



香港消防處
環保報告 2008
HONG KONG FIRE SERVICES
DEPARTMENT
ENVIRONMENTAL REPORT 2008



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第 1 章 引言

Chapter 1 Introduction

消防處的法定職責，是保障香港市民的生命及財產，免受火警及其他災難損害，同時為市民提供緊急救護服務，以及就防火措施提供意見。截至二零零八年十二月三十一日，消防處轄下共有 8,792 名軍裝人員及 630 名文職人員，管理 78 間消防局、36 個救護站、5 個辦事處、4 個消防車輛維修工場、2 間訓練學校及西九龍救援訓練中心。新落成的長洲滅火輪消防局於二零零八年十月正式啟用。為執行職責，部門管有 849 部消防車、救護車及支援車輛，以及 22 艘滅火／救援船隻。

The statutory duties of FSD are to protect life and property against fire and other calamities, provide emergency ambulance service and give advice on fire protection measures for the community. As at 31.12.2008, there were 8,792 uniformed members and 630 civilian staff working in the Department. We managed 78 fire stations, 36 ambulance depots, 5 office-based workplaces, 4 fire appliance workshops, 2 training schools and the West Kowloon Rescue Training Centre. The newly built Cheung Chau Fireboat Station was put into operation in October 2008. To carry out our duties, the Department operated a fleet of 849 fire appliances, ambulances and supporting vehicles plus a fleet of 22 fire boats and support vessels.



長洲滅火輪消防局
Cheung Chau Fireboat Station

二零零八年，消防處處理了 35,513 宗火警召喚、24,398 宗特

In 2008, FSD responded to 35,513 fire calls, 24,398 special service calls which

別服務召喚，當中包括交通意外、工業意外、氣體洩漏、山泥傾瀉及水浸；以及 643,611 宗救護召喚。對於有特別火警風險的樓宇及處所，本處發出了 5,988 份消除火警危險通知書、16,372 份消防安全指示／改善消防安全指示以及作出了 414 宗直接檢控。

消防處作為提供緊急服務的部門，不單肩負救火及拯救工作，亦注意到需要以環保和對環境負責的方式提供服務和進行行動，以表現我們對環保的承擔。我們已在各項行動中採取適當的環保措施，以期達至環境保育效果：

- ◇ 減少事故對環境的破壞；
- ◇ 發展及採用可減少傷害環境的救火策略、滅火媒體及工具；
- ◇ 舉行大型防止山火宣傳活動，提升公眾「防止山火」的意識，同心協力，減少山火的發生，從而保護大自然的郊外；
- ◇ 謹慎處理涉及危險品或化學品事故，盡量減低有害物料對環境的破壞；

included traffic incidents, industrial accidents, gas leakages, landslides and floods, as well as 643,611 ambulance calls. A total of 5,988 Fire Hazard Abatement Notices and 16,372 Fire Safety Directions/Fire Safety Improvement Directions were issued to owners/occupants of buildings and premises with special fire risks, along with conducting a total of 414 Direct Prosecutions.

As an emergency service Department, FSD is not only responsible for fire-fighting & rescue, we are also conscious of the need to deliver our services and conduct our operations in an environmentally friendly and responsible manner to demonstrate our green credentials. The following environmental measures have been put in place in our operations for the betterment of the environment:

- ◇ to reduce the impact of incidents on the environment;
- ◇ to develop and adopt more environmentally friendly fire-fighting strategies, extinguishing media and equipment;
- ◇ to launch hill fire prevention programme & publicity activities to disseminate hill fire prevention messages to the public for the purpose of reducing the number of hill fires, which in turn contributes to the conservation of our countryside;
- ◇ to cautiously handle incidents involving dangerous or chemical goods in order to minimize the

impacts of such hazardous materials on the environment;

✧ 着重防火，提供專業意見及實施規管政策，以期減少火警及可能引致的污染，如空氣及水源污染。

✧ to put emphasis on fire prevention, advisory and regulatory roles aiming at reducing the number of fires, which would in turn reduce pollution to air and water.

第2章 我們的承諾及環保政策

Chapter 2 Our Commitment and Environmental Policy

我們的承諾

我們致力保護環境。雖然面對資源限制，但我們為社會提供服務時，仍會在不影響核心服務的效率及成本效益的情況下，不斷改善我們在環境保護方面的表現。我們已制定各項減少污染的計劃，以降低在提供服務時可能會對環境造成的影響，計劃內容如下：

採取適當的滅火措施，例如：

☆ 在處理火警時使用不會破壞環境的滅火媒體；

☆ 避免在滅火時過量用水。

為緊急車輛召喚程序制定愛護環境的指引，例如：

☆ 減低警報裝置的聲浪，例如消防車或救護車在緊急召喚出動時使用警號所產生的聲響；或減低消防局及救護站的廣播系統及自動摺門所產生的聲響。

Our Commitment

Despite constraint in resources, we are committed to protecting the environment and, accordingly, pursuing continual improvement in delivering our services to the community without compromising the efficiency and cost-effectiveness of our core functions. We have established mitigating programmes to reduce the impacts on the environment that may be caused during the delivery of our services. These include :

adopting appropriate practices in fire fighting operations such as:

☆ to use environmentally friendly extinguishing media to tackle fires;

☆ to avoid excessive use of water in fire suppression.

establishing environmental care guidelines in the turn-out of emergency vehicles such as:

☆ to reduce noise generated from audio warning devices such as sirens of fire appliances & ambulances, or from our facilities like the PA systems and folding gates of fire stations and ambulance depots;

節約能源及資源；例如：

☆ 透過減少、再用及循環來減少能源及資源的使用。

須符合有關法例的要求；例如：

☆ 減少及監察在執行任務時或由機械及裝備所產生的工業廢料。

☆ 減少消防車輛、船隻及救護車的氣體排放。

環保政策

在執行行動或提供服務時，我們採取對環境負責的態度。為此，我們致力：

☆ 遵守與本處有關的環保法規；

☆ 盡量減少我們在執行職務和工作時對環境所造成的影響，並且防止污染及節省資源，包括氣體排放、產生噪音、排放污水，以及處置廢物；

reducing the use of energy and resources such as:

☆ to minimize energy and resources consumption through reduction, reuse and recycling.

meeting the legal and regulatory obligations such as:

☆ to implement appropriate measures to handle wastes generated by operational activities, machineries or equipment.

