Marine Department Environmental Report 2024

Content

A | Introduction

The Marine Department (MD) is responsible for maritime and navigational safety matters within the waters of Hong Kong. The MD pledges its full support to prevention of marine pollution since the protection of the marine environment is not only important in its own right but also instrumental in enhancing Hong Kong's position as a world-class port. This Environmental Report covers the environmental performance of the MD in 2024 and sets out our environmental targets for 2025.

In July 2023, the International Maritime Organization (IMO) adopted the "2023 IMO Strategy on Reduction of Green House Gas (GHG) Emissions from Ships" (2023 IMO GHG Strategy) with enhanced levels of ambition comparing to the 2018 Initial Strategy to reach net-zero GHG emissions from international shipping by or around 2050. Hong Kong, as an Associate Member of the IMO, is obliged to ensure that ships within Hong Kong waters comply with all applicable international standards to protect the marine environment from pollution. In 2022, Hong Kong amended the Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P) to ensure ships of 5 000 gross tonnage and above should operate in a way that their annual operational carbon intensity indicators do not exceed the required boundary and ships of 400 gross tonnage and above are additionally required to be designed or modified to have their energy efficiency index within the required value to achieve the IMO GHG strategy from international shipping.

MD also promotes an environmentally responsible management and contributes to a greener environment by pursuing environmental-friendly operations. The Electronic Business System (eBS), as the MD's Public Portal, provides public forms submission services and accepts more public application forms in electronic format staring from 30 June 2021 in order to progressively reduce the need for paper forms and copies. We shall endeavour to identify more scope for e-services to ensure a wider use of electronic communications with a view to saving the environment.

B | Green Management Structure of MD

To promote an environmentally responsible management and implement green management practice in the MD, Departmental Secretary and Executive Officer (General Registry and Committee Unit) are appointed as the Departmental Green Manager and the Departmental Green Executive respectively.

For all environmental protection matters at Divisional level (namely, the Planning and Services Division, the Port Control Division, the Shipping Division, the Multi-lateral Policy Division, the Local Vessels and Examination Division and the Government Fleet Division), the Assistant Directors of Marine formulate respective green objectives, targets and measures based on the nature of their business. Divisional Environmental Protection representatives at the senior professional level are also appointed to co-ordinate and take forward the green measures.

(a) Our Environmental Goal

"We are One in Promoting Excellence in Marine Services". MD is committed to ensuring that our services and operations are conducted in an environmental-friendly and a responsible manner conducive to a cleaner port of Hong Kong.

(b) Our Environmental Work Focuses

(i) To ensure effective control on movement of dangerous goods in the waters of Hong Kong;

(ii) To enhance our marine refuse collection and scavenging services;

(iii) To maintain a maritime oil pollution plan to combat oil spills;

(iv) To take prosecution actions against offences of marine littering and pollution;

(v) To implement international conventions on prevention of marine pollution and enforce relevant environmental legislation on vessels;

(vi) To implement effective management systems to achieve energy saving for operations at MD's public cargo working areas and light beacon;

(vii) To adopt environmental-friendly and efficient designs for facilities and work processes at Government Dockyard;

(viii) To observe the Government's green management policy in our own workplaces to ensure efficient use of natural resources and energy;

(ix) To recommend environmental-friendly seawall designs with wave-absorbing capability in the relevant development projects;

(x) To recommend conducting a proper Marine Traffic Impact Assessment for every major marine-related development project to adequately address all potential marine impacts at each stage of the project implementation;

(xi) To implement plans and measures that are relevant to our operations for fulfilling the commitments to improve the air quality; and

(xii) To promote the awareness of indoor air quality (IAQ) by participating in the IAQ Certification Scheme.

C | Proactive Port Control

(a) Harbour Patrol

To ensure all vessels navigating in Hong Kong comply with our marine legislation, MD officers perform patrol and take prosecution actions against marine littering offence. During inspections of tankers and oil barges, MD officers advise the operators to strictly follow the code of practice and make sure that no illegal transfer or discharge of oil would take place in the waters of Hong Kong.

MD officers also closely monitor dilapidated vessels or wrecks to prevent any possible release of marine pollutants, such as lubricant or fuel oil residue. In 2024, 366 dilapidated vessels and wrecks were removed for proper disposal.

Patrol Launch MD18

(b) Dark Smoke Emission Control

It is an offence for any vessel in the waters of Hong Kong to emit dark smoke which is as dark as, or darker than Shade 2 on the Ringelmann Chart for three minutes or more continuously at any one time. In 2024, four vessels were convicted for contravention of the marine legislation on dark smoke emission.

Educational leaflets with the Ringelmann Chart have been distributed to ship operators. Publicity campaigns have also been conducted so as to promote the importance of proper engine maintenance in reducing dark smoke emission.

