

# Hong Kong Fire Services Department Environmental Report 2019

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# Introduction

As an emergency service provider, the Fire Services Department (FSD) is not only responsible for firefighting, rescue, providing advice on fire protection and emergency ambulance services, but is also committed to protecting the environment by pursuing continual improvements in delivering our services to the community in an environmental-friendly manner without compromising the efficiency and cost-effectiveness of our core functions. We endeavor to comply with all relevant green legislations; monitor and control the significant environmental impacts associated with our activities and operations; and to support environmental programmes and activities.

# **Environmental Management System**

## **Environmental Auditing Committee**

Since 1995, we set up the Environmental Auditing Committee (EAC), chaired by Assistant Director (Headquarters) with Divisional Officers/Superintendent and Executive Officer appointed from respective Commands and the Administration Division as members.

## **Staff Awareness Training**

Members' willingness to participate in green initiatives is crucial to the success in building a green culture in the Department. From time to time, the EAC advises members through e-mails on green tips and best practices in housekeeping. Members are also reminded to make continuous effort towards a greener workplace. To foster the culture of environmental protection management in the Department, members were nominated to attend briefings and experience-sharing workshops on the relevant legislative initiatives and green management measures organized by relevant government departments and organizations.

# **Environmental Performances**

## **Energy Saving**

Our total electricity consumption in 2019 was 46,506,751 kWh. We thrived to challenge ourselves in curbing electricity consumption although we are operated under a continuing expanding scale. Our members are fully aware of the importance of energy saving and endeavor to contribute in this regard.

#### **Energy Saving Measures**

In order to reduce energy consumption, we had implemented a number of energy-saving measures in Fire Services premises ("FS premises") such as using T5 fluorescent light, switching off electrical equipment when not in use, replacing aged elevators to increase energy efficiency, and switching off some elevators during off-peak hours.

#### **Carbon Audit**

To combat climate change, Carbon Audit Reports were compiled for 7 FS premises in 2019. Greenhouse gas emissions from these buildings were on average 0.18 tonnes of carbon dioxide per square metre of floor area.

#### **Economy in the Use of Paper**

Paper is valuable resources. We had implemented several computer-aided systems and IT Programmes to reduce paper records and transactions. We will continue to strive our best to adhere to the principles of reduction, reuse and recycling, so as to reduce the impact on the environment.

#### **Consumption of Fuel**

Staff of the Fire Services Workshops and Transport Division and the Electrical & Mechanical Services Department conducted periodical maintenance for our fire appliances and ambulances to ensure that they were maintained at the most optimum mechanical efficiency so as to avoid excessive fuel consumption. In 2019, the FSD vehicle fleet consumed about 4,112,000 litres of fuel.

#### **Improving the Air Quality**

Our workshop staff would conduct the Vehicle Emission (Gases Analysis) tests / Diesel Vehicle Emission (Smoke Density) tests in the routine maintenance and servicing of our vehicles to ensure that their emission was in full compliance with the legislative requirements. All new fire stations and ambulance depots have been equipped with fume exhaust systems to extract exhaust from engines of fire appliances and ambulances which could improve air quality in these workplaces.

#### Management of Wastes

#### Recycling

We encouraged all members to take part in recycling programmes. In 2019, about 22,934 kg of papers was collected from our workplaces for recycling. In addition, waste separation bins have been provided in Fire Services Headquarters Building, Cheung Sha Wan Fire

Station and the Fire and Ambulance Services Academy (FASA) to encourage our staff to separate their waste for recycling.

#### **Chemical Wastes**

As at 31<sup>st</sup> December 2019, a total of 116 units of the Department had been registered as Chemical Waste Producers under the Waste Disposal (Chemical Waste) (General) Regulation of the Waste Disposal Ordinance (Chapter 354). Proper arrangements had been made with registered chemical waste collecting contractors to collect the chemical waste produced in these units.

#### **Clinical Waste**

Clinical waste generated in the course of providing ambulance and paramedic services by ambulance staff would be temporarily stored in ambulance depots installed with "Clinical Waste Storage Cupboard". The clinical wastes would then be collected and properly disposed of by designated contractors.

# **Major Environmental Initiatives**

## **Green Procurement Policy**

By the end of 2019, a total of 776 Fire Services vehicles in commission are in compliance with Euro V or above emission standards. For continual improvement, we planned to procure 77 fire appliances with Euro VI emission standards to replace the aged ones so as to gradually reduce emissions from 2020 to 2022. In 2020-21, it is anticipated that 37 new vehicles with Euro VI emission standards will be put into commission.

## **Solar Photovoltaic Panels**

The consequences of global warming are serious. To combat climate change and to achieve sustainable development, solar photovoltaic panels were installed on the roof of 9 fire services premises so as to supplement the electricity supply from the power company.

## **Indoor Air Quality Improvement**

To support the government's policy on improving Indoor Air Quality Control, the Department has looked into various options to enhance the indoor air quality of our office premises. We have participated in the IAQ Certification Scheme since 2006. Up to 2019, 21 FS premises had been certified as Excellent Class or Good Class. We will continue to conduct IAQ certification for other eligible premises so as to provide a more pleasant indoor working environment for our members.

# **Green Roofing of Fire Stations and Ambulance Depots**

Green roofing system was installed in appropriate fire stations and ambulance depots. Green planting was also carried out at the balcony and entrance. The green roof substrate soil and vegetation, apart from beautifying the roof, had brought positive effect to address the urban climatic change by reducing the energy demand for the premises through direct shading and better insulation of the roof.



Green Roof at Kai Tak Fire Station

Green Roof at Kwun Tong Fire Station

#### Food Wise Hong Kong Campaign

To support the "Food Wise Hong Kong Campaign" launched by the Environment Bureau, we signed the "Food Wise Charter" in 2013 with a view to reducing food waste. For effective monitoring of our performance in this regard, fire stations/ambulance depots are required to record the amount of food waste regularly. Reminder messages were frequently disseminated to our staff by email with a view to encouraging them to reduce food waste.

#### Waste Reduction at Source

#### **Avoidance of Use of Disposable Tableware**

As far as practical, we have thrived to minimize the use of disposable tableware. Starting from 1 January 2019, no plastic straws and poly-foam food containers are provided in the canteens of FS premises. Disposable tableware will not be provided for dine-in food and drinks, and it will not be provided by default or in sets for take-away food and drinks. In addition, our staff are encouraged to adopt a straw-less and plastic-free lifestyle.

#### No Straw Campaign

We have participated in the "No Straw Campaign" organized by the Ocean Park Conversion Foundation and undertaken not to give out straws in the canteen of FASA. We have also suspended the provision of straws through the automatic vending machines in the Fire Services Headquarters Building.

#### Avoidance of Use and Sales of Plastic Bottled Water

As another green step in promoting waste reduction at source, we have avoided the use of plastic bottled water in organizing events and meetings. In addition, we have ceased the sales of plastic bottled water through all automatic vending machines in FS premises.

## **Way Forward**

We have proposed five energy saving projects on upgrading or optimizing the air-conditioning system in 2019. We also made satisfactory progress in meeting the environmental management targets in 2019. To keep up our improvements in green management and to promote a green culture, we would continue to implement energy saving measures and to identify any potential energy management opportunities. We will monitor the target of reducing electricity consumption and carbon emission through regular checking and reporting exercises.

# **Views and Suggestions**

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