☆ to reduce emission from fire appliances, vessels & ambulances.

Environmental Policy

We act responsibly to the environment in carrying out operations and delivering services. To this end, we endeavor to:-

☆ comply with all the legal requirements for environmental protection;

☆ minimize environmental impacts, prevent pollution and conserve resources arising from our operations and activities in regard to air and noise emission, effluent discharge and the disposal of wastes;

- ☆ 監察及監管會對環境造成嚴重影響的工作及行動;糾正以往損害環境的做法;
 - ☆ 在本處的日常運作中採取物盡其用及循環再用的原則;
 - ☆ 提高本處員工的環保意識及推行環保的能力;以及讓員工、承辦商、供應商及市民了解部門的環保政策及管理策略;
 - ☆ 支持公眾環保計劃及活動。
- ☆ monitor and control the significant environmental impacts associated with our activities and operations; correct past environmental abuses ;
 - ☆ commit ‘reducing, re-using and re-cycling’ principles into our day-to-day operations;
 - ☆ promote staff’s awareness of and competence in environmental protection ; and to communicate the department’s environmental policy and management strategy to staff, contractors, suppliers and general public;
 - ☆ support public environmental programmes and activities.

第3章 環境管理制度

Chapter 3 Environmental Management System

一九九五年，我們成立了環境審核委員會，由總部總區消防總長擔任主席，而各有關總區的區長／救護監督，以及行政科的行政主任則獲委任為委員。委員會的職權範圍如下：

In 1995, we set up the Environmental Auditing Committee (EAC), chaired by the Chief Fire Officer (Headquarters) with Divisional Officers/Superintendent /Executive Officer appointed from respective Commands and the Administrative Division as members. The EAC has been empowered to:

☆ 糾正以往可能損害環境的做法，並提高本處人員的環保意識；

☆ correct past practices that might harm the environment and enhance staff's environmental awareness;

☆ 防止日後出現破壞環境的情況，鼓勵屬員減少浪費，以及循環再用資源；

☆ prevent future damage to the environment and encourage members to reduce waste and to recycle resources;

☆ 進一步促進能源效益和節約能源工作；

☆ further promote energy efficiency and conservation;

☆ 在本處執行及管理環保工作，並且定期進行環境審核；以及

☆ conduct and administer the environmental work and periodic environmental audits in the Department; and

☆ 協調本處環境管理制度的發展及推行。

☆ co-ordinate the development and implementation of departmental environmental management systems.

同年，所有消防局及救護站主管獲指派為所屬消防局及救護站的單位環境審核員，協助環境審核委員會發展及推行部門的環境審核及管理制度。

監管制度

每個總區的參事官須擔任節約能源主任，負責監管所管轄範圍的處所的能源消耗情況。每個行動總區的單位環境審核員，亦須每月向所屬總區總部提交能源消耗情況報告，以便監察。

In the same year, all fire station and ambulance depot commanders were appointed as Unit Environmental Auditors of their fire stations/ambulance depots to assist the EAC in the development and implementation of the Department's environmental auditing management systems.

Monitoring System

The Staff Officer of each Command has been appointed as the Energy Economy Officer to monitor the energy consumption on the premises under his purview. The Unit Environmental Auditor of each operational unit has been required to submit monthly energy consumption reports to the Command Headquarters for monitoring purposes.

第4章 環保工作表現

Chapter 4 Environmental Performances

節約能源

消防及救護總區轄下的 78 間消防局及 36 間救護站，是行動人員為市民提供 24 小時服務的基地。部門運作所引致的溫室氣體排放主要是來自消防局及救護站建築物消耗的能源、辦公室的用電、設備的運作及車輛的燃料等。部門已採取一系列措施，務求在這些工作地方節約能源並減少在操作車輛和工具時的氣體排放。

電力消耗

透過羣策羣力，我們已成功保持整體的用電量不超過現有水平的目標。

在二零零八／零九年的用電量共 31,761,019 千瓦小時，較零七／零八年減少了 600,624 千瓦小時。雖然部門的建築物與架構都有所增加，例如新落成的長洲滅火輪消防局正式投入運作以及兩

Conservation of Energy

The 78 fire stations and 36 ambulance depots in the fire and ambulance Commands were the bases for the operational staff to deliver 24-hour services to the public. In our operation, greenhouse gas emissions were primarily from energy consumption of fire stations and ambulance depots, electricity for office accommodation, equipment operation and fuels for our fleet vehicles. We had adopted measures to conserve energy at our workplaces and to reduce emissions arising from the operation of our equipment and vehicles.

Electricity Consumption

Through our concerted efforts in saving energy, we achieved our overall target not to exceed the existing level of electricity consumption.

