

Lands Department Environmental Report 2020

Introduction

In this environmental report, we set out our environmental policy and related performance in 2020. Since the inception of annual environmental reporting twenty-one years ago, we have attached increasing importance to environmental protection and preservation. We are committed to the development and promotion of a green culture in our daily work and among our staff. We welcome any suggestions on how we may better achieve our environmental objectives.

Key Responsibilities of the Department

The Lands Department (LandsD) is responsible for the administration of land throughout the territory. The specific responsibilities of our three functional offices are as follows:

- ***Lands Administration Office***

Disposal of land for development purposes including land grant, lease modification, land exchange and renewal of existing leases, acquisition of private land for public projects, valuation of land and property, land control and lease enforcement, maintenance of slopes on unleased and unallocated government land, ad hoc maintenance of vegetation on unleased and unallocated government land not managed by other specified government departments, and provision of expert advice on landscape and tree issues related to development control on private land and dangerous trees on private land.

- ***Survey and Mapping Office***

Land and aerial survey, map production, maintenance of the geodetic control network, maintenance of the land information system for mapping data and land record information, provision of web map services and administration of the Land Survey Ordinance (Cap. 473).

- ***Legal Advisory and Conveyancing Office***

Provision of legal advisory and conveyancing services primarily to the Department, giving consent to the pre-sale of uncompleted units and approval of deeds of mutual covenant.

Environmental Policy

In carrying out our land administration functions, we support environmental

protection and improvement by:

- formulating and implementing departmental policies and practices in line with the Government's environmental objectives;
- joining hands with other government departments to improve the environment of Hong Kong;
- developing a culture of environmental protection and awareness among staff members; and
- employing best practices in green housekeeping including adoption of energy-efficient measures in daily operations and publication of information on energy and fuel use.

Land Disposal

We will make available land or enter into land transactions with leaseholders of existing private properties for development purposes. Through the incorporation of appropriate lease conditions in land grants, land exchanges and lease modifications, and engineering conditions in the allocation of government land to government departments, we also provide, where appropriate, a vehicle whereby the Government may exercise control over environmental issues, or implement its environmental initiatives which are related to land but are outside the purview of the existing statutory framework. Some examples of the above are as follows:

- ***Liquefied Petroleum Gas***

We continue to render full support to the Government's policy initiative with regard to Liquefied Petroleum Gas (LPG) and provide sites for petrol filling stations with LPG filling facilities, where suitable. In 2020, one site for petrol filling station purposes with the requirement of providing facilities for supply of LPG to motor vehicles was sold by public tender.

- ***Sites for Waste Recycling and Waste Management***

We work with the Environmental Protection Department to identify suitable sites for the waste recycling industry. As at the end of 2020, we were managing a total of 40 short term tenancies for waste recycling use.

- ***Control on Contamination of Land***

Where there may be potential risk of contamination arising from various specific land uses such as petrol filling stations, we incorporate relevant environmental protection requirements in land leases. This measure has been extended to cover sites let by short term tenancies or being held under government land allocations by other departments.

- ***Optimising Development Density***

For sites included in the 2021-22 Land Sale Programme, air ventilation assessment has been or will be conducted where required. Such assessment assists us to incorporate where necessary specific development parameters or restrictions in the Conditions of Sale for the sites concerned.

- ***Fostering a Quality and Sustainable Built Environment***

The Government announced detailed measures in October 2010 to enhance the design standard of new buildings for fostering a quality and sustainable built environment in Hong Kong. The Buildings Department promulgated in January 2011 the practice notes to implement the measures with effect from 1 April 2011. Appropriate requirements on sustainable building design are also incorporated in the lease conditions. Moreover, lot owners are obliged under a landscape clause to landscape and to plant trees and shrubs on any parts of the lot not built upon and thereafter maintain the same satisfactorily. A new Practice Note No. 1/2020 setting out the streamlined approval process and time frame has been issued to facilitate the handling of relevant submissions.

- ***Tree Preservation***

We continue to play a key role in tree preservation, mainly through drafting of lease conditions and approval of development and landscaping plans. All applications for tree works in private developments and public projects are carefully examined, with due consideration given to preservation, transplanting and compensatory planting. A new Practice Note No. 2/2020 and the guidance notes setting out the streamlined approval process and time frame have been issued to facilitate the handling of relevant submissions.

We conduct pre-land sale tree surveys, where required, so as to identify whether or not there are any trees of particular value within the sale site.

- ***Electronic Submission of Building Plan***

The Buildings Department is spearheading the development of the Electronic Submission Hub (ESH) into a digital centralised portal for receiving and processing building plans and applications, as an alternative to the present paper-based system. We will continue to liaise with the Buildings Department regarding the development of ESH to facilitate the handling of building plan submissions.

