7 Chapter 第七章

環境保護
Environmental Protection

懲教院所綠化設施。
Green facility lights up institution.

環境目標

懲教署的職責是為在囚人士提供安全及合乎人道的羈押環境，使囚犯及所員於獲釋後易於重投社會。在這個政策目標的規範下，本署亦致力成為一個環保部門，務求透過各種環保管理及運作措施，不斷改進本身在環保方面的表現。

環保政策

為致力落實環境保護工作，本署遵守以下原則：

(a) 新懲教院所均全面遵照環保法例設計和建造，以盡量減低對環境的影響。

(b) 現時所有懲教院所的運作將按照法定的環保要求，在可能情況下力臻完善。轄下院所如有未符環保標準的舊建築物或過時設施，本署會進行重建或改善。

Environmental Goal

We are tasked with providing a safe and humane environment for the custody of prisoners and to facilitate their reintegration into the community upon their release. Within the framework of this policy objective, we are also committed to be an environmentally responsible department which strides for continuous improvement in its environmental performance through green management and operational measures.

Environmental Policy

In pursuance of our commitment to environmental protection, we adopt the following principles:

(a) To fully comply with environmental legislation and regulations in the design and construction of new penal institutions and to reduce their environmental impact to a minimum.

(b) To meet, and where possible to exceed, the statutory environmental requirements in the operations of all penal institutions. In some institutions where old buildings and outdated facilities no longer meet with environmental standards, to redevelop or to upgrade their facilities accordingly.

(c) 在所有業務及運作上，應用環保管理原則，例如：

- 節省能源及天然資源
- 減少廢物
- 減低用紙量
- 循環使用物資
- 採用環保產品及原料

(d) 提高署內人員的環保意識，並確保在署內實行環保措施。

(e) 就本署的環保表現蒐集資料、訂定目標、評估進度及撰寫報告。

環保管理

(i) 環保委員會

署方於一九九九年成立環保委員會，以便統籌環保工作。該委員會由政務秘書擔任主席，成員包括各級職員代表，其職權範圍如下：

(a) 訂定本署的環保措施；

(b) 搜羅、研究和試驗環保措施，並考慮職員就環保管理提出的建議；及

(c) 制定環保政策，將環保措施呈請首長級人員通過後推行。

委員會向本署職員通報環境運輸及工務局就全體公務員制定的環保政策，並為部門及院所訂定是年的環保目標。委員會留意能源與紙張的消耗模式及舉辦分享環保心得的論壇。此外，又邀請環保界的專業人士於委員會會議中作專題講座，藉此提高員工對環保管理的認識。

(ii) 環境審核

本署於一九九九年成立環境審核小組，到選定的懲教院所進行視察，以找出在環保方面可改善之處。年內，小組對喜靈洲戒毒所及小欖精神病治療中心進行了環境審核，審核範圍包括廢物的管理及處置、物料管理、能源及水務管理，以及員工對有關問題的了解和參與。環境審核小組的審核結果及建議，會在環保委員會的會議上審議。

芝蔴灣懲教所一隅。
A corner at Chi Ma Wan Correctional Institution.

(c) To adopt green management principles in all activities and operations such as:

- Conservation of energy and natural resources;
- Waste reduction;
- Reduction of paper consumption;
- Recycling;
- Procurement and usage of environmentally friendly products and raw materials

(d) To increase the environmental awareness of staff and see to it green measures are put into practice.

(e) To take stock of, set targets for, assess and report on the environmental performance of the Department.

Environmental Management

(i) Green Manager's Committee

In 1999, we set up a Green Manager's Committee, chaired by the Civil Secretary and comprised representatives of staff at different levels, to co-ordinate the environmental efforts of the Department. The terms of reference of the Committee are:

(a) To identify green initiatives in the Department;
(b) To source, study and experiment green initiatives; to consider staff suggestions on green management; and
(c) To formulate green policies, seek endorsement from the Directorate and implement the initiatives.

The Committee disseminated information concerning service-wide green policies formulated by the Environment, Transport and Works Bureau to our staff. It set out environmental targets at departmental and institutional levels for the year. It kept track of the energy and paper consumption patterns and provided a forum for experience-sharing. Professions from the environmental protection discipline were invited to give talks at the Committee meetings to enhance staff awareness of green management.

