

Environmental Report 2004

Introduction

The Hong Kong Police Force operates within the well-established constabulary concept of preserving life and property, preventing and detecting crime and maintaining law and order, with a strong emphasis on enlisting community support. Apart from Force Headquarters and specialist divisions or units, Police services are organised on a geographical basis. There are six Regions, each divided into Districts, which are sub-divided into Divisions. Police premises span across the territory with some offices located in commercial buildings or in Government's joint-user buildings.

Environmental Policy

2. Our mission is to enhance Force members' environmental awareness through education and publicity, and to encourage their participation in conserving the environment; to work with relevant organisations to promote environmental management in the Force; to develop and maintain a management system to improve the environmental quality of its activities; and to comply with relevant legislation and codes of practice.

Commitment and Management

3. The Steering Committee on Green Management which is chaired by the Director of Finance, Administration and Planning and includes civilian and disciplined representatives from various Major Formations at a senior level has served as a focal point for directing energy and environmental management. The Steering Committee closely monitors the consumption of paper, envelope, electricity, gas, fuel and waste paper collection. There are also Regional Green Management Committees set up in 6 Regions/Formation, namely HK Island, Kowloon East, Kowloon West, NT South, Police Training School and Police Tactical Unit. All these Committees are under the stewardship of leading commanders to strengthen green efforts in the Force.

Goals

4. Following the success in 2003/04 to cut down consumption of paper by 6% and consumption of electricity by 2.3%, the Department set a target to police formations to reduce electricity consumption of another 4%, and that of both paper and envelope by 10% in 2004/05.

Overall performance in Resource Consumption

5. The environmental performance of the Department in terms of paper, envelope, electricity, gas, fuel and waste paper collection is illustrated in Figures 1-6. It is particularly encouraging to note a double-digit decrease in the consumption of envelope (-23%) and gas (-26%) in 2004. The rise by 4% in electricity consumption was due to the decanting exercise of Police Headquarters in the latter half of 2004. During the decanting period, electricity was consumed in both new and old offices for long hours 7 days a week. The decanting exercise also provided an opportunity for the Formations to dispose of their unwanted publications, and as a result, a significant increase in waste paper collection was recorded.

Performance in 2004

I. Waste Minimisation

6. The Department has sustained efforts in minimising paper consumption. As a result, measures such as communication by e-mail, photocopying on both sides of paper, using recycled paper and reusing of envelopes become common practice of staff at all levels. Reference materials or information are disseminated by e-mail and e-bulletin boards in place of hard copies.

7. To promote reduced use of paper, the Department has taken measures to encourage Formations to adopt the mode of "Paperless Conference" at both Headquarters and regional levels. Electronic notice boards were set up in the Hong Kong Island Region and Traffic Kowloon West in late 2004. Through the e-notice boards, officers can now read the memos, notices and minutes of meetings at their own terminals, which effectively saved the use of paper. Staff are also encouraged to print less paper by manipulating the layout of printouts for record-keeping purposes. The Kowloon West Region had installed the "FinePrint" printer driver at the common terminals in the General Registries to enable printing multiple pages on one sheet. A trial conducted between April and August 2004 showed that an extra 25% of paper could be saved by using the software, which cost only \$650. Similar effect could be achieved by using the printing functions in MS Windows. The way to use the functions were illustrated step by step in the green tips which were widely circulated among the staff.

8. Other waste-minimising measures adopted include :-

- the re-use of old floppy discs through re-formatting
- the purchase of rechargeable batteries
- the use of environmentally friendly plain paper fax machines
- the provision of electronic greeting cards to replace the use of paper cards

II. Energy Conservation

9. Energy saving stickers are displayed at conspicuous places within the Force to enhance the staff awareness on energy conservation. Unnecessary energy consumption is cut as far as possible by a series of housekeeping measures such as setting a higher room temperature for cooling systems or reducing water temperature for gas boilers, shortening operation hours of lifts, and routine checking to switch off lights/air conditioners outside office hours. Staff are reminded to switch off the lights and air-conditioners when they are not in the office and turn off all electrical equipment when not in use.

10. Other than energy saving in normal office setting, the Force also pays attention to changing rooms in the police stations. Timer-switches are installed for air-conditioning units in the changing rooms. In some premises such as Sau Mau Ping District, air-conditioning would only be provided at designated hours subject to a maximum of six hours. During the winter season, half of the air-conditioners in the changing rooms in Tsuen Wan District would be turned off and locked. Zonal lighting switches are installed in some of the changing rooms under the Station Improvement Project to facilitate turning off of unnecessary lights to cater for the shift patterns of the staff.

