

2011 Environmental Report

**Transport Branch
Transport and Housing Bureau**

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INTRODUCTION

The Transport and Housing Bureau (THB) headed by the Secretary for Transport and Housing (STH) is responsible for policy matters in two portfolios, viz., Transport and Housing, handled by the Transport Branch (TB) and the Housing Department (HD) respectively. This environmental report covers the environmental performance of TB. On the part of the environmental performance of HD, please visit its website at <http://www.housingauthority.gov.hk/mini-site/hasr1011/index.html>.

TB under the Permanent Secretary for Transport and Housing (Transport) oversees the operation of four executive departments, namely, the Civil Aviation Department, the Highways Department, the Marine Department and the Transport Department.

KEY RESPONSIBILITIES OF THE TRANSPORT BRANCH

We are responsible for the formulation of policies relating to the development of transport infrastructure, provision of transport services, traffic management, maritime transport and logistics, air services and civil aviation management. In the process of policy-formulation, sustainability is also a key consideration.

The major areas of policy responsibilities include –

- planning for and implementing the construction and improvement of our transport infrastructure, with emphasis on railways;
- promoting the usage of public transport services by improving their quality and co-ordination;
- improving cross-boundary rail and road interchanges;
- managing road use, reducing traffic congestion and promoting road safety;
- supporting environmental improvement measures in transport-related areas;
- enhancing and promoting Hong Kong as an international and regional transportation and logistics hub;
- enhancing, in partnership with the Airport Authority (AA), the competitiveness of the Hong Kong International Airport (HKIA) and promoting Hong Kong as an international and regional aviation centre;
- promoting shipping safety and ensuring continued compliance with relevant international standard of ships registered in or visiting Hong Kong; and
- enhancing the competitiveness of the Hong Kong Port and strengthening Hong Kong's position as an international shipping and maritime centre.

ENVIRONMENTAL GOALS OF THE TRANSPORT BRANCH

We are committed to –

- ensuring that our policies are environment friendly;
- ensuring that all programmes and operations under our purview are conducted in an environmentally responsible manner; and
- enhancing staff's environmental awareness.

To achieve the above committed goals, we give effect through pursuit of the following objectives -

LAND AND WATERBORNE TRANSPORT

- We will continue to provide transport infrastructure and services in an environment friendly manner.

CIVIL AVIATION

- We aim to ensure that the legislative framework and administrative measures are effective in minimising the environmental impact of aircraft operations.
- We will continue to work with AA and the Civil Aviation Department (CAD) to ensure that the environmental impact of airport development and operations is minimised and that parties concerned are proactive in minimising pollution and disturbance from activities at HKIA.

PORT AND MARITIME SERVICES

- We aim to ensure that our legislative framework and administrative measures are effective in minimising the environmental impact of shipping and port operations.
- We will continue to work, in conjunction with the Environmental Protection Department (EPD) and the port and maritime community, to ensure that the environmental impact generated from shipping, port development and operations is minimised.

LOGISTICS

- We will continue to work with the logistics community to promote measures to protect the environment and to ensure that the environmental impact of logistics operations is minimised.

ENVIRONMENTAL MANAGEMENT AND PERFORMANCE

LAND AND WATERBORNE TRANSPORT

Hong Kong is one of the most densely populated cities in the world. A safe, efficient, reliable and environment friendly transport system is important to the sustainable development of the city. On environmental management, we will continue to press ahead with the following initiatives -

- priority for efficient and environment friendly transport modes;
- reduction in traffic congestion and better inter-modal co-ordination;
- greater emphasis on pedestrian facilities; and
- application of Information Technology (IT) to transport management.

Priority for efficient and environment friendly transport modes

Railways are environment friendly, safe and efficient mass carriers in Hong Kong, carrying about 40% of our public transport passengers. At present, the total length of our railways under operation is about 219 km.

