

Agriculture, Fisheries and Conservation Department

Environmental Report 2024

Profile

The Agriculture, Fisheries and Conservation Department (AFCD) provides services to the public in the following three programme areas with their respective aims:

(a) Agriculture, Fisheries and Fresh Food Wholesale Markets

- ◆ to facilitate agricultural and fisheries production; and to promote its sustainable development

(b) Country & Marine Parks and Nature Conservation

- ◆ to conserve flora, fauna and natural habitats; to designate and manage country parks, special areas, geopark, marine parks and marine reserves; and to control international trade in endangered species of animals and plants in Hong Kong

(c) Animal, Plant & Fisheries Regulation and Technical Services

- ◆ to monitor the welfare of, and control the diseases in, animals and plants through enforcement of relevant legislation; to protect public health; to protect and regulate fisheries; and to provide technical services.

2. We are responsible for management and operations of the Hong Kong UNESCO Global Geopark, the Hong Kong Wetland Park, Long Valley Nature Park, the Endangered Species Resource Centre, the Tai Lung Experimental Station, the Tai Lung Veterinary Laboratory, the Au Tau Fisheries Office, 25 country parks, 22 special areas, eight country park visitor/education centres, eight marine parks, one marine park visitor centre, one marine reserve, four animal management centres, one plant quarantine station and four wholesale food markets.

3. As at 31 December 2024, there were 2 326 civil servants working in our headquarters in the Cheung Sha Wan Government Offices and over 50 outstations throughout the territory. The departmental expenditure for 2024-25 amounted to \$2,082.88 million.

Environmental Policy

4. Our environmental policy is:

- ♦ to promote local production of fresh food in a sustainable and environmentally responsible way; and
- ♦ to conserve and enhance our natural environment.

Environmental Objectives

5. In implementing this environmental policy, we will:

- (a) develop and promote environmentally responsible technology in agricultural and fisheries production;
- (b) conserve and manage natural environment through identification, designation and management of country parks, special areas, geopark, marine parks and marine reserves;
- (c) conserve local flora, fauna and their natural habitats through law enforcement and provision of conservation advice on development proposals and planning studies;
- (d) conserve endangered species through controlling international trade;
- (e) comply with environmental legislation and adopt environmentally responsible practices in daily operations; and
- (f) review the use of resources regularly and improve to reduce any adverse environmental impacts, for example, by reducing energy consumption and air pollutant emissions in our operations.

Environmental Performance

6. We have launched various programmes to foster environmentally responsible practices and sustainable use of natural resources in agriculture and fisheries. Highlights of 2024 are set out below:

- ♦ The Accredited Vegetable Farm Scheme continued to promote good horticultural practices and proper use of pesticides. In 2024, the total number of accredited farms in Hong Kong was 280, covering about 80 hectares of farming area.

- ◆ To promote local organic agriculture, the Organic Farming Support Service provided technical support to 384 local organic farms covering about 104 hectares of farming area in 2024. Organic farming aims to help achieve a natural balance with the environment by fostering production of crops in an environmentally friendly and sustainable manner.
- ◆ The Department strives to ensure all livestock farms are operated with good husbandry practice and keep environmental nuisance to the surroundings minimal.
- ◆ In 2024, 305 inspections were conducted to the 72 licensed pig and chicken farms, during which sheds were inspected for cleanliness while the waste treatment systems were checked to ensure their operations are up to standards and the effluent's quality meets the statutory requirements.
- ◆ The Department administered a registration system for local fishing vessels to maintain fishing effort in Hong Kong waters at appropriate level.
- ◆ The Department vigilantly took enforcement actions against destructive fishing practices including trawling. It also regulates the use of snake cages, collapsible long cage traps that impact local fisheries resources, by amending and enforcing the registration conditions. Also, the Department flexibly deployed resources to step up patrols and stringently enforced the law. During the year, 2 449 patrols were conducted for combating illegal fishing activities, including those against destructive fishing practices. Communication and co-operation with the Hong Kong Police Force were enhanced to combat illegal fishing activities in Hong Kong waters. Joint enforcement actions were carried out as needed.
- ◆ The Department continued to enhance fisheries habitats and resources through deployment of artificial reefs and restocking. The accumulated volume of artificial reefs established in Hong Kong reached some 180 000 m³.
- ◆ The Department continued to implement the Accredited Fish Farm Scheme on a voluntary basis to enhance quality of cultured fish. In 2024,

a total of 175 fish farms (88 freshwater fish farms and 87 marine fish farms) covering some 27% of total area of local fish farms were registered under the Scheme.

- ◆ Environmentally friendly aquaculture practices were promoted among fish farmers, such as proper disposal of fish carcasses, maintenance of appropriate stocking density and use of pellet feed to replace trash fish. About 223 fish farms (126 mariculture farms and 97 pond fish farms) were visited in 2024 for promotion of good aquaculture practices. We have established a modernised mariculture demonstration farm with renewable solar and wind energy generation system.
- ◆ To promote organic fish farming, the Department provided technical support to fish farmers in converting their fish farms into organic fish farms. Ten organic fish farms received the accreditation from the Hong Kong Organic Resource Centre in 2024.