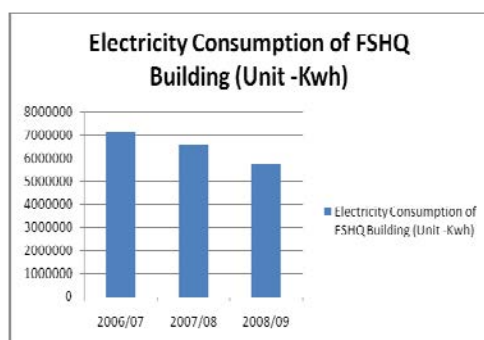
Our total electricity consumption in 2008/09 was 31,761,019 kWh, which was 600,624 kWh less than that consumed in 2007/08. Despite the increase in both buildings and operational activities, like the commissioning of Cheung Chau

個防火總區的擴張，整體上用電量仍然能獲得約 2% 的節省。

此外，我們亦將節省能源的信息《節能環保，人人有責》在部門內廣為傳揚。

消防總部大廈節約能源

不少政府部門的辦公大樓每年用電量都超過 500,000 千瓦小時，消防處總部大廈亦是其中之一。本處上年度曾訂下減少總部大樓用電量 0.5% 的目標。經各單位員工的共同努力，本年度總部大廈的耗電量為 5,746,843 千瓦小時，比去年度的 6,568,061 千瓦小時大幅下降 12.5%。



Fireboat Station and the expansion of the two Fire Protection Commands, the overall electricity consumption still recorded a net saving of about 2%.

In addition, we have also widely circulated energy conservation messages amongst staff reminding them their roles to play in energy consumption.

Energy Conservation of FSHQ Building

The Fire Services Headquarters (FSHQ) Building is one of the major government buildings with annual electricity consumptions exceeding 500,000kWh. We set an energy saving target of reducing 0.5% electricity consumption for the FSHQ in the last financial year. With the concerted efforts of the staff, the energy consumption for the building in 2008/09 was 5,746,843 kWh, which was a deduction of 12.5% comparing to the 6,568,061 kWh in 2007/08.

除了繼續在翻新工程時將 T8 光管照明設施更換為更具節能效益的 T5 光管照明設施以及在非繁忙時間關掉部分升降機外，我們更進一步推行了以下節省能源的措施:-

☆ 在翻新工程時將一些照明設施的線路改為由幾組電路控制，方便根據所需光度選擇開關光管的數量，盡量節省用電；

☆ 更換老化升降機從而改善成本效益；

☆ 將多個工作平台連接到一個列印機增加用量，減少閒置時間，改善機器效能從而避免浪費電力。

節約用紙

紙張是珍貴資源，因此我們在使用紙張時，會盡量採取物盡其用及循環再用的原則。為配合電子政府的策略，我們已推行一些電腦輔助系統及資訊科技程式，從而減少使用紙張作記錄用途及處理事務，例如電子文書系統及資訊科技設施普及計劃。

Other than continuing the replacement of T8 fluorescent light fittings by more energy efficient T5 fluorescent light during our refurbishment works and to switch off some elevators during off-peak hours, we had also implemented the following more pro-active energy saving measures:-

☆ to wire light fittings into several circuit arrangements during refurbishment works so that users could control different fluorescent tubes according to the required illumination and reduce electricity consumption;

☆ to replace aged elevators to improve efficiency;

☆ to connect different work stations to one printer to maximize usage and minimize idling time, improve the efficiency of the machine thus lessen electricity wastage.

Economy in the Use of Paper

Paper is a valuable resource. We strived our best to adhere to the principles of **Avoid, Reduce and Reuse/Recycle** in the use of paper. To keep in pace with the E-Government strategy, we had implemented some computer-aided system and IT Programme such as the Electronic Submission of Administrative Correspondence System and the Accessibility Programme to reduce

雖然本處的消防局有所增加及防火總區於本年度因應工作需要而擴張了超過 20%，但在部門上下繼續致力實施各種環保措施下，我們的紙張總耗用量僅微升了大約 4% 至 30,770 令。

本處在減少用紙方面的一系列環保措施臚列如下：

- ☆ 我們鼓勵員工利用內部電子通訊發布通告、電子便箋報告最新的活動訊息或蒐集建議等。另外，我們將分享使用的資料放在部門電子報告板上，以取代複製影印本給使用者；
- ☆ 使用部門電子電話簿，代替印刷本；
- ☆ 我們鼓勵善用部門網頁向市民發放資訊。例如本處的年報，為避免浪費紙張，我們將它上載在部門網頁，以供市民參考。我們亦鼓勵員工用電郵取代書信與市民聯絡，既快捷亦環保。部門把執行消防安全政策與規例的資料、管制危險品、消防裝置承辦商註冊程序的資料放在部門網頁『資料公布』報告板上，使市民可以

paper records and transactions.

Despite the increase of fire stations and expansion of the two Fire Protection Commands, we managed to confine the paper consumption increase to only about 4% to 30,770 reams.

Details of our measures to economize the use of papers are listed below:

- ☆ to encourage our staff to issue e-copy of circulars/memos about activities or for gathering views and suggestion. Besides, we uploaded the information for sharing at the electronic bulletin of the intranet to replace the need for distribution of photocopies to individual users;
- ☆ to replace the internal hardcopy telephone list with an electronic list;
- ☆ to make use of departmental homepages as an effective means to disseminate information to the public. For instance, the Fire Services Review had been uploaded to our homepage instead of printing out large number of copies for distribution. We also encouraged our members to communicate with the public through email instead of by post, this way not only could we respond in a more expedite manner but also more environmentally friendly. Reference materials had been placed on the Department's homepages bulletin board -

隨時獲得電子複本，從而令資訊更流通，更能有效傳遞訊息；

“Information Release”, through which information about our licensing procedures, enforcement of fire safety regulations, control on dangerous goods and registration of fire service installation contractors, are more readily accessible in electronic form. These measures have greatly enhanced the efficiency in information flow to meet the public needs;

