

# 環保報告 ENVIRONMENTAL REPORT 2024





West Kowloon Government Offices

## 1. Introduction

This report sets out the work of the Government Property Agency (the Agency) in environmental protection in 2024 and the results. As the steward of government properties, we would continue to proactively subject all our activities to the closest environmental scrutiny.

# 2. The Agency's environmental policy

- Contributing to environmental conservation by adopting sustainable designs, materials and installations in new joint-user general office buildings (JUBs) and quarters, and in fitting-out and refurbishment projects;
- managing government properties under our purview in an environmentally responsible manner;
- implementing green office management through effective housekeeping; and
- promoting awareness and participation among staff in environmental protection, reducing pollution and enhancing energy conservation and efficiency.

For information about the Agency's profile, please visit our website at https://www.gpa.gov.hk/en/about-us.html.

Treasury Building

# 3. Highlights of the year

### Contributions to Government's overall environmental goal

# Energy saving in government buildings

In FY2023/24, the Agency met the energy saving target for buildings under our management compared with energy consumption in FY2018/19.

( Part 4.1.1 )

# Greater use of energy management tools

Up to 2024, energy audits were completed for 33 buildings, and retro-commissioning of the major building services installations in 19 buildings was carried out to achieve optimal operational efficiency.

( Part 4.1.3 & 4.1.4 )



Trade and Industry Tower

#### **Developing renewable energy**

Up to 2024, a total of 20 buildings had been equipped with renewable energy (RE) systems. We continued to work with Architectural Services Department (ArchSD) and Electrical and Mechanical Services Department (EMSD) to incorporate RE technologies in our buildings as much as reasonably practicable.

( Part 4.1.4 )

# 4. Performance and progress on key environmental reporting areas

### 4.1 Energy saving and green buildings

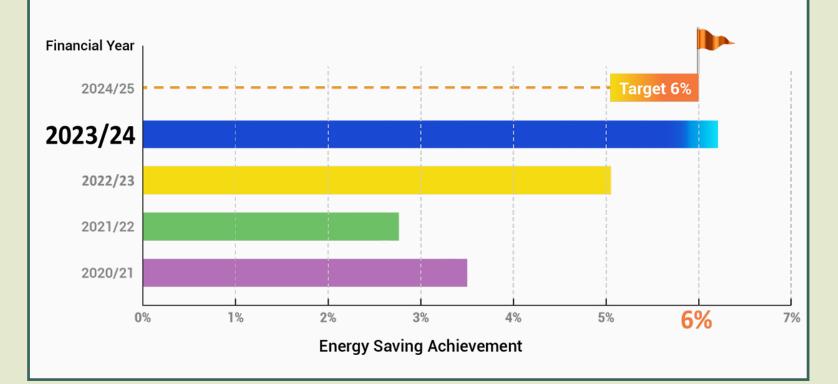
### 4.1.1 Energy consumption and saving, and RE generation

Energy consumption and saving, and RE generation in FY2023/24			
Energy consumption*	RE generation	Energy saving**	
240,386,000 kWh	172,000 kWh	15,847,000 kWh	

<sup>\*</sup> Energy consumption in JUBs and quarters under comparable operating conditions in FY2018/19

#### **Energy saving target**

The Government set a 6% energy saving target for government buildings from FY2020/21 to FY2024/25, adopting FY2018/19 as the base year. The following diagram displays our energy saving progress for JUBs and quarters, showing the Agency exceeded the target for buildings under our management in FY2023/24.



### 4.1.2 Energy efficiency management

In managing our properties, we enhanced energy efficiency through -

- adopting core air-conditioning hours in JUBs;
- setting air-conditioned temperature at 25.5°C in summer;
- reducing excessive lighting fittings and minimising illumination level during off-peak hours in common areas without adversely affecting normal operation;
- optimising operating hours of lifts and escalators;
- monitoring energy consumption by local meters; and
- monitoring energy consumption in JUBs on a monthly basis to plan for energy saving strategies.