Following the promulgation of the Railway Development Strategy 2000, we have completed the Kowloon Southern Link, and the following new passenger lines are now under construction—

- West Island Line;
- South Island Line (East);
- Kwun Tong Line Extension;
- Shatin to Central Link; and

- Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link.

Upon completion of these railway passenger lines by 2020, the total length of railways in operation will increase to about 280 km.

We launched the consultancy study on the Review and Update of the Railway Development Strategy 2000 in March 2011 to further our policy for better use of railways as the backbone of the passenger transport system, so as to minimise pollution and land requirement arising from transport infrastructure and to maintain a sustainable transport system. The study is expected to be completed by mid-2013.

The Government will continue with its efforts to enhance the co-ordination between railway and other public transport modes to avoid unnecessary duplication of public transport resources and alleviate traffic congestion. Railway developments and supportive infrastructure will be designed and built to better serve community needs.

As far as electric vehicles (EVs) are concerned, the Transport Department (TD) will continue to formulate measures to facilitate the introduction of EVs into, and their use in, Hong Kong with reference to international practices. To enhance the EV charging network, the Government and the private sector have joined hands to set up around 1 000 standard charging facilities by mid-2012.

□ ***Reduction in traffic congestion and better inter-modal co-ordination***

To reduce traffic in busy areas and hence the impact on the environment, we have taken the following measures -

- implementation of more bus-bus, bus-rail, green minibus-rail and green minibus-green minibus interchange schemes;
- rationalisation of bus routes and stops;
- introduction of Park-and-Ride schemes; and
- containing the growth of private cars.

Bus-bus interchange schemes

Bus-bus interchange schemes are pursued as one of the measures to achieve more efficient use of bus resources, relieve congestion, minimise environmental impact on busy corridors, and reduce the need for long-haul point-to-point bus routes.

Up to end 2011, a total of 245 bus-bus interchange schemes offering fare concessions up to \$30.9 to passengers had been implemented. Through the provision of fare discount incentives and selection of convenient interchanging locations, the implementation of these schemes is well received by the public. On average, some 120 000 passengers use these interchanges everyday. The schemes have also improved the bus network and facilitated inter-district travel whilst minimising the need for introducing additional bus routes.

Bus-rail and green minibus-rail interchange schemes

To promote the interchange between rail and other public transport modes, interchange discount concessions in the form of bus-rail interchange (BRI) and green minibus-rail interchange (GRI) schemes have been introduced. As at end 2011, five franchised bus routes and 55 green minibus routes were offering fare concessions to passengers involved in the BRI (\$1.5) and GRI (ranging from \$0.3 to \$3.0) schemes for the Mass Transit Railway (MTR). Besides, passengers travelling on MTR East Rail Line could enjoy free interchange on MTR feeder bus routes K12, K14, K17 and K18 at designated MTR stations along East Rail Line. At the same time, the Mass Transit Railway Corporation Limited (MTRCL) also offered free transfer on MTR bus routes for West Rail and Light Rail passengers in North-west Transit Service Area at the moment.

Green minibus-green minibus interchange schemes

Green minibus-green minibus interchange schemes are introduced to achieve more efficient use of minibus resources and minimise environmental impact on public roads subject to financial capability of the operators concerned. To promote the interchange between two different green minibus routes, fare concessions were offered to interchanging passengers on 55 routes (ranging from \$0.1 to \$8.5) as at end 2011.

Rationalisation of bus routes and stops

To improve the efficiency of bus operation and to alleviate their traffic and environmental impact, the Government has been working with the franchised bus companies to rationalise bus services and improve bus stopping arrangement.

Through route amalgamation, truncation, modification and frequency adjustment, about 21 bus trips passing through Central per day were removed in 2011. On the Kowloon side, about 122 bus trips were removed from Nathan Road.

