



附錄二：環保報告
Appendix II :
Environmental Report



政策

我們在施行工程的各個階段，十分注重環保。我們通過履行在綜合管理系統政策所定的下述承諾，致力達到這個目標：

- 遵守適用的法例及其他規定。
- 創建安全、綠化及可持續發展的環境。
- 監督承建商的表現，確保他們遵守本署的規定。
- 避免環境污染，並致力緩解因工程項目及部門運作而可能對環境構成的影響。
- 在可行的情況下，奉行以下原則：資源減省、資源再用和資源循環再造。
- 為持續改進表現，定期檢討綜合管理系統的成效及訂立的目標和指標。

Policy

We place due emphasis on environmental considerations in all stages of our projects. We endeavour to achieve this through the following commitments in our Integrated Management System Policy:

- Complying with applicable legal and other requirements.
- Creating a safe, green and sustainable environment.
- Monitoring the performance of our contractors to ensure their compliance with our requirements.
- Preventing pollution and mitigating potential environmental impacts arising from our projects and operations.
- Observing the principles of reduction, reuse and recycling in the consumption of resources wherever practicable.
- Achieving continual improvement through regular review of the effectiveness of our Integrated Management System as well as the Objectives and Targets.

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我們的工作與環境息息相關

我們明白到，在致力提供基本服務配合香港的發展時，我們的工程會對環境帶來影響。因此，我們審慎執行工作，評估工程對環境的影響，務求避免或盡量減少對環境造成不良影響，同時藉機改善環境。

CEDD and the environment

We are aware that in providing essential services to support the development of Hong Kong, our activities affect the environment. We take this challenge seriously and pay due attention to assessing, avoiding and mitigating the adverse impacts arising from our works. We also endeavour to take every opportunity to enhance the environment.

我們的工作 CEDD Activities	目標 Aim	措施 Measures
規劃及設計 Planning and Design	盡量避免對環境造成不良影響 Avoid adverse environmental impacts as far as possible 如無可避免對環境造成不良影響，採取適當的緩解措施 Adopt suitable mitigation measures when adverse impacts are unavoidable 遵守減少廢物、廢物再用及廢物循環再造的原則 Observe the principles of Waste Reduction, Re-use, and Recycling	探討不同方法 Explore options 為指定工程項目進行環境影響評估 Carry out Environmental Impact Assessment for designated projects 加入緩解環境影響的措施 Incorporate environmental mitigation measures 編訂拆建物料管理計劃 Compile Construction and Demolition Materials Management Plan
建造工程 Construction Works	確保承建商遵守環保規定 Ensure that contractors comply with environmental requirements	遵守環境許可證的審批條件 Comply with Environmental Permit Conditions 實施環境管理計劃 Implement Environmental Management Plan 實施環境監察及審核計劃 Implement Environmental Monitoring and Audit Programme
環境改善工程 Environmental Improvement Works	藉機改善環境 Take every opportunity to improve the environment 推廣綠化和採用創新的環境美化設計 Promote greening and adopt innovative landscape design	廣泛植樹 Adopt extensive planting 推行綠化總綱圖的工作 Implement Greening Master Plans 施行人造斜坡鞏固工程時美化斜坡 Landscape man-made slopes in upgrading works 修復石礦場 Rehabilitate quarries 監察已在天然山體崩塌殘痕完成的土壤生物修復工程 Monitor installed bioengineering measures at natural terrain landslide scars 清理河床 Clear up river bed

環境管理

我們透過環境管理系統，有系統地密切監察承建商的環保表現，確保他們遵守有關環保的法例和合約規定。我們在這方面取得顯著成效。

為了加強部門職能及工作流程方面的環保表現，我們自2006年9月起，把環境管理系統擴展至涵蓋整個部門。

緩解環境影響措施

透過全面規劃和設計，我們致力減少擬議工程對環境可能造成的不良影響。倘若這些影響無可避免，我們在施工及設施運作期間，採取適當的緩解措施。

■ T3號道路 - 預製及預先裝嵌式建造

為了盡量減少T3號道路的建造工程對沙田居民和區內交通的影響，天橋工程大部分採用預製分段組件施工。這種方法佔用較少地面空間，而且造成較少的建築和交通滋擾。此外，隔音屏障在工地以外預先裝嵌，盡量減少建築噪音對附近居民造成的影響。



T3號道路 - 預製及預先裝嵌式建造
Road T3 - Precast and Pre-fabricated Construction

Environmental Management

We have made use of the Environmental Management System (EMS) as a tool to systematically monitor the environmental performance of our contractors to ensure compliance with the legal and contractual environmental requirements. Remarkable improvements have been seen.

In order to enhance the environmental performance in all the functions and processes of the Department, we have extended the scope of the EMS to cover the whole Department since September 2006.

