### Lands Department Environmental Report 2024

#### Introduction

In this environmental report, we set out our environmental policy and performance in 2024. Since the inception of annual environmental reporting twenty-five years ago, we have attached increasing importance to environmental protection and preservation. We are committed to developing and promoting 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 land administration 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 preservation control for trees on private land through lease conditions.

## • Survey and Mapping Office

Land and aerial survey, map production, maintenance of the positioning infrastructure, maintenance of the land information system for mapping data and land record information, provision of spatial data services, support for the implementation of the Common Spatial Data Infrastructure (CSDI), development of the territory-wide three-dimensional (3D) digital map and 3D digital underground utilities (UU) database, enhancement of the Government Building Information Modelling (BIM) Data Repository, 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 land available or enter into land transactions with leaseholders of existing private properties for development purposes. Through the incorporation of appropriate lease conditions into 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 are as follows:

## • Electric Vehicle (EV) Charging Stations

We render full support for the Government's policy initiative on the popularisation of EVs and provide sites for EV charging stations, where suitable. In 2024, two sites for EV charging station were 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 2024, we were managing a total of 48 short term tenancies for waste recycling.

### • Control on Contamination of Land

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

### Optimising Development Density

For sites included in the 2025-26 Land Sale List, air ventilation assessments have been or will be conducted where required. Such assessments facilitate the incorporation of specific development parameters or restrictions into the Conditions of Sale for the sites concerned, as appropriate.

### • Fostering a Quality and Sustainable Built Environment

The Government announced detailed measures in October 2010 to enhance the design standards of new buildings to foster a quality and sustainable built environment in Hong Kong. The Buildings Department (BD) promulgated in January 2011 the practice notes to implement the measures with effect from 1 April 2011. Appropriate requirements for sustainable building design are also incorporated into the lease conditions. Moreover, lot owners are obliged under a landscape clause to landscape and plant trees and shrubs on any parts of the lot not built upon and thereafter to maintain them satisfactorily. Practice Note No. 1/2020A setting out a further streamlined approval process, time frame and other facilitation measures, was issued in May 2022 to aid the handling of relevant submissions.

#### • Tree Preservation

We continue to play a key role in tree preservation, mainly by drafting lease conditions and approving 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. In 2023, the LandsD introduced and promulgated a series of streamlining measures for tree

preservation, with a view to shortening processing time. Lands Administration Office Practice Note No. 6/2023, setting out the streamlined approval process, was issued in June 2023 to aid the handling of relevant submissions.

We conduct pre-land sale tree surveys, where required, so as to identify trees of particular value within the sale site.

### • Electronic Submission of Building Plans

The BD 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. The final stage of the ESH, i.e. Stage 3, was launched on 30 June 2024 to receive all types of plan submissions and related applications, including general building plans and plans for alteration and addition works. We will continue to work with the BD to pave the way for mandating e-submission of building plans, currently targeted for 2027.

### **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 2024 are set out below:

- We posted 71 309 government land notices under the Land (Miscellaneous Provisions) Ordinance (Cap. 28), requiring the clearance of unauthorised dumping or the cessation of occupation of government land. We also issued 1 770 warning letters to private land owners in respect of 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 1 346 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 at another 2 125 sites, some of which were illegal cultivation blackspots and flytipped 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 on public streets for collection of renovation debris, we conducted 1 020 inspections and five clearance operations.
- Under our preventive maintenance programme, we enhanced the appearance of 86 man-made slopes by planting vegetation or applying landscape treatments, such as stone facing during improvement works.

### Acquisition

To facilitate early implementation of sewerage improvement works in the New Territories, we acquired private land under the relevant ordinance. In 2024, we acquired 493 366 m<sup>2</sup> of private land and also made available 121 661 m<sup>2</sup> of government land in North District, Yuen Long, Tai Po and on Lantau Island for carrying out local sewerage works.

