

# Chapter Seven 第七章

## CORPORATE ENVIRONMENTAL PROTECTION

### Environmental policy and objectives

In support of the Government's commitment to set a good example in environmental protection, the Department implemented the Green Manager Scheme in November 1993 to enhance green housekeeping measures in the workplace.

In June 1996, the Department issued a policy statement on environmental protection and assigned a Departmental Green Manager to promote corporate green culture within the department, remind staff of the department's environmental policy, enhance their awareness in green housekeeping practices, encourage their participation in green management programmes, initiate new action plans where appropriate in supporting the Government's long-term strategy on environmental protection and monitor the implementation of various green measures. Since 1998, the Department has incorporated major green management initiatives and performance in its annual departmental report.

### Staff participation

To enable the effective implementation of various green measures, staff's support and vigorous participation are of particular importance. In this regard, the Department encourages staff to give suggestions on new initiatives of green management through the Staff Suggestion

## 企業環境保護

### 環保政策及目標

為支持政府承諾成為環保典範，衛生署於一九九三年十一月推行「環保經理計劃」，在工作場所加強落實環保措施。

衛生署於一九九六年六月發表環保政策聲明，並委任部門環保經理，推廣署內的企業環保文化，提醒員工本署的環保政策，加強其環保管理意識，並鼓勵他們參與環保管理活動；亦在適當地方發起新的行動計劃，以支持政府的長遠環保策略，並監察各環保措施的落實推行。自一九九八年起，各項主要環保管理提案及其成果均載述於年報內。

### 員工參與

為能有效地落實各項環保措施，員工的支持及積極參與尤其重要。在這方面，署方經常鼓勵同事透過公務員建議書計劃提出有關環保管理的新建議。多年來，很多切實可行的環保建議亦已被採用。

Scheme. Over the years, many practicable green proposals put forth by staff have been adopted.

Individual Services of the Department have assigned energy wardens to monitor energy consumption in workplace and the implementation of various green housekeeping measures in offices and clinic units under their purview. In this regard, over 200 energy wardens have been assigned.

## Waste management

To enhance public awareness in separate waste recycling, the Department has participated in the “Waste Separation and Recycling Campaign” since 2002. In 2007, waste separation bins were placed in 20 clinics and office floors of the Department to enable separate collection of waste paper, aluminium cans and plastic bottles by waste collectors for recycling, and a total 11 545 kg of waste papers were collected for recycling. In addition, empty toner cartridges of colour printers and laser printers have been separately collected for recycling.

The Department follows the guidelines issued by the Environmental Protection Department (EPD) in segregation, packaging, labelling and storage of clinical wastes and chemical wastes. In this regard, clinical wastes, chemical wastes and domestic wastes arising from clinics or laboratories are segregated from each other. Clinical wastes such as sharps boxes, and used dressings are placed in red plastic waste bags, properly labelled, securely fastened and temporarily stored in the designated area before being carried away by clinical waste collectors for disposal. The designated area for clinical wastes storage is also provided with visibly clear warning sign, protected from water and rain, always kept clean and dry and secure from unauthorised persons.

各服務單位主管指派同事擔當能源管理人，以監察其管理範圍內的工作間的耗電情況及各類環保管理措施的落實。現已有超過200位同事擔當能源管理人。

## 廢物管理

為加強公眾對廢物分類回收的意識，本署於二零零二年開始參與「廢物分類及回收運動」。並於二零零七年在20間診所及辦公室樓層內設置廢物分類回收箱，以便廢物收集商分類回收廢紙、鋁罐及膠樽作循環再用。全年回收作循環再用的廢紙總數量為11 545公斤。另外，亦有分別回收用完的彩色打印機墨盒及鐳射打印機碳粉盒，作循環再用。

本署依照環保署所發的指引處理醫療廢料及化學廢料，包括分隔、包裝、標籤及儲存。診所或實驗室產生的醫療廢料、化學廢料及家居廢物，均分開處理。醫療廢料，如利器盒和已使用的敷料，均放進紅色塑料廢物袋內。盛載醫療廢料的紅色塑料廢物袋須貼上適當標籤，袋口須妥為紮緊，並在負責收取醫療廢料的有關人員運走處置之前，移至指定地點暫時存放。用作暫放醫療廢料的地方，亦要提供清晰可見的警告標誌，防水防雨，並經常保持清潔乾爽，及嚴禁未經授權人士進入。

To comply with the Waste Disposal (Chemical Waste) (General) Regulation, chemical wastes arising from clinics or laboratories are segregated from clinical wastes and domestic wastes, temporarily stored in a designated area which is only accessible by clinic staff and collected by the EPD's licensed collectors for disposal. Domestic wastes are placed in normal black plastic waste bags for disposal.

