# **Environmental Report 2011 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. The Working Group for Environmental Conservation, chaired by the Police Civil Secretary, was set up under the Steering Committee in October 2010 to facilitate the implementation of energy saving and environmental conservation measures in the Force. 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) <u>Assistant Green Managers at Formation level</u>

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, 2011 saw a decrease in the consumption of electricity (1.95%) and paper (0.88%). On the other hand, due to the greater demand for on-going Force activities, the consumption of envelopes (+23.17%), gas (+3.87%), fuel for police vehicle (+0.86%) and fuel for Marine fleets (+0.19%) had increased in the past 12 months.

#### **Achievements in 2011**

#### 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 note was used to replace fax leader page. As a paper-saving initiative 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 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. In response to the environmental concern on the use of plastic bags, posters were mounted in the Police Tactical Unit Souvenir Shop to encourage customers to bring their own bags.
- 9. Other waste-minimising measures adopted included the use of:
  - old floppy discs through re-formatting
  - re-writable CD/DVD for data storage
  - environmentally friendly plain paper fax machines
  - electronic greeting cards instead of paper cards
  - recyclable cutlery and biodegradable meal boxes

## II. Water Management

10. Fresh water is a precious resource. The Force follows the Government's Total Water Management Strategy and encourages the use of water saving devices which included low flow showers/showers with timer, low flow taps with sensors, dual flush cisterns and sensor type urinals in police premises to save water. Stickers were displayed at conspicuous places to remind staff, cleaning contractors and canteen operators to reduce water consumption and prevent water wastage. A pilot project on the use of a "Desert Cube Waterless Urinal System" was being carried out in Formations where fresh water is used for flushing.

#### **III. Energy Conservation**

11. Energy-efficient light tubes were widely used in the Force. Improvement works were carried out in consultation with the Electrical and Mechanical Services Department (EMSD) to replace T8 fluorescent tubes and 20-watt fluorescent tubes installed inside "Exit" signs with 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. A Light Management System pilot scheme was being carried out at the G/F car park of Arsenal House, Wan Chai Police Station Reporting Centre and Tin Shui Wai Police Station under which there will be reduction in electricity consumption.

- 12. 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, reducing water temperature for gas boilers, turning off additional chillers during winter and shortening the operation hours of lifts. 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.
- 13. 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.
- 14. 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.
- 15. 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 existing wall-mounted conventional streetlights. To monitor electricity consumption, EMSD provides floor-by-floor consumption data of office lighting and equipment on a monthly basis. Formations with upsurges in electricity consumption are reminded to take appropriate measures to check their electricity usage.
- 16. 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.
- 18. Greening plays an important role in building an environmentally friendly and quality working environment. Green roof gardens were established in Cheung Sha Wan Police Station, Central District Headquarters and Police Station, and Kowloon City Police Station. Green walls were set up on the rooftop of Arsenal House East Wing and at PHQ Harcourt Garden staff entrance. To promote the development of quality skyrise greenery, the Force engaged the Architectural Services Department (ArchSD) for the design and construction of green roofs at Western Police Station, Kwun Tong Police Station and New Territories North Regional Headquarters in 2011.
- 19. Green management concepts were incorporated in various police training programmes and activities. Force members were regularly briefed on green management issues during training days. Eco-driving principles were widely promoted in all police driving training programmes to increase police drivers' environmental awareness. A Force-wide "Computer Screen Saver Design Competition on Green Management in Workplace" was launched in November 2011. Some Formations, such as Marine Region, also organized green competition like the "Green Awareness T-shirt Logo Design Competition", "No Air-conditioner Day", and tree management activities to enhance staff awareness of environmental conservation.

#### V. Recycling Programmes

- 20. The Force's waste management strategy is to minimise unavoidable waste generation and maximise material recycling. Seventeen Force premises have joined the Programme on Source Separation of Commercial & Industrial Waste organized by the Environmental Protection Department (EPD) since 2010, and received the "Programme on Source Separation of Commercial and Industrial Waste" Certificates.
- 21. 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.
- 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 in 2011 for recycling waste cooking oil into bio-diesel.