Extract from the Educational Leaflet with the Ringelmann Chart "No Excessive Dark Smoke Emission from Vessels"

(c) Dangerous Goods Control

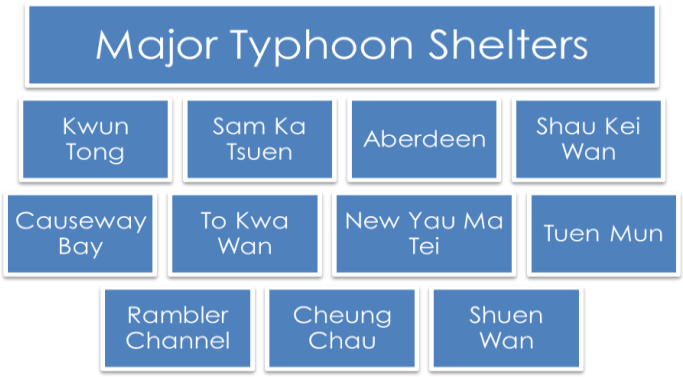
The Dangerous Goods Unit (DGU) carries out random inspections to vessels conveying dangerous goods in the waters of Hong Kong. In 2024, DGU inspected a total of 735 vessels and 37 vessels were convicted for contravening the legal requirements for conveying dangerous goods.

D | Efficient Marine Refuse Cleansing Services

Floating refuse is difficult to clear because it comes from various sources including shore, drainage or outer sea etc., and drifts with current and wind. MD is committed to keeping the harbour clean through effective and efficient marine refuse cleansing services.

MD's cleansing contractor has provided various types of vessels to clean up floating refuse in the waters of Hong Kong on a daily basis (including Sundays and Public Holidays).

The contractor also provides domestic refuse collection service to vessels in designated anchorages, berths and typhoon shelters. Currently, refuse collection vessels are stationed in the following major typhoon shelters for collecting refuse from vessels at least once a day.



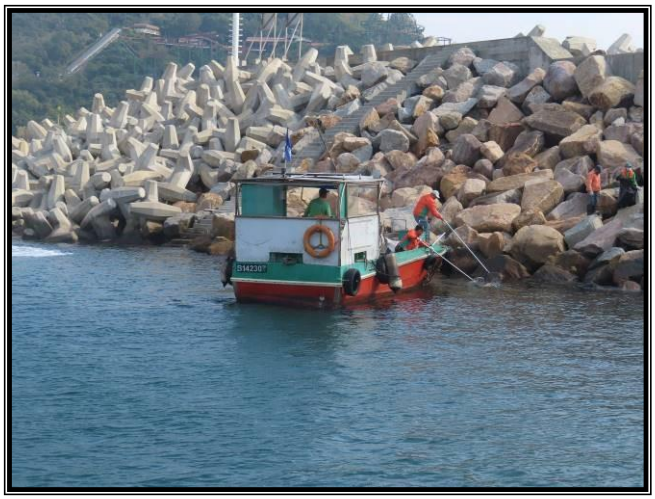
In 2024, the total marine refuse collected amounted to 2 281 tonnes*.

In 2024, the Pollution Control Unit conducted 436 visits to local vessels in various waters of Hong Kong to publicise the message of "We are One in Keeping our Harbour Clean".

* The actual weight of marine refuse collected by MD in tonnes.

Extract from the Educational Leaflet
"We are One in Keeping our Harbour Clean"

MD continued to take part in the District-led Actions Scheme to address the environmental hygiene issue of different districts. In 2024, MD conducted special scavenging operations in collaboration with other government departments to improve the marine hygiene conditions of Aberdeen Typhoon Shelter, Chai Wan Cargo Basin and Shau Kei Wan Typhoon Shelter. Moreover, being a member of the Inter-departmental Working Group on Marine Environmental Management and its two Task Forces (namely, (i) Task Force on Marine Refuse and (ii) Task Force on Emergency Response to Marine Environmental Incidents), MD continues to enhance the efforts in marine environmental management. The work includes tackling marine refuse problem and strengthening its capability and preparedness on emergency response to marine environmental incidents.



A Special Scavenging Operation in January 2024

E | Preparedness in Dealing with Oil Spills

The waters of Hong Kong are susceptible to oil spills owing to its closeness to congested waterways. MD has developed a Marine Oil Spill Response Plan to tackle oil pollution incidents. The Pollution Control Unit is on 24-hour standby and responds in situ within two hours for reported oil spillage inside harbour limits. Periodical patrols and inspections on vessels engaged in re-fuelling or transferring fuels have been carried out to remind coxswains to take precautionary measures for oil spillage. In 2024, the Pollution Control Unit responded to 159 alleged oil reports, 71 of which were confirmed and cleansing actions were taken subsequently. MD also keeps sending staff to attend internationally recognized professional training courses to maintain departmental competency and preparedness to combat potential oil spill incident.