7. We have introduced measures to conserve biodiversity and protect natural habitats. We have also been designating and managing country parks, special areas, geopark, marine parks and marine reserve along with various green management measures so as to conserve and enhance our natural environment. The following projects and activities were carried out in 2024:

- ◆ About 232 000 seedlings were planted in country parks to enhance their landscape and rehabilitate areas damaged by hill fires and soil erosion. Over 85% of the seedlings planted were native species providing more suitable habitats for local wildlife.
- ◆ As one of our on-going efforts to enhance the diversity of flora and fauna in country parks, the Country Parks Plantation Enrichment Programme was introduced in 2009. Under the Programme, exotic plantation species, in particular aged and weak ones, are removed for the growth of local plants. Native species, where appropriate, are planted to speed up the succession process. Eight non-governmental organisations were engaged to promote the benefits of the Programme to country parks and foster public participation in the Programme. In 2024, about seven hectares of plantations in country parks were newly engaged for enrichment work in the Programme.

- ◆ In 2024, we have continued to educate and publicise “Hiking Etiquette” to members of the public via various channels, such as banners and posters, social media, and online video channel. New online videos and animations were produced to disseminate these messages in a lively manner and to reach a wider audience.
- ◆ We continue to organise “Nature In Touch” education and publicity programmes for schools and the general public to promote nature appreciation, hiking safety and hiking etiquette. Besides, a number of special events had been organised in 2024, such as Hiking and Planting Day, Excursion in Country Park eco-tour series, National Ecology Day BioBlitz Experiential Tour, “Discovering Robin’s Nest Country Park” hiking challenge, etc. The programme and special events were very well-received by the general public and had attracted some 250 000 participants.
- ◆ In collaboration with the Education Bureau, the “Countryside Adventure” education programme at the Lions Nature Education Centre was launched in 2018 for kindergarten students to conduct diversified learning activities in the outdoor setting. Assisted by the Education University of Hong Kong, we rolled out a total of 12 learning and teaching packages under the curriculum-based outdoor learning programmes for primary and secondary schools in 2023.
- ◆ The Country Parks Volunteer Scheme, launched in March 2010, continued to foster public participation in nature conservation in country parks and special areas. In 2024, Country Parks volunteers served over 16 000 hours in support of the management, education and publicity work of country parks. The number of volunteers and trainees in the programme was 454.
- ◆ Various kinds of information and themed exhibitions were held at country park visitor/education centres to marshal public support and action for nature conservation. Some of these centres also offered different education programmes for schools and the public to enhance their park experience. In 2024, these centres received around 543 000 visitors.

- ♦ To encourage the public to nurture a good habit of bringing their own re-usable bottles and reducing consumption of one-off disposal plastic bottled water, the Department has installed an array of water filling stations at suitable locations in the country parks since 2018-19. Up till the end of 2024, a total of 37 water filling stations have been installed for public use.
- ♦ Apart from the “Clean Country Park You Have A Share” campaign launched in 2022, the Department has launched the “Country Park Clean-up Partnership Scheme” in March 2023, which concluded in March 2024. The initiative was run in collaboration with 25 partnering organisations to organise clean-up activities in country parks. A total of 141 clean-up activities were organised under this partnership scheme, with some 3 300 participants.
- ♦ The Department has endeavoured to adopt the use of renewable energy in country parks facilities by introducing a type of solar-powered portable toilet with ventilation fans, lighting and USB charging port to enhance visitor experience in the use of portable toilets since 2018. A total of 35 solar-powered portable toilets were hired in various country parks in 2024. In addition, a solar panel system had been installed at three country park visitor/education centres.
- ♦ Since 2017, the Department has been trying to modify the design of waste collection facilities with a view to preventing wildlife from searching through the recreational wastes. Incorporating animal-proof elements into the waste separation bin design, reduction of scattered litter bins, setting up of modular refuse collection cum recycling points at barbecue and campsites and enhancing the design of traditional litter bins against rodent invasion were put into functional uses at suitable locations. The new designs are proven effective to reduce wildlife interferences. Continuous review on the design and implementation strategies of the waste collection facilities is being carried out when necessary.
- ♦ A total of 163 environmental impact assessment applications and studies on development projects were processed.

- ◆ Conservation and management projects were undertaken in the Mai Po Inner Deep Bay Ramsar Site as well as the surrounding Deep Bay area. The two-year Management Agreement Projects were renewed for implementation from March 2023 to February 2025 for the conservation of fishponds in Deep Bay. The projects provided financial incentive to local non-profit-making organisations and fishpond operators to implement conservation measures to enhance ecological value of fishponds, and promoted public awareness of aquaculture in Deep Bay.
- ◆ Removal of invasive exotic mangrove species was continued in the Inner Deep Bay area. In 2024, about 10 370 *Sonneratia* trees were removed from the intertidal mudflat in Deep Bay.
- ◆ The Department has completed a Strategic Feasibility Study on the Development of Wetland Conservation Parks (WCPs) System under the Northern Metropolis Development Strategy in October 2024, which formulated recommendations on the overall implementation strategy for the development of the WCPs System, including the proposed boundaries, positioning and functions, conceptual plans and management options of the proposed Parks under the WCPs System, and also collected views from the public and different sections of the community on the initiative during two stages of public engagement exercises.
- ◆ The Department, together with the Civil Engineering and Development Department, was taking forward the development of the Sam Po Shue (SPS) WCP as the first park of the WCPs System at full steam. The Investigation Study of the SPS WCP commenced in September 2024, which would recommend development and infrastructure proposals, formulate a preliminary layout plan, a “Habitat Creation and Management Plan” and an “Aquaculture Development Plan”, prepare preliminary design of the recommended engineering infrastructure works, etc., for establishing the SPS WCP.
- ◆ A long-term territory-wide biodiversity survey programme was continued to maintain and update the ecological database for Hong Kong.
- ◆ The Department has co-ordinated the implementation of the Hong Kong Biodiversity Strategy and Action Plan (BSAP) since 2016 in collaboration

with other government bureaux and departments, as well as external organisations. The BSAP's first phase and the associated actions implemented had achieved substantial results. The BSAP was being updated, with reference to the latest global and national development in biodiversity conservation, and having regard to the actual situation of Hong Kong. The BSAP's second phase was targeted to be launched within 2025.

