

# 工務局 Works Bureau

香港特別行政區政府 Government of the Hong Kong Special Administrative Region



環境報告 Environmental Report

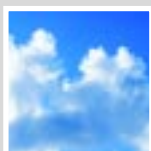
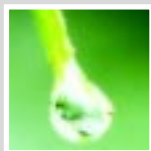


# 工程與環境 共存亦共榮

WORKS AND THE ENVIRONMENT THRIVE TOGETHER



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## 前言 FOREWORD



一切公共工程以至建築工程的推展，都是為了改造環境，以配合我們日常生活作息的需要。然而，作為我們建設過程其中的任務，便是我們有須要對環境呵護及尊重、保育資源。

工務局一向堅信其工程必須與大自然共存共榮。因此，當我們撰寫這第三份環境報告時，亦以此為鋪排。

我們從來也意識到我們在環保方面所擔當的重要角色。在2001年，我們不斷致力引進新政策、新措施，務使公共工程由始至終對環境有所裨益。我們在這方面已取得顯著的成果，於此，各工務部門可謂功不可沒。

我十分高興能藉此機會與您分享我們在2001年在環境方面的表現，並且希望你對報告感到充實及饒有趣味。

工務局局長李承仕

2002年6月

The objective of all public works projects, and indeed is also true for all construction projects, is to shape the environment to suit the need of our living and activities. But it is also part of our mission to care for and respect the environment with what we build and when we build.

Works Bureau firmly believes that its projects can and should coexist with the natural environment, and it is on this theme the presentation of our third environmental report is based.

We are always conscious of the important role we play in contributing to environmental protection in Hong Kong. Throughout 2001 we have continued to endeavour on introducing policies and initiatives to make public works a positive element on the environment throughout its whole life starting from their inception, and on this, we have to thank our works departments for our great achievements.

I am now pleased to have this opportunity to share with you our environmental performance for the year 2001, and hope you will find this report informative and interesting.

Lee Shing-See, Secretary for Works

June 2002

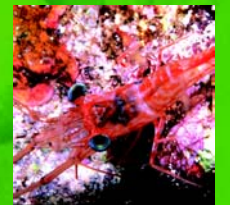
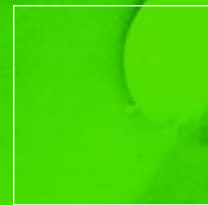
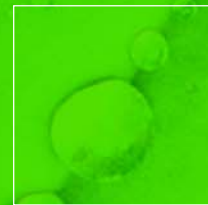
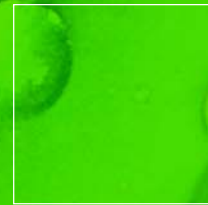
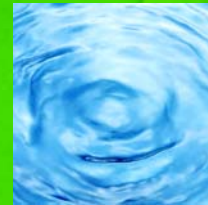


工務局與工務部門簡介

INTRODUCING WORKS BUREAU AND WORKS DEPARTMENTS

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## 工務局概覽：職能與角色

由工務局局長所領導的工務局，負責制定所有與公共工程有關的政策，以及基本工程項目的初步可行性研究、設計、建造及維修(某些情況下包括運作)等各階段的程序。同時，我們亦肩負制定供水服務、斜坡安全和防洪工作政策的責任。我們的職責，是要確保妥善地策劃、管理和推行工務計劃項目，使各項目都能達到高質素、高標準，並盡量在財政預算以內如期完成。此外，工務局須管理認可公共工程承建商名冊、認可公共工程物料供應商和專門承造商名冊，作為一項中央支援服務，協助工務部門運作。對於轄下7個工務部門，工務局須監察其推展工務計劃和提供服務的情況。在2001年，工務計劃內約有1 600項分屬不同階段的項目。在2001-02財政年度，工務計劃的總開支達230億港元。我們預計這項支出在本財政年度會略有增加。

工務局轄下的7個工務部門為：

- 建築署；
- 土木工程署；
- 渠務署；
- 機電工程署；
- 路政署；
- 拓展署；以及
- 水務署。

我們視他們為推行我們及政府整體的環保政策中的伙伴。

## OVERVIEW OF WORKS BUREAU: WHO WE ARE

We, the Works Bureau, under the direction of the Secretary for Works, are responsible for all public works related policy and procedural matters extending from initial feasibility studies of works projects through design and construction to maintenance, and operations in some cases. We have policy responsibility for water supply, slope safety and flood prevention. We are tasked with ensuring the proper planning, management and implementation of projects in the Public Works Programme (PWP), that they are constructed to high quality and standards, and as far as possible on schedule and within budget. As a provider of central support to the works group of departments, we manage the list of approved contractors, suppliers of materials and specialist contractors for public works.