Extract from the Educational Leaflet
"Prevent Oil Spill into the Sea, Reduce Harbour Pollution"

F | Cleansing of Marine Hazardous and Noxious Substances Spillage

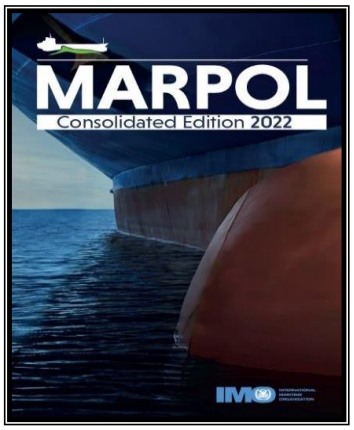
The annual marine pollution response joint exercises co-ordinated by MD and the Environmental Protection Department (EPD), code-named Oilex 2024 and the Maritime Hazardous and Noxious Substances (HNS) Exercise 2024, were held simultaneously in October 2024 in the waters off Sunshine Island to test local responses in the event of pollution caused by spillage of oil and HNS in the waters of Hong Kong.

Maritime HNS Exercise 2024 and Oilex 2024

In the test scenario, an oil tanker collided with a container vessel, leading to fuel oil spilling from the oil tanker and five containers loaded with acetone falling overboard. Combating the simulated HNS spill, the response teams lifted the damaged containers out from the sea to stop further pollution at source. The joint annual maritime HNS spillage response exercise reaffirmed the alertness and readiness of relevant Government departments under the Maritime HNS Spill Response Plan.

G | International Conventions and Local Legislation

MD represents the Hong Kong Special Administrative Region (HKSAR) at the International Maritime Organization (IMO), an United Nations specialised agency responsible for the safety and security of international shipping as well as the prevention of pollution of the environment from ships. The HKSAR is committed to implementing the International Convention for the Prevention of Pollution from Ships (known as the MARPOL Convention) including the investigation into any accidental discharge of pollutants into the sea by vessels.



World Maritime Theme 2022

To mitigate the risks of oil pollution, Annex I of the MARPOL Convention was amended so that the final waterline of oil tankers of 150 GT and above (delivered after 31 December 1979) by adding additional excluded openings fitted with watertight closure, taking into account sinkage, heel and trim, to be below the lower edge of any opening through which progressive flooding may take place, the Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A) were amended in June 2023 and came into force on 1 January 2024 .

To ensure the safety of sea transportation of dangerous goods in packaged form and reduce the risks of marine pollution, the Merchant Shipping (Local Vessels) (General) Regulation (Cap. 548F) was amended in June 2023 to implement the amended requirements of the International Maritime Dangerous Goods Code. The amended regulation came into operation on 1 January 2024 and applied to all ships including local vessels.

To reduce marine pollution from garbage, the Merchant Shipping (Prevention of Pollution by Garbage) Regulation (Cap. 413O) was amended in February 2024. The amended regulation came into force on 1 May 2024, giving effect to the amendments to Annex V of the MARPOL Convention regarding the enhanced tonnage

requirement for a ship that has to keep a Garbage Record Book and make entries for certain discharges.

To mitigate air pollution, Annex VI of the MARPOL Convention was amended to designate the Mediterranean Sea Emission Control Area as an SOx Emission Control Area by IMO. The Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P) was amended accordingly in February 2024 and came into operation on 1 May 2024 to implement the latest requirements of Annex VI of the MARPOL Convention.

Moreover, the MD has a responsibility to ensure that non-Hong Kong registered ships visiting Hong Kong comply with the requirements of various international maritime conventions. To discharge this function, Port State Control inspections will be arranged to check whether the vessels comply with the relevant convention provisions with respect to issues of marine safety and environmental protection. In 2024, 603 inspections on foreign ocean-going vessels were conducted in the waters of Hong Kong, of which three detentions were made due to serious contraventions with the MARPOL requirements.

H | Green Initiatives at Public Cargo Working Areas and Light Beacon

(a) Public Cargo Working Areas (PCWAs)

17 high mast floodlights in the Western District PCWA were replaced by more energy-efficient LED lights as of 2024.

To promote the use of renewable energy, solar panels have been installed on the rooftop of the administration buildings of the Western District and Stonecutters Island PCWAs, which have been commissioned since June 2023 and March 2024 respectively. The annual electricity consumption of PCWAs could be further reduced.