- ◆ The departmental webpage, the Hong Kong Biodiversity Online (<http://www.hkbiodiversity.net>) provided the public with handy information on local biodiversity.
- ◆ The Hong Kong Biodiversity Information Hub (HKBIH) (<https://bih.gov.hk>) was launched in March 2022, providing a one-stop shop for information on local biodiversity. With a wealth of information on over 5 500 terrestrial, freshwater and marine species, the HKBIH is currently the largest open access repository of the city's biodiversity information, with over 10 000 visits per month. The second phase of HKBIH's development, which includes a Biodiversity Geographic Information System (BGIS), had its beta version launched in September 2024. The BGIS aims to serve as a platform for featuring occurrence data or sighting records of Hong Kong's diverse species from various sources, such as government departments, academics institutions and citizen science platforms.
- ◆ The Facebook page (<https://www.facebook.com/hkbf.hk>) continued to publish educational posts involving the fun-filled mascot, Mr. B, to raise public interest and awareness on local biodiversity and to promote biodiversity-related events to the general public. A new Instagram page at (https://www.instagram.com/mr.b_nature_classroom/) was launched in January 2024, enhancing engagement and expanding audience reach to promote local biodiversity.
- ◆ The Platform for Education Programmes was launched in March 2022, and the theme was "Venture into Nature" in 2024. Together with 38 partners, various activities related to biodiversity education, including exhibitions, guided tours and workshops, were promoted on our online platform.

- ◆ To raise public awareness of regulatory framework and information regarding genetically modified organisms (GMOs), the Department continued to update relevant information to the GMO website.
- ◆ The Department continued to maintain the Endangered Species Resource Centre (ESRC) to educate the public on endangered species protection and relevant trade regulations. We hosted 246 guided visits and 50 open days, and received 8 073 and 388 visitors respectively. In addition, 50 education talks were delivered to 4 249 participants at schools and other organisations.
- ◆ Enforcement momentum to curb illegal trade in endangered species was maintained. In 2024, there were 54 cases of prosecution in respect of illegal imports, exports or possession of endangered species.
- ◆ Opened on 20 May 2006, the Hong Kong Wetland Park (HKWP) attracted about 259 000 visitors in 2024.
- ◆ An extensive school and public education programme on wetland conservation was carried out. In 2024, over 4 700 educational activities were organised at HKWP for some 85 000 students and members of the public.
- ◆ Through the Wetland Park Volunteer Scheme, the Department continued to promote direct public involvement in wetland conservation. More than 488 volunteers were registered under the scheme in 2024 to provide guided interpretation service and support conservation work in wetlands. In 2024, volunteers served over 19 000 hours in HKWP.
- ◆ HKWP continued to implement various energy saving measures, such as enhanced utilisation of natural sunlight and ventilation, shortening of operation hours of air-conditioning systems and use of Building Integrated Photovoltaic (PV) System to generate power. Moreover, the lighting control system in the Visitor Centre has been computerised to further optimise the lighting level. The automatic lighting control recommended in the retro-commissioning project undertaken by EMSD has been installed as a further energy-saving measure.

- ◆ To strengthen the public awareness on the negative consequences of feeding wild animals, the Department launched an education programme themed “Don’t Feed Wild Animals” from 2018 to 2023. Education events including booths, guided tours, talks and workshops have been organised near feeding blackspots, in schools and at elderly centres, with a view to enhancing public knowledge and spreading the message of not feeding wild animals. In 2024, more than 130 events were organised. Since the first quarter of 2024, the Department has further launched a series of publicity and education activities with the theme of “All for No Feeding”, including extensive advertisements, promotional videos, publicity materials like banners and posters at feeding blackspots, so as to inform the public about the latest feeding ban regulations and the negative impacts of feeding animals.

- ◆ The Long Valley Nature Park (LVNP) integrates wetland conservation, farming operation and nature education in one place. Through habitat management and eco-friendly farming practice, the ecological landscape at the LVNP is composed of a mosaic of wet and dry farmland, marshes, water ponds and water channels, etc., and provides home for diverse wildlife. Opened in November 2024, the LVNP also provides educational and recreational opportunities for the public.

- ◆ The North Lantau Marine Park (NLMP) has been established since 1 November 2024. Covering about 2 400 hectares of water, the NLMP is the eighth and largest marine park in Hong Kong. The establishment of the NLMP increases the area of Hong Kong's protected marine habitat to over 8 500 hectares, which is conducive to the conservation of the Chinese White Dolphin (CWD) and the marine environment and ecosystem in North Lantau waters. The NLMP provides critical linkages with the nearby Sha Chau and Lung Kwu Chau Marine Park (about 1 200 hectares) and The Brothers Marine Park (about 970 hectares) in North Lantau waters to form a matrix of connected marine protected areas. Furthermore, the NLMP is contiguous with the Pearl River Estuary Chinese White Dolphin National Nature Reserve established in Guangdong Province, thereby linking the marine protected areas in Hong Kong and the Mainland to provide important connections among these core CWD habitats.

