Environmental Report

2023

Lands Department

ntroduction

In this environmental report, we set out our environmental policy and performance in 2023. Since the inception of annual environmental reporting twenty-four 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, 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 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 are as follows:

- *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 2023, we were managing a total of 46 short term tenancies for waste recycling.

- *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 2024-25 Land Sale Programme, air ventilation assessments have been or will be conducted where required. Such assessments facilitate the incorporation of specific development parameters or restrictions in 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 standard of new buildings to foster 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 for sustainable building design are also incorporated in 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 the same satisfactorily. Practice Note No. 1/2020A setting out further streamlined approval process, time frame and other facilitation measures, was issued in May 2022 to aid the handling of relevant submissions.

▲ New measures are in place on a site at the junction of Sai Yee Street and Argyle Street, Mong Kok to foster a quality and sustainable built environment there.

- ## *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 in respect of tree preservation to shorten the 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.

▲ Tree of Particular Value designated under lease for preservation in the development at Sai Yee Street.

  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 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. The ESH will be implemented in three stages. Stages 1 and 2 of the ESH were already launched to accept structural and technical plan submissions. We will continue to liaise with the Buildings Department regarding the Stage 3 development of the ESH to facilitate the handling of building plan submissions.

Land Management

Our target is to maintain, and where appropriate, to 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 2023 are set out below:

- We posted 63 021 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 issued another 1 783 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 1 304 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 2 307 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 on public streets for collection of renovation debris, we conducted 954 inspections and nine 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.

Located at No. 61 Tung Lo Wan Village, Shatin, the slope (No. 7SW-D/CR203) is maintained by the Lands Department. Slope improvement works, including replacing the hard surface with a vegetated cover, have been carried out.

▲ Before slope improvement works

▲ After slope improvement works

Acquisition

To facilitate early implementation of sewerage improvement works in the New Territories, we acquired private land under the relevant ordinance. In 2023, we acquired 1 897 m² of private land and also made available 166 449 m² of government land in North District, Tsuen Wan, Yuen Long, Tai Po and Sha Tin for carrying out local sewage works.

Upgrading of Tuen Mun Sewerage, Phase 1
Village Sewerage Works at Fu Tei Ha Tsuen, Tuen Mun

▲ Before works

▲ After works

Survey and Mapping

- *ISO 14001 Environmental Management System*

  Since 2007, our Survey and Mapping Office (SMO) has been operating an Environmental Management System (EMS) 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 2023 and the external audit conducted by a certification body in October 2023 confirmed our full compliance with the 2015 version (i.e. the latest one) of ISO 14001 on EMSs.

- **_Open Data_**

  To promote the use of digital maps and digital spatial data and to follow 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 the integration, exchange and sharing of spatial data in Hong Kong. The Consolidated Annual Open Data Plan (Spatial Data Plan included) for 2024-26 was released on our website (https://www.landsd.gov.hk/en/resources/consolidated-annual-open-data-plan.html) in December 2023. As at the end of 2023, a total of 86 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 spatial data for commercial and non-commercial uses. These open digital maps and data are available for download 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 Public Sector Information Portal (https://www.data.gov.hk) and the CSDI Portal.

  Open spatial data and open digital maps promote and facilitate paperless applications and thus reduce the use of 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 use of digital maps and spatial data helps to further reduce paper consumption.

- **_Hong Kong Map Service 2.0 (HKMS 2.0)_**

  In addition to allowing users to order digital and paper map products of 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 the 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, information about heritage sites and other 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 up-to-date digital maps of Hong Kong as well as over 400 types of geospatial information about the public facilities and services provided by 38 government departments. In November 2023, a new feature called "GeoInfo Chat" was released to simplify the search process across various datasets. Users can easily access information and receive prompt responses through the interactive chat function which enhances both user satisfaction and efficiency in information retrieval.

