## **Environmental Report 2013 Hong Kong Police Force**

### Introduction

Our mission is to enhance Force members' environmental awareness through education and publicity, and to encourage their participation in conserving the environment. We collaborate with relevant organisations to promote environmental management in the Force. This includes compliance with the Clean Air Charter, relevant green legislation and codes of practice.

## **Green Management**

- 2. The Force is committed to conserving the environment through appropriate means. We promote an environmentally responsible attitude among our members in the efficient use of resources, waste minimisation and pollution prevention in the course of our work. The Steering Committee on Green Management, chaired by the Director of Finance, Administration and Planning, comprises disciplined and civilian representatives from Major Formations. It serves as the focal point for monitoring and addressing energy saving and environmental management issues in the Force. These issues include consumption of paper, envelopes, electricity, water, gas and fuel, and waste paper collection. At regional and district levels, green management is a standing item in the relevant forums such as the Regional Green Management Committee and the Regional Commander's Quarterly Conference.
- 3. We have a three-tier structure for promoting and monitoring green management in the Force:

### (a) Green Managers at Major Formation level

They take the lead in Major Formations on green management and related matters. They implement green initiatives and monitor resource consumption.

## (b) Assistant Green Managers at Formation level

Their role is to develop and implement green housekeeping measures in the Formations' units/bureaux/divisions.

# (c) Green Wardens at office level

Green Wardens conduct random checks on office premises and remind

colleagues to comply with the relevant green housekeeping measures, e.g. switch off unnecessary lighting, adopt energy-saving mode for computer/office equipment, and print on both sides of the paper.

## **Overall Performance in Resource Consumption**

4. The Force's performance relating to the consumption of electricity, paper, envelopes, fuel and gas as well as the collection of waste paper in the past years are shown in Figures 1 to 6. With Formations' concerted efforts, 2013 showed a decrease in the consumption of electricity (-1.54%), paper (-5.36%), envelopes (-22.87%), fuel for police vehicle (-6.47%) and fuel for Marine fleets (-5.71%). On the other hand, the consumption of gas (+3.78%) had increased in the past 12 months.

#### **Achievements in 2013**

#### I. Waste Minimisation

- 5. The Force continued to sustain its efforts in minimising paper consumption. Measures such as communication by e-mail, issuing and storage of bulky documents and reference materials through electronic means instead of hard copies, printing on both sides of the paper, drafting on overleaf of used paper and reusing of envelopes had been a common practice at all levels. Electronic notice boards were widely used in police stations for internal communication. The adoption of paperless conference at both headquarters and regional levels was also encouraged.
- 6. Staff were asked to use less paper by printing multi-pages on a single sheet for record-keeping. A step-by-step guide was promulgated via green tips to encourage staff to use the E-phone Message function in the Lotus Notes Platform instead of the GF 74. Post-it fax notes were used to replace fax leader pages. To discourage indiscriminate printing of emails and their attachments, an advisory note on paper-saving was displayed in all internal e-mail messages received by Force members in the PEN system.
- 7. In the procurement of products, we took into account environmental factors such as energy efficiency and recyclability as far as applicable. In this respect, the Force purchased green products like re-cycled ink/toner cartridges, mercury and cadmium free dry batteries, and rechargeable batteries. Wood-free and recycled printing paper constituted a high percentage (81.37%) of the total amount of paper consumed. Police Forms were printed using recycled paper as well. Staff were reminded to purchase green products as far as possible and where economically rational, and choose only the prescribed products that bear Grade 1 or Grade 2 energy labels under the energy efficiency labelling scheme to expand green Government procurement.

- 8. Other waste-minimising measures included the use of:
  - re-writable CD/DVD for data storage
  - environmentally friendly plain paper fax machines
  - electronic greeting cards instead of paper cards

### **II.** Water Management

9. Fresh water is a precious resource. The Force followed the Government's Total Water Management Strategy and encouraged the use of water saving devices, including low flow showers/showers with timer, low flow taps with sensors, dual flush cisterns and sensor type urinals in police premises to save water. "Guidelines on Water Conservation" has been posted on E-Green Corner to enhance staff awareness on the efficient use of water. Stickers were displayed at conspicuous places to remind staff, cleaning contractors and canteen operators to reduce water consumption and prevent water wastage.

# **III. Energy Conservation**

- 10. Energy-efficient light tubes were widely used in the Force. T8 fluorescent tubes and 20-watt fluorescent tubes inside "Exit" signs were replaced by more energy efficient T5 tubes and 5-watt LED bulbs respectively. Low wattage tubes with occupancy sensors were installed at staircases, common corridors and lift lobbies to improve energy efficiency of lighting installations. Solar water heating system and energy-efficient water heater were introduced in police premises to improve the energy efficiency of the water heating system. Reviews were conducted in Kowloon East Region to rationalise the numbers as well as the operating hours of the compound floodlights in police premises. Wong Tai Sin Police Station installed the Light Management System at the Report Room and car park to reduce electricity consumption.
- 11. Housekeeping measures were implemented to avoid unnecessary energy consumption such as dividing office areas into separate electricity control zones, removing unnecessary lights in offices and common areas, using programmable timer switches to switch off office electrical appliances after office hours, installing timer to control the supply of air-conditioning, regular cleaning of air-conditioning system to enhance energy efficiency, turning off additional chillers during winter, shortening the operation hours of lifts and reducing water temperature for gas boilers. Staff were reminded to switch off lights and air-conditioners when leaving the office and turn off the electrical equipment not in use. Energy saving stickers were displayed at conspicuous places within the Force premises to enhance staff awareness on energy conservation.