- ◆ The Department continued to implement a series of measures and programmes for the conservation of coral communities and other important habitats in marine parks in the eastern waters of Hong Kong. Key measures include effective management of marine parks and marine reserve, organisation of education and publicity activities to enhance public understanding of the importance of coral communities, monitoring and studies such as the annual Reef Check to assess the status of coral communities of Hong Kong, as well as formulation and implementation of measures to restore degraded coral communities.
- ◆ To conserve and enhance fisheries resources, a fish restocking exercise with public participation was held in June 2024, in alignment with the National Fish Release Day and other nationwide efforts. An educational event was also organised in July 2024, allowing students to participate in the restocking activities. These initiatives aim to restore and enhance fisheries resources as well as raising public awareness of the conservation of fisheries resources and the need to protect the aquatic environment.

8. To comply with environmental legislation and reduce environmental impacts of our operations, we have adopted the following environmentally responsible measures:

- ◆ We have been using manual sectional switches to turn off parts of the lighting and mechanical ventilation systems in areas with sunlight and natural flow of air, as practicable.
- ◆ T8 luminaires lighting panels have been replaced with T5 model at our Headquarters in the Cheung Sha Wan Government Offices.
- ◆ We have kept in view possibilities to optimise condensing water temperature of cooling systems and to reduce the number of air-conditioning pumps/machines and operating hours of air-conditioning facilities for minimising energy consumption without affecting our normal operations.
- ◆ We have been exploring possible energy saving opportunities in the Department with the Electrical and Mechanical Services Department through established standing working mechanism.

- ◆ We have been deactivating/removing non-essential lighting, replacing light bulbs with lower wattage/energy efficient models and adjusting lighting hours of specific zones to suit our operational needs. Outstations have ceased procuring tungsten filament lamps for general lighting purposes since 2011.
- ◆ We have been providing electronic services (e.g. e-forms, e-payment etc.) to the public to enhance customer satisfaction and reduce paper consumption.
- ◆ Three-year energy-cum-carbon audits were completed in 2023 for the Cheung Sha Wan Wholesale Food Market (CSWWFM) and Western Wholesale Food Market (WWFM). The audits identified opportunities for reducing energy consumption and carbon emissions. While we have implemented all of the recommended housekeeping measures to enhance energy efficiency, we will continue to take steps to implement the recommended energy management opportunities and carbon reduction measures including the replacement of existing fluorescent lights with LEDs and selectively switching off the lighting in CSWWFM as well as replacement of existing fluorescent lights with LEDs and installation of motion sensors to monitor lighting in WWFM. The works for replacing the fluorescent lights with LEDs in CSWWFM started in 2024 and will be completed in 2025. Replacement and installation works in WWFM will be implemented pending availability of funding.
- ◆ To tie in with the government environmental policy to reduce waste sent to landfill, food waste generated in CSWWFM and WWFM has been delivered to Organic Resources Recovery Centre (O•Park1) of Environmental Protection Department (EPD) since August 2018 for conversion to renewable energy as well as compost by-product for landscaping and agricultural use. With the support from EPD, the average monthly food waste collected from the above-said two markets has progressively increased from 67.8 tonnes in 2018 to 137 tonnes in 2024.
- ◆ Turning Waste to Energy - In view of the large amount of food waste generated in the two government wholesale food markets, EPD provided funding to design, build and implement decentralised food waste pre-

treatment facilities in CSWWFM and WWFM which were in operation in March 2023 and March 2024 respectively. The food waste pre-treatment facilities adopt mechanical treatment for impurities removal and size reduction, so as to turn organic food waste into a consistent semi-liquid product slurry round the clock. EPD will then arrange to collect and deliver the slurry to Tai Po Sewage Treatment Works for subsequent food waste/ sewage sludge anaerobic co-digestion and energy recovery. The slurry will be anaerobically co-digested with sewage sludge to generate biogas as an energy source to produce electricity for the sewage treatment facilities' internal consumption.

- ◆ Reduction of Greenhouse Gas (GHG) Emission – About 4.5 tonnes food waste generated in the two government wholesale food markets each day which were delivered to O•Park1 by truck on daily basis. With the implementation of food waste pre-treatment facilities, the number of haul trips to Tai Po Sewage Treatment Works will be reduced to once per week from seven. Delivery of food waste generated at WFMs to (i) O•Park1 and (ii) the Tai Po Sewage Treatment Works for energy recovery instead of to landfills for disposal will not only save the landfill space but also significantly reduce travelling distance and number of waste collection trucks to be deployed. The fewer haul trips can help reduce fuel consumption and hence GHG emission.
- ◆ In parallel, the market management has also carried out relevant publicity/educational activities such as arranging periodic visits for Market Management Advisory Committee members to EPD's O•Park1 and distribution of leaflets to market stakeholders in order to promote the concept of waste reduction at source.
- ◆ A series of green and energy saving initiatives (such as installing PV system over covered walkways, solar hot water system, PV panel integrated lamp poles and motion detection sensors for lighting system) have been launched in the New Territories South Animal Management Centre (NTSAMC) and the Shatin Plant Quarantine Station.
- ◆ We have been identifying premises, such as the Tai Lung Veterinary Laboratory (TLVL), for energy saving opportunities. An energy audit for the TLVL covering the period from 2021 to 2024 was conducted.

Various housekeeping measures were identified as energy management opportunities and were addressed by TLVL. Improvement of air conditioning system is in progress; the chillers of the main building has been replaced and those at the new annex have been completed in November 2023. Solar panels were installed and completed in 2024.