(ii) Environmental Auditing

Since 1999, we have set up an Environmental Audit Team to inspect selected penal institutions with a view to identifying areas where environmental performance can be improved. In 2005, the Team conducted environmental audits for Hei Ling Chau Correctional Institution and Siu Lam Psychiatric Centre. Aspects such as waste management and disposal, material management, energy and water management, and staff awareness and participation are covered in the audit inspection. The findings and recommendations of the Environmental Audit Team will be shared at the Green Manager's Committee meeting.

環保管理措施

(i)節省能源

(a)節省使用能源

監察系統

各院所每季均須就耗電量向環保經理提交報告以作監察用途。如果耗電量增加，便須提供充分理由。行政組會留意部門在節省能源方面的表現是否符合既定目標。節省能源表現最佳及最差的院所，會獲邀在環保委員會會議上分享其經驗及所遭遇的困難。

環保的內務管理方法

各院所已成立監察小組，並委派「綠色代理人」在辦公樓宇作例行檢查，以確保有效執行環保的內務管理措施。

更換設施計劃

為達致長遠節省能源的目標，署方已設法提升照明及空調設施的能源效益，包括把傳統的電力裝置更換為節約能源的裝置、把組合照明開關改為獨立開關、在周邊圍欄安裝自動計時開關、在職員更衣室安裝室內感應器，以及在進行翻新工程時改善樓宇結構。年內，署方在15間院所把超過4 964支傳統的日光燈管更換為裝有電子鎮流器的T8型燈管。

能源審核

署方邀請了機電工程署為各懲教院所進行能源審核，以期找出未臻完善及可節約能源之處。年內，機電工程署分別就小欖精神病治療中心、蔴埔坪監獄及塘福中心完成能源審核。有關審核提供了耗用能源的資料並提出改善建議。各院所已加強內務管理措施，藉減省燈具降低照明度，以及實施更換日光燈管及出口指示牌的計劃。

使用太陽能

各院所均已把環保的耗用能源概念，應用於日常運作之中。例如石壁監獄利用太陽能為洗衣工場提供洗熨用的暖水；沙咀勞教中心及芝新懲教所利用日光晾曬囚犯衣物；小欖精神病治療中心則建造了一個用太陽能推動的噴水池。署方最近又邀請機電工程署就本署樓宇裝設

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Environmental Management Initiatives

(i) Energy Conservation

(a) Reduction of energy consumption

Monitoring system

Institutions were required to submit Quarterly Returns on Electricity Consumption to the Green Manager for monitoring purpose. They had to justify any increase in consumption. The Administration Section would keep track of the departmental performance in energy saving and benchmark results against set targets. Institutions with best and worst performance were invited to share their experience and problems encountered at Green Manager's Committee meetings.

Green Housekeeping Measures

Institutions set up surveillance teams and appointed green executives to conduct routine checking on office premises to ensure that these measures were effectively implemented.

Replacement Programmes

To achieve energy savings in the long run, we took every opportunity to upgrade the lighting and air-conditioning installations to an energy efficient level, to replace the conventional electrical appliances by energy efficient appliances, to modify group lighting switches to individual switches, to install automatic time switches for perimeter fences and occupancy sensor control in staff changing rooms and to improve the building structure during refurbishment programmes. In 2005, we replaced over 4 964 conventional fluorescent tubes by T8 type with electronic ballasts in 15 institutions.

Energy Audits

To help identify areas of inefficiency and room for energy saving, the Electrical and Mechanical Services Department (EMSD) was invited to conduct energy audits. In 2005, EMSD completed energy audits in Siu Lam Psychiatric Centre and Ma Po Ping Prison and Tong Fuk Centre. The studies provided information on how energy was used and suggested recommendations for improvement. The institutions had stepped up their housekeeping measures, reduced the illumination level by de-lamping and implemented fluorescent tube and exit sign replacement programmes.