☆ 如必須列印文件，我們鼓勵員工盡量減少用紙，例如：

☆ when printed documents were absolutely necessary, to encourage our members to reduce the amount of paper used by means of:

縮小篇幅可節省列印用紙，改用小冊子模式列印、壓縮多個畫面放在一頁列印或雙面列印。使用有雙面打印功能的影印機；

rightsizing approach to save paper e.g. use of booklet mode, multiple images per page printing pre-set function or double-sided printing. Use photocopier with duplex capabilities;

使用追蹤修定模式更改文件，毋需逐次列印不同修定文件；

using tracking mode for document amendments in order to avoid printing each amended version;

減少影印和避免印製過量複本。利用已使用紙張空白的背面作接收傳真、草擬及影印等用途；

minimizing photocopies and avoiding producing excessive copies. Reuse the blank side of used papers to photocopy, print and receive faxes;

傳真文件時，避免使用傳真引頁；

avoiding the use of fax cover sheets;

使用傳真伺服器以收取傳真信息以減少使用紙張；

using a fax server to receive fax messages to minimize the use of papers;

☆ 循環使用舊的文件夾或循環使用信封。

☆ reusing file jackets and envelopes;

☆ 定期傳閱有關節約用紙的電子通告，以提倡員工盡量減少用紙。我們鼓勵員工「想清楚才列印」的習慣，如非必要，切勿列印備存。

燃料消耗

消防處工程部及機電工程署汽車維修部人員，定期檢查及維修所有消防車及救護車，確保車輛機件性能良好，避免消耗過量燃料。消防處的車隊在 2008 年的總汽油耗用量為 2,201,838 公升，而柴油耗用量則為 1,700,856 公升，比上年度分別下降約 9% 及 7%。

本處非常支持政府提倡的“停車熄匙”政策，除訓令所有本處司機必須嚴格遵守有關規定外，更鼓勵屬員在工餘駕駛時停車熄匙。

除了教授優良的駕駛技術及安全意識給本處司機外，本處的駕駛訓練學校亦推行環保駕駛，目的是在每一處細微的地方養成良好習慣，將車輛的耗油量、廢氣排放量、以至制動系統、輪胎及

☆ promoting periodically the message of economizing paper consumption by electronic circulars to staff. We encouraged all users to adopt a "think before you print" practice and consider printing only when absolutely necessary.

Consumption of Fuel

Staff of the Fire Services Workshops and the Electrical & Mechanical Services Department conducted periodical maintenance and necessary repairs to ensure that our fire appliances and ambulances were maintained at the most optimum mechanical efficiency to avoid excessive fuel consumption. In 2008, the FSD vehicle fleet consumed about 2,201,838 litres of petroleum and 1,700,856 litres of diesel, which were about 9% and 7% respectively less than the last year's consumption.

This Department had been very supportive towards the government's "switch off idling vehicles" policy. Not only did we require all Service drivers to strictly comply with the requirements, but also encouraged our members to practice the same driving manner when driving their private cars.

Besides imparting good driving skills and safety awareness to our drivers, our Driving Training School also promoted "Eco-driving", with attention paid to every single little detail so as to reduce the fuel consumption and emissions, as well as minimize the depreciation of the

機件的損耗減至最低。

減少噪音影響

當消防或救護車被緊急召喚時，消防局／救護站內的緊急廣播系統、自動摺門，以及消防車／救護車的警號，均會產生不同程度的噪音。為了減低噪音影響，消防處已推行以下消滅噪音措施：

消防局及救護站的緊急廣播系統

☆ 除了向所有行動單位發出指示在夜間把緊急廣播系統的音量調低外，我們還加入音量調校時間掣，進一步減低對社區的噪音污染。

消防車及救護車警號的使用

☆ 警號可幫助消防車或救護車快速抵達緊急事故現場，而警號所發出的聲響，更可以舒緩等待救援及求助者的疑慮。不過，警號所產生的噪音，難免對公眾造成滋

braking system, tires and the different mechanical components.

Reduction of Noise Impact

Noise was inevitably generated by the emergency broadcasting systems, the automatic folding-doors at fire stations/ ambulance depots and the sirens of the fire appliances/ ambulances in responding to emergency calls. We implemented the following mitigating measures to reduce the noise pollution levels:

Emergency Broadcasting System in Fire Stations and Ambulance Depots

☆ Apart from instructing all operational units to tune down the volume of the emergency broadcasting systems during night time, we had also installed the volume control timers which further reduced our noise pollution to the community.

Use of Siren by Fire Appliances and Ambulances

☆ the purpose of using siren mounted on fire appliances or ambulances was to enable them to promptly arrive at the scene of incident. The sound of siren also provided a form of reassurance to persons awaiting assistance or rescue and to comfort

擾。為了在這兩方面取得平衡，本處已有明確訓令說明如何妥善使用警號，包括指示車輛主管在深夜時分酌情使用警號，可以根據當時的路面或交通情況，關掉或間歇使用聲響示警裝置。

their anxieties. However, the noise inevitably caused nuisance to the public. With a view to striking a balance, the Department had laid down clear orders on the proper use of siren which included instructing the officers-in-charge to exercise discretion during the night time to either switch off the audio warning devices or use them intermittently, according to the prevailing road configuration or traffic condition.

消防局／救護站的自動摺門

Automatic Folding Doors of Fire Stations and Ambulance Depots

☆ 為減低操作摺門所引致的噪音滋擾，消防處已在自動摺門安裝變速驅動裝置，作為消減噪音的措施。此外，本處策劃組亦已將有關系統納入所有新建消防局及救護站的設計內。有此裝置後，本處在二零零八年已沒有收到市民提出有關自動摺門發出噪音的投訴。

☆ to reduce the noise generated from the operation of folding doors, variable speed drivers had been installed as a mitigation measure on all the existing automatic folding doors. Moreover, Planning Group of this Department had also included such device in the design of all new fire stations and ambulance depots. With the installation of such device, this Department had received no complaint in 2008 regarding the noise caused by automatic folding doors.