Environmental Mitigation Measures

Through comprehensive planning and design, we endeavour to minimize all possible adverse environmental impacts resulting from proposed projects. When projects inevitably bring about adverse environmental impacts, we adopt suitable mitigation measures in both construction and operation stages.

■ Road T3 - Precast and Pre-fabricated Construction

To minimize the construction impact of Road T3 on the local residents and traffic in Sha Tin, most of the bridge works in this project have adopted a precast segmental construction method which occupies less working space at ground level and generates less construction nuisance and disturbance to traffic. Also, the noise barriers are pre-fabricated off-site to minimize construction noise impact on the nearby residents.

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■ 彩雲道及佐敦谷的地盤平整工程 - 輸送帶系統

為了減少以車輛運送泥石和空氣污染，我們使用一條長1.6公里的輸送帶。輸送帶橫跨繁忙市區，把挖掘物料由彩雲的主要工地運往舊啟德機場，再以躉船運走處理。這個輸送系統是高架鋼造構築物，完全密封和隔音，並設有安全裝置和塵埃控制系統，能夠以每小時約六公里的速度運走直徑達300毫米的石塊。

■ Site Formation Project at Choi Wan Road and Jordan Valley – Conveyor Belt System

To reduce earth-moving traffic and air pollution, we have used a 1.6 km long conveyor belt system through the busy urban area to transport the excavated material from the main site at Choi Wan to the former Kai Tak Airport for disposal by barge. The system is an elevated steel structure, fully enclosed and sound insulated, and is equipped with safety devices and a dust control system. It is capable of transporting rock of up to 300 mm in size at a speed of approximately 6 km per hour.



彩雲道及佐敦谷的地盤平整工程 - 輸送帶系統
Site Formation Project at Choi Wan Road and Jordan Valley - Conveyor Belt System

施工期間的其他緩解環境影響措施 Other Environmental Mitigation Measures during Construction



沉澱池處理工地上產生的廢水
Sedimentation tank to treat the wastewater generated on site



車輛離開工地前，須先清洗車輪
Wheel washing before leaving the site



在淤泥屏障內進行填石工作
Rock filling within silt screen



臨時隔音屏障
Temporary noise barriers

拆建物料的管理

公眾填料委員會由我們的署長擔任主席，負責公眾填料的策略性管理。有關的管理工作按下列三項原則執行：

- 減少
- 再用
- 循環再造

政府的政策是在公共工程的規劃、設計和施工階段，盡量減少產生拆建物料。我們為建造業提供服務，讓公眾填料可以卸置於設在策略性地點的公眾填料接收設施。我們暫時儲存剩餘的公眾填料，以供日後再用。

在2006年，公眾填料接收設施共接收約650萬公噸公眾填料。

環境管理計劃

過去多年，我們的承建商一直推行廢物管理計劃，透過在工地把產生的廢物分類，減少在源頭產生的廢物數量，使運往公眾填料接收設施和堆填區的拆建物料數量減至最少。過往的廢物管理計劃現已擴展成為環境管理計劃，其範圍除涉及減少廢物亦涵蓋消滅環境滋擾方面。在環境管理計劃下，承建商必須在工地設立一套環境管理系統，以便推行各項緩解環境影響的措施，並監察這些措施的成效。此外，為推廣在工地實施創新的環境管理和污染消滅措施，我們也鼓勵承建商參與多項獎勵計劃。

環境監察及審核計劃

我們為《環境影響評估條例》涵蓋的指定工程項目實施環境監察及審核計劃，以密切監察承建商的環保表現，並確保承建商遵守環境影響評估報告的規定。

Management of Construction and Demolition Materials

The Public Fill Committee, under the chairmanship of our Director, is responsible for the strategic management of public fill. The strategic management builds on the 3R principle:

- Reduce
- Reuse
- Recycle

It is government policy to reduce generation of construction and demolition (C&D) materials in planning, design and construction of public works projects. We provide a service to the construction industry for the disposal of public fill at public fill reception facilities at strategic locations and we temporarily stockpile the surplus public fill for future reuse.

In 2006, the total quantity of public fill received at public fill reception facilities was about 6.5 million tonnes.



鯽魚涌公眾填料臺船轉運站
Quarry Bay Public Filling Barging Point

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Environmental Management Plan

Over the years, our contractors have been implementing waste management plans (WMP) to reduce the generation of wastes at source and minimize the disposal of C&D materials to public fill and landfill sites by on-site sorting of the wastes generated. The scope of a waste management plan, now known as an environmental management plan (EMP), has been widened to cover not only waste reduction but also abatement of environmental nuisances. Under an EMP, the contractor is required to set up an environmental management system on site to implement and monitor the performance of various environmental mitigation measures. In addition, our contractors have been encouraged to participate in various award schemes to promote innovative environmental management and pollution abatement measures on sites.