Energy-efficient LED Lights in Western District PCWA

(b) Aids to Navigation

To save energy, more than 90% of the aids to navigation on various bridges and piers have been replaced with longer-lasting LED lanterns that consume less electricity. The Sha Chau Leading Light was replaced with a longer lasting LED lantern in 2024 to save energy.

Sha Chau Leading Light

I | Going Green at Government Dockyard

The Government Dockyard on Stonecutters Island is the operational and maintenance base of all government vessels. Going green is an on-going commitment of the Government Dockyard. The following environmental measures were implemented at the Government Dockyard in 2024:

- ✧ Collected 491 waste batteries and 477 used toner cartridges for recycling;
- ✧ Replaced conventional streetlamps with 143 solar-powered light-emitting diode (LED) units, illuminating various open boatyards, outdoor spaces, major access routes and main streets, while promoting the use of photovoltaic (PV) system to reduce carbon emission in the Government Dockyard;

New Replacement of PV LED Units in 200T Open Boatyard

New Replacement of PV LED Units in 70T Open Boatyard

A Streetlamp Pole replaced with PV LED Units

Streetlamp Luminaire glowed with PV LED Units at Dusk

✧ Replaced the entire fresh and flush water pump set with a variable speed drive (VSD) control system, optimising power consumption and achieving energy savings by minimizing the need for pumps to operate at full power during periods of low utilisation;

Newly installed fresh and flush water pump set with VSD Technology for Optimising Energy Efficiency

Newly Installed Control Panel for VSD Units

✧ Replaced all traditional fluorescent tubes in the outboard engine workshop with LEDs to enhance energy efficiency;

A Light Fixture with Newly Replaced LED Tubes

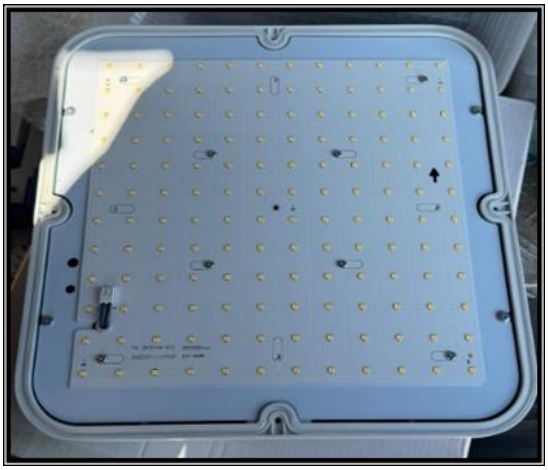
New Replaced LED Tubes at the Outboard Workshop

✧ LED luminaries were deployed to replace traditional fluorescent lamps across the plant rooms in Blocks B, J, and K of the Government Dockyard. In addition to saving power, these luminaires delivered superior luminous efficacy, extended lifespan, and required minimal maintenance;

Newly Installed LED Luminaries in Genset Room

Newly installed LED Luminaries in Chiller Plant Room

Newly Installed LED Luminaries in AHU Room



A New LED Luminaire

✧ To continue utilising the Internet of Things (IoT) technology for real-time monitoring power consumption in repair yards, aiming to improve energy efficiency and eliminate energy wastage;

Six Smart Meters for monitoring power consumption

✧ Displayed plants in offices;

✧ Affixed "Save Energy" stickers to light switches to remind staff to switch lights off when not in use; and

✧ Subject to funding availability, a photovoltaic system with solar panels designed to convert sunlight into electricity will be installed on the rooftops of the Government Dockyard's buildings in the coming years.

Green Fleet

(i) Green New Vessels with Environmental-Friendly Engines

Marine diesel engines installed on new vessels procured by MD comply with the latest IMO's regulation in reducing nitrogen oxide emission.

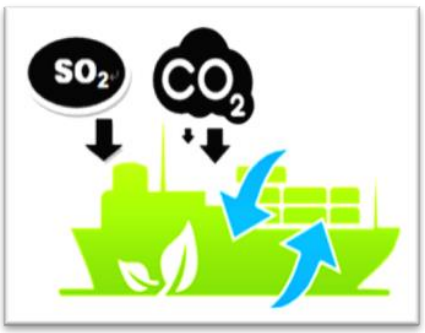
To follow the Government's green procurement policy, main and auxiliary diesel engines (over 130kW) on new government vessels comply with the most recent MARPOL regulations (i.e. the engines are IMO nitrogen oxide Tier II emission types or above, if applicable).

In addition, MD's new vessels incorporate the use of hybrid power system and diesel-electric propulsion system to reduce fuel consumption and emission of nitrogen oxide, sulphur oxide and carbon dioxide. Shore electric power and/or solar cells are used for lighting and ventilation so as to eliminate emission of greenhouse gas by the vessel's own generator during the vessel's standby.