Since January 2002, bus companies have deployed only Euro II and above buses on Yee Wo Street to help enhance the environment in the pedestrian-busy corridor. The Government has been working with the franchised bus companies on deployment of more Euro II and above buses on other busy corridors including Hennessy Road, Queensway, Des Voeux Road Central and Nathan Road. As at end 2011, about 97% of the buses deployed on the above busy corridors were Euro II and above buses.

Park-and-Ride schemes

Park-and-Ride (PnR) facilities are usually provided at public transport hubs strategically located on the fringe of busy business/urban areas so that motorists can leave their cars behind and switch to public transport to complete their trips.

PnR schemes have been operating under the management of TD or MTRCL at Hong Kong, Kowloon and Tsing Yi Stations of Airport Express, at Choi Yuen Road near East Rail Line Sheung Shui Station, at Hung Hom Station, at West Rail Line Kam Sheung Road Station, at Choi Hung Station of Kwun Tong Line and some commercial carparks operated by private developers located near Olympic Station of the Tung Chung Line, Hang Hau Station of the Tseung Kwan O Line, and Wu Kai Sha Station of the Ma On Shan Line.

In planning future rail stations and major transport interchanges, especially those on the fringe of the urban area, PnR facilities will be developed wherever appropriate.



Park-and-Ride Facilities

Containing the Growth of Private Cars

The rapid growth rate in the number of private cars has aggravated traffic congestion. To contain the growth of the private car fleet, the Government has increased the First Registration Tax (FRT) rate of each tax band for private cars by about 15%. The Government has also enhanced the FRT concession rate and cap for first registered environment-friendly petrol private cars from 30% and \$50,000 to 45% and \$75,000 respectively. This is to provide sufficient incentives to persuade new private car buyers to go for an environment friendly petrol private car instead of a traditional petrol private car.

Greater emphasis on pedestrian facilities

Promoting better pedestrian environment is one of the means to enhance the quality of life. We continued to implement pedestrian schemes in 2011. In Mong Kok, the trial part-time pedestrian scheme at Sai Yeung Choi Street South, Nelson Street, Soy Street and Tung Choi Street was taking shape and being closely monitored. Comments from the nearby residents and the Yau Tsim Mong District Council will be taken into consideration in the fine tuning and review of the scheme. In addition, we are taking forward feasibility studies on the development of pedestrian subway systems in Causeway Bay and footbridge system in Mong Kok, so as to create space for pedestrian movements, minimise vehicle-pedestrian conflicts and improve roadside air quality. We are also taking forward various measures for improving the walking environment in Yuen Long Town.



Sai Yeung Choi Street South
(part-time pedestrian scheme)

Footpath widening is another effective means to improve pedestrian environment. We have completed the footpath widening works at Kweilin Street in Sham Shui Po and are making good progress on footpath widening works and landscaping works in various districts, including Woosung Street, Ning Po Street and Parkes Street in Jordan.

To improve pedestrian accessibility to uphill areas and to reduce dependence on vehicular access to these areas via congested, steep and narrow access roads, provision of escalator links / elevator systems are to be considered. In this connection, the Government has developed a comprehensive, objective, fair and highly transparent ranking system on the provision of hillside escalator links / elevator systems to determine the merits of the proposals received and the relative priorities for conducting feasibility studies and taking forward the projects. These escalator links / elevator systems will enable pedestrians to overcome height differences and will provide an alternative mode of transportation for pedestrians.

□ ***Application of IT to transport management***

We continue to promote the deployment of advanced information and telecommunication technologies to enhance the performance of the transport system in Hong Kong. Such enhancement enables road users to access real-time traffic information, thus helping them to plan ahead their driving routes or transportation means in a more efficient manner. Road users will enjoy smoother journeys with reduced journey time, thereby contributing towards lower fuel consumption and vehicle emissions.

Journey Time Indication System

In light of the satisfactory performance of the Journey Time Indication System, the system was expanded to cover Kowloon and Hong Kong East in May 2010. The system provides the latest traffic situation for motorists crossing the harbour so that they can make informed route choices and avoid congested tunnels. The real-time cross-harbour journey time is also shown on TD's website.