## Economical use of paper

The Department has adopted the following housekeeping measures to economise the use of paper:

- use blank side of used papers for printing or writing to reduce paper consumption;
- reuse envelopes and file jackets;
- use both sides of a paper for drafting and double-sided copying as far as possible;
- rollout e-Leave system for staff with electronic mail account to replace printed leave application form;
- avoid using fax leader page as far as possible;
- encourage staff to make better use of electronic means in disseminating health messages such as uploading publications onto departmental website and more frequent use of CD-ROM to keep printed publications to the minimum;
- maximise the use of Internet and electronic mail facilities for communication to replace hardcopies; and
- cease internal circulation of hardcopies of clinic time table, telephone directory etc to reduce paper consumption.

為遵守《廢物處置(化學廢物)(一般)規例》，診所及實驗室所產生的化學廢料要與醫療廢料及家居廢物分開處理，並暫放在只准許有關職員進出的指定化學廢料儲存地方，由環保署發牌的化學廢物處理承辦商收集處置。一般家居廢物則放進黑色塑料廢物袋內以作處置。

## 節約用紙

衛生署採取了下列環保措施，以節約用紙：

- 利用已用過紙張的空白一面作打印或書寫用途，以減少用紙量；
- 信封及檔案夾再用；
- 盡量使用紙張雙面及雙面影印；
- 持有電郵戶口的同事已採用電子處理假期申請系統，以取代紙張印製的假期申請表；
- 傳真時盡量避免附加面頁；
- 鼓勵同事多利用電子方式發布健康訊息，例如在部門網站上載刊物及較多採用製作光碟方式，以減少出版紙本刊物的數量；
- 增加互聯網的使用和以電子郵件通訊，取代紙張文件傳閱；以及
- 停印一些供同事內部傳閱的印刷品，例如診所時間表及部門總部電話名冊，以減少用紙。

The Department has adopted the following green initiatives to save paper:

- In 2001, the number of electronic mail users in the Department was only 160. Through continued office automation, the number of electronic mail users has increased to 2 000 in 2007.
- The Accessibility Programme (AP) launched in 2007 provides an electronic platform for staff who do not have an electronic mail user account. It enables AP users to communicate with users of other Government networks through emails; access basic personal data (personnel) and monthly salary e-statement safely and easily; apply for leaves and submit other related applications. The use of AP system to process applications helps to shorten the time and minimise errors in the course of delivery and in the approving processes.
- E-forms for various licensing applications of the Department have been made available to the public on the government's official website.

With staff's consort effort, envelopes and A4 papers consumption in 2006 was significantly reduced by 30% and 10% respectively when compared to 2005; and the total envelopes and A4 papers consumption was further reduced by 22% in 2007 as compared to 2006.

衛生署也採取了下列的環保措施，以節約用紙：

- 透過不斷加強辦公室電子化，衛生署使用電子郵件的人數由二零零一年的160人，增至二零零七年的2 000人。
- 於二零零七年初推行的「資訊科技設施普及計劃」(AP)，為其他未有個人電子帳戶的員工提供自動化電子平台；使用者可透過AP電子系統，與政府網內其他電郵使用者作電郵通訊、安全而輕易地查閱其個人的基本人事資料及薪俸月結單、申請假期及提交其他和人事相關的申請等。利用AP電子系統處理申請，有助減少人手遞送過程和申請批核的時間及潛在錯誤。
- 不同種類的衛生署牌照電子申請表格也可從政府網頁下載。

由於員工的共同努力，本署於二零零六年全年信封及A4紙張的用量較二零零五年分別下降30%及10%。與二零零六年比較，二零零七年全年信封及A4紙張的總用量進一步下降22%。

## Green purchase

The Department supports the use of recycled papers. In 2004, recycled papers contributed only less than 30% of the total paper consumption. Up to the end of 2007, over 90% of the total paper consumption was recycled papers. The use of non-recycled wood-free papers was reduced substantially.

In addition, the Department has implemented the following green procurement initiatives to support the use of environmental friendly products:

- plain paper fax machines to replace thermo fax machines so that making a second copy of the thermo fax for filing purpose is not required;
- photocopiers with double-side copying feature;
- clinical waste bags and sharps boxes which are not made from polyvinylchloride (PVC) materials and are capable of safely incineration;
- mercury-free blood pressure monitors and thermometers;
- LCD monitors to replace old CRT monitors for more effective energy saving; and
- recycled and reusable stationery and other office supplies such as refillable ball-pens, reusable toners and printer cartridges etc.