With a view to holistically building a green Government fleet, MD on 18 December 2024 set up an inter-departmental working group to explore the technological development in relation to green maritime fuel-powered vessels regularly and identify potential government vessels to use green maritime fuels upon decommissioning in future.

(ii) Existing Vessels

Since 2002, MD crew have been advised to operate vessels at economically safe speed in accordance with the engine manufacturer's recommendation. Up to 2024, 12 MD operated and 50 police diesel-driven vessels have been using renewable B5 biodiesel in order to reduce emission of greenhouse gas, e.g. carbon dioxide.



J | Green Housekeeping

We are committed to the Government's green management policy and advocate the principle of 4Rs – "Reuse, Reduce, Recycle and Replace". For instance, disposable paper cups have been replaced by reusable cups when hosting meetings. Our colleagues are also encouraged to bring their own cups to meetings. To advocate good green practice, no bottled water is distributed by the pantry service.

Reusable Cups

(a) Recyclable Materials Collection Campaign

MD's Headquarters at Harbour Building has joined the Recyclable Materials Collection Campaign organised by the Building Management Office since early 2008 to allow paper waste, plastic bottles and metal to be collected separately at the source.

Recyclable Bins in Harbour Building

In 2024, the recycled materials collected at Harbour Building amounted to 2053 kg, with the breakdown as follows:

Materials	Amount Collected (kg)
Waste Paper	1 969
Metals	6
Plastics	78
Grand Total	2 053

Government Fleet Division has been working closely with the operator of the canteen in Government Dockyard with a view to reducing food waste. A food waste composter has been installed for the canteen in Government Dockyard.

Food Waste Recycling Bin in Government Dockyard

(b) "Plastic-free Takeaway" Campaign

In line with Government's green policy, to minimise the use of disposable tableware and cultivate the habit of using reusable tableware, the catering operators in the Government Dockyard Canteen, Tuen Mun Public Cargo Working Area (PCWA) Government Canteen and New Yaumatei PCWA Government Canteen have been ceased distributing plastic straws and poly-foam food containers to customers since 2021. Posters were placed in prominent places to remind colleagues to use reusable tableware as far as possible when buying takeaway meals and avoid asking for disposable cutlery.

(c) Green Information Technology (IT)

By utilising clusters of servers and virtualisation technology, 76 physical servers and applications supporting 39 backend systems and IT infrastructure have been transformed, resided and run within a Cloud Computing environment as of end 2024.

As a total e-business solution for port formalities documents and public services, Common Certificate/Licence/Permit Services (CCLPS) platform was introduced and Electronic Business System (eBS) continuously evolved to save paper and travelling cost.

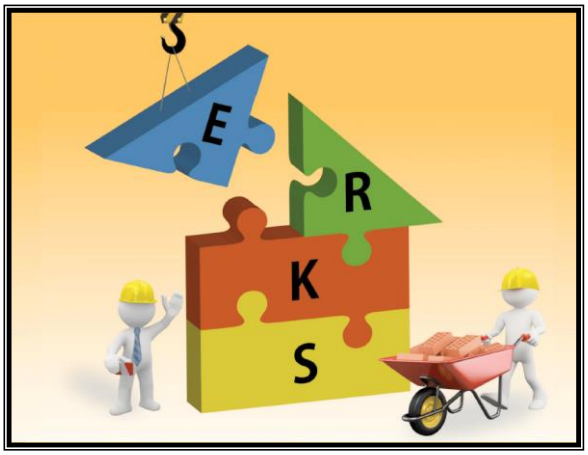
(d) E-Notices, Circulars and E-cards

In 2024, MD continued to disseminate information through the departmental intranet and departmental website to minimise the circulation of hard copies and consumption of paper. Electronic greeting cards have been sent out since 2001.

(e) Paper Saving

We endeavour to consume less paper. In 2024, MD consumed 8 055 reams of A4 recycled paper[1]. Detailed figures of paper consumption for the period between 2009 and 2024 are at ***Annex I***. To reinforce staff awareness, guidelines on green management have been re-circulated to all staff at regular intervals.

An electronic filing system (known as Electronic Record-keeping System) has been rolled out since August 2019 for Batch 1 users, April 2020 for Batch 2 users, November 2020 for Batch 3 users and June 2021 for Batch 4 users. The use of information technology helps reduce paper consumption.



Electronic Record-keeping System

(f) Energy Saving

In 2024, MD consumed 20 384 119 kWh of energy. Detailed figures of energy consumption for the period between 2009 and 2024 are at ***Annex II***.

MD has participated in energy saving projects with a view to reducing energy consumption. In addition, energy wardens have been appointed since 2005 to conduct green housekeeping inspections and energy saving checks on a bi-monthly basis. In addition, Divisional Executive Officers have been tasked to perform regular checks on the completed inspection reports conducted by the energy wardens.