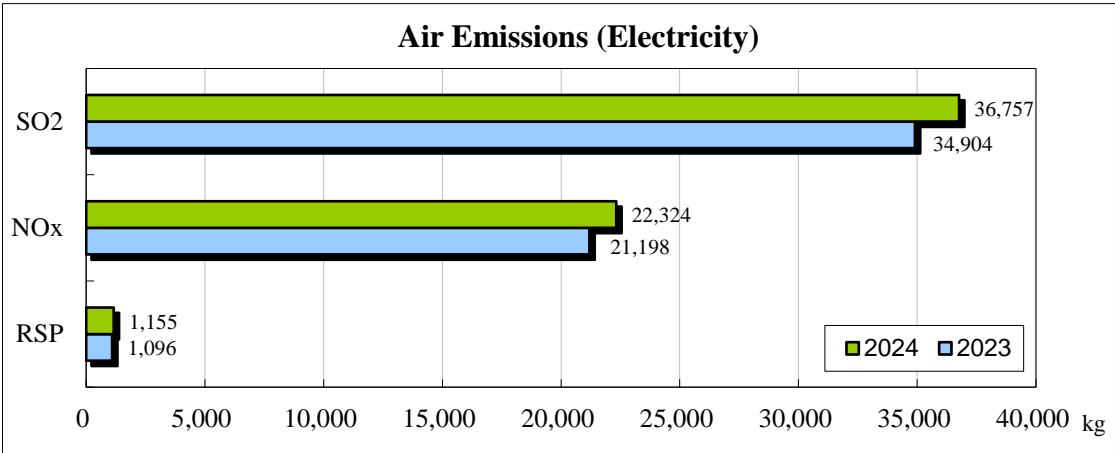
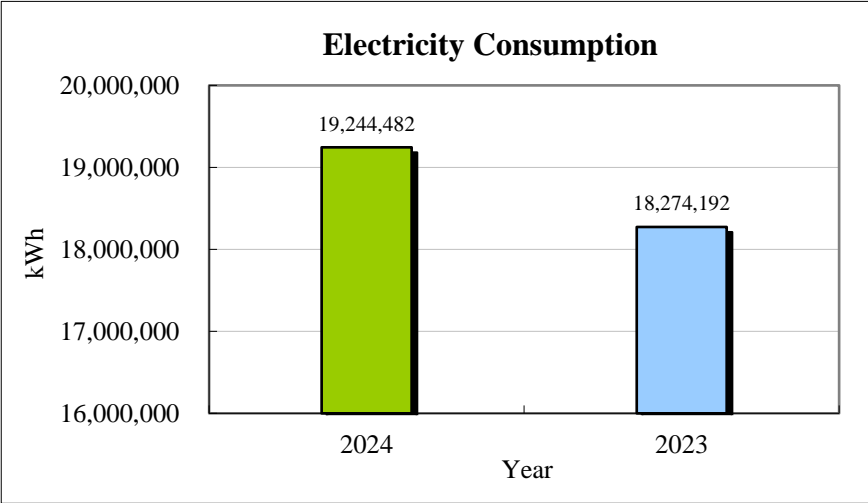
- ◆ A set of green and energy saving measures have been adopted at the Hoi Ha Wan Marine Park Visitor Centre, including installation of PV panels on the roof top of the building, PV panel integrated lamp post, water filling station and bio-treatment toilet. These elements have been incorporated into the education programme in order to promote green living to the public.
- ◆ Air-conditioning and central lighting in our Headquarters have been programmed to shut down at 6:30 p.m. and 8:00 p.m. respectively to sustain energy saving.
- ◆ We have been replacing dilapidated electric appliances with new models with energy saving label.
- ◆ In 2024, “Good” or “Excellent” Class Certificates under the Indoor Air Quality Certification Scheme were obtained at our Headquarters, the Ticket Office and the Visitor Centre of HKWP, the office on 2/F and Room T213 on M/F (Avian Influenza Surveillance Section of Animal Health Division) of CSWWFM, the office on 2/F of WWFM, the whole building (excluding 1/F) of NTSAMC, the office on G/F of the Kowloon Animal Management Centre, offices of Marine Parks Division and Marine Conservation Divisions at Units 2201 and 2209, 22/F, CDW Building, Marine Parks (West) Management Office on G/F of Tuen Mun Area 44 Joint-user Complex and Wholesale Fish Market (TMJCWFM) and office of Fauna Conservation Division on 19/F of PeakCastle.
- ◆ We have been encouraging our colleagues to adopt green specifications promulgated by the EPD for procurement of items. Particularly, we have incorporated environmental protection guidelines into all of the cleansing contracts for our premises.

Electricity, Petroleum, Paper and Envelope Consumption

9. Major sources of our air emissions are electricity consumption and vehicles. The air emissions mainly include Sulphur Dioxide (SO₂), Nitrogen Oxides (NO_x) and Respirable Suspended Particulates (RSP).

(a) Electricity¹

Our electricity consumption in 2024 was 19 244 482 kWh, leading to emissions of 36 757 kilograms (kg) SO₂, 22 324 kg NO_x and 1 155 kg RSP. When compared with 2023, there was an increase of 970 290 kWh in electricity consumption in 2024, accompanied by a rise in emissions of SO₂ by 1 853 kg, NO_x by 1 126 kg and RSP by 59 kg.



¹ It excludes electricity consumption of offices accommodated within joint-user buildings under the management of the Government Property Agency.