11. The Police Clubs managed to cut gas consumption by 15% and electricity consumption by 2% respectively in 2004 with the continuous enforcement of

the following energy saving practices:

- liaising with the electricity company to conduct an energy audit for the Clubs
-
- raising room temperature by 1 °C-2°C in the Clubs
-
- reducing the water temperature in changing rooms from 60 °C to 40°C
-
- installing an electronic device to the gas boiler switch
-
- use of energy saving lighting bulbs, and switching off all unnecessary lights
-
- switching on air-conditioners only five minutes before the venue was used
-
- appointing Energy Saving Officers
-
- conducting regular inspections and briefings to contractors regarding energy saving matters
-
- regulating use of swimming pool heaters, for example, lowering thermostat from 28 °C to 26 °C

12. Fuel consumption is another focus in green management in the Force. For police land transport, specific measures had been adopted on fuel efficiency, including : -

- use of more fuel efficient types of vehicles
- continuous exploration of cleaner fuel types
- close monitoring on vehicle maintenance programme and replacement of less fuel efficient old vehicles
- pursuit of enhanced hydrocarbon recovery system
- promoting good driving practices

13. Energy saving measures to reduce fuel consumption had similarly been taken for marine fleets, including : -

- enhanced use of “loitering engine”
- reduction of “full speed engine trials”
- exploration of replacement of two stroke engines by four stroke engines

III. Environmental Awareness Among Staff

14. To promote environmental awareness amongst staff, the Force has publicised useful tips on green management in internal publications and through intranet. 14 “Green Corners” are set up in Police premises to act as forums to exchange ideas on green management. Suggestion boxes are placed to encourage green ideas from the staff. Some premises organised promotional activities to foster staff participation. Kwai Tsing District has launched an Electricity Saving Campaign in which quiz competition was held and surprise check on use of electricity was conducted. In Tseung Kwan O Division, the staff have made use of the old bottles to make vases for

decoration in the police station.

15. The Police Training School incorporated green management concepts into its training programmes and activities. Briefings on green management for PTS staff were organised with the assistance of Hong Kong Productivity Council, Environmental Protection Department and Electrical and Mechanical Services Department. Visits/liaison with Kadoorie Farm and Ocean Park had also enhanced PTS staff's understanding of green issues. Besides, Police Constable recruits and youth trainees participated in the community clean-up days.

16. Another Police special unit – Police Tactical Unit has also introduced incentive schemes to encourage green practices. It would award groups of colleagues who had saved electricity and gas within their sections with cash coupons from the office snack stores. Colleagues who collected recyclable waste up to 10kg per month would also be awarded with the coupons. PTU had even designed its own promotional stickers to remind the staff to switch off the lighting and save energy. Every evening at 1700 and 1800 hours, a message would be broadcasted to remind colleagues to switch off the lights before they left.

17. Appointing green wardens in the Force has proven effective in fostering staff participation. Staff at working level are appointed to remind colleagues to comply with the housekeeping measures and turn off unnecessary lights and office appliances. To review its current green practices for continual improvement, Support Wing had also appointed its officers to conduct an energy audit internally in 2004.

IV. Recycling Programmes

18. Waste paper, can and plastic bottle collection points are placed in Police premises. Private contractors are engaged in collecting used paper and ink cartridge regularly. The initiative of recycling confiscated DVD/VCD/CDs was first introduced in Mongkok Police District in 2002 and the practice further extended to Crime Kowloon West in 2004. Arrangements have been made with a recycling company to collect the seized discs for recycling. The company would first destroy the discs in piles by drilling holes and breaking them into smaller granules, the granules would then be transported to China for recycling. In 2004, over 100,000 DVD/VCD/CDs in Crime Kowloon West were destroyed for recycling.

V. New Initiatives in the Police Buildings

19. Inclusion of energy-saving devices was one of the core elements in the planning and design of the new Police Headquarters Complex. The new Headquarters Complex has been awarded by EMSD the Registration Certificates for Compliance with Code of Practice for Energy Efficiency of Electrical Installations, Lighting Installations and Lift and Escalator Installations. Some of the energy saving facilities are highlighted as follows:-

- sea water cooled chillers which increase system efficiency as compared to traditional air-cooled system
- sea water cooled heat recovery chillers which enables waste heat from chiller unit to be recovered from space heating and dehumidification
- individual and infra-red presence sensor control for cellular offices
- variable speed drive for water distribution pump and air distribution

- fan to meet the changing demand
- high efficacy luminaries (e.g. T5 fluorescent tubes) and electronic ballasts
- flexible switching zoning control by centralized lighting control system
- timer control for outdoor lighting
- harmonic filter devices which reduce power loss and increase system efficiency
- advanced drive for high speed passenger lift

20. The new energy saving installations provided an excellent platform on which to kick-start energy saving programmes in new PHQ complex. To achieve the best results, “Energy Saving Tips for Housekeeping in New PHQ Complex” have been issued to all Formations. Lightings have been pre-set to be switched off at 1930 hours, 2100 hours and 2400 hours. Lightings are controlled by zones and the switches are labelled by colour for easy coding. Formations assign designated officers for conducting random checks at regular intervals of the zones or floors under their charge to ensure that lighting is switched off when all staff of the Unit have left. Air-conditioning is limited within 0800 – 1900 hours unless otherwise requested by Formations. Lifts and escalators are in restrictive operation after office hours.