Use of Solar Energy

Institutions adopted environmentally friendly energy consumption concepts in daily operations. For instance, Shek Pik Prison used solar energy to provide warm water for washing and ironing

1 環保委員會會議分享最佳經驗。
Green Manager's Committee meets for sharing best practices.

2 喜靈洲島上廣植林木。
Massive planting of trees on Hei Ling Chau.

太陽能電板進行可行性研究。隨著科技的發展，本署期望日後可在懲教運作中擴大使用太陽能。

(b)減少運載需求

為減少運載需求，押解及支援組已集中處理押解工作，務求減少所需的運載次數。各院所又制訂了使用運載設施的時間表，藉此減低耗油量。

(ii)節約用水

各院所的監察小組均有定期檢查水龍頭及花灑有否出現漏水情況，以期及早糾正問題。院所已安裝了效能更佳及具備慳水功能的新型洗衣機，又為水掣加裝了自動關閉裝置及調節水流。清洗地板時已棄用水龍頭及改用水桶。雨水和用以清洗蔬菜的食水亦會留存作澆灌植物之用。本署又經常透過教育及推廣途徑，提醒職員及所員注意節約用水。

(iii)廢物管理

(a)減少用紙

本署已致力減少用紙，各院所的綠色代理人不斷在辦公室推廣各種環保措施及監察節省用紙的成效。使用過的紙張及報章雜誌均會收集供循環再造。

本署廣泛使用資訊科技以達致有效溝通及減少用紙的目的。年底時，本署總部、各院所有外設辦事處共有6 481名用戶的電腦與本署的廣域網連接。懲教署內聯網是本署的資料庫，載有範圍廣闊的有用資料，大大減低了列印資料以供傳閱的需要。與此同時，電子處理假期申請系統及伺服器傳真服務，亦有助減少用紙。

(b)固體廢物的再用和再造

本署盡量把製衣、書籍裝訂及木工等工場所產生的廢料回收再用。標誌製作工場及信封製造工場產生的鋁質廢料及切割出來的紙類廢料，經收集後會售予承辦商以供再造。碎布會用作清潔和製造環保袋；黏貼膠片用作密封紙板盒；而廢木料則用於木工訓練。懲教署自一九九九年開始，每年向郵政署的代入單張/刊物服務處回收5 000個用過的紙板盒，作為盛放小信封盒的外盒。

喜靈洲戒毒所一隅。
A corner at Hei Ling Chau Addiction Treatment Centre.

processes in the Laundry Workshop. Sha Tsui Detention Centre and Chi Sun Correctional Institution dried prisoners' clothing under sunlight. In Siu Lam Psychiatric Centre, a fountain driven by solar energy was constructed. Recently, we invited EMSD to embark on a feasibility study on the installation of photovoltaic panels in our premises. Through the advancement of technology, we hoped that we could extend the use of solar energy in penal operation in future.

(b) Reduction of transport requirements

To reduce transport requirements, Escort and Support Group adopted a grouping arrangement in discharging escort duties to reduce the number of journeys required. Institutions also set a schedule on the use of transport facilities as a means to reduce fuel consumption.

(ii) Water Conservation

The surveillance teams in institutions conducted routine inspections on water taps and shower heads so as to rectify water leakage problems at an early stage. New washing machines with increased productivity and water saving features were installed. Automatic switch-off devices were added on water taps. Water flow was adjusted. Buckets instead of water hoses were used for washing floors. Rain water and water used for washing vegetables was saved for watering plants. Staff and inmates were constantly reminded of the need to save water through education and motivation.

(iii) Waste Management

(a) Reduction of paper consumption

We were committed to reducing paper consumption. Green executives of institutions promoted green practices in the offices and monitored performance on paper consumption on an on-going basis. Used paper, magazines and newspapers were collected for recycling.

Information technology was used extensively to achieve effective communication and reduction in paper consumption. At the end of 2005, 6 481 users in the departmental headquarters, penal institutions and out-posted offices were connected to our Wide Area Network. The departmental web-based Intranet served as the departmental information portal for a wide variety of useful documents. This significantly reduced the need for hard copy circulation. The e-Leave system and server fax services also helped reduce paper consumption.