(b) Energy Performance of our Government premises²

The following table tabulates energy consumption of our government buildings in 2018-19 and 2023-24:

	Energy consumption before normalisation (Billed & RE)	Energy consumption after normalisation under comparable operating conditions³	Renewable energy (RE) generation
2018-19 (baseline) (million kWh)	19.36	18.39 (a)	0.011
2023-24 (million kWh)	18.57	17.15	0.054
Net change (million kWh)	-0.79	-1.24	+0.043
Change compared with (a)		+5.54% (b) (+value for saving)	+0.24% (c)
Energy Performance (b)+(c)		+5.78% (+value for performance improvement)	

(i) *Measures of Energy Saving*

Under comparable operating conditions of 2018-19, our saving in energy consumption in 2023-24 was 5.8%. Measures taken included:

- ♦ installing energy-efficient water pumps within the country parks area;
- ♦ replacing the defective parts of water pumps in the joint-user complex;
- ♦ replacing air-conditioning systems in visitor centres, management centre, office and nursery;

² Electricity and other forms of energy such as town gas and liquefied petroleum gas, contribution of renewable energy to carbon reduction of government buildings and infrastructure facilities are taken into account.

³ Activities of the Department evolve over time in meeting the public service demands, which lead to changes of operating conditions and significant impacts on energy consumption in areas such as operating hours, usage rate, number of equipment, the floor area of venues, volume of water/sewage flow, etc. Adjustments (or normalisation processes) are therefore conducted to calculate the energy consumption under comparable baseline operating conditions.

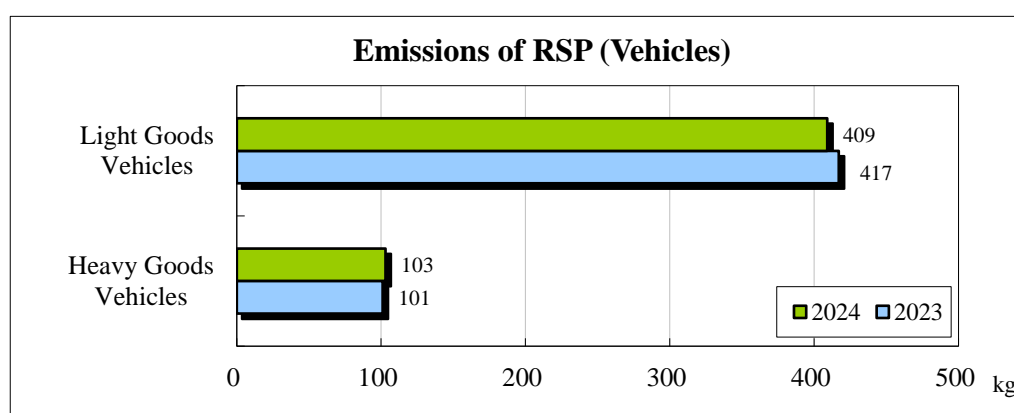
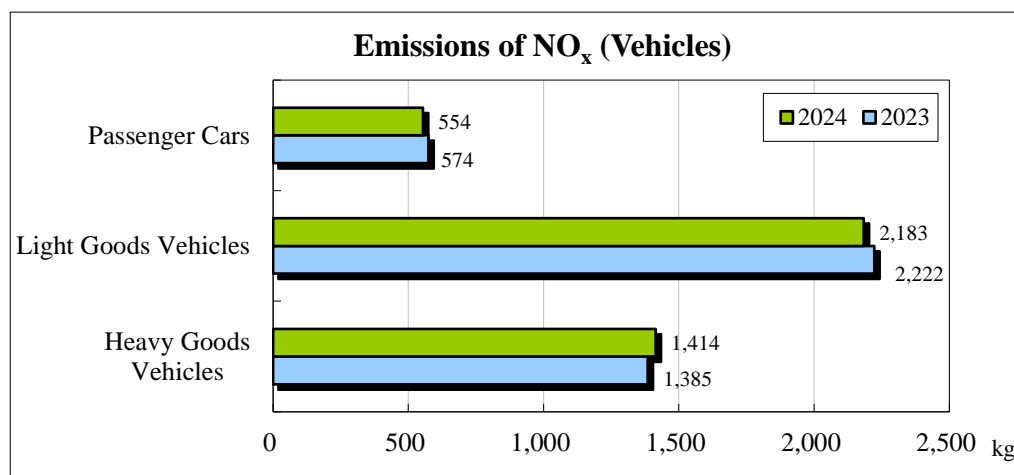
- ◆ replacing/modifying existing electrical appliances and fittings in HKWP and wholesale food markets;
- ◆ replacing lighting system with LED lamps in wholesale food markets and the joint-user complex;
- ◆ upgrading the recirculation aquaculture system in our experimental farm by installing variable-frequency drive (VFD) to improve overall energy efficiency;
- ◆ upgrading/optimising the chilled water and seawater pumps in CSWWFM by installing VFD to improve overall energy efficiency;
- ◆ using plastic curtains to help reduce electricity consumption of air-conditioners in areas where doors are kept open for a long period of time due to operational needs;
- ◆ encouraging the use of renewable energy, for instances solar energy through the installation of solar panels, to provide green energy for electrical appliances; and
- ◆ reviewing and adjusting the irrigation frequency of the irrigation system at TMJCWFM regularly according to humidity level in the premises.

(ii) *RE Generation Facilities*

- ◆ Installing/using of PV panels in visitor, management and education centres, offices, stations and wholesale food markets.