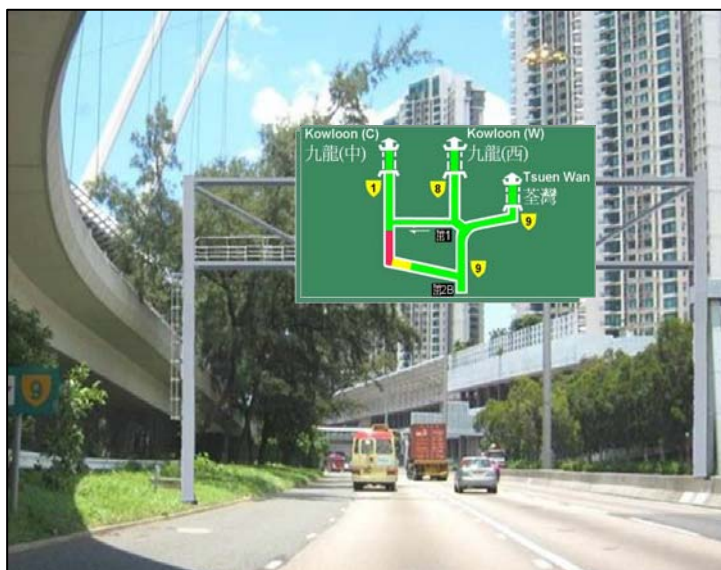
Area Traffic Control System

In view of the significant benefits of the Area Traffic Control (ATC) system in optimising the utilisation of road capacity, minimising traffic delay and reducing vehicle emissions, we have expanded the system in phases to cover more districts. By the end of 2011, we have expanded the system to cover Tseung Kwan O. With the greater coverage of the ATC system, overall traffic delay at intersections is minimised and journey time is reduced. Due to better co-ordination of traffic signals resulting in less stop and start activities, fuel consumption and emissions of vehicles are also reduced.

We also plan to replace the conventional traffic signals with light-emitting diodes (LED) in three phases to reduce power consumption. Phase 1 (Hong Kong Island) and Phase 2 (Kowloon) were completed in May 2010 and March 2011 respectively. Phase 3 (New Territories) is being implemented, and is expected to be completed by end 2012.

Speed Map Panels

We are carrying out a project to install five Speed Map Panels on strategic routes in the New Territories. The project will be completed in late 2012, and the new Speed Map Panels will provide motorists with traffic conditions of the roads towards Kowloon by gantry signs in map format.



Proposed Speed Map Panel at Tai Po Road, near Shatin Racecourse

Traffic and Incident Management System

We are developing the Traffic and Incident Management System (TIMS) to enhance efficiency and effectiveness in managing traffic and transport incidents and in disseminating traffic and transport information to the public. TIMS is scheduled for commissioning in 2015.

Public Services on the Internet

To help motorists and other road users better plan their journeys, we have been providing information on road network, traffic conditions and public transport services on the Internet.

We enhanced the Road Traffic Information Service, which provides real-time traffic information on the Internet to facilitate the selection of optimum transport modes and routes, by launching a mobile version of the website in May 2010.

The Driving Route Search Service, which provides motorists with the optimum driving route options based on selection criteria such as distance, travel time, toll, etc., has been made available on the Internet since April 2010. The mobile version of the website was launched in August 2011. We are developing the mobile phone applications, which will be launched in early 2013.

Since April 2009, the Hong Kong eTransport, which is a one-stop multi-modal public transport route search system with map information, has been made available on the Internet to provide a point-to-point search service covering various public transport modes with map display. To enable commuters to search for public transport routes anytime and anywhere, we launched the mobile version of the website and an iPhone application of the Hong Kong eTransport in August 2011, and we launched the Android application in November 2011.