此外，在總部及許多院所均設有回收廢物箱以收集鋁罐、膠樽、廢紙及用過的電腦光盤，藉此推動職員注意環保。

(c)殘羹堆肥

本署推行「後院堆肥」計劃，藉助微生物把殘羹轉化成狀似泥土的堆肥。製成的肥料既用作施肥，亦在本署的秋季賣物會上出售。

(d)化學廢物及醫療廢物的處理

本署轄下共有10間院所已根據《廢物處置條例》下的《廢物處置(化學廢物)(一般)規例》，登記為化學廢物生產者。化學廢物會由已登記的承辦商收集。年內，承辦商共收集了2 925公斤固體化學廢物及48 880公升液體化學廢物以供處置及循環再造。

各院所醫院所產生的醫療廢物，均按照環境保護署發出的「小型醫療廢物產生者醫療廢物管理工作守則(初稿)」所規定的方式處置。

(iv)保護自然環境

本署轄下的青山灣入境事務中心、歌連臣角懲教所、豐力樓、大欖懲教所及東頭懲教所，均設有溫室培育不同品種的植物。

年內，勵敬教導所開辦了一個園藝興趣班以教導所員保護自然環境的重要。石壁監獄亦舉辦了一項植樹活動，藉此提高員工的環保意識及美化環境。

(v)採購及使用環保製品和原料

懲教署於本年八月與一間電力公司簽訂協議，利用爐底灰來生產混凝土電纜蓋。爐底灰是燃煤電廠鍋爐產生的副產品之一，過往一直被界定為廢料，直至一九五零年研究人員發現可利用它來生產輕質碎石混凝土磚。大欖懲教所在轄下的預製混凝土工場生產爐底灰電纜蓋，利用爐底灰取代沙石，將之與水泥混合，再製造成混凝土電纜蓋。這種電纜蓋比傳統的混凝土蓋輕，所以較易運送及處理。大欖懲教所又設有生產線，利用再造石生產鋪地磚。

赤柱監獄一隅。
A corner at Stanley Prison.

(b) Reuse and recycling of solid waste

Scrap materials from various workshops of garment-making, bookbinding and carpentry were reused. Aluminum and paper off-cuts generated from the sign-making and envelope-making workshops were saved and sold to contractors for recycling. Rags of linen were used for cleaning, cloth pieces for making environmental bags, adhesive films for sealing of cardboard boxes and scrap wood for carpentry training. The Correctional Services Industries had started in 1999 to collect 5 000 used cardboard boxes per year from the Envelope Insertion Unit of the Post Office for reuse as the outer containers of smaller boxes containing the envelopes.

Recycle bins for collection of aluminum cans, plastic bottles, paper waste and used computer discs were set up in Headquarters and many institutions to foster staff awareness of green practice.

(c) Composting of food waste

Institutions had implemented the programme of "Backyard Composting" by transforming the food waste into a soil-like substance through micro-organisms. The products were used as plant fertiliser and for sale at the Autumn Fair.

(d) Handling of chemical waste and clinical waste

A total of 10 penal institutions had been registered as the Chemical Waste Producer under the Waste Disposal (Chemical Waste) (General) Regulation of the Waste Disposal Ordinance. Chemical wastes were collected by registered contractors. In 2005, 2 925 kg solid chemical waste and 48 880 litres of liquid chemical waste were collected by the contractor for disposal and recycling.

Clinical wastes generated by institutional hospitals were disposed of in accordance with the Draft Code of Practice for the Management of Clinical Waste for Small Clinical Waste Producers issued by the Environmental Protection Department.

(iv) Preservation of the Natural Environment

Green houses for nursery of various species of plants were set up in Castle Peak Bay Immigration Centre, Cape Collinson Correctional Institution, Phoenix House, Tai Lam Correctional Institution and Tung Tau Correctional Institution.