We oversee the operation of seven works departments for implementing the PWP and delivering their services. In 2001, the PWP included about 1,600 projects in various stages of implementation. Annual PWP expenditure in the financial year 2001/2002 reached HK\$23 billion. Estimated expenditure for the current financial year is expected to be slightly higher.

The seven works departments, which are also our partners in realizing ours as well as Government's environmental goals and policies, are:

- Architectural Services Department;
- Civil Engineering Department;
- Drainage Services Department;
- Electrical and Mechanical Services Department;
- Highways Department;
- Territory Development Department; and
- Water Supplies Department.



## 我們的環保目標

工務局進行工程項目時，旨在確保各項工作均以最高質素及對環境負責的方式完成。我們經常會就工程對環境的影響作出全面考慮，而引入政策。我們的工程會按照最新的環保標準及盡可能採用最新的環保技術施工。我們希望能在各工務部門及本地建造業，就推廣環保意識達致示範作用。

## 我們的環保政策

我們，在展開工務工程項目及制訂建造標準時，會繼續關注有關建造工程對環境造成的影響。

我們旨在確保各項服務均以最高質素及環保的方式進行。

我們確保所有的基礎建設及防洪工程項目，完全符合環境影響評估條例及其他環保法例的要求。

我們會繼續確保有足夠地方，棄置各項涉及挖掘海床的工程項目產生的沉積物，並確保以環保的方式進行棄置工作；並避免挖掘海床。

我們會繼續保護天然水源，確保經處理後為客戶供應的食水水質，符合世界衛生組織食水水質的指引。

我們會致力令「人造」斜坡更加安全及綠化，避免造成不良的視覺效果。

我們會聯同建造業，共同增強業界在各方面工作的環保意識。

工務局承諾確保所有其負責服務與及內部運作，以對環保負責的方式進行。工務局會持續不斷地改善本身的環保表現。



## OUR ENVIRONMENTAL GOAL

The Works Bureau in delivering public works projects aims to ensure that its services are delivered to the highest quality and in an environmentally responsible manner. We always introduce policies with full consideration of their impact on the environment. Our projects are required to be executed according to the latest environmental standards and whenever possible adopting the latest environmental technology. Leading by example we aim to promote environmental awareness both within our works departments and the local construction industry.

## OUR ENVIRONMENTAL POLICY

We, in delivering public works projects and setting construction standards, will continue to take account of the impact of its construction works on the environment.

We aim to ensure that our services are delivered to the highest quality and in an environmentally responsible manner.

We will ensure that infrastructure development and flood prevention projects are implemented in full compliance with the Environmental Impact Assessment Ordinance and other environmental legislative requirements.

We will continue to secure adequate space for the disposal of dredged sediment as a result of various works projects and ensure that such disposal takes place in an environmentally acceptable manner. We will endeavour to avoid dredging.

We will continue to protect raw water sources and ensure that the quality of treated water supplied to consumers conforms to the World Health Organisation's Guidelines on Drinking Water Quality.

We will endeavour to make our 'man-made' slopes safer and greener and minimize any adverse visual impact on the environment.

We will work with the construction industry to enhance environmental awareness throughout all aspects of the industry's work.

The Works Bureau is committed to ensuring that all services offered by the Bureau, as well as our internal operations, are conducted in an environmentally-responsible manner and that we will seek to continually improve our environmental performance.



### 建築署

Architectural Services Department



### 土木工程署

The Civil Engineering Department

建築署一向抱著對環境負責的態度來設計、採購及維修所有除公共房屋以外的政府建築物為己任。為此，建築署會落實節約能源、減少耗用天然資源、避免污染以及促進社會健康與持續發展的要求。

建築署藉著實行ISO 14001環境管理系統，對他們自己及其各項工程的環保表現精益求精。

The Architectural Services Department commits to undertake the design, procurement and maintenance of all government buildings (other than public housing) in an environmentally responsible manner by implementing conservation of energy, reducing the consumption of natural resources, minimizing pollution and promoting a healthy and sustainable development for the community.

The Department continuously seeks to improve the environmental performance of themselves and their projects through the implementation of the ISO 14001 environmental management system.

土木工程署藉著一套全面的環境監察和控制措施，使其能以在對環境要求來說可接受的方式，在香港進行工地平整、填海及海上挖泥工程。

該署並會進行各種環保工程，例如清理河床和預防山泥傾瀉。此外，亦會逐步提高人造斜坡的安全標準，並加以美化。舊礦場會廣植樹木，以回復原貌。

現時，該署更積極與學界一起研究推動再造石料和其他拆建物料的使用。

The Civil Engineering Department undertakes site formation, land reclamation, marine dredging in Hong Kong in an environmentally acceptable manner, with full environmental monitoring and control measures.