CIVIL AVIATION

AA and CAD have implemented a range of initiatives to safeguard the environment. The former is responsible for the operation and development of HKIA and the latter is the regulator for civil aviation and provider of air traffic control services.

Initiatives by AA

AA's Environmental Commitment

HKIA is committed to being the greenest airport in the world and a leading environmental performer in Hong Kong. AA's environmental policy focuses on adopting and encouraging practices that minimise pollution and maximise energy and natural resource use efficiencies.

In 2011 AA formulated their first three-year environmental plan. The plan is a living document that will be updated annually with targets for the next three years. The plan now consists of more than 120 initiatives and specific targets. These initiatives demonstrate the commitment to the three "Rs" of environmental protection: reducing, reusing and recycling.

As reported last year, in December 2010, AA led an airport-wide pledge to cut carbon emissions by 25% per workload unit (defined as one passenger or 100 kilogrammes of cargo) by 2015 based on the 2008 levels. To achieve this goal, AA worked with the business partners to develop carbon reduction initiatives covering all major buildings and facilities at HKIA. In September 2011, AA launched an online audit system that helps business partners track their carbon footprint with reports based on their consumption of electricity, water, vehicle fuels, refrigerant, town gas and paper.

AA also minimises its environmental impact by ensuring that the airport can handle the latest generation of aircraft, which makes less noise, uses less fuel and emits less carbon. During the year, to accommodate the new Boeing 747-8 freighter, which has a longer wingspan and fuselage, AA widened a taxiway on the cargo apron.

Minimising Emissions

To reduce both greenhouse gas and air pollutant emissions, AA promotes the use of electric, hybrid and liquefied petroleum gas-powered vehicles at HKIA. From mid-2013, all new sedans in the airport's restricted area will be electric, and AA will ban fossil fuel-powered sedans starting in 2017.

AA reduces air pollution in the airfield by offering fixed ground power (FGP) and pre-conditioned air (PCA) systems, which eliminate the need for aircraft to generate electricity using their auxiliary power units (APUs) while parked. The emissions associated with FGP, which draws electricity from the local utility, are 12% – 20% less than those from APUs. During the year, AA started a project of more than \$100 million to replace the existing, centralised FGP system with 136 standalone units serving all of the parking stands at Terminal 1 (T1). In 2014, AA will ban the use of APUs while aircraft are at parking stands. In 2011/12, AA began replacing the PCA system at 48 parking stands at T1. When the second phase of this project is completed in 2013, the entire PCA system will use a new, low global warming potential refrigerant.

During the year, AA integrated the water chillers in the air-conditioning systems that serve T1, Terminal 2 (T2), the Ground Transportation Centre, HKIA Tower and the Airport World Trade Centre. The modifications give AA additional operational flexibility and will save about 5 million kWh or 2 950 tonnes of carbon emissions annually.

Saving Energy

Lighting represents about 10% of AA's electricity consumption. One of the energy saving initiatives substitutes LEDs for conventional lights, reducing consumption by 40% – 70% per light. In 2011, AA replaced 25 000 lights with LEDs in the Arrivals Halls, Baggage Reclaim Hall, Meeters and Greeters Hall, the ceiling of T2, the automated people mover platforms in T1 and all of the directional signs in T1. AA also began installing LEDs in advertising panels.

In addition to saving energy, AA is testing alternative energy resources. In 2011, AA completed a solar panel trial and started a feasibility study on the use of wind turbines.

Reducing Solid Waste

AA works closely with its business partners to help them cut the volume of solid waste generated at HKIA. During the year, AA introduced green fit-out requirements for licensees. The requirements cover several areas, such as air-conditioning temperatures and the use of energy-efficient lights and timers for lighting on retail displays. In addition, new catering outlets must include adequate kitchen space for washing crockery and cutlery.