   The mobile map application MyMapHK also introduced a new function, "Report Map Issue", in 2023, which allows the general public to report map-related issues and upload site photos. This function facilitates effective and paperless reporting.
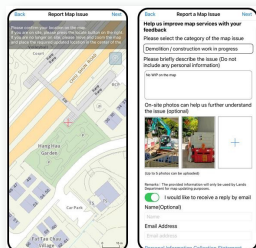
   ▲ The new function "Report Map Issue" of MyMapHK

- ***Common Spatial Data Infrastructure (CSDI) Portal***

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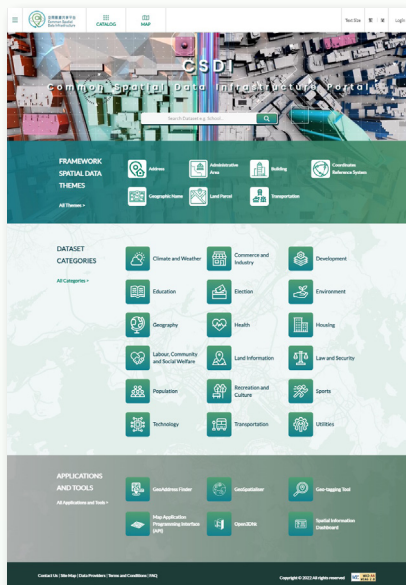

  ▲ Landing page of the CSDI portal

  Being an entry point under the CSDI initiative, the CSDI Portal which was launched in 2022, serves as a one-stop platform for data owners to share their spatial data with different stakeholders including government departments, business sectors, academia and the general public. Through effective sharing of spatial data on the CSDI Portal, we aim to minimise the duplication of efforts among government departments and the public in maintaining and processing data, thereby supporting decision-making and enhancing the efficiency of work for smart applications and sustainable development. It also helps to save users' efforts in processing, publishing and managing spatial data and services, which in turn reduces the overall consumption of electricity.

- ## *Open3Dhk*

  To tie in with the development of smart city, we have started the production of a territory-wide 3D Visualisation Map since 2021. The first two batches of 3D Visualisation Map covering Kowloon East and Kowloon Central have been released for the public free of charge. A new online application platform, "Open3Dhk" (https://3d.map.gov.hk/) was launched to demonstrate the potential applications of 3D map data. With its interactive functions, users can view photorealistic 3D city models of Kowloon East and Kowloon Central, as well as building information and the approximate lot boundaries. Users can browse and retrieve spatial data in a 3D digital environment.
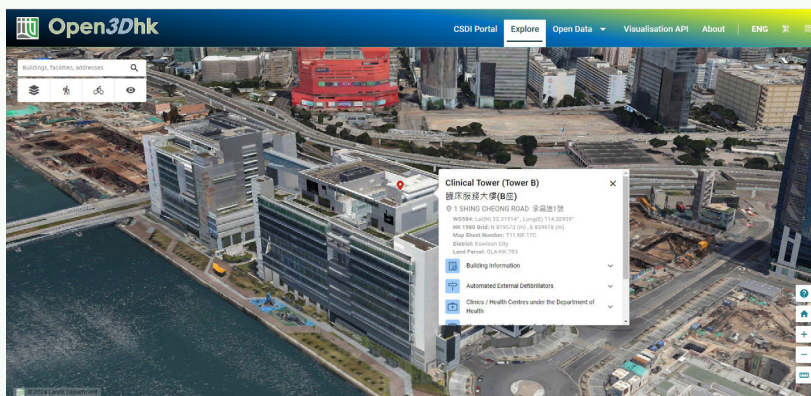