# VI. Initiatives in New Police Buildings

- 22. Energy conservation and environmental friendliness continued to be a prominent theme in new police premises. The Force engaged EMSD, City University of Hong Kong, Applied Science and Technology Research Institute, and China Light and Power in exploring and developing energy-saving initiatives in the Force.
- 23. The new Lamma Police Post construction project has, commenced in November 2011, incorporated a green landscape design to harmonize with the Island's seafront and rural setting. To make greening an integral part of new police buildings, a number of greening initiatives including energy efficiency electricity devices such as T5 fluorescent lamps, LED lights and room occupancy sensors; solar-powered LED landscape lighting; and the 2.4 kWh solar panels to provide hot water supply for showers will be adopted in the construction project.
- Opportunities were taken to introduce green elements into a building during the works projects. For example, during the renovation works at the Central District Police Station in 2011, a green roof was set up at the podium. Vertical greening was included in the enhancement project of the PHQ Harcourt Garden Entrance to promote the development of quality skyrise greenery in the Force. This vertical greening concept will be extended to other police premises, and the one coming on stream is the new Report Room project in Wong Tai Sin Police Station.
- 25. The 2008-09 Policy Agenda announced the implementation of a District Cooling System (DCS) to meet the demand of air-conditioning for public and private

non-domestic buildings in the Kai Tak Development (KTD). The DCS is capable of saving 35% and 20% electricity consumption as compared with the conventional air-cooled and water-cooled air conditioning systems respectively. The new Police Kowloon East Regional Headquarters complex, which will be situated within KTD, will be the first police premises to benefit from the proposed DCS.

#### **Engagement with Stakeholders**

- 26. The Force works closely with EMSD to identify energy saving opportunities at all times. EMSD has completed energy audits for more than 20 police premises, and the resultant Energy Management Opportunities have been implemented or are being pursued.
- 27. In support of the Force's Strategic Direction of raising Force members' awareness of social responsibility, the Kwun Tong District conducted the "Old Toy Donation Scheme" to collect used toys for families of ethnic minorities. 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 2011" organised by the World Wildlife Fund on 26 March 2011.

# **Indoor Air Quality**

- 28. In support of the Government's drive of improving indoor air quality (IAQ) in offices and public places, the Force participates in the IAQ Certification Scheme and engages EMSD to carry out regular IAQ inspection for Force premises which are used as offices with construction floor areas exceeding 10,000 m² and served by mechanical ventilation and air conditioning system. In 2011, the Central District Headquarters and Divisional Police Station, and Tuen Mun Wu Hong Police Quarter were awarded the IAQ (Excellent Class) Certificates while Arsenal House West Wing and Hong Kong Auxiliary Police Headquarters were awarded the IAQ (Good Class) Certificates. IAQ inspection was also conducted in the following police premises in 2011:
  - 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
  - Tuen Mun Police Station

29. Police premises will continue to be selected in the coming years for the conduct of IAQ measurements and related improvement works.

# **Challenges of Climate Change**

- 30. In support of the Government's efforts to meet the challenges of climate change, the Force participated in the Carbon Audit on Buildings Scheme. Greenhouse gas (GHG) emissions in police premises were measured and energy efficiency measures identified to reduce the Force's carbon footprint. In 2008 2011, carbon audits were conducted for Arsenal House East Wing, Traffic Kowloon West Operational Base, and Marine Headquarters.
- 31. Continued efforts were made to reduce fuel consumption and GHG emissions. For police land transport, emphasis on reducing fuel consumption and GHG emissions continues with eco-driving principles being widely promoted in all police driving training programmes. Following successful conclusion of a trial, use of recycled engine oil has been expanded to include more police vehicles. The Force now has 177 fuel-efficient hybrid vehicles and 16 all-electric zero emission vehicles in service, with 23 all electric vehicles (two and four wheeled) to be delivered during 2012. The Force will also start a trial of B5 (bio-diesel) fuel in 2012. In November 2011, the Force participated in an electric vehicles exhibition at the Hopewell Centre, showing its electric motorcycle and electric saloon car and its efforts in reducing carbon footprint.
- 32. 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. Following the complete delivery of the new Medium Patrol Launches under the Versatile Maritime Policing Response project, better fuel efficiency has been achieved through the use of higher power-to-weight ratio diesel engines. Fuel-efficient engines have been fitted onto existing vessels to find a better match between the vessel and the engine to achieve saving in fuel consumption. Moreover, a study on introducing a real-time fuel monitoring system onto police launches and craft is underway to enable the crews to select the most economical speed. Marine Region also joined EPD in the pilot use of bio-fuel on selected police craft with a view to further reducing carbon emissions.

# **Way Forward**

33. 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

34. 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**