
環境保護

Environmental

Protection

第七章

Chapter 7



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勵新懲教所屋頂裝上太陽能電池板，冬天可為該所的熱水供應系統節省石油氣用量 15-18%，夏天更可達 30-40%

Solar panes on the roof of Lai Sun Correctional Institution help save 15-18% of LPG use for water heating in winter and 30-40% in summer

為執行環保工作，本署訂定並遵行以下原則：

- 新懲教院所將全部遵照環保法例設計和建造，以減低對環境的不良影響。
- 現有懲教院所的運作將按照法例所定的環保要求，在可能情況下，力臻完善。轄下院所如有不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。
- 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
- 提高署內人員環保意識，並確保署內實行環保措施。
- 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

環保委員會

本署於一九九三年年底委派政務秘書擔任本署環保經理，以便統籌環保工作。此外，又於一九九九年五月成立環保委員會，成員包括各級職員。委員會的職權範圍如下：

- (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。
- (c) 制定環保政策，將環保措施呈請首長級人員通過後推行。

委員會於四月舉行會議，以便為部門及各院所

In pursuance of its commitment to environmental protection, the Department has set out and adopted the following principles -

- 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.
- To meet, and where possible to exceed, the statutory environmental requirements in the operations of all existing 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 In some institutions where old buildings and outdated facilities no longer meet with environmental standards, to redevelop or to upgrade their facilities accordingly.
- 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 use of environmental friendly products and raw materials.
- To increase the environmental awareness of staff and ensure green measures are put into practice.
- To take stock of, set targets, assess and report on the environmental performance of the Department.

Environmental Management

Green Manager's Committee

To better co-ordinate the environmental protection efforts of the Department, the Civil Secretary was appointed Green Manager of the Department in late 1993. A Green Manager's Committee comprising representatives from staff of different levels of the Department was set up in May 1999 with the following terms of reference:

- (a) To identify green initiatives in the Department.
- (b) To source, study and experiment green

訂定是年的環保目標。委員會負責監察工作計劃進度，並協調各方工作，以求達致目標。

環境審核

年內，本署繼續指派內部審核人員在兩個院所（歌連臣角懲教所及勵敬教導所）進行環境審核。審核範圍包括排污設施、廢物管理及使用能源三方面。審核小組有來自行政組、工業組和工程及計劃組的三名成員。該組於十二月完成有關視察工作後，已將調查結果知會上述兩個院所，以便進行跟進工作。

節省能源

節省照明設施及其他電器的耗電量

年內，本署轄下四個懲教院所（即壁屋監獄、壁屋懲教所、小欖精神病治療中心及大欖女懲教所）展開更換螢光管鎮流器的工程。壁屋監獄及壁屋懲教所的更換工程已於十月完成。至於小欖精神病治療中心及大欖女懲教所的工程，則仍在進行。該項計劃使壁屋監獄及壁屋懲教所在照明方面的總耗電量平均節省達 30%。

各懲教院所及職員訓練院均設有能源監察小組，負責定期巡邏職員宿舍及辦公室，將不必要的燈火、空調及電腦等關掉。

使用太陽能

勵新懲教所於一九八四年安裝太陽能系統代替石油氣，為該所的廚房、浴室及洗衣工場等地方供應熱水。目前，該系統使冬天及夏天的石油氣用量分別節省約 15 至 18% 及 30 至 40%。為進一步提高該系統的效能，本署已向建築署申請更換現有的鍋爐。

除上述系統外，壁屋監獄四個更亭亦安裝獨立的太陽能電風扇系統。該系統由備有內置電池的單晶太陽電池板組成，功率可達 40 瓦，足以為更亭內的 12 伏特電風扇提供所需電力。

initiatives; to consider staff suggestions on green management.

- (c) To formulate green policies, seek endorsement from the Directorate and implement the initiatives.

The Committee held its meeting in April to set out the environmental protection targets for 2000 at both the departmental and institutional levels. It monitored the progress of the work plans and co-ordinated efforts to achieve the targets by individual units.

Environmental Audit

In 2000, the Department continued to appoint its own internal auditors to conduct environmental audits in two selected sites, namely the Cape Collinson Correctional Institution and the Lai King Training Centre, to cover the topics of drainage connection, waste management and energy use. The audit team comprised three members, one each from the Administration Section, the Correctional Services Industries, and the Works and Planning Section. The inspection to the two sites was completed in December 2000 and the findings were conveyed to the institutional management for follow-up action.