### **Survey and Mapping**

### • ISO 14001 Environmental Management System

Since 2007, our Survey and Mapping Office (SMO) has been operating an Environmental Management System under which environmental considerations are taken into account in project planning and execution, office administration, and every stage of the survey and mapping process. Our performance in these areas is regularly audited. Both the internal environmental audit conducted from April to May 2024 and the external audit conducted by a certification body in September 2024 confirmed our full compliance with the latest ISO 14001 standards.

## • Open Data

To promote the use of digital maps and geospatial data in line with the Government's open data policy, we have been publishing Annual Open Data Plans and Annual Spatial Data Plans since 2018 and 2021 respectively, as part of an effort to foster integration, exchange and sharing of spatial data in Hong Kong. The Consolidated Annual Open Data Plan (Spatial Data Plan included) for 2025-27 was released on our website (https://www.landsd.gov.hk/en/resources/consolidated-annual-open-data-

plan.html) in December 2024. As at the end of 2024, a total of 89 spatial datasets have been released on the CSDI Portal (https://portal.csdi.gov.hk/).

We have also made most of our digital map products and various geospatial data available for both commercial and non-commercial uses. These open digital maps and data can be downloaded free of charge from the Hong Kong Map Service 2.0 (https://www.hkmapservice.gov.hk), the LandsD's website (https://www.landsd.gov.hk/en/spatial-data/open-data.html), the Open Data Portal (https://www.data.gov.hk) and the CSDI Portal. Furthermore, CSDI Use Cases, including the District-based Spatial Information Dashboard and Storytelling Application, have been launched, showcasing the benefits and potential applications of open spatial datasets.

Open spatial data and open digital maps promote and facilitate paperless applications, thereby reducing reliance on environmentally unfriendly storage media such as CDs and DVDs. We continue to identify more data and digital map products that can be made available to the public. The increasing adoption of digital maps and spatial data further contributes to reducing paper consumption.

### • Hong Kong Map Service 2.0

In addition to allowing users to order digital and paper map products from the SMO, the HKMS 2.0 supports online applications for copyright licences to reproduce maps/photographs, obviating the need for paper-based applications and enhancing user experience. Since the launch of "Application for Copyright Licence" in 2019, over 600 applications have been processed online through the HKMS 2.0.

## • Geospatial Information Hub (GIH)

The GIH is a web-based information platform for searching, displaying and sharing a vast amount of geospatial data through the government intranet. Various types of geospatial data from different government departments, including digital maps, aerial photographs and land records, can be conveniently viewed on the computer, hence reducing the need for paper maps.

More and more applications and services are being integrated with energy-efficient servers, resulting in further conservation of computing resources and hence greater savings in electricity consumption.

### • GeoInfo Map and MyMapHK

GeoInfo Map is an online map service that allows the public to access upto-date digital maps of Hong Kong, along with over 400 types of geospatial information about the public facilities and services provided by 38 government departments. In 2024, 18 historical paper maps were digitised and made available on GeoInfo Map.

MyMapHK is a mobile map app available on iOS, Android and Huawei platforms. It serves as an all-in-one map app featuring six themes: Map, Hiking, Old Hong Kong, Election, P5Me (Please Find Me), and Offline Map. The app offers up-to-date trilingual base maps of Hong Kong, integrating more than 300 types of data related to public facilities for easy access by the public.

Both GeoInfo and MyMapHK simplify access to geospatial data, promote the use of digital map products and contribute to reducing the reliance on paper-based maps.

#### • CSDI Portal

The CSDI was established to provide government departments, private organisations and the public with an information infrastructure for sharing spatial data to support the development of Hong Kong as a smart city.

Launched in 2022 as part of the CSDI initiative, the CSDI Portal serves as a one-stop platform designed to facilitate sharing of spatial data by data owners with various stakeholders, including government departments, businesses, academia and the general public. By promoting effective sharing of spatial data, the CSDI Portal aims to save significant resources and time in creating, maintaining and processing data. This not only enables users to leverage spatial data more efficiently for informed decision-making and innovative applications, but also contributes to sustainable development.

