

INDEX

Environmental policy and objectives

Staff participation

Waste management

Economical use of paper

Green purchase

Environmental design in new projects

Energy conservation

Air quality improvement

Tobacco control

目錄

環保政策及目標

員工參與

廢物管理

節約用紙

環保採購

新建築項目的環保設計

節約能源

改善空氣質素

控煙

Environmental policy and objectives

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

In June 1996, DH 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. Major green management initiatives and performance have also been incorporated in the annual departmental report since 1998.

環保政策及目標

為支持政府成為環保典範，衛生署於一九九三年十一月推行「環保經理計劃」，以加強工作地點的環保措施。

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，在署內推廣企業環保文化，提醒各員工本署的環保政策，加強同事環保管理意識，鼓勵同事參與環保管理活動；又策劃各項環保措施，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，本署亦把各項主要環保管理項目及其成效載述於年報內。

[Back to the index](#)

[回到目錄](#)

Staff participation

To enable various green measures be effectively implemented, staff support and vigorous participation are of particular importance. In this regard, members of staff are encouraged to give suggestions and put forth new initiatives on green management through the Staff Suggestion Scheme. Practicable green proposals have also been adopted

Energy wardens have been assigned by heads of Service units to monitor energy consumption in workplace and facilities under their purview and to remind their staff of implementing various green measures. Up to the end of 2005, a total 248 energy wardens have been assigned.

員工參與

要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。一些切實可行的環保建議亦已被採用。

各服務單位主管須指派同事擔當能源管理人，以監察其管理範圍內的工作間及設施的耗電情況及各類環保措施的落實。截至二零零五年年底，共有 248 位同事擔當能源管理人。

[Back to the index](#)

[回到目錄](#)

Waste management

To enhance public awareness in separate waste recycling, DH has participated in the "Waste Separation and Recycling Campaign" since 2002. Waste separation bins have been placed in 23 DH clinics and office floors to enable separate collection of waste paper, aluminium cans and plastic bottles by waste collectors for recycling. In 2005, a total 14,150 kg of waste papers for recycling were collected. In addition, empty toners cartridges of colour printers and laser printers are separately collected for recycling.

DH follows guidelines of the Environmental Protection Department (EPD) in the segregation, packaging, labelling and storage of clinical wastes. Clinical wastes arising from clinics or laboratories are segregated from domestic wastes in such a way that sharps boxes, dressings / swabs and wastes caked with blood as well as other potentially infected wastes are placed in red plastic waste bags whereas domestic wastes are placed in normal black plastic waste bags. Red plastic waste bags containing clinical wastes are properly labelled, securely fastened and temporarily stored in a designated location before being carried away for disposal. The clinical wastes storage area is also provided with visibly clear warning sign, protected from water and rain, always kept clean and dry and secure from unauthorised persons.

DH follows EPD's guidelines in the segregation, packaging, labelling and storage of chemical wastes. To comply with the Waste Disposal (Chemical Waste) (General) Regulation, chemical wastes arising from clinics or laboratories are segregated from domestic wastes and collected by the EPD's licensed collectors for disposal.

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」，在 23 間公共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、鋁罐及膠樽循環再用。於二零零五年，所回收的廢紙總數量為 14,150 公斤。另外，亦有分類回收用完的彩色列印機色盒及鐳射列印機碳粉盒，作循環再用。

本署依照環保署發出的指引處理醫療廢料，包括分隔、包裝過程、標籤及儲存。診所或實驗室產生的醫療廢料，須與家居廢物分開處理。利器盒、敷料／拭子、沾滿血液的醫療廢料及其他可能受污染的廢物，均須放進紅色塑膠廢物袋內。至於家居廢物，則須放進一般黑色塑膠廢物袋內。盛載醫療廢料的紅色塑膠廢物袋須貼上適當標籤，袋口須妥為紮緊，並移至指定地點暫時存放，等待運走處置。用作暫時存放醫療廢料的地方，也設有清晰可見的警告標誌，不受水滲雨淋，並經常保持清潔乾爽，而且嚴禁未經授權人士進入。