Staff were also encouraged to use internal stairs for access to nearby floors instead of lifts. Routine spot checks on lighting/air conditioners were conducted outside office hours.

- 12. The Force continued to follow the Government's directive of setting the ambient office temperature to 25.5°C in the summer months. To complement this green initiative, the Force relaxed the dress code for male officers performing indoor office duties to plainclothes. Staff were encouraged to dispense with the wearing of ties and jackets, except when they were required to meet members of the public or attend formal functions.
- 13. To improve energy efficiency and reduce cooling load, staff were encouraged to use venetian blinds to adjust the penetration of sunlight to suit different seasons and deflect heat from the sun. Solar control window films were installed in police premises with high window-to-wall ratio, such as Arsenal House and the New Territories South Regional Headquarters building.
- 14. In the Police Headquarters (PHQ) premises, a number of energy reduction measures have been implemented. Carbon monoxide detection devices were installed at Arsenal House car parks to fine-tune the operation of the ventilation system. Ten solar powered streetlights were installed along the fence walls between PHQ and Harcourt Garden to replace the previously wall-mounted conventional streetlights. To monitor electricity consumption, the Electrical and Mechanical Services Department (EMSD) provided floor-by-floor consumption data of office lighting and equipment on a monthly basis. Formations with upsurges in electricity consumption were reminded to take appropriate measures to check their electricity usage.
- 15. Other than normal office setting, canteens were also a target for green management application. With the help of EMSD and the catering contractor, the PHQ Canteen Management Committee re-programmed the lighting and air-conditioning supply zones of PHQ catering outlets. Lighting and air-conditioning supplies were suspended in unoccupied areas and during break times. The canteen operators of other Police Stations were also encouraged to switch off lighting and air-conditioning during non-peak hours.

### IV. Environmental Awareness Among Staff

Nineteen "Green Corners" were set up in police premises to provide an area for sharing of experience and good practices on green management. In addition, six E-Green Corners have been set up on the intranet to provide a platform for the dissemination of information on green management matters, including useful green tips. DOs and DON'Ts on electricity consumption were posted on the intranet, and re-circulated by individual Formations at six-month intervals. Staff were also encouraged to attend seminars organised by EMSD on energy-saving measures, and to exchange experience with other organisations in the public and private sectors.

17. Green management concepts have been incorporated in various police training programmes and activities. Force members were regularly briefed on green management issues during training days to increase their environmental awareness. To enhance staff awareness of environmental conservation, Force members were encouraged to participate in various green activities, such as the "Green Monday" scheme to promote low carbon and vegetarian diet to PHQ staff starting from 23 September 2013; "No Air-Con Night 2013" on 26 September 2013 organised by Green Sense; and "Electricity Efficiency Scheme" held between November 2013 and February 2014 in Yau Tsim District. Planting activities were organised by various Police Stations to arouse staff's interest in greening and embellishing the station environment.

## V. Recycling Programmes

- 18. Twenty-seven Force premises have joined the Programme on Source Separation of Commercial & Industrial Waste organized by the Environmental Protection Department (EPD).
- 19. In addition to energy-saving housekeeping practices, the following recycling programmes had been introduced:
  - Waste Paper Conspicuously-labelled "recycle green boxes" were placed in Formations to collect waste paper for recycling. A contractor for the collection of paper wastes had been engaged.
  - Cans and Plastic Bottles Aluminium cans and plastic bottles were sorted in special receptacles/three-coloured waste separation bins for recycling.
  - Glass Bottles Police Officers' Club (POC) and Police Sports and Recreation Club (PSRC) introduced glass bottles recycling exercise to collect used glass bottles.
  - CDs/VCDs/DVDs The recycling of confiscated CDs/VCDs/DVDs was
    first introduced in Mong Kok Police District in 2002. The scheme was
    subsequently extended to 13 other police stations/offices. A
    commercial contractor was engaged to shred and dispose of the shredded
    CDs/VCDs/DVDs from the 14 police stations/offices.
  - Cartridges The Force engaged three vendors of IT consumables for the collection of used cartridges, scrap lead and empty shells of specific models.
  - Waste Cooking Oil Kitchens of the PHQ canteens joined the waste

cooking oil collection programme since 2011 for recycling waste cooking oil into bio-diesel.