Environmental Monitoring and Audit Programme

We have implemented the Environmental Monitoring and Audit Programme for all the designated projects covered by the Environmental Impact Assessment Ordinance to closely monitor the environmental performance of contractors and to ensure compliance with the requirements specified in the Environmental Impact Assessment Reports.

新技術的應用

■ 將軍澳的淤泥清理裝置

將軍澳市中心西面的主要雨水暗渠出口已設置淤泥清理裝置，包括弧形水閘和一個地底淤泥清理箱。在進行維修時，弧形水閘會降低，以便積存在暗渠的泥沙清除到地底淤泥清理箱，暫時儲存並去水/處理，然後卸置於堆填區。這項設施符合環保，可以減少對附近居民造成的臭味和景觀影響。



24小時連續噪音監察
24-hr continuous noise monitoring



分隔可循環再用物料以供收集
Separate recycling materials for collection

Application of New Technology

■ Desilting Compound at Tseung Kwan O

A Desilting Compound, comprising radial gates and an underground desilting chamber, has been constructed at the outlet of the main 8-cell storm-water culvert at the western side of Tseung Kwan O New Town. At times of maintenance works, the radial gates will be lowered to facilitate removal of silt deposits inside the culvert and their transportation to an underground chamber, where the silt deposits will be stored temporarily and dried/treated before tipping to the landfill. The facility will provide an environmentally acceptable means to minimize nuisance to nearby residents, in terms of odour and visual impacts.



將軍澳的淤泥清理裝置
Desilting Compound at Tseung Kwan O

環保教育及培訓

我們為員工提供環保知識及相關技能的培訓，讓員工持續進修，以應所需。在2006年，我們舉辦了下列課程：

Environmental Education and Training

To equip our staff with the necessary knowledge and skills, continuous education in environment related subjects is provided. In 2006, the following training courses were organized for our staff :

課程 Course Title	課程數目 No. of Courses	參加人數 No. of Participants
環保法例及環保事項(廢物與空氣)培訓課程 Training Course on Environmental Legislation and Environmental Issues (Waste and Air)	7	328
建築廢物處置收費計劃簡介會/研討會 Briefing/Seminar on Construction Waste Disposal Charging Scheme	2	58
「市區綠化的關鍵」研討會 Seminar on Keys to Urban Greening	1	49
樹木與建造教育課程 Trees and Construction Education Programme	1	36

我們又提名了55名員工參加10項由其他機構舉辦的環保課程。
55 members of our staff were also nominated to attend a total of 10 environmentally related training courses arranged by other organizations.

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環保辦公室

在辦公室管理方面，我們致力建立環保辦公室文化，在節約用紙和用電等方面訂定目標，提高員工的環保意識。

我們相信環保辦公室並不只限於室內，故此我們在總部大樓的翻新工程中亦加入綠化平台的項目。另外，我們又規定所有司機在停車等候時都要關掉引擎，以減少廢氣排放；並不時進行巡查，確保員工遵行規定。

我們除了把環保意念引入辦公室管理，亦致力為員工提供良好的工作環境。自2003年起，我們參加了「室內空氣質素管理計劃」，並連續獲頒發「良好級」檢定證書。透過計劃，我們監察總部大樓的空調系統的運作，確保室內空氣質素符合標準，讓員工可以舒適地工作。

Green Office

We strive to establish a green office in our day-to-day office administration. By setting green targets on areas like electricity and paper consumption, we have also enhanced our staff's environmental awareness.

We believe green office practice should go beyond the office and hence we have embarked on a landscape improvement project to add greenery to the podium of our Ho Man Tin Headquarters. In order to reduce air pollution, all departmental motor drivers have also been instructed to turn off the engines when waiting for passengers. Surprise checks have also been conducted to ensure strict adherence.