本署依照環保署發出的指引處理化學廢料，包括分隔、包裝過程、標籤及貯存。根據《廢物處置(化學廢物)(一般)規例》，化學廢料須與家居廢物分開處理，並只可由環保署特許的化學廢物處理承辦商收集及處置。

[Back to the index](#)
[回到目錄](#)

Economical use of paper

DH has adopted the following green measures to economize the use of paper:

- ✧ use blank side of used papers for printing or writing to reduce paper consumption;
- ✧ reuse envelopes and file jackets;
- ✧ double-sided copying and use both sides of a paper for drafting;
- ✧ rollout e-Leave system for staff with electronic mail account to replace printed leave application form since mid-2004;
- ✧ 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 DH website and more frequent use of CD-ROM so as to keep departmental paper publication materials to the minimum; and
- ✧ maximize the use of Internet and electronic mail facilities for communication to replace hard copies.

Since 2005, DH has ceased printing hardcopies of some publication materials such as clinic time table and departmental headquarters telephone directory which used to be produced in large quantity for circulation.

To step up efforts in paper saving, DH has increased electronic mail users from 160 in early 2001 to 1,500 by the end of 2005. It is expected that the number of electronic mail users will further increase in 2006.

DH supports the use of recycled papers. In 2004, recycled papers contributed only less than 30% of the total paper consumption. However, recycled papers contributed about 60% of the total paper consumption in 2005. It is expected that the percentage of recycled paper consumption will further increase in 2006. Accordingly, less non-recycled wood-free papers have been consumed.

節約用紙

本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列印或書寫用途，以減少用紙量；
- ✧ 信封及檔案夾回收再用；
- ✧ 雙面影印及紙張雙面使用；
- ✧ 自二零零四年年中起，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資訊，例如在衛生署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；以及
- ✧ 增加利用電子郵件傳遞資訊，以取代紙張檔傳閱。

自二零零五年，本署已停止印製一些以往須大量印製以供同事傳閱的印刷品，例如診所時間表及部門總部電話名冊。

為加強節約用紙，本署的電子郵件用家人數由二零零一年年初的 160 人，倍增至二零零五年年底的 1 500 人。預計於二零零六年，電子郵件用家人數會進一步增加。

本署支持多採用可循環再造紙張。於二零零四年，可循環再造紙張佔整體的用紙量不多於 30%。然而，於二零零五年，可循環再造紙張已佔整體的用紙量大概 60%。預計於二零零六年，可循環再造紙張的使用率會進一步上升。非循環再造的林木製紙張的使用量也相應減少。

[Back to the index](#)
[回到目錄](#)

Green purchase

DH supports more use of recycled papers instead of non-recycled wood-free papers. As compared to 2004, the procurement of wood-free papers was significantly reduced by 60% whereas the procurement of recycled papers was increased by 22% in 2005.

In addition, DH has implemented various green procurement initiatives to support the use of environmental friendly products which include the followings:

- ✧ fax machines using plain paper to replace thermo fax machines so that making a second copy of the thermo fax for filing purpose is no longer 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 which are due for replacement 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

本署支援多採用可循環再造紙張及減少使用非循環再造的林木製紙張。與二零零四年度比較，林木製紙張的採購數量已於二零零五年期間大幅下跌 60%。相反地，可循環再造紙張的採購數量即上升 22%。

另外，本署亦有推行其他不同類別的環保物料採購，以支援使用較具環保效益的產品，並包括如下：

- ✧ 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盛載利器箱；
- ✧ 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取代到期更換的老化極射線顯像管顯示器；以及
- ✧ 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、可循環再用的列印機色盒及鐳射列印機碳粉盒等。

[Back to the index](#)

[回到目錄](#)

Environmental design in new projects

DH has taken into consideration of environmental protection elements in the design of new clinics such as reducing the use of materials which could have adverse environmental impact and increasing the use of energy efficient plant and equipment. The Public Health Laboratory Centre designed by the Architectural Services Department (Arch SD) has achieved the excellent rating in terms of environmental performance in the building design through assessment made by the Business Environment Council in accordance with the Hong Kong – Building Environment Assessment Method (HK-BEAM) for New Office Designs. Credits of best environmental design of the Public Health Laboratory Centre 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.