Energy Conservation

Reduction of Energy Use for Lighting and other Electrical Appliances

The Department started a replacement programme for the ballasts of fluorescent tubes in four penal institutions, namely the Pik Uk Prison, the Pik Uk Correctional Institution, the Siu Lam Psychiatric Centre, and the Tai Lam Centre for Women during the year. The work for the first two institutions was completed in October 2000 while that for the other two is currently underway. As a result of the replacement programme, total energy saving in lighting in the Pik Uk Prison and the Pik Uk Correctional Institution reaches 30% on average.

Self-energy-audit teams were set up in institutions and the Staff Training Institute to patrol the barracks/office areas to turn off unnecessary lights, air-conditioners, computers, etc. on a regular basis.



在壁屋監獄更亭安裝的太陽能電風扇系統
A solar energy electric fan system installed at a guard kiosk in Pik Uk Prison

減少廢物及廢物再造

減少用紙

一九九八至二零零零年部門總用紙量如下：

年份	總用紙量(令)	較上一年增減(%)
1998	17 216	-8.7
1999	17 083	-7.7
2000	20 430	+19.6

二零零零年用紙量增加是由於白沙灣懲教所投入服務，以及本署因展開大型的助更生宣傳運動而需印製更多宣傳刊物所致。

年內，本署除盡量收集用過一面的紙張作印刷和影印用途，以及重複使用信封外，更切實審核刊物及文件的分發安排，以減少所需印本數目。例如，《公務員通訊》已由560份減至312份，減幅達44%。此外，又重新設計表格，以盡量減少所需頁數。

本署現正加強使用資訊科技，使電子通訊發揮更大效用。年內，本署將總部的局域網升級，並按照政府辦公室自動化計劃將網絡擴展至各懲教院所。年底時，本署總部及各院所和外設辦事處共458名用戶的電腦均與本署的寬廣區域網絡連接，因此可透過電腦網絡溝通無阻，省卻製備和儲存各類文件。為減低將文件影印以分發各組別的需要，

Use of Solar Energy

A solar system was installed in the Lai Sun Correctional Institution in 1984 to provide hot water to certain parts of the Institution, such as kitchen, bathroom and laundry, to replace the use of liquefied petroleum gas (LPG). The system currently saves 15-18% of LPG use in winter and 30-40% in summer. To further enhance the efficiency of the system, an application has been made to the Architectural Services Department to replace the existing boiler.

Apart from the above system, solar energy electric fan systems were installed in four guard kiosks of the Pik Uk Prison. This is a stand-alone system made up of mono-crystalline solar panels with embedded batteries. It has a power capacity of 40 watts which is sufficient to supply electricity for a 12-volt electric fan installed inside the guard kiosk.

Waste Reduction and Recycling

Reduction of Paper Consumption

The total departmental paper consumption for 1998 to 2000 is as follows -

Year	Total Paper Consumption (reams)	Percentage Change Compared to Previous Year
1998	17 216	- 8.7%
1999	17 083	- 7.7%
2000	20 430	+19.6%

以及使資料可以共用，本署已建立內聯網。該網絡載有香港法例、政府規例、工作守則、常務訓令、部門動向、管理資訊、參考資料及職員福利事宜等大量資料，讓職員查閱。

固體廢物的再用和再造

一九九九年四月，本署工業組開始向郵政署代入單張／刊物服務處回收用過的紙板盒再用。這些大紙板盒內有盛載信封的小紙板盒。工業組每年約收回 4 000 個此類大紙板盒。

赤柱監獄及白沙灣懲教所的標誌製作工場用 1.5 毫米和 3 毫米厚的鋁板作為交通標誌的底板。工場每天都會收集切割出來的大量鋁板廢料，售予承辦商以供再造。出售這些鋁廢料除可物盡其用外，每年更為本署帶來約 150,000 元的收益。

本署亦盡量將製衣、書籍訂裝及木工等工場所產生的廢料作其他用途。例如，將碎布用作清潔、製造布袋或製作小巧物品在秋季賣物會出售；黏貼膠片供密封紙板盒；廢木料作木工訓練等。

除將廢紙循環再造外，本署總部、沙咀勞教中心及喜靈洲懲教所均設有廢物回收箱，分別回收鋁罐及膠瓶。



在囚人士收集木工工場的木糠以堆肥作種植植物用
An inmate collects saw dust at a carpentry workshop for composting as soil conditioner for gardening

The increase in paper consumption in 2000 is attributable to the addition of the Pak Sha Wan Correctional Institution and the need for printing more publicity materials in connection with the launch of a major publicity campaign on rehabilitation.