21. In late 2004, a Working Group on Energy Conservation in Arsenal House was set up with representatives from resident formations, CDIST, Arch SD and EMSD to look into all areas of energy consumption in the new building with a view to exploring energy saving measures. An energy review comprising a site walk to floors of Arsenal House to measure lighting levels and air temperatures, as well as to take readings on energy consumption for analysis, would be conducted in 2005. The results together with the Working Group's recommendations would be submitted to the Building Management Committee of Arsenal House for consideration.

22. Following the successful implementation of various energy saving features in the Station Implementation Project and new Police Headquarters, the Planning and Development Branch will, as planned, include green measures into the New Territories South Headquarters and Operational Base Project. The new green features include the following : -

Building Services System

- Use of heat recovery chillers and heat pump as energy efficient heating source for domestic hot water pre-heating
- Provision of T5 fluorescent lamps with electronic ballasts with “Digital addressable Lighting Interface” control system
- Provision of motion detector for cellular offices air- conditioning and lighting on/off control
- Use of photo-cell for lighting adjustment

Architectural Design

- The configuration of the tower block is designed to receive less amount of solar heat gain by reducing in extent the east and west facades while the tower block is so orientated to reduce air-conditioning costs
- Use of special ventilated curtain wall systems on the east and west facades for reduction of solar heat transmitted into the building

- interior
- Use of low-emissioned laminated ventilated heat-strengthened glazing panels for vision zone of the curtain wall system for better light transmittance while keeping the heat gain low
- Use of purpose made sun shading device

Engagement with Stakeholders

23. The Department works closely with EMSD to identify energy saving opportunities. Up to December 2004, EMSD completed audits on 14 police premises. The Energy Management Opportunities recommended by EMSD were either implemented or actively pursued.

24. We are also supportive for the green events organised by other departments or organisations. The Force as a whole entered the competition of "Energy Efficiency and Conservation in Government" for the category of "Best Practice Awards" and 10 police premises had entered the "Venue Saver Awards" in 2003/04. During the competition period (from October 2003 to September 2004), the Force closely monitored the electricity consumption figures and continued our efforts to reduce electricity consumption.

25. We believe that the momentum generated by taking part in green activities organised by outside bodies will be conducive to the development of an environmentally responsible culture amongst our staff. We encouraged the staff to join the Green Trail Walk for the World Environmental Day on 26/27 June 2004. 9 teams of Force members with a total of 140 participants had enrolled for the activity.

Achievements

26. The Force has won the Energy Efficiency and Conservation Best Practice Silver Award in a competition organised by the Electrical and Mechanical Services Department in 2004. The Award reflects the concerted efforts of individual Formations in energy savings through deliberate and focused strategies. With the enthusiasm and commitment of the staff, the Formations have demonstrated good energy practices, and attained very encouraging results as evidenced by the significant reduction in electricity bills. During the competition period in October 2003 to September 2004, the top three savers, namely Auxiliary Support Bureau, Police Tactical Unit and Training Wing, had successfully achieved a reduction of 18% in electricity consumption; other Formations also attained a reduction by 2% to 6%.

Focus for Further Action and Improvement

27. As in the past, the Department will adhere to the 3-R 'Reduce, Re-use, Recycle' principles in our day-to-day housekeeping. Planned actions in the coming year will include:-

- setting consumption targets and actively pursuing new environmental initiatives for better green management
- exploring measures to further reduce electricity consumption
- pursuing energy saving recommendations of the Working Group on Energy Conservation in the new Police Headquarters Complex
- setting a central collection point at the General and Development Section of the Administration Wing for the recycling of unwanted DVD/VCD/CDs in police offices

- reviewing the Green Manager Scheme with a view to appointing personnel at different levels to develop and promote green measures in police premises

Feedback

28. It is intended that the publication of this Environmental Report will serve as a comprehensive and useful guide for promoting a green culture within the Force, our client departments and contractors. If you have any views and suggestions in connection with this Environmental Report, you are welcome to contact us via email at phq-gr@police.gov.hk.

February 2005
Administration Wing
Hong Kong Police Force