



Hong Kong Fire Services Department Environmental Report 2018



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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 legislation; 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 reminds members by issuing green tips and best practices in housekeeping through e-mails. 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 2018 was 45,572,927 kWh with a slight decrease of about 0.94% as compared with 2017. We thrived to challenge ourselves in curbing electricity consumption although we operated under a continuing expanding scale. Our members are fully aware of the importance of energy saving and are dedicated to contribute.

Energy Saving Measures

In order to reduce energy consumption, we had implemented a number of energy-saving measures in FSD 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, we have compiled 11 Carbon Audit Reports for FSD premises with annual electricity consumption over 500,000 kWh in 2018. Greenhouse gas emissions from these buildings were on average 0.17 tonnes of carbon dioxide per square metre of floor area with a slight increase of 4.29% as compared with 2017.

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. The paper consumption in 2018 was 40,637 reams, representing a decrease of about 6.90% as against 2017. We will continue to make every effort with a view to reducing paper consumption.

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 2018, subsequent to 3.23% and 2.44% increase of emergency calls and fire safety inspections respectively, the FSD vehicle fleet consumed about 3,928,000 litres of fuel, representing an increase of 7.52% over that in the previous year.

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 legal 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 and thus improve air quality in the workplaces.

Management of Wastes

Recycling

We encouraged all members to take part in recycling programmes. In 2018, about 27,610 kg of papers were collected from our workplaces for recycling, which was equivalent to about 11,805 reams of papers or about 29.05% of the Department's paper consumption for the entire year. In addition, waste separation bins have been placed 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 31st December 2018, a total of 115 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”. Those clinical wastes would then be collected and properly disposed of by designated contractors.

Major Environmental Initiatives

Green Procurement Policy

By the end of 2018, a total of 752 Fire Services vehicles in commission are in compliance with Euro V or above emission standards. For continual improvement, we planned to procure 122 fire appliances with Euro VI emission standards to replace the aged ones so as to gradually reduce emissions from 2019 to 2022. In 2019-20, it is anticipated that 32 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 8 fire services premises so as to supplement the electricity supply from the power company.

“Zero Hill Fire Scheme”

To protect our countryside from fire, we launch the campaign of “Zero Hill Fire Scheme” since 2007 to engage the community in promoting their awareness of the hazards of hill fires during Ching Ming and Chung Yeung Festivals. The Campaign aimed at encouraging all rural villages in Hong Kong to participate in hill fires prevention. With the concerted effort of all participating villages, we could better protect our environment by reducing the number of hill fires significantly. In 2018, 492 participating villages had successfully hit the target of “Zero Hill Fire” and were given award as a due recognition of their success.

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. FSD has participated in the IAQ Certification Scheme since 2006. Up to 2018, 21 fire services 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 Station and Ambulance Depot

Green roofing system was implemented 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 Sheung Shui Ambulance Depot



Green Roof at Kowloon 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.

No Straw Campaign

This Department has participated in the “No Straw Campaign” organized by the Ocean Park Conversion Foundation and undertakes not to give out straws in the canteen of FASA and the restaurants of Fire Services Club. We also encourage our staff to adopt a straw-less and plastic-free lifestyle.

Avoidance of Use and Sales of Plastic Bottled Water

As another green step in promoting waste reduction at source, we proactively avoid 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 had secured funding for 36 energy saving projects on upgrading or optimizing the air conditioning system since 2017. We also made satisfactory progress in meeting the environmental management targets in 2018. 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

To save paper, we do not provide hard copy of this report. An electronic copy of this report is available at our website (http://www.hkfsd.gov.hk/eng/environmental_report_index.html). Your valuable comments are most welcome. Please send them to us by email at hkfsdenq@hkfsd.gov.hk.