Land Management

Our target is to maintain and where appropriate improve the environmental conditions of all unallocated government land and private land through effective land control and lease enforcement measures. Some specific tasks carried out in 2020 are set out below:

- We posted 43 387 government land notices under the Land (Miscellaneous Provisions) Ordinance (Cap. 28) for clearance of unauthorised dumping or occupation of government land. We issued another 949 warning letters to private land owners in respect of nuisances, erection of structures or conversion of uses not permissible under the leases.
- Our District Lands Offices joined hands with other government departments in providing off-street bicycle parking spaces to encourage the use of this environmentally-friendly mode of transport.
- In addition to cutting grass on a regular basis at 1 246 sites on government land, as part of the Government's effort in the anti-mosquito campaign, we removed rubbish and waste and drained stagnant water on another 2 392 sites, some of which were illegal cultivation blackspots and fly-tipped sites.
- We also broadcast messages on both television and radio to appeal to the general public not to build, buy, rent or occupy any unauthorised structures on private agricultural land or government land. Such activities could lead to serious consequences.
- To contain the proliferation of placing skips for collection of renovation debris in public streets, we conducted 606 inspections and 8 clearance operations.
- We enhanced the appearance of 100 man-made slopes by planting vegetation or applying landscape treatments, such as stone facing during improvement works under our preventive maintenance programme.
- To raise public awareness of the serious consequences of unlawful occupation of government land and to advise the public of the revised penalties under section 6 of the Land (Miscellaneous Provisions) Ordinance (Cap. 28), posters were sent to District Lands Offices, government offices, the Heung Yee Kuk, rural committees, village offices etc. for display.
- Two versions of roadside banners were displayed at designated spots in the territory with a view to educating the public not to occupy government land unlawfully or erect unauthorised structures on private agricultural land.

Acquisition

To facilitate early implementation of sewerage improvement works in the New Territories, we acquired private land under the relevant ordinance. In 2020, we acquired 2 899 m² of private land and also made available 30 487 m² of government land in Tai Po, North District and Sha Tin for carrying out local sewage works.

Survey and Mapping

- *ISO 14001 Environmental Management System*

Our Survey and Mapping Office (SMO) has adopted an Environmental Management System (EMS) since 2007. In implementing the EMS, SMO takes into account environmental considerations in project planning and execution, office administration as well as in every stage of the survey and mapping process. The performance of SMO in these areas is regularly audited. Both the internal environmental audit conducted in June 2020 and the external audit conducted by an external certification body in September 2020 confirmed that SMO had been in full compliance with the 2015 version (i.e. the latest one) of ISO 14001 EMS requirements.

- ***Open Data***

To promote the use of digital maps and digital spatial data and to align with the Government's open data policy, SMO has released six sets of open maps and nine sets of open spatial data for free commercial and non-commercial uses. These open maps and data are available for download from LandsD's website (<https://www.landsd.gov.hk/en/spatial-data/open-data.html>) and the public sector information portal (<http://www.data.gov.hk>). Open data in digital format promotes paperless applications and reduces the use of environmentally-unfriendly storage devices such as CDs/DVDs. Moreover, LandsD is identifying more data and digital map products which can be made available to the public. The ever-increasing use of digital maps will lead to further reduction in paper consumption.

- ***Hong Kong Map Service 2.0 (HKMS 2.0)***

HKMS 2.0 (<http://www.hkmapservice.gov.hk>) has strengthened its online map sale and order services to support applications for copyright licences to reproduce maps/photographs in both digital and paper formats, in addition to the sale of digital and paper map products of SMO. Since the launch of "Application for Copyright Licence" on 29 July 2019, over 300 applications for such copyright licences have been processed on HKMS 2.0. Customers can place orders for map products on this online system. The workflow of processing these orders on HKMS 2.0 is also paperless by design.

- ***Geospatial Information Hub (GIH)***

GIH is a web-based information platform for searching, displaying and sharing a vast amount of geospatial data through the government intranet. Various geospatial data from different departments, including digital maps, aerial photographs, heritage sites and other land record information, can be conveniently overlaid for viewing on computer screens, which reduces the need for paper maps.

On IT infrastructure, virtualisation technology has been adopted progressively since mid-2013 whereby a single computer server is used for operating multiple applications and map services. In 2020, several new energy-efficient and high-performance servers were procured, which resulted in decommission

of about 3% of the total physical servers and some reduction in electricity consumption.