In March 2011, AA started a programme to send food waste from the airport's catering outlets to an off-site plant, where it is converted into animal feed. In September 2011, airline caterers, hotels, cargo terminals and other business partners joined the scheme, diverting more than 700 tonnes of food waste from landfills. AA expects the volume of reclaimed food waste to continue growing.

Water Treatment Upgrade

In April 2011, AA began a \$34 million upgrade of greywater treatment plant. When the project is completed in June 2012, the plant will use an aerobic treatment process based on membrane biological reactor technology. The upgrade will increase the capacity to generate quality treated water from 1 500 to 6000 cubic metres per day.

Green Roofs

In 2011, AA completed a successful trial of a 100-squaremetre green roof on the Seawater Pump House. By October 2012, AA will have installed vegetation-covered roofs on the T1 Limousine Lounge and SkyPier. AA will use the data gathered from those buildings to plan future installations, with a goal of adding green roofs to five of their buildings by 2014.

Environmental Awards

In 2011/12, for the Hong Kong Awards for Environmental Excellence, AA received the gold prize in the public organisations and utilities category, as well as a “Class of Excellence” Energywi\$e label; a “Class of Excellence” Wastewi\$e label; a “Class of Good” IAQwi\$e label for the air quality in the T1 Departures level, Check-in and Arrivals halls; and a Carbon “Less” Certificate for reducing the carbon emissions in HKIA Tower and T2.

EPD recognised the air quality in T1, T2, the North Satellite Concourse and SkyPier with a “Good Class Certificate”. AA won a Capital Entrepreneur Green Enterprise award in 2011 and received the Best Environmental Responsibility award in the Asian Excellence Recognition Awards 2011 organised by Corporate Governance Asia. In the Hong Kong Green Awards 2011, AA received a gold in the large corporation category. AA won a “Friends of EcoPark” award from EPD and, in the “Take a ‘Brake’ Low Carbon Action Corporate Green Driving Award Scheme” organised by Friends of the Earth (HK), AA received gold awards for improving fuel efficiency and reducing fuel consumption. Finally, AA was awarded a gold prize by Airports Council International in the ACI Asia-Pacific 2011 Green Airports Recognition.

□ ***Initiatives by CAD***

CAD has implemented a series of aircraft noise mitigation measures and has kept close and continuous monitoring. Such measures include noise abatement departure procedures, Continuous Descent Approach procedures, and the use of flight paths over water to avoid overflying residential areas whenever possible.

For aircraft departing to the northeast of the airport, CAD requires all airlines to adopt the noise abatement departure procedures stipulated by the International Civil Aviation Organisation.

In 2011, CAD recorded that 87% (the remaining percentage was due to weather) of arriving aircraft were able to land from the southwest of HKIA (i.e. over water) between midnight and 7 a.m.; and 99% of aircraft departing to the northeast of the airport were able to take the southbound route over the West Lamma Channel between 11 p.m. and 7 a.m.

Only aircraft meeting stipulated requirements in Chapter 3 of Annex 16 Volume I Part II of the Convention on International Civil Aviation are allowed to operate at HKIA. All aircraft operating at HKIA meet stringent noise standards.

CAD also provides periodic reports on its website on aircraft noise measurements. Moreover, CAD meets members of the public and maintains a hotline to handle enquiries or complaints on aircraft noise.

Rationalisation of air route system

Taking advantage of the latest development in satellite navigation technologies, CAD has been able to achieve rationalisation of the Hong Kong air route system with a view to enhancing its operating efficiency.

CAD has implemented new air routes with effect from 22 October 2009, which have shorter travelling distances for aircraft arriving from the west and the north of Hong Kong. Each arrival flight from the Mainland, South East Asia and Europe has been able to save up to about 210 kilometres in flight journey or 14 minutes in flight time. During 2011, more than 63 000 flights benefited from these shortened routes.