In 2005, Lai King Training Centre operated a hobby class in gardening to educate the inmates on the importance of preservation of natural environment. Shek Pik Prison also organised a Tree Planting event to

在其他院所，更有利用再造紙為政府印製名片和信封。

署方已提醒各院所盡量於採購標書條款及評估過程中加入環保元素。本署的物料供應倉已確保從政府物流服務署的環保產品清單中採購消耗品。

(vi)防止污染

(a)水質污染

為確保符合法定環保要求，本署推行了一系列計劃，為各懲教院所改善現有的污水處理設施。歌連臣角懲教所已於廚房水渠安裝過濾器，以改善所排放污水的質素。署方又定期化驗廢水樣本以監察污水的水質，並禁止把化學廢物和受污染的廢水排放入污水渠。

(b)空氣污染

為配合政府的無煙工作間政策，本署自一九九六年起規定除了在指定的吸煙範圍之外，在辦公室內外均禁止吸煙。部分院所更成立反吸煙委員會，以教導職員及所員吸煙的害處。石壁監獄曾邀請控煙辦公室在訓練課程中舉行講座。為改善空氣質素，在各院所的露天場地均禁止燒草或焚燒建築廢物。機電工程署亦為本署進行測試以監察室內的空氣質素。壁屋監獄在洗衣大樓的乾衣組安裝了掛牆風扇以改善空氣流通情況。大欖懲教所的石壆工場及混凝土廠房，均會在沙堆及混凝土拌合機洒水以減少懸浮塵埃。喜靈洲懲教所的綠色代理人不時突擊檢查車輛，以確保車輛在靜止時關閉引擎。

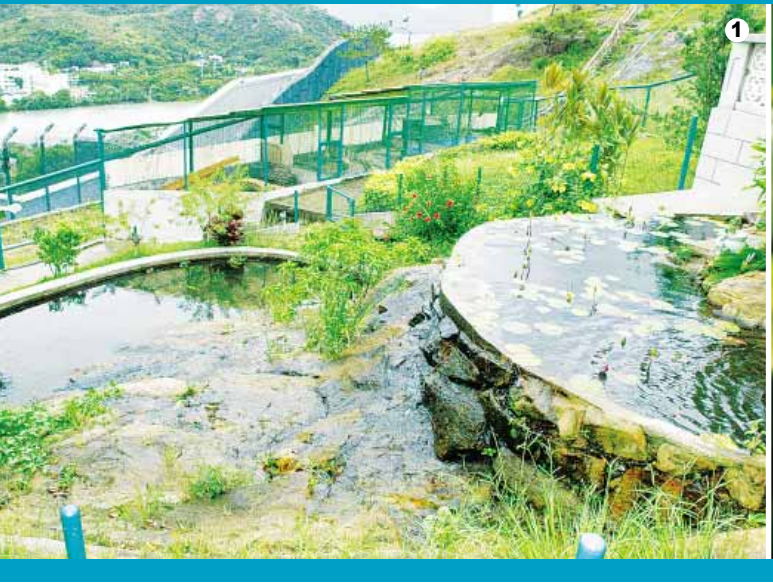
(c)噪音污染

本署已提醒各院所控制噪音水平。院所內活動室的電視音量均保持在適當水平，各工場亦減少使用擴音器。在木工工場工作的職員和所員均獲提供耳筒以作保護。所有發出噪音的機器，均遵從有關職業安全及健康的指引。

提高職員環保意識的訓練

(i)讓職員接受環保培訓

為提高職員的環保意識，本署已把多項環



enhance the green consciousness of the staff and to beautify the environment.

(v) Procurement and Use of Environmental Friendly Products and Raw Materials

We signed an agreement with CLP Power Hong Kong Limited in August 2005 to produce concrete cable covers using furnace bottom ash (FBA). FBA was one of the by-products left in furnaces of coal-fired power stations. It had been labeled as waste until 1950s when researches found that it could be used for production of lightweight aggregate concrete blocks. In Tai Lam Correctional Institution (TLCI), production of FBA cable covers took place at a precast concrete plant where FBA substituted sand and silt in mixing with cement to produce concrete cable covers. These covers were easier to be carried and processed as they were lighter in weight when compared to traditional concrete covers. TLCI also set up a production line using recycled aggregates to make paving blocks.

In other institutions, recycled paper was used for production of name cards and envelopes for the Government.