Folding gates at Fire Station installed with noise mitigation measure

設有減低噪音裝置自動摺門的消防局

改善空氣質素

控制車輛的廢氣排放

在車輛進行一般維修檢查時，工程部的同事會進行車輛氣體(燃釋氣體分析)測試；以及柴油氣車排放(黑煙密度)測試，以確保本處車輛排放符合法例的要求。

汽車排氣設備

所有新的消防局及救護站均已在車房安裝廢氣設備。有關設備可以把消防車及救護車引擎排放抽走，從而改善工作地點之空氣質素。

氣體回收系統

機電工程署為所有消防局／救護站的汽油加油站安裝第二期氣體回收系統的工程已於本年度完成，表示本處已符合《空氣污染管制(油站)(汽體回收)規例》的最新要求。有關回收系統可減少對氣候有損害的碳氫化合物釋放到大氣層。

Improving the Air Quality

Vehicle Emission Control

Our workshop staff had conducted the Vehicle Emission (Gases Analysis) tests/ Diesel Vehicle Emission (Smoke Density) tests in the routine maintenance and servicing to ensure that the emission of our vehicles was in full compliance with legal requirements.

Vehicle Exhaust System

All new fire stations and ambulance depots were equipped with fume exhaust systems at the appliance rooms. The systems served to extract exhaust from engines of fire appliances and ambulances and thus improve air quality in the workplaces.

Vapour Recovery System

EMSD had completed the installation programme for Phase II Vapour Recovery Systems in all petrol filling stations in our fire stations/ambulance depots in 2008, which indicated that this Department has fully complied with the latest requirements of the Air Pollution Control (Petrol Filling Stations) (Vapour Recovery) Regulations. Such systems help reducing climate damaging hydrocarbon emission being released into the atmosphere.

廢物管理

廢物分類及循環再用

本處深明到地球的資源有限，因此我們除了努力減少浪費外，更鼓勵全體人員參與廢物分類及循環再用計劃，並於二零零八年在工作間收集了約 17,000 公斤可循環再用的廢紙，相等於超過 6,000 令紙張，大約佔本處全年耗紙量的 20%。

化學廢物

根據《廢物處置條例》(第 354 章)的《廢物處置(化學廢物)(一般)規例》，截至二零零八年十二月三十一日本處共有 116 個單位登記為化學廢物產生者。本處亦已安排註冊化學廢物收集商，收集該等單位所產生的化學廢物。

在二零零八年，本處交由註冊承辦商回收處理的化學廢物，如廢機油、電池油、廢引擎冷卻劑、鹼性廢汽車電池電解液，合共 28,840 公升。此外，亦回收一些固體化學廢物，包括 12 桶(每桶 200 公升)沾有機油的布碎和 6 桶(每桶 200 公升)廢棄過濾芯。

Management of Wastes

Waste Separation and Recycling

The Department fully understood that Earth's resources were limited. As such, we encouraged all members to take part in the waste separation and recycling programme. In 2008, about 17,000 kg of papers were collected from our workplaces for recycling, which was equivalent to more than 6,000 reams of papers or about 20% of the Department's paper usage for the entire year.

Chemical Wastes

As at 31st December 2008, 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.

In 2008, a total of 28,840 litres of liquid chemical wastes, e.g. used lubricating oil and transformer oil, coolant and battery alkaline electrolyte were collected by the registered contractor for recycling and disposal. A total of 12 drums (200 litres capacity) of lubricating oil contaminated rags and 6 drums (200 litres capacity) of spent filters were also collected.

醫療廢物

救護人員在提供救護及輔助醫療服務時所產生的醫療廢物，會被妥善放置在醫院的醫療廢物箱。

家居廢物回收

本處為支持環保署在政府宿舍及屋邨舉辦的「家居廢物源頭分類計劃」，在多個消防宿舍大廈的電梯大堂、垃圾房或樓梯，設置廢物分類回收桶進行廢物源頭分類。

在 2008 年，消防處多幢政府宿舍在上述廢物回收計劃取得滿意的成績，薄扶林消防官員宿舍及黃大仙員佐級已婚人員宿舍榮獲銅獎，而將軍澳消防宿舍、消防處永定道消防宿舍、西營盤郵政局大廈(消防已婚人員宿舍)與柴灣消防員佐級已婚人員宿舍亦獲頒優異獎。



Medical Wastes

Medical wastes generated in the course of providing ambulance and paramedic services by ambulance staff were properly disposed of in the infectious waste containers of hospitals.

Domestic Waste Recovery

In order to support EPD's Programme on 「Sources Separation of Domestic Waste」 in government quarters and other estates, waste separation bins had been placed at lift lobbies, refuse storage rooms or staircases of the FSD quarters.

In 2008, a number of FSD quarters achieved remarkable results in the Recycling Programme. The Pok Fu Lam Fire Station Officers' Married Quarters and the Wong Tai Sin Fire Services Quarters both won the Bronze Award while Tsueng Kwan O Fire Services Quarters, Wing Ting Road Fire Services Quarters, Sai Ying Pun Post Office Building (FSD married quarters), Chai Wan Fire Services Rank & File Married Quarters were awarded with Certificates of Merit.