Through collaborative efforts with adjacent air traffic control centres, CAD has implemented reduction of spacing requirement between flights on air route M750/B576 transiting the Hong Kong and Taipei Flight Information Regions for Korea since July 2011. By reducing spacing requirement between flights, the air route capacity is increased and more aircrafts are able to fly at optimum and fuel efficient altitudes, thereby achieving fuel saving and reduction of CO₂ emission. Since implementation, around 8 500 flights have used these routes between July and December 2011.

Furthermore, CAD is preparing for the implementation of an additional set of noise mitigating departure procedure, which involves the use of satellite navigation. For aircraft departing to the northeast of the airport, the procedure makes use of modern aircraft's on-board navigation capabilities to achieve higher track-keeping accuracy, in particular during the turn around Lantau Island towards the south. The aircraft noise footprint can therefore be confined, reducing the overall aircraft noise effect on residential areas in the vicinity of the flight path.

CAD would continue to develop and progressively apply more advanced aviation technologies and closely work with other air traffic control authorities and the airline operators to further enhance the air route system in the Hong Kong Flight Information Region.

PORT AND MARITIME SERVICES

The Marine Department (MD), which is responsible for maritime and navigational safety matters within the waters of Hong Kong, has implemented various initiatives to protect and improve the environment -

- MD operates a fleet of patrol vessels to ensure compliance with marine regulations against offences such as littering, illegal transfer or discharge of oil, and smoke emission by ships in Hong Kong waters.
- MD monitors the exhaust of vessels and conducts spot checks on vessels within Hong Kong waters. On receipt of complaint and sufficient evidence of excessive dark smoke emission causing nuisance, MD will initiate prosecution.

- MD adopts performance-based contract for the scavenging of floating refuse and collection of refuse from ocean-going ships and local vessels to ensure the effectiveness and efficiency of the marine cleansing services.
- MD maintains a Maritime Oil Spill Response Plan to co-ordinate departmental actions for handling oil pollution incidents in Hong Kong waters and continues to fulfill the pledge to respond on site within two hours of reported oil spillage inside harbour limits.
- MD has signed a co-operation arrangement with the port administration of Guangdong, Shenzhen and Macao to adopt the Regional Maritime Oil Spill Response Plan for the Pearl River Estuary.
- MD maintains energy saving plans to minimise energy consumption in the China Ferry Terminal and the Hong Kong-Macau Ferry Terminal by economising on the use of lighting and air-conditioning.
- MD has adopted green measures on all fronts in the operation of the Government Dockyard (GD), including annual review and upgrading of facilities with environment friendly engines, equipment and products, regular air quality checks on indoor worksites and emission measurements for engines installed on government vessels, etc. The shore power supply facilities were installed at GD in November 2011 with a view to reducing noise pollution and exhausting gas emission from generators of lay-by vessels.
- MD implements relevant international conventions on marine pollution prevention through the enactment and enforcement of legislation. These conventions include the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78), and the International Convention on Oil Pollution Preparedness Response and Co-operation 1990. These conventions apply to all ships in Hong Kong waters and Hong Kong registered ships anywhere in the world.

- MARPOL 73/78 has six Annexes to prevent or minimise pollution from ship operations in respect of (I) oil; (II) noxious liquid substances in bulk; (III) harmful substances in packaged form; (IV) sewage; (V) garbage; and (VI) air pollution. All six Annexes have been extended to the Hong Kong Special Administrative Region.
- We also work closely with operators of container terminals, mid-stream and river trade operators to preserve a clean and safe environment for sea transport. We encourage the application of IT in port operations. For example, MD has established an “Extensible Markup Language Dangerous Goods System” to facilitate the direct system-to-system submission of dangerous goods manifests by shipping operators. As to the provision of e-business service, the Electronic Business System has provided features such as auto-approval for online application, online payment via auto-pay, self-printing of Permits/Certificates, and online enquiry for application status. Port operators have widely adopted the Electronic Data Interchange for exchanging information in day-to-day operation. The above measures have vastly enhanced the efficiency and competitiveness of the port as well as reduced the consumption of paper.
- Container terminal operators have also implemented other measures, such as the use of energy saving equipment, reduction of unnecessary light fittings, installation of grease traps and oil interceptors in workshops and kitchens, engaging specialised contractors to handle waste disposal, and the use of electricity-powered cranes and liquefied petroleum gas shuttle buses to reduce air pollution.
- We recognise that the protection of the marine environment is not only important in its own right but also instrumental in enhancing Hong Kong’s position as a world-class port. In the course of port planning and development, we will continue to work with EPD and the Sustainable Development Unit to comply with relevant environmental impacts and sustainability assessment requirements.