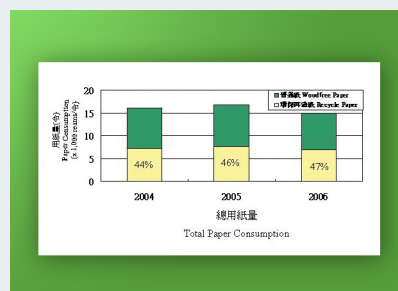
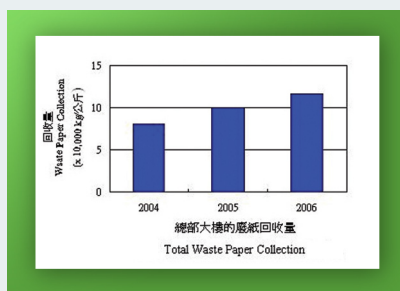
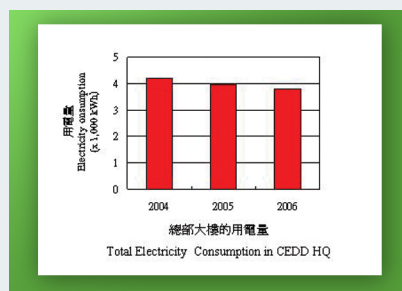
Apart from adopting green office practice, we have endeavoured to provide our staff with a good working environment. We have, since 2003, joined the Indoor Air Quality Certification Scheme under which we have ever since been awarded the "Good Class" Indoor Air Quality Certificate. Through close monitoring of the air-conditioning system in our Ho Man Tin Headquarters, we have ensured that the indoor air quality meets the standard where staff can comfortably work.

我們採取以下辦公室環保措施：

We have adopted the following green practices in office administration :



在同事的共同努力下，我們在用電及用紙方面達到以下成績：
 With the joint effort of all our staff, we have accomplished the following achievements in electricity and paper consumption :



清新空氣約章

為了支持政府的「藍天行動」和香港總商會的「清新空氣約章」，我們成立了一個工作小組，負責就部門的日常運作，確定可實施的廢氣排放管制措施，並計劃如何推行這些措施。這方面的工作進度如下：

- 鼓勵員工盡量採用「7-7-7清新都市」指引所載的良好做法。
- 把「室內空氣質素管理計劃」涵蓋整個部門。
- 把作業指引提供給大廈管理委員會參考。
- 提醒清潔承辦商使用安全的清潔用品。
- 鼓勵工地監督人員接受培訓，以成為車輛黑煙管制計劃的認可檢舉員。
- 達到節約用電的指標。
- 在綜合管理系統下，實施其他廢氣排放管制措施。

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2006年的環保表現

我們每年訂定環保目標和指標，務求在環保表現方面持續改善。2006年的工作成效如下：

Environmental performance 2006

To achieve continual improvement in our environmental performance, we have set annual environmental objectives and targets. Below is a summary of our achievement in 2006.

目標 Objectives	指標 Targets	成績 Achievement
減少用紙及用電 Reduction of paper and electricity consumption	<p>減少部門的總用紙量，較2003年少10% To reduce total paper consumption of the Department over that in 2003 by 10%</p> <p>以環保紙取代25%的總用紙量 To substitute 25% of normal plain paper consumption of the Department with recycled paper</p> <p>減少本署大樓的用電量，較2003年少10% To reduce electricity consumption of the Civil Engineering and Development Building over that in 2003 by 10%</p>	<p>部門的總用紙量較2003年減少21% Total paper consumption of the Department reduced by 21% when compared with that in 2003</p> <p>環保紙佔總用紙量的47% Recycled paper took up 47% of the total paper consumption</p> <p>本署大樓的用電量較2003年減少約16% Electricity consumption of the Civil Engineering and Development Building reduced about 16% when compared with that in 2003</p>
改善居住環境 Enhancement of living environment	<p>種植至少130萬棵樹/灌木 Plant at least 1.3 million trees/shrubs</p> <p>美化280個在防止山泥傾瀉計劃下已予鞏固的斜坡 Landscape 280 upgraded slopes under the Landslip Preventive Measures Programme</p> <p>在修復的石礦場提供42,000平方米的綠化地帶 Provide 42,000 m² of greening areas in rehabilitated quarries</p>	<p>已種植195萬棵樹/灌木 1.95 million trees/shrubs were planted</p> <p>已美化280個在防止山泥傾瀉計劃下已予鞏固的斜坡 280 upgraded slopes under the Landslip Preventive Measures Programme were landscaped</p> <p>已在修復的石礦場提供42,000平方米的綠化地帶 42,000 m² of greening areas was provided in rehabilitated quarries</p>

Clean Air Charter

In support of the Administration's Action Blue Sky and Hong Kong General Chamber of Commerce's Clean Air Charter, we have set up a working group to identify the air emission control measures that are relevant to our daily operations and to map out the way forward to implement the measures. We have made the following progress :

- Encouraging our staff to implement as far as practicable the good practice contained in the "7-7-7 Care-for-Air Public Guideline".
- Extending the application for Indoor Air Quality Certificates to the whole Department.
- Passing the "Quick" Business Guide to the Building Management Committees for consideration.
- Reminding the cleaning contractors to use safe chemicals for cleaning.
- Encouraging site supervisory staff to be trained as accredited spotters under the Smoky Vehicle Control Programme.
- Achieving the target on the reduction of electricity consumption.
- Implementing other air emission control measures under the Integrated Management System.



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