- ***GeoInfo Map and MyMapHK***

Launched in May 2010, GeoInfo Map is a web map service that allows the public to access up-to-date digital maps of Hong Kong as well as over 300 types of geospatial information on the public facilities and services provided by 29 government departments. It also offers location search and useful map tools for users to enhance their map viewing experience on the digital platform.

The launch of the mobile application, MyMapHK, on both the iOS and Android platforms in June 2014 has further extended the web map services to users of mobile devices.

With the implementation of GeoInfo Map and MyMapHK by LandsD, the public can conveniently access geospatial data from different sources on the Internet. Compared with the traditional way of using map information such as to locate directions and other information on a paper map, these new platforms promote the use of digital maps with a view to reducing paper consumption. Likewise, other government departments can make use of these common platforms to deliver their geospatial information and hence the efforts required for establishing, operating and managing their own platforms to disseminate geospatial information can be greatly reduced, which helps lower costs and facilitate energy saving within the Government. For example, LandsD worked closely with the Environmental Protection Department in publishing various facility data, including the static data, namely “Environmental Exhibition & Resource Centres” and “Charging Points for Electric Vehicles”, together with the real-time data, namely “Air Quality Health Index” and “Beach Water Quality Index”, on GeoInfo Map for searching and viewing.

- ***Hong Kong GeoData Store***

Launched in late 2018, the Hong Kong GeoData Store, the alpha version of the Common Spatial Data Infrastructure, is a web geospatial data portal that supports the public and developers in using geospatial data, map-related services and APIs for different applications. Since the launch of this portal, the public and private sectors can save the efforts required for processing, publishing and managing repeated data.

- ***Land Information System Portal (LIS Portal)***

LIS Portal was launched in August 2018 for staff of LandsD to search and retrieve registered land documents on the departmental intranet. Through the LIS Portal or its linked map view of the Geographic Information Retrieval System 2, users can search with locational or textual searching functions and to retrieve registered land documents associated with the lots. The portal has centrally kept the previously procured registered land documents as well as the

essential land documents arranged for registration by LandsD since 2018, thereby reducing the need for paper prints in daily operation.

- ***Map Application Programming Interface (Map API)***

Map API was officially launched on 3 December 2020 for both the public and government bureaux and departments to make use of the interface for provision and dissemination of map-related information via API protocol. Map API reduces the time and efforts required for system developers to build and maintain their map-related products. Both the general public and developers can now easily embed LandsD's standard topographic maps and imagery maps in their applications by using Map API and they are no longer required to order and process raw digital maps from LandsD for basic map presentation in their applications.

- ***Online Geodetic Survey Information***

The provision of Online Geodetic Survey Information service for the public commenced in October 2006. Thanks to the launch of the service, the public can browse and download horizontal and vertical survey control data and other reference documents related to geodetic survey from SMO's website (https://www.geodetic.gov.hk/en/gi/gsi_index.htm). Geodetic Survey Station Summary and relevant data can be downloaded for free. The monthly average download rate was about 20 000 times in 2020. This service has greatly reduced the need for hardcopy geodetic information while enhancing the effectiveness and efficiency of service delivery.

- ***Electronic Map Book***

"*eHongKongGuide*", an electronic map book produced by LandsD, has been available for free download on the departmental website since 2017. Based on the paper version of *Hong Kong Guide*, "*eHongKongGuide*" not only provides detailed maps covering the territory of Hong Kong, but also carries comprehensive information on geographic features and community facilities in digital form. The launch of "*eHongKongGuide*" helps reduce the number of printed copies of *Hong Kong Guide*, which has decreased by 26% compared with that of 2017.

Green Housekeeping

We are committed to the promotion of a green culture in the workplace. We have established house rules on green office management for staff to follow.

- ***Environmental Management and Auditing***

The Departmental Secretary is our Green Manager who coordinates and reviews our green housekeeping initiatives. Green Executives have also been appointed in individual sections/groups of offices to coordinate and monitor

green housekeeping measures and to encourage staff participation in green housekeeping in their offices. In addition, an Energy Warden is appointed in each office to ensure strict implementation of energy saving measures.

The Green Executives are also tasked with conducting quarterly reviews and audits of green management practices in their offices, focusing on aspects such as paper and energy saving. They also ensure other green management practices (e.g. air conditioning units, lightings and other electrical equipment are switched off when not required/in use) are followed through.

- ***Experience Sharing and Training***

To maintain momentum in environmental protection, we continued to provide training for our staff in 2020. A total of 16 Green Executives/Energy Wardens or their assistants were nominated to attend workshops on energy efficiency and green management organised by the Electrical and Mechanical Services Department. We will identify more training opportunities to promote staff awareness of the importance of environmental protection.

