with traffic signals in the territory, 1,934 were under the control of ATC system.



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.



Kowloon Bay Vehicle Examination Centre

- (ii) **Category 2 including traffic lights, CCTV, 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:



- Turn off escalators at the end of the operating period
- Turn 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

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 2021:

1. North District Government Offices, 3 Pik Fung Road, Fanling, New Territories
2. Harbour Building, 38 Pier Road, Central, Hong Kong
3. Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong
4. Queensway Government Offices, 66 Queensway, Hong Kong
5. Cheung Sha Wan Government Offices, 303 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon
6. Mong Kok Government Offices, Kowloon, 30 Luen Wan Street, Mong Kok, Kowloon
7. Sha Tin Government Offices, 1 Sheung Wo Che Road, Shatin, New Territories
8. Kowloon East Government Offices, 12 Lei Yue Mun Road, Kwun Tong, Kowloon
9. Cross Harbour Tunnel Administration Building, Cross Harbour Tunnel, Hung Hom, Kowloon
10. Tate's Cairn Tunnel Administration Building, Siu Lek Yuen Road, Shatin, New Territories
11. Tower II of Grand Central Plaza, 138 Shatin Rural Committee Road, Sha Tin, New Territories

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

12. West Kowloon Government Offices South Tower, 11 Hoi Ting Road, Yau Ma Tei, Kowloon
13. Tseung Kwan O Tunnel Administration Building, 1 Tseung Kwan O Tunnel Road, New Territories
14. Lion Rock Tunnel Administration Building, Lion Rock Tunnel, Sha Tin, New Territories
15. Kai Tak Administration Building, Kai Tak Tunnel, Kowloon City, Kowloon
16. Shing Mun Tunnels Administration Building, Shing Mun Tunnels, Tsuen Wan, New Territories
17. Eastern Harbour Crossing Administration Building, Eastern Harbour Crossing, New Kowloon Inland Lot 6047, Cha Kwo Ling East, Kwun Tong, Kowloon
18. Lung Shan Tunnel and Cheung Shan Tunnel Administration Building, Wo Keng Shan Road, Ta Kwu Ling, New Territories
19. Scenic Hill Tunnel and Airport Tunnel Administration Building, 38 Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road, Lantau Island, New Territories
20. Central-Wan Chai Bypass Tunnel Administration Building, Administration Building, Oil Street, North Point, Hong Kong
21. Transport Department Vehicle Examination Complex, 18 Sai Tso Wan Road, Tsing Yi, New Territories



 環境保護署 ENVIRONMENTAL PROTECTION DEPARTMENT		
Indoor Air Quality Certificate (Good Class) 室內空氣質素檢定證書 (良好級)		
Valid period: _____ to _____ 有效日期: _____ 到 _____		
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. 本人證明下列地點的室內空氣質素完全符合「良好級」室內空氣質素指標。		
Name of building: _____ 建築物的名稱: _____ Address: _____ 地址: _____ Certified location(s): _____ 已檢定地點: _____		
Approved HKUAS IAQ Signatory 若獲認可或核准的室內空氣質素簽署人員		
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: _____ Certificate No.: _____ 證書編號: _____		
(This certificate is issued based on the results of the HKUAS 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 _____ 所得之結果簽發)		
Indoor Air Quality Certification Scheme for Offices and Public Places 辦公室及公眾場所的室內空氣質素檢定計劃		
		Indoor Air Quality Information Centre 室內空氣質素資訊中心

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
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

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 2021

The progress/achievements versus the targets for 2021 are summarized in the following table.

Objectives	2021 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 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 MTR Tung Chung Line using adult Octopus were offered \$1 fare discount for interchanging with New Lantau Bus (NLB) routes 37, 37H, 37P, 37M, 38, 38X, 39M, N37 and N38 at Tung Chung Station or vice versa; • Passengers travelling on MTR 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. Besides, passengers could also enjoy free interchange on MTR feeder bus routes K12, K14, K17 and K18 which were operated by KMB at Tai Po Market Station or vice versa²; and • To promote Tuen Ma Line, a “Special Interchange

² MTRCL offers free transfer on MTR bus routes for Tuen Ma Line and Light Rail passengers in North-west Transit Service Area at the moment.

Objectives	2021 Targets	Progress & Achievements
		<p>Discount” in collaboration with franchised bus operators was introduced until 1 January 2022. Adult Octopus users were offered \$1 fare discount for interchanging between designated MTR stations and eighteen franchised bus routes (CTB routes 20, 22, 22M and KMB routes 3B, 5, 5A, 5C, 5D, 5P, 6F, 11, 11K, 11X, 12A, 15X, 21, 26 and 28), while other Octopus holders (including children, elderly, persons with disabilities and students) were offered \$0.5 fare discount.</p> <p>(ii) The details of GMB-rail interchange schemes are as follows:</p> <ul style="list-style-type: none"> • Passengers were offered \$0.3 to \$3.0 fare discount for interchanging between over 500 GMB routes and MTR; and • To promote Tuen Ma Line, a “Special Interchange Discount” in collaboration with GMB operators was introduced until 1 January 2022. Adult Octopus users were offered \$1 fare discount for interchanging between designated MTR stations and six GMB routes 25A, 25B, 26, 27M, 28MS and 49, while other Octopus holders (including