Apart from collecting papers printed on one side for printing and photocopying and reusing envelopes as far as possible, the Department also reviewed the distribution of publications/documents critically during the year to reduce the number of copies required. For example, the number of copies of Civil Service Newsletters was reduced from 560 to 312, representing a 44% reduction. Forms were redesigned to reduce the number of pages required as far as possible.

The Department is also expanding the use of information technology for more effective electronic communication. In 2000, we enhanced the Local Area Network (LAN) in the departmental headquarters, which is being linked up with various institutions under the Government Office Automation (GOA) Project. At the end of 2000, 458 users in the departmental headquarters, penal institutions and out-posted offices were connected to the Wide Area Network (WAN) of the Department. Users can communicate effectively through the computer network, thus saving paper documents to be produced and stored. To reduce the need of photocopying information materials to various sections and enable effective information sharing, a web-based Intranet, which forms a large information repository, was built. Useful information such as the Laws of Hong Kong, government regulations, standing orders and instructions, departmental news, management information, reference materials, staff welfare matters, etc. have been uploaded to the Intranet for access by staff.

Reuse and Recycling of Solid Waste

The Correctional Services Industries started in April 1999 to collect used cardboard boxes from the Envelope Insertion Unit of the Post Office for re-use.

These cardboard boxes are the outer containers of smaller boxes containing envelopes. Every year,

殘羹堆肥

本署於一九九九年十月開始在喜靈洲戒毒所及喜靈洲懲教所採用以垃圾箱或其他盛器堆肥的「後院堆肥」計劃，以及利用蚯蚓將有機廢物變成養分豐富的護土素的「蠕蟲堆肥法」。此外，亦置備十部環保堆肥箱，供喜靈洲戒毒所、喜靈洲懲教所、芝蔴灣懲教所、馬坑監獄、小欖精神病治療中心及芝蔴灣戒毒所使用。製成的肥料供上述院所作種植用途，及在本署舉行的秋季賣物會上出售。



在喜靈洲戒毒所用以生產養分豐富的護土素的堆肥箱(右)，堆肥箱模型構造圖(左)

The box used at Hei Ling Chau Addiction Treatment Centre to produce dark nutrient-rich soil conditioner through the composting process (right). A model showing the interior of the composting box (left)

保護自然環境

本署的懲教院所大多位於偏遠郊區和大嶼山、喜靈洲及青洲等離島。本署一直致力保護自然環境和野生動物的棲息空間，並安排囚犯栽樹種花。年內植樹株數如下：

院所	植樹株數
勵敬教導所	500
喜靈洲懲教所	200
喜靈洲戒毒所	50
勵新懲教所	50
馬坑監獄	30
沙咀勞教中心	20
羅湖懲教所	10

about 4 000 cardboard boxes are returned for re-use.

In the sign making workshops in the Stanley Prison and the Pak Sha Wan Correctional Institution, aluminum panels of 1.5 and 3mm thick are used to make backings of traffic signs. Each day a large quantity of aluminum off cuts is generated. They are saved and sold to contractors for recycling. Apart from putting the scrap material into good use again, the selling of the aluminum scraps generates an income of about \$150,000 each year.

Scrap materials from various workshops, such as garment, bookbinding, and carpentry, are re-used for other purposes as far as possible. For example, rags of linen are used for cleaning, short length cloth pieces for making bags, off-cuts for making small items for sale in the Autumn Fair, adhesive films for sealing cardboard boxes and scrap wood for carpentry training purpose.

Apart from the recycling of paper waste, recycle bins for collection of aluminum cans and plastic bottles have been placed in the departmental headquarters, the Sha Tsui Detention Centre and the Hei Ling Chau Correctional Institution.