#### Joint-user general office buildings



Switching off external lightings at Queensway Government Offices during non-operating hours



Optimising operating hours of escalators at West Kowloon Government Offices



Switching off portion of lightings at Lai Chi Kok Government Offices during non-operating hours



Optimising operating hours of lifts at Cheung Sha Wan Government Offices

<sup>\*\*</sup> Compared with energy consumption in FY2018/19

#### **Boundary control points (BCPs)**



Switching off unused lightings at Heung Yuen Wai Boundary Control Point (HYW BCP) during non-operating hours



Optimising operating hours of escalators at Hong Kong-Zhuhai-Macao Bridge Hong Kong Port (HZMB HKP)



Switching off external lightings at HYW BCP during nonoperating hours



Optimising operating hours of lifts at HYW BCP

#### 4.1.3 Energy audit

We worked with EMSD to conduct energy audits in selected JUBs and quarters and implement energy saving opportunities as much as reasonably practicable. (Part 4.1.4)

#### 4.1.4 Improvement of energy performance

#### **Energy saving projects**

We strove to reduce energy consumption, and closely worked with EMSD to explore energy saving measures on actual operation requirements and implement energy saving projects in our existing buildings, including -

- replacing existing plant and equipment with more energy-efficient alternatives;
- upgrading central control and monitoring system for energy management;
- installing motion sensor for lighting devices in common areas; and
- replacing lighting fittings with LED lights.



Replacement of air-cooled chiller at Wu Chung House



Replacement of primary air handling units at Ho Man Tin Government Offices

#### **Retro-commissioning (RCx)**

We worked with EMSD to arrange RCx for building services systems in JUBs with annual energy consumption greater than 1,000,000 kWh.

We had implemented the energy saving opportunities identified during RCx process, including adjustment of temperature set point for air conditioning system to improve energy efficiency and performance.

#### **Energy-efficient features and technologies**

We adopted various energy-efficient features and technologies in JUBs and BCPs, including -



Use of daylight at Passenger Clearance Building in HZMB HKP



Services-on-demand escalator at HZMB HKP



LED lightings with automatic control at Passenger Terminal Building in HYW BCP



Occupancy sensor of lighting control at Trade and Industry Tower



External sun shading devices at Treasury Building



Power regenerative lifts at Treasury Building

#### Renewable energy technologies

We worked with ArchSD and EMSD to explore opportunities for installing RE systems at our buildings.



Light pipes at Trade and Industry
Tower



Photovoltaic panel system at Tai Po Government Offices



Solar lamp poles at Shun Lee Disciplined Services Quarters

### 4.1.5 Green building recognition



#### **Treasury Building**





Gold rating under BEAM Plus New Buildings Version 1.2



#### **West Kowloon Government Offices**





Platinum rating under BEAM Plus New Buildings Version 1.2

### 4.1.6 Greening and landscaping

We adopted landscaping at pedestrian level, roof gardens, podium gardens and vertical green system at façades in our new buildings for environmental and amenity benefits.





Vertical greening at West Kowloon Government Offices

Roof garden at Trade and Industry Tower



Landscaping at HZMB HKP

### 4.2 Green transport

### 4.2.1 Electric vehicle (EV) charging facilities

EV charging facilities had been installed in selected car parking spaces at new JUBs and BCPs.



EV chargers at HZMB HKP public car park



EV chargers at Treasury Building car park

### 4.2.2 Adoption of EVs in the government fleet

We planned to replace the conventional fuel-propelled departmental vehicles by electric vehicles or other environmentally friendly vehicles.

### 4.3 Carbon management

In 2024, we conducted carbon audits for 46 JUBs, 61 quarters and 2 BCPs. We had implemented carbon reduction measures in various areas recommended in the audits as normal practice.