第5章 環保採購政策

Chapter 5 Green Procurement Policy

為持續改善環境，消防處已在投標規格要求方面採用環保措施。截至二零零八年年底，本處共有309輛符合歐盟 III 或以上廢氣排放標準的車輛服役。此外，90輛符合歐盟 IV 廢氣排放標準的新車將於二零零九年投入服務。本處將會採購 92 輛消防車及126 輛救護車作為更換舊車之用，從而減少車輛廢氣排放。

在採購工具時，我們會盡量考慮環保因素，例如能源效益及循環再用問題等。此外，本處會盡量考慮依照政府物流服務署的環保產品清單，採購消耗品。

在二零零八年，我們採用了約 845 個循環再造的打印機碳粉盒，又安排承辦商回收 994 個已使用的打印機碳粉盒。我們在二零零七年訂定維修保養合約時，已經把這種環保做法推廣至回收傳真機的碳粉盒。而在這類型

For continual improvement, green procurement measures had been incorporated in tender specifications. Under such procurement policy, by the end of 2008, a total of 309 Fire services vehicles were in compliance with Euro III or above emission standards. In addition, 90 new vehicles with Euro IV emission standards will be put into commission in 2009. We will further procure 92 fire appliances and 126 ambulances to replace aged vehicles which will also reduce emissions.

In the procurement of equipment, we took into account environmental factors such as energy efficiency and recyclability as far as practicable. Moreover, considerations were also given to procure consumable items from the Green Products List of the Government Logistics Department.

In 2008, we acquired 845 nos. of recycle toners cartridges and arranged the collection of 994 used toners by contractors. During the renewal of maintenance contract in 2007, recycling of used toner cartridges for facsimile machines was arranged. For this type of toner cartridges, we had recycled 318

的碳粉盒方面，本處今年在已採購的 512 個碳粉盒中回收了 318 個，其餘的將會在消耗後回收，確保可以循環再用。

再者，我們安排供應商在二零零八年回收約 300 枚耗盡的手提無線電通話機電池。

cartridges out of the 512 procured in 2008, where the remaining cartridges will be recycled after they are completely used.

Furthermore, about 300 nos. of handheld radio batteries were collected by the supplier for recycling in 2008.

第6章 二零零八年主要環保措施

Chapter 6 Major Environmental Initiatives in 2008

「零山火計劃」

為保護大自然，部門於二零零七年推行全新的防止山火宣傳策略-「零山火計劃」，提高市民對山火隱患的警覺性。

過往的資料顯示，大部分的山林火都在清明節及重陽節期間發生。有見及此，消防處舉辦「零山火計劃」的目的，是鼓勵全港的鄉村參與防止山火，務求羣策羣力，大幅減少山林火發生，為保護環境而各盡一分力。

參與這項計劃的鄉村，須承諾在清明節及重陽節指定的時間內，確保其所屬範圍內沒有山林大火發生。能夠實現承諾的村落會得到消防處處長簽發的證書，以資鼓勵。二零零八年的兩個節日，共有多達 445 條參與的

“Zero Hill Fire Scheme”

With a view to protecting our countryside, the Department had launched the “Zero Hill Fire Scheme” in 2007 which was a campaign strategy to engage the community to increase their awareness of the hazards of hill fires.

It was shown in the past that most hill fires occurred around Ching Ming and Chung Yeung Festivals. The Campaign, “Zero Hill Fire Scheme” was aimed to encourage all rural villages in Hong Kong to participate in the prevention of hill fires. We hoped that with the concerted effort of all villages, we could better protect our environment by reducing significantly the number of hill fires.

All participating villages undertook that there would be no hill fire within their village area during a designated period around the Ching Ming Festival and Chung Yeung Festival. A certificate from the Director of Fire Services would be awarded as a token of appreciation to those villages which had succeeded in

鄉村能夠達到「零山火」目標。

their undertaking. In 2008, 445 villages had successfully hit the target of “Zero Hill Fire” and were awarded.



消防屬員向掃墓的市民派發防止山火的宣傳單張
FSD staff Distributing leaflets on Hillfire Prevention to gravesweepers

改善室內空氣質素

為響應政府提倡改善室內空氣質素的政策，本處已研究不同的可行方案。經過審慎考慮後，本處採取一系列措施提升空氣質素，例如在市場尋找合適的工具或儀器，以減少室內空氣污染物；清洗冷氣喉管，改善機械通風及空調系統等。

本處以下處所在去年的室內空氣質素檢定計劃中獲得「良好級室內空氣」的認證：

- ◆ 消防處總部大廈
- ◆ 西灣河消防局

Indoor Air Quality Improvement

To echo 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 implemented a number of measures, such as searching for suitable tools/equipment in the market which would reduce the level of indoor air pollutants, arranging cleansing of air ducts to improve the MVAC system etc.

The following Fire Service Premises had won the “good air quality” certification in 2008:-

- ◆ Fire Service Headquarters Building
- ◆ Sai Wan Ho Fire Station

- ◆ 西灣河救護站
 - ◆ 上環消防局
 - ◆ 中區消防局
 - ◆ 沙田消防局
 - ◆ 尖沙咀消防局
 - ◆ 馬鞍山消防局
 - ◆ 馬鞍山救護站
 - ◆ 救護訓練學校

 - ◆ 寶馬山消防局暨救護站

 - ◆ 大赤沙消防局暨救護站

 - ◆ 黃大仙消防局
 - ◆ 黃大仙救護站
 - ◆ 竹篙灣消防局暨救護站

 - ◆ 消防訓練學校
- ◆ Sai Wan Ho Ambulance Depot
 - ◆ Sheung Wan Fire Station
 - ◆ Central Fire Station
 - ◆ Sha Tin Fire Station
 - ◆ Tsim Sha Tsui Fire Station
 - ◆ Ma On Shan Fire Station
 - ◆ Ma On Shan Ambulance Depot
 - ◆ Fire Service Ambulance Command Training School
 - ◆ Braemar Hill Fire Station cum Ambulance Depot
 - ◆ Tai Chik Sha Fire Station cum Ambulance Depot
 - ◆ Wong Tai Sin Fire Station
 - ◆ Wong Tai Sin Ambulance Depot
 - ◆ Penny's Bay Fire Station cum Ambulance Depot
 - ◆ Fire Services Training School