## Open3Dhk

To support the development of a smart city, we initiated the production of a territory-wide 3D Visualisation Map in 2021. As of 2024, the 3D Visualisation Map and street image "Streetscape 360" covering Kowloon, New Territories Northwest, Lantau and the Islands were available to the public through Open3Dhk (https://3d.map.gov.hk/). Additionally, the Open3Dhk features the 3D Indoor Map of over 200 buildings in Kowloon, which has transformed traditional 2D or paper-based floor plans into environmentally friendly digital models.

### • Land Information System Portal (LIS Portal)

The LIS Portal was launched in 2018 to enable authorised LandsD users to access digital copies of registered land documents, thereby reducing the need for physical copies. In 2024, the LIS Portal was enhanced by optimising the search engine and including new types of land documents to support daily land administration tasks. We will continue to enrich the content of the Portal.

### • Map Application Programming Interface (Map API)

The Map API was developed for use by government bureaux and departments as well as the general public to support the creation of customised map applications. We have extended the range of the Map API services to the newly released 3D Visualisation Map, 3D Indoor Map and Streetscape 360. All these Map APIs are accessible on Open3Dhk and the CSDI Portal. These new 3D Map APIs eliminate the complexities in acquiring and processing raw spatial data, minimising the developers' efforts to establish, operate and manage their own platforms for disseminating 3D spatial information, leading to substantial cost and energy savings.

### • Online Geodetic Survey Information

The Online Geodetic Survey Information service has been open for public use since 2006. Users can browse, search and download horizontal and vertical survey control data and other reference documents related to geodetic surveys from the LandsD's website, GeoInfo Map and MyMapHK free of charge. Moreover, users can also gain access to the Geodetic Survey Control Station Database via the CSDI Portal and the Open Data Portal. These functions have greatly reduced the need for hard copies of geodetic information and enhanced the effectiveness and efficiency of service delivery.

## • Electronic Map Publication

Starting from 2023, we ceased the annual publication of the paper-based *Hong Kong Guide*. The *Hong Kong Guide* has been replaced by an electronic map publication, namely the "*eHongKongGuide*", which is available for free download from the LandsD's website. The "*eHongKongGuide*" provides not only detailed maps covering the territory of Hong Kong, but also comprehensive information on geographic features and community facilities in digital form.

### • Government BIM Data Repository (GBDR)

The Government BIM Data Repository (GBDR) was launched in 2022 to serve as a centralised platform for BIM data sharing among works departments. It houses design and as-built BIM models of capital works projects in native formats and converts them into open BIM and open GIS formats to facilitate effective BIM data exchange across the Government and the development of the 3D Digital Map of Hong Kong. Embracing a paperless approach, the GBDR allows works departments to conveniently submit their BIM models directly without the need for physical media, thereby reducing paper and material consumption. Additionally, the GBDR provides works departments with BIM Data Validation Tools and BIM APIs, minimising duplication of efforts in BIM data processing across the Government, and reducing the time and effort required for system developers of works departments to build and maintain their own BIM/GIS applications, resulting in lower energy consumption and improved efficiency.

### • Underground Utilities Information System (UUIS)

The UUIS is an online platform featuring a comprehensive database designed for government departments and participating public utility undertakings to contribute and share UU data. The primary objective of the UUIS is to create an accurate 3D digital UU database that facilitates efficient planning and execution of underground works in the construction industry, ultimately reducing road closure times due to excavation and benefiting the community as a whole.

Grounded in the Environmental, Social and Governance principles, the UUIS aims to minimise the efforts and waste associated with compiling utility plans from various UU stakeholders. The LandsD collaborated with major utility undertakings to establish a common data standard for UU information, resulting in the development of an initial digital UU database in GIS format for the whole territory.

The initial 3D digital UU database was established and progressively developed in April 2023. Additionally, a platform facilitating UU data sharing in a 2D/3D geospatial environment for authorised parties was launched in October 2024, enabling the utility undertakings to electronically access and update the UU data.

### **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 promote 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 the adoption of other green management practices (e.g. switching off air conditioning units, lighting and other electrical equipment when not required/not in use).