Carbon audits result for FY 2023/24 on buildings with annual electricity consumption over 500,000 kWh		
1. Scope of reporting	Tonnes of CO <sub>2</sub> -e	
Sub-total scope 1 : direct greenhouse gas (GHG) emissions	3,560	
Sub-total scope 2 : indirect GHG emissions	152,500	
Sub-total scope 3 : other GHG emissions	1,760	
Total GHG emissions :	157,820	

2. GHG reduction measures implemented in the reporting period		
Energy saving	Replacement and upgrading of building services installations with more energy-efficient alternatives	
Paper saving	Utilisation of recycled paper for reuse	
Water saving	Installation of water saving devices	
Recycling activities	Implementation of various waste separation and recycling programmes	

### 4.4 Waste reduction and recycling

#### 4.4.1 Waste disposal and recovery

We implemented waste separation and recycling programmes for JUBs, quarters and BCPs, and recorded waste quantities monthly for performance monitoring.

		Waste quai	ntities in 2024		
Recycle waste :	Paper	Metal	Plastic	Glass	Waste disposed
	869,290	35,110	44,400	66,780	165,819,000

### 4.4.2 Separation, storage and collection of recyclables

We continued to provide waste separation bins for paper, plastic and metal in JUBs, quarters and BCPs. Other recycling programmes for glass bottles, electronic equipment, used clothes, etc. had also been carried out.

#### 4.4.3 Food waste reduction and recycling

We participated in Environmental Protection Department (EPD)'s pilot scheme on point-to-point food waste collection for selected government quarters -

- Chai Wan Police Married Quarters
- Fire Services Department Pak Shing Kok Married Quarters
- Fan Garden
- Kwai Yung Court
- Stanley Junior Staff Married Quarters
- West Kowloon Disciplined Services Quarters



Waste separation bins at HZMB HKP



Food waste bins collection at Stanley Junior Staff Married Quarters

#### 4.4.4 Achievements in waste management



Awards (Gold and Bronze Awards, and Certificate of Merit) issued by EPD in the Commendation Scheme on Source Separation of Commercial and Industrial Waste



Awards (Bronze Award and Certificate of Merit) issued by EPD in the Commendation Scheme on Source Separation of Domestic Waste



Friends of EcoPark Certificate of Appreciation issued by Environment and Ecology Bureau for sustaining the support given to recycling business in EcoPark



Wastewi\$e Certificates (Good and Basic Levels) issued by Environmental Campaign Committee in the Hong Kong Green Organisation Certification



Certificate of Appreciation issued by EPD in Carbon Neutrality (Waste Reduction) Chapter

Appreciation awards and certificates for participation in various programmes organised by EPD -

- Rechargeable Battery Recycling Programme
- Fluorescent Lamp Recycling Programme
- Peach Blossom Trees Recycling Programme

### 4.5 Other green performance

### 4.5.1 Indoor air quality

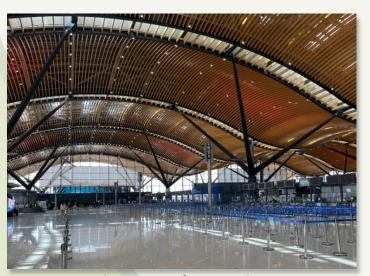
Our premises obtained Excellent Class and Good Class in EPD's Indoor Air Quality Certification Scheme in 2024 -

#### **Excellent Class**

- North Point Government Offices
- Trade and Industry Tower
- Treasury Building
- Tuen Mun Government Offices
- West Kowloon Government Offices
- HZMB HKP
  - Arrival and Departure Private Car Passenger Clearance Annexure
  - Immigration Building (Arrival and Departure)
  - Passenger Clearance Building
- HYW BCP
  - Passenger Terminal Building

#### **Good Class**

All other JUBs suitable for IAQ monitoring



HZMB HKP under IAQ certification scheme



Treasury Building under IAQ certification scheme

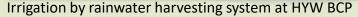
#### 4.5.2 Water management

We worked closely with ArchSD to enhance the water supply systems of our premises, including -

- installing water saving devices, such as sensor water taps and dual flush toilet cisterns, whenever feasible in renovation and maintenance projects;
- installing flow controllers to water taps of toilets and pantries in all existing JUBs whenever feasible; and
- placing posters in prominent places to encourage water saving.

Rainwater harvesting systems for irrigation were installed in Treasury Building and HYW BCP. In HZMB HKP, wastewater is treated through reclaimed water pumping station for flushing purpose.