Objectives	2021 Targets	Progress & Achievements
		<p>children, elderly, persons with disabilities and students) were offered \$0.5 fare discount.</p> <p>(iii) Between 2012 and 2021, the cumulative reduction of the number of bus trips in the busy corridors in Central, Causeway Bay and Yau Tsim Mong was 6,326.</p>
Reduction of Vehicular Emissions	(i) To tighten emission standards for first registered vehicles	<p>(i) The statutory vehicle emission standards for first registered vehicles (except for diesel private cars, motorcycles and tricycles) have been tightened to Euro VI by phases starting from 1 July 2017. This measure was completed in 1 March 2021.</p> <p>(ii) The government has implemented an ex-gratia payment scheme to phase out Euro IV Commercial Diesel Vehicles since 2020. About 6,300 vehicles of this category were phased out in 2021.</p>
Use of Alternative Fuel Vehicles to Replace Old Diesel Vehicles	(i) To phase out old diesel commercial vehicles (ii) To continue to encourage more owners to have their old diesel PLBs converted to LPG, Euro VI or above or electric ones	(i) To continuously improve roadside air quality, the Government launched in October 2020 an incentive-cum-regulatory programme to progressively phase out about 40 000 Euro IV diesel commercial vehicles (which include goods vehicles, light buses and non-franchised buses) by the end of 2027. The Administration limited the service life of diesel commercial vehicles newly

Objectives	2021 Targets	Progress & Achievements
		<p>registered on or after 1 February 2014 to 15 years.</p> <p>(ii) The number of licensed LPG PLBs increased from 3,568 in 2020 to 3,594 in 2021. As at the end of 2021, there were 3,594 licensed LPG, 133 licensed Euro IV and 622 licensed Euro V or above PLBs.</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 identify suitable locations for territory-wide application of walkability enhancement measures upon completion of the study on “Enhancing Walkability in Hong Kong”</p> <p>(ii) To implement the 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 six walkway covers, where were nominated by District Councils, were completed in 2022. Design work of the walkway covers for 5 public hospitals are in progress.</p>
Efficient Use of Road Space through Application of Advanced Technologies	<p>(i) To enhance the user interface of “HKeMobility” mobile application with personalised traffic and public transport information and provide additional real-time traffic and transport information</p> <p>(ii) To continue the collection and dissemination of</p>	<p>(i) Target achieved.</p> <p>(ii) Target achieved, collection and dissemination of real-time traffic data to be continued.</p> <p>(iii) Target achieved.</p> <p>(iv) Car journey time surveys were conducted in the 3rd and 4th quarters and local improvements have been carried out</p>

Objectives	2021 Targets	Progress & Achievements
	<p>real-time traffic data for free download and value-added re-use by the public</p> <p>(iii) To operate, maintain and enhance the Traffic and Incident Management System</p> <p>(iv) To conduct survey to gauge the performance of Area Traffic Control Systems and identify improvements if appropriate</p> <p>(v) To continue the installation of Journey Time Indication Systems</p>	<p>if necessary.</p> <p>(v) Completed installation 5 additional sets of Journey Time Indication Systems.</p>
Saving Electricity and Maintaining Good Indoor Air Quality at our facilities	<p>(i) To contain the electricity consumption of our non-office facilities to the level of 2019 as far as possible.</p> <p>(ii) To contain the electricity consumption of our office facilities³ to the level of 2019 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>(i) Electricity consumption of our non-office facilities in 2021 was 1.77 million kWh, an increase of 45% as compared with the consumption in 2019.</p> <p>(ii) Electricity consumption of our office facilities in 2021 was 3.89 million kWh, an increase of 219% as compared with the consumption in 2019. The increase of electricity consumption was mainly due to commissioning of the Transport Department mega Vehicle Examination Complex in Tsing Yi. While it has replaced the three previous vehicle examination centres and released the precious land in urban area for other developments, this</p>

³ Excluding electricity consumption in joint-user government buildings which are reported by the Government Property Agency.

Objectives	2021 Targets	Progress & Achievements
		<p>multi-storey complex (in contrast with the previous open-air vehicle examination centres) with increased covered areas requires more artificial lighting and mechanical ventilation, escalators for transportation of public to various floors, and on-site sewage treatment and hence incurs more electricity for operational needs.</p> <p>(iii) Target achieved.</p>
Green Office Management	<p>(i) To continue with the green office management practices</p> <p>(ii) To contain the paper consumption to the level of 2020</p> <p>(iii) To maintain the use of recycle paper to 60% or above of paper consumption</p>	<p>(i) Target achieved, green office management practices to be continued.</p> <p>(ii) Paper consumption in 2021 has increased by 17.8% as compared to the consumption in 2020. The increase of paper consumption was mainly due to the increase of paperwork in the anti-pandemic campaign.</p> <p>(iii) Target achieved, recycle paper contributes 81% of total paper consumption.</p>
Staff Awareness	<p>(i) To enhance staff awareness in related aspects through training and self-learning.</p>	<p>(i) Relevant seminars and programmes on environmental protection were arranged for colleagues.</p> <p>(ii) Relevant information was uploaded to intranet for colleagues' reference.</p>

OUR 2022 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 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 Diesel Commercial Vehicles, about 6,000 vehicles of this category are expected to be phased out within 2022.
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 diesel Public Light Buses converted to LPG, Euro V or above, or electric ones
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 facilitate the Electric Bus Projects of the Environmental Protection Department and franchised bus companies (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 selected walkways

Objectives	Targets
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 installation of additional 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 “congestion charging” at government tolled tunnels
Saving Electricity and Maintaining Good Indoor Air Quality at our Facilities	<ul style="list-style-type: none"> (i) To lower the electricity consumption of our non-office facilities compared to the level of 2021 (ii) To lower the electricity consumption of our office facilities compared to the level of 2021 (iii) To maintain a “Good/Excellent” class of indoor air quality at our premises which are eligible to join the IAQ Certification Scheme.
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 2021 (iii) To maintain the use of recycle paper

Objectives	Targets
	to 60% or above of total paper consumption
Staff Awareness	(i) To enhance staff awareness in related aspects through training and self-learning.