消防局／救護站的天台綠化工程

在二零零八年，以下消防處所的天台綠化工程已竣工：-

- (1) 沙田救護站
- (2) 元朗分區消防局(訓練大樓)

綠化植物及土壤層於屋頂造成隔熱，除了美化環境外，某程度上還可減少能源消耗，從而減低碳排放量。

Green Roofing of Fire Station and Ambulance Depot

In 2008, green roofing system was implemented in the following Fire Services premises:-

- (1) Sha Tin Ambulance Depot
- (2) Yuen Long Divisional Fire Station (Recue Training Block)

The green roof substrate soil and vegetation, apart from beautifying the roof, brought positive effect to urban climatic change by reducing a certain degree energy demand through direct shading and better insulation of the roof.



元朗分區消防局(訓練大樓)天台綠化前(圖左)及綠化後(圖右)

*Greening roofing at Yuen Long Divisional Fire Station
(Rescue Training Block) Before (left photo) and After (right photo)*

於二零零九年度納入綠化天台工程的消防處建築物臚列如下：-

- 青衣消防局
- 粉嶺消防局
- 馬頭涌消防局
- 寶林消防局
- 薄扶林消防局
- 梅窩消防局
- 牛頭角救護站

The following FS buildings were selected for implementation of green roofing in 2009 :-

- Tsing Yi Fire Station
- Fanling Fire Station
- Ma Tau Chung Fire Station
- Po Lam Fire Station
- Pok Fu Lam Fire Station
- Mui Wo Fire Station
- Ngau Tau Kok Ambulance Depot

第7章 藍天行動及清新空氣約章

Chapter 7 Blue Sky Action and the Clean Air Charter

藍天行動

為改善我們的生活環境及香港空氣質素，本處全力支持由環境保護署所推出的「藍天行動」的運動。總區環境審核員會嚴格檢討所屬總區的行動及日常活動，並且推行有助香港建立藍天的措施。本處已提醒屬員遵行措施以減少車輛、船隻及設備的排放。

清新空氣約章

為執行約章的承諾宣言，本處已於二零零七年成立能源及排放管理小組，成員來自各總區的代表。

能源及排放管理小組負責確定氣體的排放源頭及能源耗用的數據，從而制訂減排目標，制訂及推行減少排放氣體及節約能源的措施。此外，小組除了向環境審核委員會匯報小組的工作，亦安排工作匯報以加強同事的認知，保持他們對空氣清新目標的熱忱。

Blue Sky Action

The Department is in support of the 'Action Blue Sky' campaign launched by EPD. Command Environmental Auditors have been invited to review operations and daily activities conducted in respective Commands critically and put forward measures that are conducive to building up a Blue Sky in Hong Kong. Members of the Department have also been reminded to observe the measures that would help reduce emission from our vehicles and equipment.

Clean Air Charter

To fulfill the commitments under the Clean Air Charter, the Department has set up an Energy and Emission Management (EEM) Team with representatives from different Commands.

The EEM Team has been tasked to identify air emissions and energy consumption, establish energy/ emissions reduction targets, design and implement measures to reduce emission and minimize energy consumption etc. In addition to reporting the achievement to the Environmental Auditing Committee, the EEM Team would also provide briefings to our staff in raising staff awareness of and enthusiasm for clean air targets.

第8章 加強員工環保意識的訓練

Chapter 8 Staff Awareness Training

屬員自願參與實行環保措施，是部門成功建立環保文化的關鍵。為鼓勵屬員參與建立環保文化，環境審核委員會編製了《香港消防處環境管理手冊》，從而提醒並協助屬員。我們會致力確保所有員工具備所需的技巧、知識，以及了解部門對環保的重視，從而得到他們全力支持上文提及的目的及目標。

總區／單位環境審核員會已經定期就環保表現進行內部審核，確保朝着正確的方向進發。環境審核委員會找出不符合環保的情況後，會建議相應的糾正和預防措施。環境審核委員會亦會不時發出電子郵件，就內務管理提出環保要訣及最佳的工作守則，提醒屬員注意環保，以及繼續努力建立更環保的工作場所。

Members' willingness to participate in green initiatives is crucial to the success in building a green culture in the Department. With a view to fostering staff involvement, the Environmental Auditing Committee has compiled a "Departmental Manual on Environmental Management" to remind and assist its members in this respect. We would ensure that all staff have the necessary skills, knowledge and understanding on the Department's green policy in order to get their support in the stated objectives and targets.

Environmental Management Teams of Commands/Units have periodically conducted internal auditing on performance, making sure that the targets are kept on track. The Environmental Auditing Committee suggests corrective and preventive actions if any irregularities are identified. From time to time, the Environmental Auditing Committee 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.

為了在部門內培養環保管
理，消防處已提名環境審核
員、有關主管或能源及排放
小組成員，參加由政府部門
及其它環保機構籌辦的簡介
會及經驗分享工作坊，了解
影響環境的立法工作及推廣
環保措施。

To foster the culture of environmental protection management in the Department, Environmental Auditors, relevant supervisors or EEM Team members have been nominated to attend briefings and experience sharing workshops on the relevant legislative initiatives and green management measures organized by the relevant government departments and organizations.