All Government buildings in MD switch off external lighting installations for advertising, promotional and decorative purposes at or before 10pm until 7am on the following day.

[1] No virgin paper (also known as woodfree paper) was consumed in 2024.

(g) Water Saving

Stickers and posters obtained from the Water Supplies Department are placed in prominent places such as pantries and washrooms to remind colleagues to reduce water consumption.

It is the Government's target to reduce the per capita fresh water consumption by 10% by 2030 as pledged in the Policy Agenda 2017 and 2018. For 2024, fresh water consumption in MD was reduced by 7.6% when compared to 2023. Relevant water saving tips have been shared with our staff, such as to turn off the tap while soaping hands, place water efficiency labels, fix dripping taps and water mains promptly and use water saving devices, e.g. water efficient tap. We appealed for our staff continuous support in water saving.

Poster and Sticker of Water Saving Placed in Toilets, MD Headquarters at Harbour Building

Poster of Water Saving in Block A Canteen, Government Dockyard

(h) Waste Separation bins and Separate Collection Systems for recyclable at Harbour Building

The recycling facilities in designated office areas and the collection frequency depends on the notice from the office department at Harbour building. The collection of glass recycling occurs once per week.

(i) Reducing fuel consumption

Our drivers continued to comply with the requirement to switch off idling engines and observe eco-driving practices.

(j) Carbon audit

Bureaux and departments are required to conduct annual carbon audits for their buildings with annual electricity consumption over 500 000 kWh. Carbon audits were carried out at the Hong Kong-Macau Ferry Terminal, China Ferry Terminal and Government Dockyard. The greenhouse gas emissions were 3 953, 1 880 and 2 224 tonnes of CO_2 or equivalent respectively for the Financial Year 2023-2024.

Energy and carbon audit for Government Dockyard was conducted by a consultant appointed by Electrical and Mechanical Services Department (EMSD) in October 2023. The consultant has recommended several energy management opportunities (EMOs) and carbon reduction measures with a view to saving energy in Government Dockyard. Government Fleet Division (GFD) has implemented some of the recommendations, such as providing reminder labels to promote the use of staircase instead of elevators and switch off air-conditioning units upon leaving the room, activation of hibernation modes for photocopying machines etc. Over the past years, some toilets and corridors in office buildings have been replaced with LED lights as required. GFD will continue to collaborate with various occupants of Government Dockyard and explore suitable places to implement the remaining recommendations, such as reduction of lighting in non-office areas and replacing fluorescent lights with LED.

(k) Green Tips in "Scuttle Butt"

"Ten Housekeeping Green Tips" have been regularly circulated to staff via internal emails. Green tips and news about environmental conservation are also publicised in our staff newsletter, "Scuttle Butt", on a quarterly basis.

Extract from "Scuttle Butt" Issue No. 95 (May 2024)

Extract from "Scuttle Butt" Issue No. 96 (November 2024)

(l) Earth Hour 2024

We supported "Earth Hour 2024" organised by World Wide Fund for Nature by relaying the event information to all staff to encourage their participation at home by turning off non-essential lighting and air-conditioning respectively.

Earth Hour 2024

(m) Green Procurement

When procuring goods and services, MD has taken into account the environmental considerations to purchase green products and services where applicable. For instance, MD has adopted the green specifications and green procurement practice promulgated by the Environment and Ecology Bureau.

Out of the green procurement list of 183 Government product items with established green specifications promulgated by the Environment and Ecology Bureau, MD has procured goods/services under 21 product items with green specifications. The total values purchased of these items in 2024 were HK$11,997,078.00.

The major items of green products and services purchased by MD in 2024 were network products, server and hiring services of coaches with 20 or more passenger seats.

K | Good Indoor Air Quality

MD has joined the Indoor Air Quality (IAQ) Certification Scheme launched by EPD to promote and commend good IAQ management practice. The following premises have been classified as "Good Class" under the IAQ Certification Scheme:

- ✧ MD Headquarters (Harbour Building)
- ✧ Government Dockyard's Administration Building (Block A)
- ✧ Harbour Patrol Section Main Building and its Annex Building
- ✧ China Ferry Terminal
- ✧ Hong Kong-Macau Ferry Terminal

Indoor Air Quality (IAQ) Certification Scheme

Improvement work for IAQ was conducted in 2023 in the marine office at deck 1, outer pier of the Hong Kong-Macau Ferry Terminal. One set of Primary Air Unit (PAU) was installed where fresh air was collected, pre-treated and supplied to the office area. The installation improved the CO_2 accumulated in the office area to achieve better IAQ.