### VI. Initiatives in New Police Buildings

- 20. Energy conservation and environmental friendliness continued to be a prominent theme in new police premises.
- 21. To promote energy conservation and environmental friendliness in new police premises, the Force aimed at achieving the "Gold" rating under the Building Environmental Assessment Method (BEAM) Plus (New Building) certification conferred by the Hong Kong Green Building Council for the new Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station (KERHQ), and the new Annex Building of Police Sports and Recreation Club (PSRC) projects.
- 22. In the design of the KERHQ, various forms of energy efficient features and renewable energy technologies, such as utilizing district cooling system for air conditioning, automatic demand control of chilled water circulation system, automatic demand control system for air supply, demand control of fresh air supply with carbon dioxide sensors, photovoltaic system and solar hot water system, would be adopted. For greening features, there would be greening on appropriate roof and facades for environmental and amenity benefits. For recycled features, condensate water and rainwater recycling system would be adopted for irrigating the greenery.
- 23. In the new Annex Building of PSRC project, energy efficient features and renewable energy technologies were incorporated into the building design. These features included adoption of T5 energy efficient fluorescent tubes with electronic ballast and lighting control, daylight sensors for external lighting, LED type exit signs, automatic switching of lighting and ventilation fan inside the lift, building energy management system, solar hot water systems, localized control for air-conditioning systems, demand control air-conditioning with individualized manual on-off control for the fresh-air, natural ventilation via openable windows, low flow taps and dual-flush toilets. A green roof would also be provided.

## **Engagement with Stakeholders**

- 24. The Force works closely with EMSD to identify energy saving opportunities at all times. For 2013, EMSD conducted energy walk-through inspections for 30 Formations. The resultant energy management opportunities have either been implemented or are being pursued.
- 25. The Force continued to promote the "Used Clothing Collection Campaign"

jointly organised with the Salvation Army, and participated in the One-hour-long Lights Out Event – "WWF Earth Hour 2013" organised by the World Wildlife Fund on 23 March 2013. The Traffic New Territories South conducted annual "One Officer One Used Toy" programme to promote recycling, sharing and caring to the society.

## **Indoor Air Quality**

26. In support of the Government's drive of improving indoor air quality (IAQ) in offices and public places, the Force participated in the IAQ Certification Scheme and engaged EMSD to carry out regular IAQ inspection for offices with construction floor areas exceeding 10,000 m² and were served by mechanical ventilation and air conditioning system. In 2013, Central District Headquarters and Divisional Police Station was awarded an "Excellent Class" IAQ Certificate. Arsenal House High Block, Arsenal House West Wing, Wong Tai Sin District Headquarters and Divisional Police Station, Mong Kok Police Station, North Point Police Station, Cheung Sha Wan Police Station, Tsim Sha Tsui Police Station, New Territories South Regional HQ and Tuen Mun Police Station were awarded "Good Class" IAQ Certificates. Police premises would continue be selected in the coming years for the conduct of IAQ measurements and related improvement works.

# **Challenges of Climate Change**

- 27. Greening plays an important role in providing an environmentally friendly and quality working environment. To promote the development of quality skyrise greenery, green roof gardens were set up in Cheung Sha Wan Police Station, Kowloon City Police Station, Central District Headquarters and Police Station, New Territories North Regional Headquarters, Tai Po Police Station cum Headquarters, Sheung Shui Police Station, Sau Mau Ping Police Station, Wong Tai Sin Police Station, Kwun Tong Police Station and Hong Kong Police College. Green walls were put up on the rooftop of Arsenal House East Wing, and at PHQ Harcourt Garden staff entrance and Wong Tai Sin Police Station Report Room. Architectural Services Department (Arch SD) has been invited to conduct feasibility study on the setting up of green roof garden at Hong Kong Island Regional HQ and Mong Kok Police Station.
- 28. In support of the Government's efforts to meet the challenges of climate change, continued efforts were made to reduce fuel consumption and greenhouse gas (GHG) emissions. For police land transport, use of recycled engine oil has been expanded to include more police vehicles. In 2013, the Force has expanded the size of its zero emission electric vehicle fleet. Cleaner diesel engine vehicles with the latest Euro V environmental standards have replaced petrol engine vehicles for patrol duties.
- 29. Continued efforts have been made by the Marine fleet to reduce fuel consumption, and emissions of GHG and Marine pollutants. Euro V unleaded petrol and

diesel fuels have been employed in the entire Fleet with noticeable improvement in smoke and pollutant emissions. Three Police Launches participated in EPD's Pilot Scheme of using B5 diesel resulting in the reduction of about 155 tonnes of carbon dioxide emissions. A new kind of paint that could reduce the resistance of water has been applied to the hull of some Police Launches to achieve fuel saving.

## **Way Forward**

30. The Force will continue to follow the 3-R principles – Reduce, Re-use, Recycle – in its daily operations. The effectiveness of the energy saving measures adopted in the Force will be monitored closely. In support of the Government policy on environmental protection, the Force will continue to explore ways to further promote green management.

#### **Feedback**

31. This Environmental Report provides a guide for the promotion of a green culture within the Force. We welcome your views in connection with this Report. Please contact us via email at *phq-gr@police.gov.hk*.

**Administration Wing Hong Kong Police Force**