LOGISTICS

We encourage the use of paperless exchange of information in the logistics industry through the promotion of wider use of IT along the supply chain. For example, a study on cross-border supply chain visibility is underway to explore the feasibility of establishing an electronic platform for tracing cross-border movement of goods. Besides, we had sponsored the On-Board Trucker Information System (OBTIS) pilot study which was completed in October 2011. OBTIS provides an information and technology platform for enhanced efficiency in fleet management and better communication between truckers and stakeholders of the supply chain. OBTIS is now being operated on a commercial basis.

GREEN OFFICE MANAGEMENT

MANAGING PAPER AND ENERGY CONSUMPTION

It is our mission to improve and conserve our environment, and to optimise the use of resources to reduce pollution and waste. We strive to implement various green housekeeping measures in daily office operations with a view to maintaining a green workplace. Our main focus of the green office management is on reducing paper and energy consumption.

With the advocacy of environmental conservation over the past few years, staff awareness in this respect has been greatly enhanced and staff members have developed good practices by adopting the following green initiatives -

On Paper Consumption

- to use recycled paper in office operations;
- to print and photocopy on both sides of paper;
- to reuse single-side used paper for drafting, printing and receiving fax;
- to reuse envelopes and loose minute jackets for internal transmission of documents and correspondence;
- to communicate and disseminate information by electronic means within bureaux/departments as well as with members of the public;
- to avoid printing or photocopying documents unless hard copy is absolutely necessary;
- to distribute soft copies by emails, diskettes or CD-ROMs instead of print-outs; and
- to upload reports, circulars and other publicity materials on e-bulletin board, intranet and internet websites for general reference.

□ ***On Energy Consumption***

- to turn off some lighting when the occupancy is low, e.g. during lunch and after office hours;
- to use sensors to automatically switch off unnecessary lighting in office areas and public communal areas such as reception counters, corridors, lift lobbies, etc., during lunch and after office hours;
- to maintain office temperature at 25.5°C during the summer time;
- to activate the standby or hibernation mode features of personal computers;
- to switch off personal computers (including both monitor and computer processing unit) after office hours;
- to switch off non-essential servers at night, on Saturdays, Sundays and public holidays;
- to check the effectiveness of energy saving measures regularly; and
- to encourage staff to walk up or down one or two storeys instead of using the lift.

GREEN PURCHASING

“Green” stationery items supplied by the Government Logistics Department, such as clutch pencils, refillable ball pens, recycled pencils and furniture made of chip board, are now widely used in TB. Other green items, e.g. recyclable laser printer toner cartridges and box files made of recycled paper, are also ordered from contractors for office use.

It has all along been our practice to purchase only office equipment, such as photocopiers and printers, with Energy Efficiency label. We also use e-tender whenever applicable.

STAFF AWARENESS

The support and co-operation of staff members are always the key to the success of our green office management. We will continue to work closely with our staff with a view to fostering a green culture and ensuring that our offices operate in an environmentally responsible manner.

VIEWS AND SUGGESTIONS

Views or suggestions in connection with this Environmental Report can be sent to us via email at environmentalreport@thb.gov.hk, by fax (fax no.: 2868 4643), or in writing to 20/F, East Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, Hong Kong.