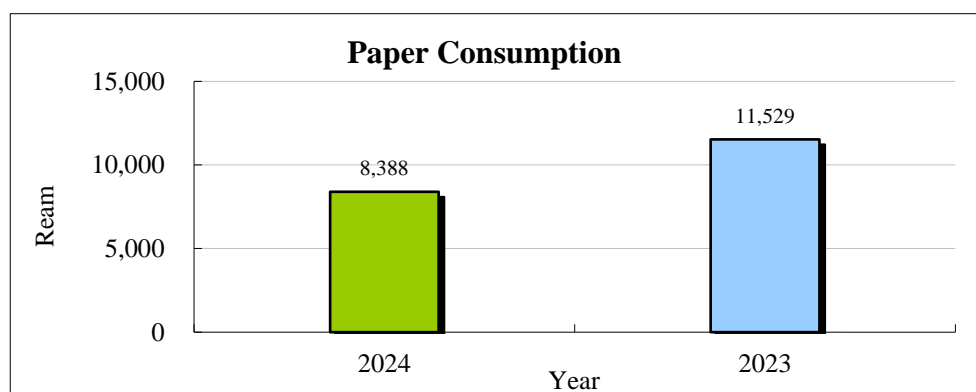
(c) Petroleum

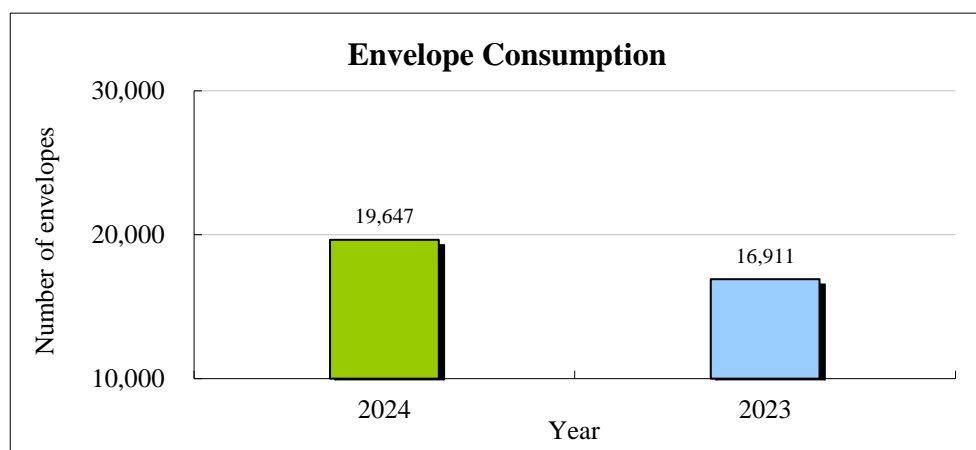
Total kilometres (km) travelled by our departmental vehicles in 2024 was 2 152 295 km (2 196 015 km in 2023). Average emissions of NO_x of our passenger cars, light goods vehicles and heavy goods vehicles were 554 kg (574 kg in 2023), 2 183 kg (2 222 kg in 2023) and 1 414 kg (1 385 kg in 2023) respectively. For RSP, 409 kg (417 kg in 2023) and 103 kg (101 kg in 2023) were emitted by our light goods vehicles and heavy goods vehicles respectively, while emissions of RSP by our passenger cars were negligible.



(d) Paper and Envelopes

In 2024, we consumed 8 388 reams of paper and 19 647 envelopes in our daily operations. Compared with 11 529 reams and 16 911 envelopes in 2023, consumption of paper dropped by 3 141 reams and consumption of envelopes increased by 2 736 in 2024.





10. We will continue our best endeavours to ensure the most efficient use of resources in the years ahead.

Carbon Audits

11. This Department has been conducting annual carbon audits of buildings that have annual electricity consumption of more than 500 000 kWh. Four AFCD buildings (i.e. CSWWFM, WWFM, TLVL and HKWP) conducted carbon audits for 2023-24 using the template for “Paper Approach” Carbon Audit adopted by bureaux and departments at the website: <https://cnsd.gov.hk/en/green-business-and-industry/carbon-audit/>.

12. The aggregate results of the carbon audit of these four buildings are summarised below:

1. Scope of Reporting

Total Scope 1/Direct greenhouse gas (GHG) Emissions:	16.3	Tonnes of CO ₂ -e
Total Scope 2/Indirect GHG Emissions:	6 450.58	Tonnes of CO ₂ -e
Total Scope 3/Other GHG Emissions:	125.5	Tonnes of CO ₂ -e
Total GHG Emissions:	6 592.38	Tonnes of CO ₂ -e

2. GHG Performance in Ratio Indicators

GHG Emissions per Floor Area (Total GHG Emissions/Floor Area):	0.009	Tonnes of CO ₂ -e/ m ²
GHG Emissions per Employee (Total GHG Emissions/No. of Employee):	13.68	Tonnes of CO ₂ -e/ employee

3. GHG Reduction Measures and Targets Implemented in the Reporting Period

Energy saving	Operating BIPV system to support energy consumption of office; adjusting thermostat of air-conditioners to its optimum; and installing motion sensor lights
Paper saving	Encouraging staff members to use both sides of paper when printing; reusing used papers as scrap paper; and purchasing recycled paper products
Water saving	Encouraging cleansing workers to save water
Recycling activities	Recycling waste paper; and collecting food waste and waste recyclables
Staff engagement	Reminding staff members to turn off computers before leaving office;
Housekeeping measures	Switching off lights when rooms/areas not being used/occupied; turning off unnecessary lightings and electrical equipment; and circulating reminder emails about housekeeping measures (especially relating to energy saving) among staff members

Green Housekeeping System

13. We have set up a departmental green management system since 1994. A Green Manager has been appointed to coordinate the green housekeeping efforts in the Department. In addition, the Green Management Committee (with a Directorate Officer as the chairperson and representatives from our five operation Branches as members) has been established to give steer in developing, implementing and monitoring green office practices, as well as to promote environmental awareness among our staff.

