# 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, inspire 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 in its annual departmental report major green management initiatives and performance.

#### **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

#### 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,衞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。

衞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,在署內推廣企業環保文化,提醒員工本署的環保政策,加強其環保管理意識,推動同事參與環保管理活動;又策劃各項新的行動計劃,以支持政府的長遠環保策略,並監察有關措施的落實推行。自一九九八年開始,本署把各項主要環保管理項目及其成效載述於年報內。

#### 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

management through the Staff Suggestion 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 2008, 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 9 845 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

用。

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」。於二零零八年在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9 845公斤。另外,本署 亦有安排分類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責收 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 料的地方,亦要提供清晰可見的警告標

collectors for disposal. The designated area for clinical waste storage is also provided with visibly clear warning sign, protected from water and rain, always kept clean and dry and secure from unauthorised persons.

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.

為遵守《廢物處置(化學廢物)(一般)規例》,化學廢料須與醫療廢料及家居廢物分開處埋,並暫放在只准許有關職員進出的指定化學廢料儲存地方,由環保署特許的化學廢物處理承辦商安排收集及處置。一般家居廢物則放進黑色塑料廢物袋內以作處置。

#### **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;

#### 節約用紙

衞生署採取了下列環保措施,以節約用 紙:

- ▲ 盡量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;
- ▲ 信封及檔案夾回收再用;
- ▶ 盡量利用雙面影印及紙張雙面使用;
- ▶ 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;

- 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.

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 in Department of Health has increased to 2 263 in 2008.
- 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 save more papers, shortens the time, and minimises errors in the course of delivery and in the approval processes. The number of AP account users at the end of 2008 was over 4 550.

- ▶ 鼓勵同事多利用電子方式發布健康訊息,例如在部門網站登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;
- 増加利用電子郵件傳遞信息,以取代 紙張文件傳閱;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。

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,衞生署 使用電子郵件的人數由二零零一年的 160人,增至二零零八年的2 263人。

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, A4 papers consumption in 2006 and 2007 were significantly reduced by 8.8% and 11.8% respectively when compared to 2005; However, the A4 paper consumption in 2008 was only reduced by 5.9% when compared with the figures in 2005. This lesser deduction was attributed to the launch of the Health Care Voucher Scheme (HCVS), Influenza Vaccination Subsidy Scheme (IVSS), EatSmart@School Campaign and Men's Health Programme (MHP). Furthermore, photocopies of health questionnaires to all clients in clinics for the Avian Influenza also led to the rise of paper consumption.

▲不同種類的衞生署牌照電子申請表格 也可從政府網頁下載。

因員工的共同努力,本署於二零零六年 及二零零七年的A4紙張用量較二零零五 年分別下降8.8%及11.8%。由於本署的 服務不斷的擴展及增加,故二零零八年 全年A4紙張的用量則較二零零五年只下 降5.9%。所擴展及增加的服務包括醫療 券、流感疫苗資助計劃、「健康飲食在 校園」運動及男士健康計劃等。而在各 診所大量複製及派發的禽流感調查表, 亦增加用紙量。

#### **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 2008, over 99% 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 environmentally 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;

#### 環保採購

衞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%。直至二零零八年年底,可循環再造紙張的使用量已佔整體的用紙量99%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;

- clinical waste bags and sharps boxes which are not made from polyvinylchloride (PVC) materials and are capable of safely incineration;
- use of plastic bags with 100% recycled material;
- use of degradable/recycled materials for outsourced cleansing service becomes one of the requirements in the service tenders;
- mercury-free blood pressure monitors and thermometers;
- liquid crystal display (LCD) monitors to replace old cathode ray tube (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.

# **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

- ► 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100%可循環再造塑料的塑膠袋;
- ► 策劃外判清潔服務合約時,使用循環 再造或可分解的清潔物料規定為必需 條件;
- ▶ 採用不含水銀的血壓計及温度計;
- ▼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。

#### 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。 本署的公共衞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:

environmental design of PHLC include:

- fitting with energy saving luminaries, heat recovery systems and energy efficient airconditioning 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.

When planning for additional accommodation requirements, the Department will first consider the reuse of the existing building instead of setting up a new building which will only be considered as a last resort. One example was the conversion of the vacant accommodation of the former nurses' quarters at the Kowloon Hospital of the Hospital Authority into the CHP building in the aftermath of SARS.

#### **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 nonessential electrical appliances while not in use;
- conducting energy audit survey for individual clinic buildings of high energy consumption to identify practical and effective energy saving measures;

- ►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。

在策劃增設新的辦公大樓時,本署亦會 首先考慮使用現有的空置設施。例如在 二零零三年爆發嚴重急性呼吸系統綜合 症後,本署將早前空置的九龍醫院護士 宿舍轉變為衞生防護中心,以求「物盡 其用」。

#### 節約能源

衞生署採取了下列環保措施,以節省能 源:

- ▶將燈光調配至最低照明水平;在無需使用時,關掉非必要的電器設備;
- ► 為個別耗電量大的診所大樓進行能 源審核調查,研究有效可行的節能措 施;

- 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 light-emitting diode (LED) signs to step up measures in achieving energy saving;
- 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; and
- participating in the "One-hour-long Lights Out on the Summer Solstice" event organised by the Friend of the Earth.

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:

- ► 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較高磁鎮流器,並以效能較高的T5螢光管,取代 T8螢光管;
- ►為加強節約能源,增加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;
- ►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温度,保持於 25.5°C的水平;及
- ▲ 積極參與地球之友舉辦的「夏至熄 燈」活動。

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 調開關及室温控制;

- replacing tungsten halogen lamps in conference rooms with cool light type energy saving lamps;
- ▶ installing solar filtering films to the interior of window glass panels for areas facing sunshine to reduce indoor temperature due to solar heat load:
- 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 to reduce the energy consumption.

The Lam Tin Polyclinic after implementing measures on the energy efficiency programme recommended by EMSD's energy audit for building, including temperature setting and improvement in air conditioning system, delamping, 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 10.4% in 2008 as compared to 2003. In order to promote energy saving to other government departments, this venue was also chosen as one of the showcase venues by the EMSD's leaflets in 2008.

Due to service expansion, launching of new services, air conditioning upgrading at public mortuaries, air ventilation enhancement to chest clinics as well as additional E&M facilities and

- ▶採用較省電的冷光類節能燈泡,取代 會議室內的鹵素燈泡;
- ► 在面向陽光照射的地方,為玻璃的內側加裝濾陽光片,以減低太陽熱能的室温效應;
- ■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在能源審核(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。該診所於二零零八年的用電量,較二零零三年減少10.4%。而機電工程署亦將藍田分科診所的高能源效益表現於該署二零零八年的刊物內加以介紹,以作跨部門環保推廣之用。

由於現有服務擴展、新增加的服務、公 眾殮房的空調系統提升、加強胸肺科診 所的通風系統、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

electrical equipments, the increased usage of electricity was unavoidable. Despite all the energy saving measures, a 1% increase in the overall energy consumption was recorded in 2008, as compared to 2007.

增加。雖然各項省電管理措施已在年內 推行,二零零八年整體的用電量仍較二 零零七年增加1%。

#### 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-ducts 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 for 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

#### 改善空氣質素

作為政府的衞生事務顧問,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。

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:

■ 鼓勵外勤工作員工盡量使用公共交通 工具,以及

- ▶ instructing all drivers in the Department to switch off their car engines while waiting and issuing circulars at regular intervals to remind them of this.
- ▶ 指示本署司機停車熄匙,並不時發出 通告提醒各司機職系同事。