## 環保採購

衛生署支持採用可循環再造紙張。於二零零四年，可循環再造紙張的使用量只佔整體的用紙量不足30%。直至二零零七年年底，可循環再造紙張的使用量已佔整體的用紙量90%以上。非循環再造的林木製紙張使用量也大幅度減少。

另外，本署亦有推行下列的環保物料採購建議，以支持使用較具環保效益的產品：

- 採用普通紙張傳真機來取代熱能紙張傳真機，因此無須把傳真本再影印作存檔用途；
- 採用有雙面影印功能的影印機；
- 採用不含PVC塑膠物料並可安全焚化的醫療廢物袋及利器盒；
- 採用不含水銀的血壓計及溫度計；
- 採用更具節能效益的液晶顯示器來更換老化極射線顯像管顯示器；及
- 採用可回收及循環再用的辦公室文具物資，如可更換筆芯的原子筆、可循環再用的打印機墨盒及鐳射打印機碳粉盒等。



## Environmental design in new projects

Green elements have been taken into consideration in the design of new clinic buildings, which include reducing the use of materials that could have adverse environmental impact and increasing the use of energy efficient plant and equipment. In accordance with standards of the Hong Kong – Building Environment Assessment Method for New Office Designs, the Public Health Laboratory Centre (PHLC) designed by the Architectural Services Department achieved excellent rating in terms of environmental performance in the building design based on assessment of the Business Environment Council. Credits of good environmental design of PHLC include:

- fitting with energy saving luminaries, heat recovery systems and energy efficient air-conditioning electricity consumption to reduce electricity energy consumption;
- adopting non-ozone depleting refrigerants and thermal insulation materials for building fabrics to avoid ozone depletion; and
- providing designated facilities and area for the storage and collection of recyclable materials.

## Energy conservation

The Department has adopted the following energy saving measures:

- de-lamping lights to the minimum required for illumination and switching off lights and non-essential electrical appliances while not in use;

## 新建築項目的環保設計

在設計新診所大樓時，亦會考慮到環保元素，包括減少使用對環境有害的物料和增加使用具能源效益的設備及器材。本署的公共衛生檢測中心由建築署負責設計；經商界環保協會按照香港建築環境新辦公大樓設計評估法，作出環保設計評估後，該中心獲評定為最高優秀級別的環保設計建築物。該中心的出色環保設計包括：

- 配備節能照明系統、熱能循環再用系統及有能源效益的空調系統，以減低耗電量；
- 採用不損耗臭氧層的雪種及隔熱建築材料，以免損耗臭氧層；及
- 提供特定設施及地方，供存放與回收可循環再用的物料。

## 節約能源

衛生署採取了下列節省能源措施：

- 將燈光調配至最低照明水平；在無需使用時，關掉非必要的電燈及電器設備；

- conducting energy audit survey for individual clinic buildings of high energy consumption to identify practical and effective energy saving measures;
- modifying group lighting switches to individual switches;
- installing air curtains at clinic entrances to prevent infiltration of un-treated hot and cold air from outside;
- replacing magnetic ballasts by electronic ballasts and change T8 fluorescent tubes to the more efficient T5 fluorescent tubes;
- replacing conventional illumination signs of emergency exit in clinics by LED signs to step up measures in achieving energy saving; and
- maintaining indoor temperature at 25.5°C during summer months for general offices and public areas equipped with air-conditioning facilities provided that the normal operation of essential medical services will not be affected.

In accordance with recommendations made in the energy audit report of the Electrical and Mechanical Services Department (EMSD) for PHLC, the following energy saving measures and improvement works have been implemented and completed for the building:

- installing separate air conditioning on/off and temperature controls in the conference room and the multi-functional hall;
- replacing tungsten halogen lamps at conference rooms with cool light type energy saving lamps;
- installing solar filtering films to interior of window glass panels for critical areas facing sunshine to reduce indoor temperature due to solar heat load;

- 為個別耗電量大的診所大樓進行能源審核調查，確定有效可行的節能措施；
- 將分組式燈光開關改為獨立式開關設計；
- 在診所入口加裝風閘，以防止滲入未經處理的外來熱及冷空氣；
- 以電子鎮流器取代用電量較高的磁鎮流器，並以效能較高的T5螢光管取代T8螢光管；
- 為加強節約能源，增多採用耗電量較低的發光二極管(LED)指示燈取代現時裝置在診所內的傳統緊急逃生指示燈；以及
- 在不影響重要醫療服務正常運作的情況下，把一般辦公室及公眾地方，在夏季月份的室內空調溫度，保持於25.5°C的水平。

根據機電工程署的能源審核(公共衛生檢測中心)報告中的建議，大樓已落實及完成以下的節能措施及改善工程：

- 為會議室及多用途會堂加裝獨立的空調開關及室溫控制；
- 採用較省電的冷光類節能燈泡，取代會議室內的鹵素燈泡；
- 在面向陽光照射的玻璃窗內側加裝濾陽光片，以減低太陽熱能的室溫效應；

- rescheduling and optimising the operation of chiller plant, electrical and mechanical (E&M) plant and other building services facilities such as lifts; and
- replacing all conventional spot lights and down lights by energy saving lamps at the outer wall and perimeter of the building.