Institutions were reminded to include environmentally friendly elements in tender specification and evaluation process of procurement as far as possible. Our supplies store had ensured that the consumable items were procured from the Green Products List of the Government Logistics Department.

(vi) Pollution Prevention

(a) Water pollution

We implemented a series of projects to upgrade and improve the sewage treatment facilities in various penal institutions to ensure compliance with statutory requirements. In Cape Collinson Correctional Institution, filters were installed in the drains of kitchen to improve the quality of sewage before discharge. Samples of waste water were tested on a regular basis to monitor the quality of the effluents. Discharge of chemical wastes and contaminated water into the sewer was prohibited.

(b) Air pollution

In line with Government's smoke-free workplace policy, smoking had been prohibited in both office and non-office environments except in designated smoking areas since 1996. Anti-smoking Committee was set up in some institutions to educate

1 & 2 小欖精神病治療中心一隅。
A corner at Siu Lam Psychiatric Centre.

保課題，例如「拯救環境」、「減少廢物計劃」及「車輛黑煙管制計劃檢舉人員訓練」等，納入各院所定期為紀律部隊人員舉辦的在職訓練課程。年內，環保委員會邀請了嘉道理農場暨植物園主持以「有機種植」為題的講座，另外又邀請了各院所的綠色代理人出席由電機工程署主辦的「經驗分享工作坊」、「環保駕駛講座」及「公共交通能源效益及節約能源講座」。有關節約能源的海報及「10 項良好辦公室管理的要訣」海報亦張貼於告示板以向職員廣泛宣傳。部分院所又闢設了「環保資料站」，藉此提高職員的環保意識。

(ii)參與香港花卉展覽

為提高職員對保育自然環境的興趣和意識，本署參加由康樂及文化事務署主辦的香港花卉展覽。本署職員在二零零五年花卉展覽中贏取了 6 個獎項。

前瞻

本署會繼續致力推行環保管理及研究更多新的環保措施，務求持續改善在保護環境方面的表現。

本署在「香港花卉展覽 2005」的攤位。
CSD's booth in the "Hong Kong Flower Show 2005".

staff and prisoners on the hazards of smoking. Shek Pik Prison invited Tobacco Control Office to deliver talks at the training session. To improve the air quality, the burning of grass and construction wastes in open areas of institutions was prohibited. The EMSD would conduct tests to monitor the quality of indoor air. In Pik Uk Prison, wall mounted fans were installed in the drying section of the Laundry Complex to improve ventilation. At kerbstone workshop and concrete plant in Tai Lam Correctional Institution, water was sprayed on the sand piles and concrete mixing machines to suppress the suspended dust particles. The green executive of Hei Ling Chau Correctional Institution conducted spot checks on the vehicles to ensure that the engines were off while the vehicles were not in motion.

(c) Noise pollution

Institutions were alerted to the need for controlling the noise level. The volume of television sets in the dayrooms was kept at an appropriate level. The use of loud hailer in workshops was reduced. Ear-phones were provided to the staff and prisoners in the carpentry workshops. Machines generating noise were governed by guidelines on Occupational Safety and Health.

Staff Awareness Training

(i) Training of staff on environmental protection

To foster the environmental awareness of staff, topics such as “Saving the Environment”, “Waste Reduction Plan” and “Smoky Vehicle Spotter Training” were covered in the in-service training sessions for disciplined staff on a regular basis. In 2005, the Green Manager's Committee invited the Kadoorie Farm and Botanic Garden to deliver a talk on “Organic Farming”. The green executives of the institutions were also invited to attend the Experience Sharing Workshop, Seminars on Eco-driving and Energy-saving for Public Transport organised by the ESMD.

Posters on energy conservation and "Ten Tips for Good Housekeeping" were posted on notice boards. Green corners were set up in some institutions to promote green consciousness.

(ii) Participation in the Hong Kong Flower Show

To promote the staff's interest in and awareness of conservation of the natural environment, we took part in the Hong Kong Flower Show organised by the Leisure and Cultural Services Department. In the 2005 Flower Show, six prizes were won by our staff.

The Way Forward

We will keep up our efforts in green management and explore new initiatives to achieve our environmental goal.