Primary Air Unit (PAU)

L | Environmental Targets for 2025

To sustain our accomplishments on environmental work, we shall continue to:

- ✧ do our best to prevent and fight against all forms of marine pollution, such as marine refuse, oil spills, smoke emission, etc.;
- ✧ encourage our staff and appeal for their support for adopting green measures and participating in green activities;
- ✧ convert more aids to navigation to longer life-span LED lanterns;
- ✧ identify business areas to be transformed into an e-service under eBS;
- ✧ explore new means and pay particular attention to a wider use of electronic measures to minimise the usage of paper and energy;
- ✧ work closely with EMSD and EPD in implementing more energy-saving projects to reduce electricity consumption and identifying renewable / alternative energy;
- ✧ replace those aged air-conditioning systems by adoption of the energy-saving type chillers and variable refrigerant volume (VRV) systems to reduce electricity consumption; and
- ✧ identify more areas in Government Dockyard which can use energy-saving lighting to reduce electricity consumption and explore the possibility for installing solar panels in available spaces to generate green energy in Government Dockyard.

To fulfil our commitments under the Clean Air Charter, we will continue to:

- ✧ implement energy saving measures with a view to reducing energy consumption in Government Dockyard and ferry terminals;

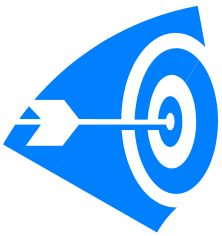
- ✧ implement the Government's green procurement policy that main and auxiliary diesel engines (over 130 kW) on new government vessels are IMO NOx Tier II emission types or above if applicable;

- ✧ encourage user departments to adopt more solar energy for their new government vessels where possible;

- ✧ review vessels' operational profile and urge all user departments to operate at the optimal conditions as far as practicable to reduce fuel consumption;

- ✧ work with EPD on using biofuel in government vessels; and

- ✧ explore with user departments who bid for government new shipbuilding projects to adopt green maritime fuel, hybrid propulsion systems and/or other green technologies, if applicable.

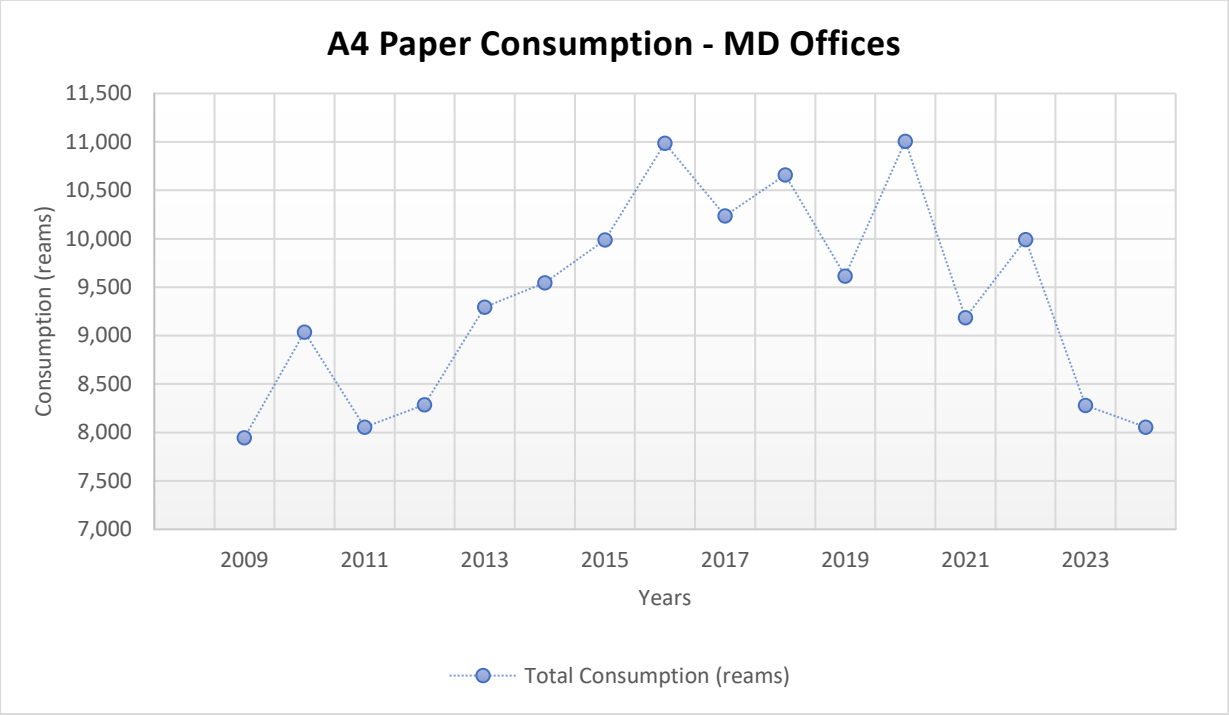


M | Information and Suggestions

We encourage knowledge and experience sharing with stakeholders on environmental issues. You are welcome to share with us your views and suggestions by the following means –