### • Experience Sharing and Training

To maintain the momentum of environmental protection, we will continue to nominate our Green Executives/Energy Wardens or their assistants 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 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 will be 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 2024-25 is tabulated below:

	Energy consumption before normalisation (billed & renewable energy)	Energy consumption after normalisation under comparable operating conditions	Renewable energy generation	
FY 2018-19 (baseline) (million kWh)	1 671 711	1 602 277 (a)	0	
FY 2024-25 (million kWh)	2 327 202	1 380 774	0	
Net change (million kWh)	+655 491	-221 503	0	
Change compared with	(a)	+13.8% (b)	0% (c)	
(%)		(+value for saving)		
Energy Performance (b)+(c)		+13.8%		
(%)		(+value for performance improvement)		

Note: Activities of the Department evolve over time in meeting service demands, which lead to changes in operating conditions and a significant impact on energy consumption in areas such as operating hours, usage rate, quantity of equipment and the floor area of venues. Such changes also bring about a significant impact on energy consumption. Adjustments (or normalisation processes) are therefore made to calculate the energy consumption under comparable baseline operating conditions. Under comparable operating conditions in FY 2018-19, the saving on electricity consumption of similar venues/facilities in FY 2024-25 was 13.8% 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 units, lighting and energy-Green tips on energy saving have been consuming equipment. promulgated for staff compliance. We also continue to implement established measures, such as setting the air conditioning temperature at 25.5°C.

### Fuel Consumption

The major fuel user 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 emissions and fuel consumption.

The total fuel consumption of our vehicle fleet was 241 105 litres in 2024, representing a decrease of 1.44% as compared with the previous year. The decrease in fuel consumption was attributable to the delivery of eight replacement vehicles with eco-friendly Euro VI design in 2024.

### • Green Procurement and Indoor Air Quality

In 2024, we spent about \$26.2 million on purchasing products and services from the green procurement list provided by the Environment and Ecology Bureau. In addition, our 18 offices attained "Good Class" or "Excellent Class" under the Indoor Air Quality (IAQ) Certification Scheme in 2024.

### • Paper and Envelope Consumption

Departmental information, such as circulars and notices, is mainly disseminated to staff through emails and the intranet. Tablet PCs and notebooks are increasingly used in designated internal meetings with a view to reducing paper consumption. Our environmental performance in terms of paper and envelope consumption since 2020 is shown in Figure 1 and Figure 2 respectively. When compared with 2023, a decrease of 2% and 7% in paper consumption and envelope consumption were recorded respectively.

## • Paperless Meetings

We have introduced notebook computers for most professional staff and set up wireless local area networks in meeting rooms at the headquarters to facilitate paperless meetings. With a secure wireless network connection, meeting participants can retrieve and share documents using their notebook computers without printing them out. This helps reduce paper consumption in printing meeting documents, which are usually produced in multiple copies and for one-off use.

### Waste Recycling

In 2024, we collected about 24 662 kg of waste paper, 4 749 used toner cartridges and 348 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 recycling practices.

### • Digital Form and Web Form for Public Services

We have continued our efforts to enhance digital services by gradually converting traditional digital forms into web forms. Of the 51 digital forms, 12 have transitioned to web forms, all of which are available on the LandsD's website (https://www.landsd.gov.hk/en/resources/public-forms.html). This shift significantly reduces the need for printing, streamlining the application process and improving user experience.

### **Availability of this Report**

This Report can be viewed on the LandsD's website (https://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 2024 for Inclusion in the 2024 Controlling Officer's Environmental Report (To be Presented in Chart)

Caption of graph/chart	2020	2021	2022	2023	2024	To be presented in chart		
Green housekeeping measures								
Paper consumption (in ream)	40 759	45 659	46 532	47 441	47 210	Figure 1		
No. of envelopes consumed	211 870	242 732	238 312	247 650	234 996	Figure 2		
Quantity of waste paper collected for recycling (in kg)	28 938	30 252	30 356	27 432	24 782	Figure 3		
No. of used printer toner cartridges collected for recycling	6 045	6 095	5 612	5 173	4 749	Figure 4		
Quantity of plastic waste collected for recycling (in kg)	208	238	263	328	348	Figure 5		