第9章 目標及措施

Chapter 9 Targets and Initiatives

本處二零零八年的環保管理工作進展良好，大部分目標均已達到。為不斷改善環保管理的工作，以及推廣環保意識，本處已制定二零零九年的工作目標，詳情如下：

節約用電

節省能源及改善用電都有助減低溫室氣體的排放，紓緩地球暖化問題。儘管部門在二零零八年已成功做到減少消耗能源，但仍會繼續落實各項節能措施，並找出有待改善能源管理的空間。我們會繼續探討內部綠色環保管理實務建議，加強辦公室在節省能源及其他資源方面的環保措施。

本處來年會於總部大廈進行碳排放審計及推行排減措施，針對節約建築物運作用電以減少溫室氣體排放。

We had made satisfactory progress in meeting the environmental management targets in 2008. To keep up continual improvement in green management and to promote a green culture, we have set for ourselves the following targets and initiatives for 2009:

Saving of Electricity

Both energy saving and improving energy efficiency would help reduce greenhouse gas emission and alleviate global warming. Notwithstanding the achievement of reduction in energy use in 2008, we would continue to implement energy saving measures and to identify any potential energy management opportunities. We would continue to explore green housekeeping practices to minimize the use of energy and other resources in our offices.

We would conduct a carbon audit for the Fire Services Headquarters Building in the coming year to identify further scopes of energy savings so as to minimize greenhouse gases emission.

節約用紙

我們盡量減少出版印刷刊物，改為採用電腦文件檔案；又鼓勵同事多利用電子方式、以內部電腦伺服器傳遞電子信息的溝通方式；以及多善用部門的網站向市民公佈有用的資訊。

天台綠化工程

我們與負責保養的單位緊密合作，為所挑選的消防局和救護站推行天台綠化工程。天台種植不但有美化環境的價值，更能為建築物提供隔熱效用。

改善空氣質素

為了維持良好的空氣質素，部門一些辦公大樓會繼續參與環境保護署的室內空氣質素檢定計劃。根據在二零零八年落成場地所得的認證經驗，本處會考慮讓更多消防局／救護站參與室內空氣質素檢定計劃。

Saving of Paper

We would try to reduce paper consumption through production of reports in soft copies. We would continue our efforts to develop electronic systems and promote in-house use of intranet for communication and use Departmental Website for dissemination information to the public.

Green Roofing System

We would work closely with our maintenance agent to implement green roofing system at selected fire stations and ambulance depots. The growing of plants on roofs would not only give aesthetic value to the environment, but also provide insulation effect to the building.

Improving air quality

To help maintain good air quality, we would continue to participate in the Indoor Air Quality (IAQ) Certification Scheme organized by Environmental Protection Department for selected venues. With the experience gained from completed projects in 2008, we will consider to extend the IAQ scheme to more fire stations and ambulance depots.

環境管理體系

由於本處九龍灣工程部工場取得 ISO14001 環境管理體系認證的經驗，因此本處擬在其他工場單位實施有關體系，當中包括港島工場及機場消防局。本處相信屬員的環境保護意識將會大大提升。

Environmental Management Systems

With experience from the ISO 14001 accreditation of the Kowloon Bay Workshop on environmental management systems, the Department is preparing to implement the environmental management system in the other echelons including the Hong Kong Workshop and the Airport Fire Station. It is envisaged that members' awareness on environmental protection would be greatly enhanced.

第10章 索取資料的途徑

Chapter 10 Sources of More Information

如果需要更多有關資料，請致電 2733 7820 查詢，或致函消防處，地址如下：

香港
九龍
尖沙咀東部
康莊道 1 道
消防處總部大廈
消防處

你亦可瀏覽消防處網址：

<http://www.hkfsd.gov.hk>

歡迎你提出寶貴意見。你可填寫夾附的回應表格，然後郵寄至上述地址，亦可電郵至下列地址：

hkfsdenq@hkfsd.gov.hk

For more information, please give us a call at 2733 7820 or write to us at:

Fire Services Department
Fire Services Headquarters Building
1 Hong Chong Road
Tsim Sha Tsui East
Kowloon
Hong Kong

You may also visit our Web Site at :

<http://www.hkfsd.gov.hk>

Your valuable comments are most welcome. You may send them by mail and by using the enclosed feedback form to the above address or by email to:

hkfsdenq@hkfsd.gov.hk

我們重視你的意見

你的寶貴意見有助我們改善環保管理制度

(請填妥以下問卷，並傳真至消防處總部管理組，傳真號碼：2739 5879)

1. 這份報告書能否提供所有你想知道的香港消防事務環保資料?

是

否

2. 如果上題所選的答案為“否”，你希望我們在下一份環保報告書內加入什麼資料？

3. 這份報告書的整體篇幅及內容如何?

太短

太長

適中

其他：_____

4. 其他意見：

5. 你屬於那個團體?

市民

環保組織成員

公務員

其他：_____

* 如果希望我們回覆，請提供以下資料：

姓名： _____

聯絡方法： _____

Feedback Form

YOUR OPINION IS IMPORTANT TO US

We value your opinion as a way to improve our Environmental Management System

(Please complete the questionnaire and return it to Fire Services Headquarters, Management Group by Fax. No. 2739 5879)

1. Can the report provide you with all the Environmental Protection information that you want to know in relation to Fire Services in Hong Kong?
- Yes No

2. If your answer to question 1 is "No", what additional information will you want us to include in our next Environmental Report?
- _____

3. How is the overall length and content of the Report?

Too short Too long About Right

Others: _____

4. Other comment:
- _____

5. What is your affiliation?

Member of the Public Environmental Protection Group Member

Civil Servant Others: _____

* If you want us to respond to you, please provide the following information:

(Name): _____ (Contact): _____