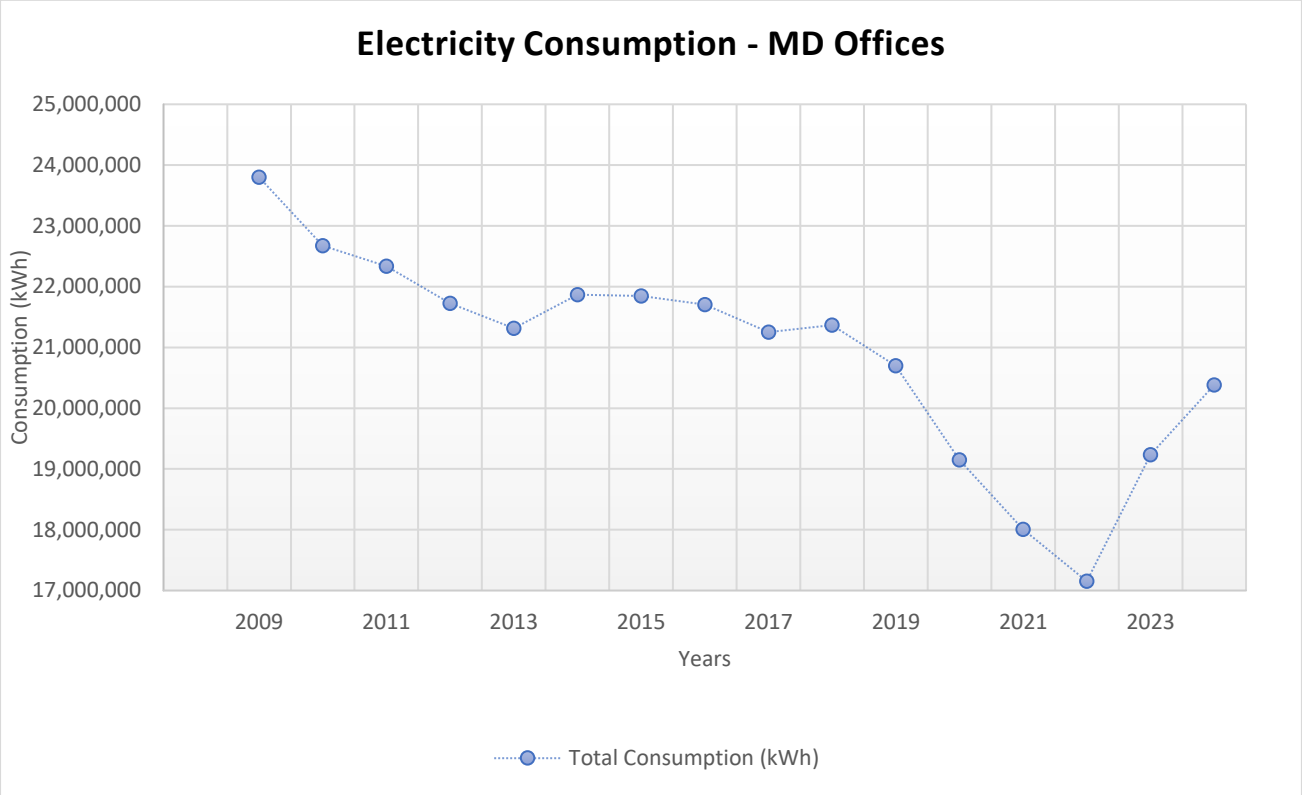
Address:	Marine Department Headquarters, 22/F, Harbour Building, 38 Pier Road, Central, Hong Kong.
Tel:	2542 3711
Fax:	2541 7194
E-mail:	mdenquiry@mardep.gov.hk

Annex I



Year	Total Consumption (reams)
2009	7 947
2010	9 038
2011	8 056
2012	8 285
2013	9 296
2014	9 545
2015	9 990
2016	10 986
2017	10 235
2018	10 660
2019	9 615
2020	11 008
2021	9 186
2022	9 991
2023	8 281
2024	8 055

Annex II



Year	Total Consumption (kWh)
2009	23 800 719
2010	22 671 480
2011	22 336 616
2012	21 723 773
2013	21 316 588
2014	21 866 410
2015	21 844 606
2016	21 704 401
2017	21 250 261
2018	21 366 900
2019	20 700 853
2020	19 150 100
2021	18 005 484
2022	17 152 273
2023	19 233 984
2024	20 384 119