The Department also carries out many environmentally friendly projects such as cleaning up of riverbeds and landslip prevention projects. Man-made slopes are progressively upgraded into a safer standard and visually pleasing form. Old quarries are restored to their pristine state by active planting of trees.

The Department is actively researching into and promoting the use of recycled aggregates and other construction and demolition (C&D) materials in collaboration with the academia.





### 渠務署

#### The Drainage Services Department



### 機電工程署

#### The Electrical and Mechanical Services Department

渠務署對確保香港的環境質素，有著重要的角色。渠務署負責設計、建造、操作、維修及改善香港的污水收集系統。近年維多利亞港水質的改善，亦有賴該署多年來的努力。

渠務署並負責香港的防洪工作。該署進行了多項改善的工程，以減低由於新界北部土地用途不斷改變所帶來的水浸風險。

The Drainage Services Department has an important role in the environmental quality of Hong Kong. It designs, constructs, operates, maintains and upgrades the sewage collection system in Hong Kong. The improvement in the quality of water in the Victoria Harbour is attributable to their effort over the years.

The Department is also responsible for flood prevention in Hong Kong. Many good projects are implemented to alleviate the flooding risk to counter the trend of increase in flooding due to ever changing pattern of land use in Northern New Territories.

機電工程署對改善香港的環境貢獻良多。在提倡善用能源方面，尤其積極。例如推出能源效益標籤計劃、能源效益註冊計劃，以及引進水冷式空調系統等。此外，該署並提倡使用可再生能源如太陽能等。該署亦協助政府推行空氣質素改善措施，進行室內空氣質素測試並簽發證書，以及就汽車使用低污染燃油（如計程車使用石油氣），提供技術意見。

The Electrical and Mechanical Services Department has made important contributions to the improvement of the environment of Hong Kong. The Department is particularly active in the promotion of efficient use of energy, for example, through the energy-label system, energy efficiency registration system, introducing water-cooled air conditioning system. It also promotes the use of renewable energy sources such as solar heating. It assists in government's initiatives in improving air quality by providing indoor air quality tests and certification system, and providing technical input on fostering the use of clean fuel in vehicles such as LPG in taxis.



### 路政署

The Highways Department



### 拓展署

Territory Development Department

路政署規劃、設計和興建的道路系統，均會完全符合工務局的環保政策和有關環保的法例。目前，該署正積極研究可否以再造砂石和再造瀝青興建及維修道路，以及採用由拆建物料所製造的混凝土磚塊鋪地。這些措施都有助本地的減廢努力。

作為香港最大的道路建造者，路政署在設計興建新道路和改善現有道路時，都會盡量把握進行綠化的機會。

The Highways Department plans, designs, and constructs the road system in full accordance with Works Bureau's policy on caring about the environment and the environmental legislation. It is also researching actively on the possibilities of using recycled aggregates and recycled asphalt in the construction and maintenance of roads, and the usage of concrete paving blocks that are made from construction and demolition materials. These have a beneficial effect on the local waste reduction effort.

Being the greatest road builder in Hong Kong, the Department actively pursues any greening opportunities in the design and construction of new roads and upgrade of existing roads.

拓展署的職責是開拓足夠的土地來發展新市鎮，以容納香港不斷增加的人口。在履行這項職責的同時，拓展署也十分注重環保及新市鎮的居民的福祉。為此，拓展署制定了一套適用於規劃及設計的環保政策，以供顧問及承建商遵守。彼等在工程中，均須遵行減少廢物、循環再用和循環再造的原則。

拓展署在環保方面最顯著的成就，便是在新市鎮廣泛植樹和美化環境，提供當地居民良好的生活質素。

While fulfilling its obligation to provide sufficient land for the development of new towns to accommodate the ever increasing population in Hong Kong, Territory Development Department takes good care of the environment as well as the well being of the future residents. The Department has established a set of environmental policies to guide its design and planning, and for its consultants and contractors to abide by. All of them should observe the principles of waste reduction, reuse and recycle in their projects.

Their most visible environmental effort are the extensive landscaping and afforestation in new towns, which provide quality living to residents there.