For experience sharing, we have created the “Green Corner” webpage on the departmental intranet to promulgate our green housekeeping policies, green tips, best practices, and other useful information. All new staff are informed of our green measures and initiatives via the welcoming email message when they join the department.

- ***Energy Conservation and Consumption***

According to the 2019 Policy Address, the Government endeavours to achieve a “Green Energy Target” of 6% saving on energy consumption in government buildings and infrastructure facilities from Financial Year (FY) 2020-21 to FY 2024-25 under comparable operating conditions, using FY 2018-19 as the baseline. The total electricity consumption of our venues/facilities installed with separate electricity meters in FY 2018-19 and FY 2020-21 is tabulated below:

	Actual electricity consumption (million kWh)	Electricity consumption of similar venues/facilities under comparable operating conditions (million kWh)
FY 2018-19 (baseline)	1 671 711	1 507 025
FY 2020-21	2 004 215 (+19.9%)	1 502 088 (-0.3%)

Note: The figure of electricity consumption under comparable operating conditions should have taken into consideration significant changes in premises, plants and equipment, number of staff, services, service hours, demand for services etc. for a like-for-like comparison with the baseline.

As set out above, the change in electricity consumption of our venues/facilities from FY 2018-19 to FY 2020-21 was +19.9%.

Under comparable operating conditions in FY 2018-19, the saving on electricity consumption of similar venues/facilities in FY 2020-21 was -0.3% after the implementation of some housekeeping measures. For example, simple and cost-free measures have been introduced to improve the energy performance of air conditioning, lighting and energy consuming equipment. Green tips on energy saving have been promulgated for compliance by staff. We also continue to implement established measures such as setting the air conditioning temperature at 25.5°C.

- ***Fuel Consumption***

The major user of fuel is our vehicle fleet. We have instructed our Motor Drivers to strictly comply with the requirements set out in the Motor Vehicle Idling (Fixed Penalty) Ordinance (Cap. 611), which took effect on 15 December 2011. Switching off vehicle engines whilst waiting helps reduce exhaust emission and fuel consumption.

The total fuel consumption of our vehicle fleet was 187 786 litres in 2020, representing a decrease of 36% as compared with the consumption in the previous year. The decrease in fuel consumption was attributable to the delivery of some new vehicles with environmentally-friendly designs in 2020 and a decrease in vehicular usage during the periods of special work arrangements for government departments to reduce the risk of the spread of Covid-19 in the community.

- ***Paper and Envelope Consumption***

Departmental information such as circulars and notices are mainly disseminated through emails and the intranet to staff. Tablet PCs and notebooks are increasingly used at designated internal meetings with a view to reducing paper usage. Our environmental performance in terms of paper and envelope consumption since 2016 is indicated in Figure 1 and Figure 2 respectively. When compared with 2019, a decrease of 14.7% both in paper consumption and envelope consumption was recorded. We are generally satisfied with the results in view of the increased departmental activities in 2020.

- ***Paperless Meeting***

We have introduced the use of notebook computers for most professional staff and set up wireless LANs at meeting rooms in the Headquarters to facilitate the practice of paperless meetings. Thanks to secure wireless network connection, meeting participants can retrieve and share documents by using their notebook computers without printing them out. It helps reduce the consumption of paper for printing meeting documents, which are usually in

multiple copies and for one-off use.

- ***Waste Recycling***

In 2020, we collected about 28 938 kg of waste paper, 6 045 used toner cartridges and 208 kg of plastic waste for recycling. Our performance in these areas in the past five years is reflected in Figures 3 to 5 respectively. The overall trend is encouraging as staff are more attuned to the practice of recycling.

Availability of this Report

This Report can be viewed on LandsD's website (<http://www.landsd.gov.hk>).

Contact Us

You are welcome to give us suggestions and views on this Report by emailing us at landsd@landsd.gov.hk or calling our enquiry hotline on 2231 3294.

**Statistics on Green Performance up to 2020
for Inclusion in the 2020
Controlling Officer's Environmental Report
(To be Presented in Chart)**

Caption of graph/chart	2016	2017	2018	2019	2020	To be presented in chart
Green housekeeping measures						
Paper consumption (in ream)	45 227	47 320	47 277	47 817	40 759	Figure 1
No. of envelopes consumed	251 933	253 742	250 103	248 573	211 870	Figure 2
Quantity of waste paper collected for recycling (in kg)	45 618	41 863	40 041	38 549	28 938	Figure 3
No. of used printer toner cartridges collected for recycling	5 823	6 095	7 098	5 869	6 045	Figure 4
Quantity of plastic waste collected for recycling (in kg)	456	496	371	343	208	Figure 5