▲ Demonstration of "Explore" function of Open3Dhk

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

  The LIS Portal was launched in 2018 to facilitate authorised users in the LandsD to access digital copies of registered land documents, thereby reducing the need for printing or copying the documents. To strengthen the support to daily land administrative tasks of the LandsD, the LIS Portal is being enhanced by incorporating new functions and features. Furthermore, we will continue to enrich the document library by incorporating more land documents onto 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 and facilitate users' development of their own map applications. In 2023, with the release of 3D Visualisation map of Kowloon East and Kowloon Central, we made available the corresponding 3D Visualisation Map API in "Open3Dhk" to further enhance the variety of API service. Map APIs and 3D Visualisation Map API remove the hassles of system developers in ordering and processing raw spatial data, thus reducing their time and effort in building and maintaining their map-related products. The efforts required for establishing, operating and managing their own platforms to disseminate spatial information are greatly reduced, which helps save costs and energy.
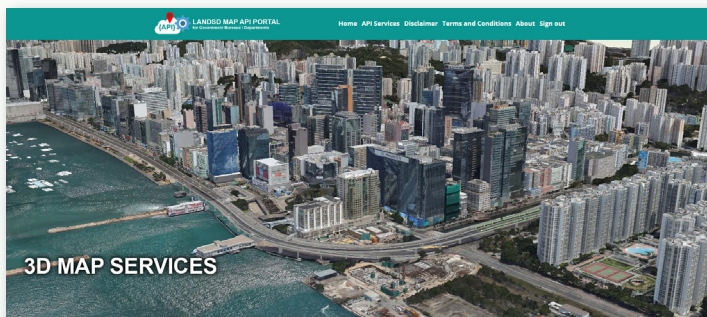

▲ Map API Portal for government bureaux/departments
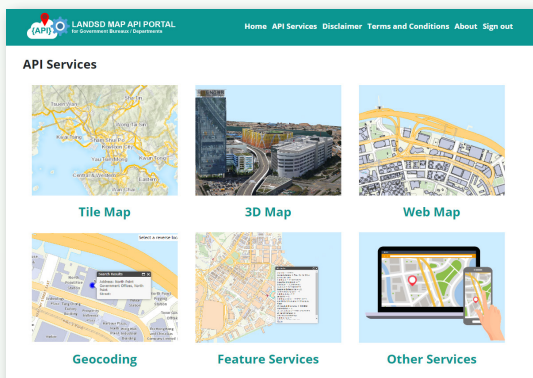
▲ Various Map API services supporting government bureaux/ departments GIS applications

• *Online Geodetic Survey Information*

The Online Geodetic Survey Information service has been open for public use since 2006. Users can browse, search for 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 Public Sector Information Portal. These functions have greatly reduced the need for geodetic information in hard copies and enhanced the effectiveness and efficiency of service delivery.

• *Electronic Map Publication*

Starting from 2023, we ceased the annual publication of paper-based *Hong Kong Guide*. The *Hong Kong Guide* has been replaced by an electronic map publication "*eHongKongGuide*", which is available for free download from the LandsD's website. The "*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.
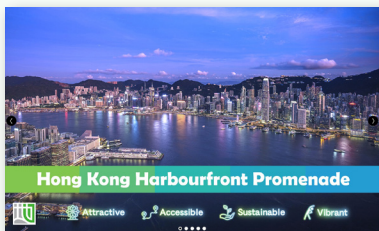
▲ The "e-HongKongGuide" 2023 features the harbourfront promenade

▲ The "e-HongKongGuide" 2023 provides detailed maps of Hong Kong. Picture shows a map of the Tiu Keng Leng and LOHAS Park area

- ***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 to open BIM format and open GIS format to facilitate effective BIM data exchange across the Government and the building up of the 3D Digital Map of Hong Kong. Embracing a paperless approach, the GBDR allows works departments to conveniently submit their BIM models to the GBDR 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 the duplication of efforts within the Government as a whole in BIM data processing, 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.

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 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. air conditioning units, lighting and other electrical equipment are switched off when not required/not in use).

- *Experience Sharing and Training*

  To maintain the momentum of environmental protection, we continued 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 in 2023. 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 2023-24 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	1 577 824 (a)	0
FY 2023-24 (million kWh)	2 324 489	1 447 452	0
Net change (million kWh)	+652 778	-130 372	0
Change compared with (a) (%)		+8.3% (b) (+value for saving)	0% (c)
Energy Performance (b)+(c) (%)		+8.3% (+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 2023-24 was 8.3% 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 units, lighting and energy-consuming equipment. Green tips on energy saving have been 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 to reduce exhaust emissions and fuel consumption.