Reclaimed water pumping station at HZMB HKP

### 4.5.3 Green operation in commercialised/ leased-out Premises

For premises leased out to private tenants, we incorporated green requirements in the tenancy agreements, including -

#### **Waste reduction**

- prohibiting use of disposable tableware in government canteen;
- avoiding provision of plastic bottled water in food and catering premises; and
- prohibiting sale of plastic bottled water measuring 1 litre or less through automatic vending machines.

#### **Energy saving in lighting**

• lights out for external signs from 10p.m. to 7a.m. in new licence agreement of advertising areas.

We encouraged new tenants of street-facing retail shops to sign up EPD's "Charter on External Lighting" to minimise light nuisance and energy wastage since December 2017.

#### 4.5.4 Fitting-out recycling and reusing

We encouraged recycling and reusing fittings to help waste reduction in office and surplus quarters renovations.

#### Moving to leased-in offices

- liaised with landlords to waive the reinstatement requirement; and
- encouraged departments to adopt the existing fitting-out in newly leased offices.

In 2024, some landlords agreed to waive the reinstatement liability in the lease. Some departments agreed to wholly or partly adopt the existing fitting-out of the newly leased offices.

#### **Vacating leased-in offices**

(leases with reinstatement liability clause)

• negotiated with landlords to repossess the property in its "as-is" condition.

In 2024, we successfully persuaded some landlords to repossess the property in its "as-is" condition.

#### **Leased-out surplus quarters**

- leased out surplus quarters on an "as-is" basis; and
- adopted a flexible approach in requiring tenants to fulfil their reinstatement obligation.

We retained the outgoing tenants' fittings and fixtures which were in good condition on a case-by-case basis.

### 4.6 Housekeeping measures in the Agency's offices

### 4.6.1 Paper consumption

Paper consumption in the Agency's offices in 2024		
Paper size	Reams	
A4	3,330	
A3	160	

To reduce paper consumption, we implemented various saving measures -

- using 100% recycled paper;
- double-sided printing;
- collecting used paper for recycling; and
- distributing documents in digital format.

### 4.6.2 Green procurement

We followed the list of products with green specifications promulgated by EPD.

In 2024, the Agency spent approximately \$3.7 million on purchasing various products and services from the list, including -

- toner cartridges;
- network products, e.g. LAN switches, routers, etc.; and
- LPG water heaters.

#### 4.6.3 Green housekeeping

We assigned a Green Manager and an Energy Warden to implement green housekeeping in the Agency's offices.

Reducing paper consumption	( Part 4.6.1 )	
Reducing electricity consumption	<ul> <li>switched off lights and electrical equipment when not required;</li> <li>set room temperature at 25.5°C in summer; and</li> <li>issued regular reminders to all staff.</li> </ul>	
Using environmentally friendly office appliances	<ul> <li>used recycled toner cartridges for printers.</li> </ul>	
Reducing water consumption	<ul> <li>used self-closing or sensor water taps in toilets; and</li> <li>posted notices in pantries and toilets to remind staff of reducing water consumption.</li> </ul>	

#### 4.6.4 Green activity

In November 2024, we visited Kadoorie Farm and Botanic Garden, which is a conservation and education centre, to raise staff awareness on nature conservation and sustainable living.



Kadoorie Farm and Botanic Garden in Tai Mo Shan, Tai Po



# **Environmental targets for 2025 onwards**

We would persistently implement the following measures at our premises for continuous improvement in environmental protection -

- incorporating sustainable features in new JUBs and renovation projects;
- adopting energy-efficient and RE technologies in existing properties where practicable;
- reducing electricity consumption in common areas of our premises;
- monitoring energy consumption in JUBs;
- reducing GHG emissions;
- maintaining greening and landscaping;
- reducing waste and facilitating waste collection and recycling programme;
- raising energy saving awareness of JUBs and BCPs users and quarters residents;
- monitoring indoor air quality;
- promoting environmentally friendly operations by tenants;
- facilitating waste reduction at source and updating green measures through tenancy agreements; and
- keeping up green housekeeping measures.

# **Comments and Suggestions**

We welcome views and suggestions on this report. You may contact us by -

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