新建築項目的環保設計

本署在設計新診所時，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；以及
- ✧ 提供特定設施及地方，供存放與回收可循環再用的物料。

[Back to the index](#)
[回到目錄](#)

Energy conservation

DH has adopted the following green measures to save energy:

- ✧ De-lamping lights to the minimum required for illumination and switch-off lights and non-essential 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.
- ✧ Modification of group lighting switches to individual switches.
- ✧ Installation of air curtains at clinic entrances to prevent infiltration of un-treated hot and cold air from outside.
- ✧ Replacement of magnetic ballasts by electronic ballasts and change T8 fluorescent tubes by the more efficient T5 fluorescent tubes.
- ✧ Replacement of conventional illumination signs of emergency exit in clinics by 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.

To further enhance energy saving, the following improvement works have been carried out in 2005 to the Public Health Laboratory Centre which accounts for approximately one-third of the energy consumption of DH:

- ✧ Installation of separate A/C on/off and temperature controls and in the conference room and the multi-functional hall.
- ✧ Replacement of tungsten halogen lamps at conference rooms by cool light type energy saving lamps.
- ✧ Installation of solar filtering films to interior of window glass panels for critical areas facing sunshine to reduce indoor temperature due to solar heat load.
- ✧ Rescheduling and optimization of the operation of chiller plant and E&M plant.

節約能源

本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準；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。
- ✧ 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 熒光管取代 T8 熒光管。
- ✧ 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。
- ✧ 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 的水準。

公共衛生檢測中心約佔衛生署整體用電量的三分之一。為進一步節能，本署於二零零五年度為該中心大樓進行以下的改善工程：

- ✧ 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膽，取代會議室內的鹵素燈膽。
- ✧ 在面向西面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。
- ✧ 調校製冷及機電機組，以達至最佳的運作效益。

Progress of major energy saving projects is listed in the table* below:

Description of energy saving measures	Expected completion date	Status as at end 2005
Adjustment of indoor A/C temperature to 25.5°C in the summer time for DH buildings equipped with central A/C facilities (except there are special operational reasons to maintain a lower indoor temperature such as drug stores, mortuaries etc.)	Sep-05	Implemented
T5 lighting retrofit	Dec-05	Project completed
Optimization of chiller plant and rescheduling E&M plant at Public Health Laboratory Centre	Dec-05	Project completed

(* information provided by EMSD)

In 2004, the electricity consumption of the Public Health Laboratory Centre was 20,947,501kWh. After the implementation of a series of energy saving measures, the electricity consumption recorded in 2005 has dropped to 19,394,782kWh which is equivalent to a 7.4% reduction as compared to 2004.

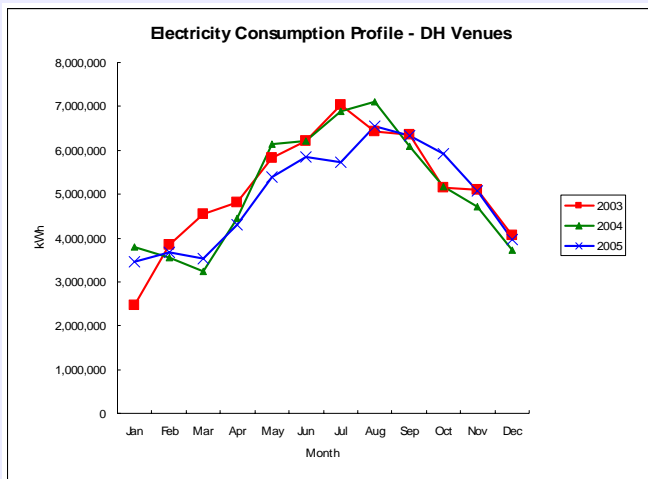
下表*列出主要節能項目的進展:

主要節能措施	預計完成日期	於二零零五年年底的情況
把設有中央空調的衛生署建築物的夏日室內空調溫度，調校至不高於 25.5°C 的水準 (一些因特殊運作理由須保持較低室溫的服務單位如藥物儲存倉及殮房等除外)	二零零五年九月	已實行
裝設效能較高的 T5 熒光管	二零零五年十二月	項目已完成
調校公共衛生檢測中心大樓製冷及機電機組，以達至最佳的運作效益	二零零五年十二月	項目已完成

(*資料由機電工程署提供)

於二零零四年期間，公共衛生檢測中心的總用電量是 20,947,501kWh。當一連串的節約能源措施落實後，該中心於二零零五年度所錄得的總用電量下降至 19,394,782kWh。與二零零四年度比較，相等於 7.4% 的減幅。

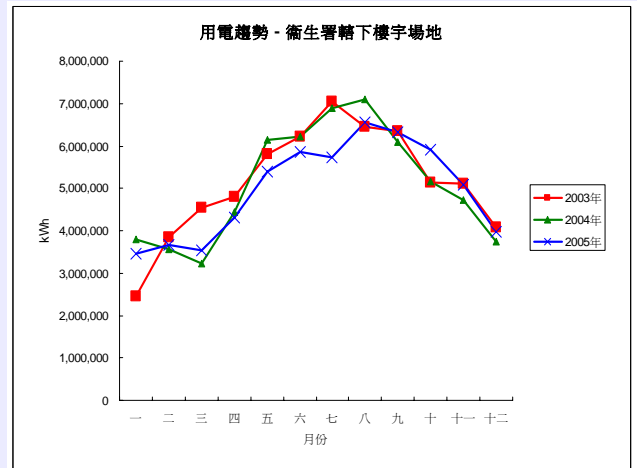
An overall energy consumption profile of DH from 2003 to 2005 is illustrated in the diagram* below:



(* information provided by EMSD)

The diagram indicates a decreasing trend in electricity consumption in 2005 during summer months from April to September as compared to previous years. Upon the completion of all retrofit projects for enhancing energy efficiency and with the implementation of green housekeeping measures, it is expected that further energy saving can be achieved for DH.

下圖*展視由二零零三至二零零五年度本署整體的用電趨勢:



(*資料由機電工程署提供)

圖表顯示出於二零零五年度夏天四至九月份整體用電量的趨勢與往年比較，是正在下降。當完成所有可提高能源效益的裝設項目，並配合其他環保管理措施的推行，預計可進一步節省本署整體的電力消耗。

[Back to the index](#)
[回到目錄](#)

Air quality improvement

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 A/C systems have been conducted by EMSD periodically for DH clinics and offices to enhance the operational efficiency of A/C systems and to ensure adequate fresh air ventilation. By the end of 2003, IAQ tests and air-duct cleaning works were completed for all offices and clinic units once. In 2004 and 2005, IAQ tests have been conducted again in 23 and 19 venues respectively.

DH has also taken the following measures in support of minimizing air pollution caused by exhaust emissions by vehicles:

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

改善空氣質素

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及確保有足夠的鮮風流通量。截至二零零三年年底，所有辦事處及診所服務單位已完成一次室內空氣質素測試及風槽清潔工程。於二零零四及二零零五年間，分別為 23 及 19 個地點再進行室內空氣質素測試。

本署亦已採取以下措施，支持減低因汽車廢氣排放所產生的空氣污染：

- ✧ 鼓勵外勤工作人員盡量使用公共交通工具，以減少車輛廢氣所造成的空氣污染；以及
- ✧ 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。

[Back to the index](#)

[回到目錄](#)

Tobacco control

Smoking is the largest single cause of death and diseases in Hong Kong. Tobacco smoke creates nicotine, carbon monoxide and respirable suspended particles (RSPs). Second-hand smoke is the main source of indoor air pollutant that leads to the high RSP concentration in the air. RSPs get into the lungs and cause damages to health, leading to respiratory problems and increase the risk of getting lung cancer.

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

In 2001, DH established the Tobacco Control Office (TCO) to coordinate and enhance the Government's tobacco control efforts, discourage smoking, contain proliferation of tobacco use, and protect the public from exposure to second hand smoke to the maximum extent.