  The total fuel consumption of our vehicle fleet was 244 632 litres in 2023, representing an increase of 6.58% as compared with the consumption in the previous year. The increase in fuel consumption was attributable to the resumption of normal operation after the epidemic and the rise in departmental activities in 2023.

Upon the delivery of replacement vehicles with eco-friendly design in 2023, six Euro IV and 14 Euro V vehicles were replaced by Euro VI vehicles. Further fuel consumption savings are expected in the future.

- ***Green Procurement and Indoor Air Quality***

In 2023, we spent about $29.8 million in purchasing products and services from the green procurement list provided by the Environment and Ecology Bureau. In addition, our 17 offices attained "Good Class" or "Excellent Class" under the Indoor Air Quality (IAQ) Certification Scheme in 2023.

- ***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 at designated internal meetings with a view to reducing paper consumption. Our environmental performance in terms of paper and envelope consumption since 2019 is shown in Figure 1 and Figure 2 respectively. When compared with 2022, an increase of 1.9% and 3.9% in paper consumption and envelope consumption were recorded respectively, mainly due to the rise in departmental activities in 2023.

- ***Paperless Meeting***

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

- ***Waste Recycling***

    In 2023, we collected about 27 432 kg of waste paper, 5 173 used toner cartridges and 328 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.

- ***Digital Form and Web Form for Public Services***

    We have converted all public forms into digital format and made them available on the LandsD's website (https://www.landsd.gov. hk/en/resources/public-forms.html). Instead of making pre-printed blank forms available at public counters, the forms are now printed on request only. In addition, we have started to create web forms for providing public services online to further reduce the need for printing.

Statistics on Green Performance up to 2023 for Inclusion in the 2023 Controlling Officer's Environmental Report
(To be Presented in Chart)
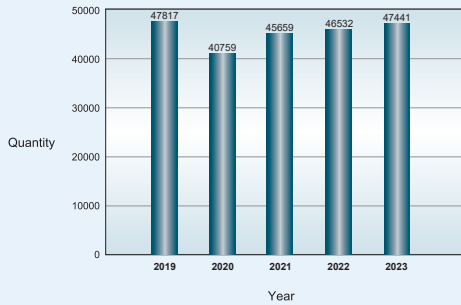
Figure 1: Paper consumption (in ream)

Figure 2: No. of envelopes consumed

Figure 3: Quantity of waste paper collected for recycling (in kg)
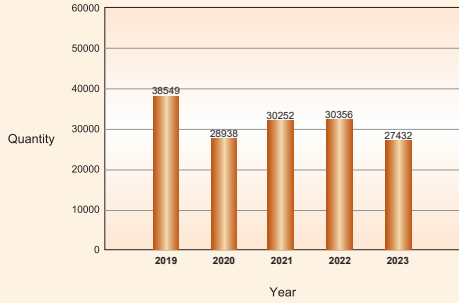

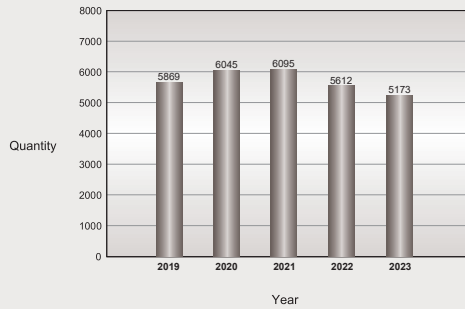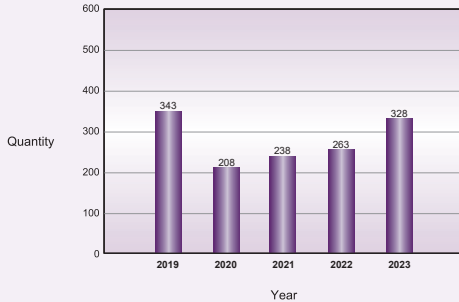Figure 4: No. of used printer toner cartridges collected for recycling

Figure 5: Quantity of plastic waste collected for recycling (in kg)

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.