14. To assist the Green Manager in monitoring and implementing green policy and practices, a group of Assistant Green Managers (who are usually officers in charge of outstations) have also been appointed. They are responsible for monitoring green housekeeping performance of premises under their purview and reporting on a monthly basis.

15. To further strengthen the system and explore areas for improvement to ensure the green targets are achieved, Environmental Audit Teams have been formed since 2000. Led by the Green Management Committee members, the Audit Teams are

tasked to carry out green audits in our office premises. Committee members, as the Leaders of the Audit Teams, are required to report their audit results at regular Committee meetings.

Nurturing a Green Culture

16. We are committed to nurturing a green culture in our workplace. Green tips and relevant information are uploaded to the departmental intranet for access by our staff. To increase awareness and participation of staff in green management issues, colleagues are also encouraged to attend training and workshops on green management and energy conservation.

17. The 3-R principle of “Reduce, Reuse and Recycle” is practised in our offices to make efficient use of resources, as well as to reduce wastage and pollution as far as possible. Examples are as follows:

(a) Economising the use of papers

- ◆ Use both sides of papers
- ◆ Use recycled papers
- ◆ Collect usable single-sided papers
- ◆ Cut down on photocopying
- ◆ Set double-sided printing as default for all network printers in the Headquarters
- ◆ Discard the use of fax leader pages
- ◆ Use electronic mail and soft copies for exchange of documents
- ◆ Reduce the number of copies for distribution or circulation, if hard copy is absolutely needed
- ◆ Reduce the use of envelopes and reuse envelopes

(b) Conserving energy

- ◆ Check vehicles regularly to ensure that they are in good conditions for fuel efficiency
- ◆ Control fuel consumption and reduce emissions of pollutants by encouraging staff to share pool car for duty visits and site visits
- ◆ Strictly comply with the requirement of switching off idling motor vehicle engines

- ◆ Participate proactively in the Government's electric vehicle trial tests
- ◆ Encourage adoption of more electric cars in the coming years
- ◆ Use public transport whenever possible, especially when the Air Quality Health Index is high
- ◆ Switch off electrical appliances when not in use
- ◆ Control individual light zones by using sectional light switches
- ◆ Lower illumination level of offices where appropriate
- ◆ Shorten central lighting hours
- ◆ Shade sun-exposed windows and keep exterior doors/windows closed as far as possible
- ◆ Maintain room temperature of all air-conditioned office at 25.5°C during summer months
- ◆ Use manual sectional switches to turn off parts of the lighting and mechanical ventilation systems as appropriate in areas of the wholesale food markets with sunlight and natural flow of air
- ◆ Replace dilapidated electric appliances with new electric appliances with energy saving labels

(c) Minimising waste and recycling

- ◆ Use refillable ball pens
- ◆ Separate collection of used and waste paper
- ◆ Encourage staff to use their own cups instead of paper cups
- ◆ Minimise the use of products that are not environmentally friendly, such as correction fluid
- ◆ Reuse loose minute jackets
- ◆ Proactively inform other bureaux/departments of the minimum number of hard copies of reports, newsletters, circulars, publications, etc. required and request soft copies whenever feasible
- ◆ Introduce recycle bins in offices to encourage separation of wastes (papers, plastic bottles, aluminium cans, CDs, stationery and rechargeable batteries) for recycling
- ◆ Use biodegradable plastic bags where operationally feasible while reduce the use of non-environmentally friendly plastics or plastic bags in packaging souvenirs
- ◆ Collect used laser printer toner and ink-jet cartridges for recycling
- ◆ Circulate guidelines on green practices and waste avoidance to our staff to raise their awareness.

Way Forward

18. We are committed to enhancing our green performance. We will continue to explore green saving initiatives for our offices and encourage our staff to attend experience sharing sessions on the latest trend and technological advances in efficient use of resources and in reduction of air emissions.

19. The four wholesale food markets have accounted for about 50% of our total electricity consumption during the year. Given the significant reduction in electricity consumption in the markets after adopting power saving measures in the past few years, we will continue to explore and adopt further energy saving measures for the markets. We will regularly review and take on board energy saving measures with due regard to the ever-changing environment and new development in technology for further eliminating wastage and enhancing efficiency of the use of resources. Continuous efforts will be made to secure the support of our staff and market traders in taking part in the saving drive on an on-going basis.

20. To enhance staff awareness of resource efficiency, we will regularly remind our staff to observe the guidelines on green measures. We will continue to implement the annual Staff Suggestion Scheme to commend staff's contribution and achievement in resource saving, waste reduction, as well as setting good examples of fostering good habits in the workplace.

Comments and Suggestions

21. We welcome your comments and suggestions, which help us further improve our green performance. You may send us your views to/through:-

Post : 5/F, Cheung Sha Wan Government Offices,
303 Cheung Sha Wan Road,
Kowloon, Hong Kong
Fax : 2311 3731
Telephone : 1823
Email : mailbox@afcd.gov.hk