The TCO organizes various activities to promote smoke-free culture and anti-smoking which include the followings:

"Security guard training workshops" on Anti-smoking Ordinance

Since February 2003, the TCO has conducted seminars on Anti-Smoking Ordinance to assist the management and frontline employees / security guards to effectively enforce the Smoking (Public Health) Ordinance and maintain the environment smoke-free. Through a variety of presentations, the managers and security guards understand more their enforcement powers and the requirements of the Ordinance.

Anti-smoking health education and promotion

Tobacco Control Teams and Smoke-Free Ambassadors of the TCO provide various health promotion and education in the community. Tobacco Control Teams visit tobacco retailers and statutory no-smoking areas to monitor the level of compliance of the Smoking (Public Health) Ordinance. Smoke-Free Ambassadors provide health education on smoking issues to the managers and staff of restaurants with less than 200 seats and conduct health education to the public on a one-to-one basis to promote a smoke-free culture.

控煙

吸煙是本港最大的單一致死及致病的原因。燃燒煙草會產生『尼古丁』，『一氧化碳』及『可吸入懸浮粒子』。二手煙是造成室內空氣污染的主要源頭，令空氣中的『可吸入懸浮粒子』濃度急速上升，空氣質素亦變得惡劣。這些粒子能夠進入及積聚於人體肺部，對健康造成不良的影響（包括引致呼吸系統毛病、破壞肺部組織，以及增加患上肺癌的風險）。

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。

於二零零一年，本署成立控煙辦公室，以統籌及加強政府的控煙工作，鼓勵市民不要吸煙，抑制煙草的廣泛使用，並盡可能減低公眾受到二手煙影響。

控煙辦公室曾舉辦不同類別的活動，推廣無煙文化及宣傳反吸煙。其中包括以下活動：

保安員控煙法例講座

由二零零三年二月開始，為提高現職或即將任職的保安員對《吸煙（公眾衛生）條例》的認識，以及協助管理人如何處理違例吸煙者，控煙辦公室特別為他們提供禁煙法例講座，協助他們更有效地執行有關法例，以保持禁煙區內良好的無煙環境。並透過不同形式的內容講解，讓管理人和保安員更了解法例的要求及法例所賦予他們的權力。

反吸煙健康教育及推廣

控煙辦公室的控煙小組和無煙大使，在各社區舉辦不同形式的健康推廣及教育活動。控煙小組巡察煙草零售商和各禁止吸煙區有否遵守《吸煙（公眾衛生）條例》。無煙大使到訪煙草零售商及少於 200 個座位的食肆，向經理和員工提供健康教育，亦以面談形式提供健康教育予大眾市民以推廣無煙文化。

Roving exhibitions

The TCO organizes and conducts exhibitions to deliver health messages to the public. The theme of the roving exhibition is "Say No to Second-hand Smoke", to let people know more about the benefits of a smoke-free life and smoke-free environment.

Smoke-free workplace workshops

The TCO delivers a series of Smoke-free Workplace Workshops regularly to assist companies and organizations to implement smoke-free policy and provides them "Smoke-free Workplace Implementation Manual" (Chinese Only) with practical advice on how to establish and maintain a smoke-free environment in workplace.

More details of the TCO activities and the future development can be found in the website <http://www.tco.gov.hk>.

巡迴展覽

控煙辦公室籌辦及舉行各種展覽以宣揚健康訊息。巡迴展覽的主題是『拒絕二手煙』，讓市民知悉更多有關無煙生活及無煙環境的好處。下表列出控煙辦公室由二零零一年七月至二零零五年期間舉辦巡迴展覽的數目：

無煙工作間工作坊

控煙辦公室定期舉辦無煙工作間工作坊，協助私人公司及機構實施無煙工作間，並派發中文版《無煙工作間 簡易實施指引》，詳述無煙工作間的實施步驟及成功要訣。

有關控煙辦公室的活動及未來發展方向，可瀏覽控煙辦公室網址 <http://www.tco.gov.hk> 閱取更詳盡資料。

[Back to the index](#)

[回到目錄](#)