Composting of Food Waste

The Department has also started a programme of “Backyard Composting”- the use of bins/containers



大欖女懲教所內的花園一角
A garden inside the Tai Lam Centre for Women

馬坑監獄、小欖精神病治療中心和喜靈洲戒毒所等懲教院所更設有苗圃。

採購及使用環保製品及物料

本署各洗衣工場現正計劃安裝臭氧洗衣系統，以節省能源和減少使用化學物品。該系統並可改善排放的污水水質，大幅減低洗衣成本。本署已向有關供應商及醫院管理局收集相關數據，以便分析。此外，本署亦已獲批款項，以便於二零零一年年中在壁屋洗衣房以試驗性質安裝該系統。

防止污染

為符合法定環保要求，本署現正推行一系列計劃，為幾所懲教院所改善現有污水處理設施。有關基本工程項目詳情如下：

- (a) 改善懲教院所的污水處理設施（第一期）
 - 包括歌連臣角懲教所、芝蔴灣戒毒所、蔴埔坪監獄及塘福中心。

計劃約耗資 5,380 萬元（按二零零零年物價計算），並預算在二零零一年五月動工，二零零三年四月竣工。

to keep the compost pile, and “Vermicomposting”- the use of earthworm to convert organic waste into nutrient-rich soil conditioner in the Hei Ling Chau Addiction Treatment Centre and the Hei Ling Chau Correctional Institution in October 1999. Furthermore, 10 earthmakers are in use in the Hei Ling Chau Addiction Treatment Centre and the Hei Ling Chau Correctional Institution, the Chi Ma Wan Correctional Institution, the Ma Hang Prison, the Siu Lam Psychiatric Centre and the Chi Ma Wan Drug Addiction Treatment Centre. The products are being used as fertiliser for plants grown in the institutions and for sale in the Autumn Fair of the Department.

Preservation of the Natural Environment

Most of our penal institutions are located in remote rural areas and outlying islands such as Lantau, Hei Ling Chau, and Green Island. The Department has strived to protect the natural environment and the habitat for wildlife. Prisoners are also engaged in planting trees and flowers. The number of trees planted during the year is as follows:

75

Location	No. of trees planted
Lai King Training Centre	500
Hei Ling Correctional Institution	200
Hei Ling Chau Addiction Treatment Centre	50
Lai Sun Correctional Institution	50
Ma Hang Prison	30
Sha Tsui Detention Centre	20
Lo Wu Correctional Institution	10

Nurseries are maintained in some institutions such as the Ma Hang Prison and the Siu Lam Psychiatric Centre and the Hei Ling Chau Addiction Treatment Centre.

Procurement and Use of Environmental-friendly Products and Materials

Plans to install Ozone Laundry Systems (OLS) in all CSD laundries to reduce energy consumption and chemical usage are in hand. OLS would make the effluent discharge much more



副署長彭詢元(前)及人員在喜靈洲的曠地植樹綠化環境
Deputy Commissioner, Mr Pang Sung-yuen (front), and staff members plant trees in an open area on Hei Ling Chau

- (b) 改善懲教院所的污水處理設施 (第二期)
 — 位於喜靈洲的懲教院所及沙咀勞教中心。

計劃約耗資 2.86 億元 (按一九九九年物價計算)，已於十一月動工，並將於二零零一年十二月完成。

environmentally acceptable and significantly reduce laundry cost. Relevant data have been collected from the suppliers and the Hospital Authority for analysis. Funds have been approved for the first trial installation in mid-2001 at the Pik Uk Laundry.

Pollution Prevention

To comply with the statutory environmental requirements, the Department is implementing a series of projects to upgrade or improve the

existing sewage treatment facilities for a number of penal institutions. Details of the capital works projects are as follows:

- (a) Improvement of Sewage Treatment Facilities in CSD Institutions (Phase I) - Cape Collinson Correctional Institution, Ma Po Ping Prison and Tong Fuk Centre, Chi Ma Wan Drug Addiction Treatment Centre

The project was estimated to cost about \$53.8 million (at 2000 price level). It is planned to commence in May 2001 for completion by April 2003.

- (b) Improvement of Sewage Treatment Facilities in CSD Institutions (Phase II) - institutions on Hei Ling Chau, Sha Tsui Detention Centre

The project, at an estimated cost of \$286 million (at 1999 price level), commenced in November 2000 for completion in December 2001.