The Lam Tin Polyclinic implemented measures on the energy efficiency programme recommended by EMSD's energy audit for the building. Measures including temperature setting and improvement in air conditioning system, de-lamping, installation of occupancy sensors for lighting control, changing conventional exit signs to LED sign boards, replacing T8 fluorescent lamps by T5 ones as well as other green housekeeping, has achieved a significant electricity saving of more than 13% in 2007 as compared to 2003.

In 2007, the Kwai Chung Public Mortuary, the Ha Kwai Chung Polyclinic and the Kowloon Bay Health Centre of the Department were awarded by EMSD the Certificate of Registration for "Good Energy Performance" buildings in its "Hong Kong Energy Efficiency Registration Scheme for Buildings" for compliance with the Code of Practice for Energy Efficiency in respect of lighting, air conditioning and lift installations.

Due to service expansion, launching of new services and new venues, as well as additional E&M facilities and electrical equipment, increasing demand in the use of electricity was unavoidable. Despite all the energy saving measures, a 2.3% increase in the overall energy consumption was recorded in 2007, as compared to 2006. The rise in the mean daily maximum air temperature from 25.8°C in 2006 to 26.4°C in 2007 could also be a contributory factor to the increase in energy consumption.

- 調校製冷、機電機組及樓宇內如電梯等的其他機電設施，以達至最佳的運作效益；以及
- 採用省電燈泡，取代大廈外牆及周邊的照明裝置及射燈，以減低耗電量。

藍田分科診所亦採納機電工程署的能源審核(藍田分科診所)報告中的能源效益計劃所建議的節能措施，其中包括適當地控制室內空調及燈光照明水平，加裝燈光自動開關感應，以發光二極管(LED)指示燈取替傳統緊急逃生指示燈，以T5螢光管取代T8螢光管及其他環保管理措施。該診所於二零零七年的用電量，較二零零三年減少13%。

在機電工程署所推行的『香港建築物能源效益註冊計劃』中，本署轄下的葵涌公眾殮房、下葵涌分科診所及九龍灣健康中心，分別於二零零七年期間在照明、空調及升降機等裝置方面符合『建築物能源效益守則的應用』的能效規範，並獲機電工程署頒發『高能效表現』建築物的註冊證書。

由於現有服務擴展、新增加的服務、新使用的樓宇及新添置的機電設施和電器等因素，用電需求無可避免地有所增加。雖然各項省電管理措施已在年中推行，本署於二零零七年整體的用電量仍較二零零六年增加2.3%。另外，香港每天平均最高氣溫由二零零六年的攝氏25.8度上升至二零零七年的攝氏26.4度，也是進一步令累積用電量度增加的因素之一。



## Air quality improvement

Being the Government's health adviser, the Department has been taking a leading role in the smoke-free workplace policy since 1982. This policy has been applied to all institutions of the Department since 1996.

From both the green management and the infection control aspects, adequate fresh air ventilation in the working environment of clinics and health centres is important for protecting the health of staff and the public. Since 1999, Indoor Air Quality (IAQ) tests and cleaning of air-duct of air conditioning systems have been conducted by EMSD for clinics and offices of the Department to enhance the operational efficiency of air conditioning systems and to ensure adequate fresh air ventilation. By the end of 2007, the second round of IAQ tests and air-duct cleaning works were completed for all offices and clinic units. Periodic IAQ tests and air duct cleaning works every four to five years are continued to be carried out for selected venues each year.

To support reducing air pollution caused by exhaust emissions of vehicles, the Department has taken the following measures:

- encouraging staff to make use of public transport while performing outdoor duties; and
- all drivers to switch off the car engine while waiting and issuing circular at regular intervals to remind them of this.

## 改善空氣質素

作為政府的衛生事務顧問，本署率先自一九八二年起推行無煙工作間政策。此項政策亦由一九九六年起在本署轄下所有服務單位執行。

在環保管理及感染控制方面，診所及健康中心的工作環境內須有足夠鮮風流通量，這對保障員工及市民的健康十分重要。自一九九九年開始，機電工程署已分階段為本署轄下各診所及辦公室，定期進行室內空氣質素測試及空調系統的風槽清潔工程，以提高空調系統的操作效能，並確保有足夠的鮮風流通量。截至二零零七年年底，所有辦事處及診所服務單位已完成第二次室內空氣質素測試及風槽清潔工程。機電工程署會在往後每年繼續為一定數目的辦事處及診所服務單位進行每四至五年一次的空氣質素測試及風槽清潔工程，以確保室內空氣質素。

另外，本署亦已採取以下措施，支持減低因汽車排放廢氣所產生的空氣污染：

- 鼓勵外勤工作人員盡量使用公共交通工具，以及
- 所有司機停車熄匙，並定時發出通告提醒各司機職系同事。