水務署  
Water Supplies Department



水務署在環保方面最主要的任務，是要確保香港食水的水質是安全的。而該署在提供良好水質的同時，亦要確保環境不會因而受損。為此，該署會把濾水廠的污泥脫水，然後妥善棄置於堆填區。至於用以濾水的化學品，亦會按照規定的程序以安全的方法處理。

Water Supplies Department's principal environmental mission is to ensure the quality of drinking water provided to Hong Kong is safe. It has also taken measures to ensure that in the process of providing good quality water to Hong Kong, the environment is not adversely affected. As such, sludge generated from the treatment works are dewatered into solid form and properly disposed of at landfills. Treatment chemicals are handled methodically in a safe manner.

## 工務局的架構 ORGANISATION OF WORKS BUREAU

### 計劃及資源部

確保工務計劃如期實施，並符合經濟效益。計劃及資源部亦負責經常檢討工務局及工務部門所依據的程序及使用的資源，及管理各部共用的綜合管理資訊系統。

### Programme and Resources Division

ensures that the PWP is delivered in a timely and cost efficient manner. The Division is responsible for the continuous review of procedures and resources for both WB and the works departments. It administers a comprehensive management information system concerning each division.

### 工務政策部

制訂有關公共工程的採購的工務政策，及建造標準包括環保事項、品質及安全。另一方面，工務政策部亦負責有關供水、斜坡安全及防洪的政策事宜。

### Works Policy Division

formulates the works policies on procurement of public works and construction standards including environmental issues, quality and safety. In addition the Division is responsible for looking after policy matters on Water Supply, Slope Safety and Flood Prevention.

### 建造業檢討部

負責執行建造業檢討委員會報告內的建議。

### Industry Review Division

is responsible for the implementation of the recommendation of the Construction Industry Review Committee Report.

### 法律諮詢部

就工務政策及其他法律事宜，向工務局提供意見。另一方面，法律諮詢部亦就建築合約的各類問題與及與建築有關的法律事宜，向各工務部門提供意見。

### Legal Advisory Division

provides advice to WB on the works policies and other legal matters. In addition, the Division provides legal advice to all the works departments on all aspects of construction contracts and construction related legal matters.

### 行政部

負責策劃、管理及檢討工務局的人力資源。行政部負責工務局辦公室環境的各項事宜。

### Administration Division

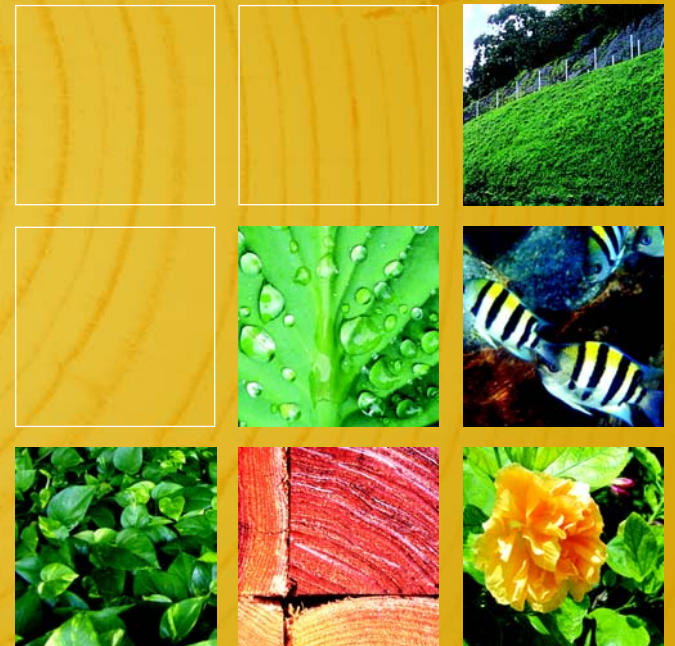
is responsible for the planning, managing and reviewing of human resources for WB. The Division takes care of all issues regarding WB's office environment.



工務環境政策

WORKS POLICY ON THE ENVIRONMENT

2





## 工務局面對環境問題的挑戰

工務局須面對兩方面的環境問題。其一是工程在施工期間所造成的環境影響，其二是因工程的存在或其運作對環境的長遠影響。對於前者，我們要求工務部門在施工期間採取所有必須的措施，以期減低影響。至於後者，假如工程屬於工務政策範圍，例如水務、防洪或斜坡鞏固等，我們便會在規劃階段審慎評估工程運作對環境的長遠影響，並遵行環境法例的規定，甚致超逾法例規定的水平。

我們在施工期間所面對的環境問題，與建造業所面對的並無二致，但在各行各業之中，建造業所面對的環境問題可謂獨一無二。由於建造過程屬於暫時性質，而且規模龐大，加上環境變數甚多，故希望以經濟的方法來施行控制措施實在要面對極大困難。

建造工程所產生的污染和滋擾問題主要包括噪音、塵埃、震動、污水、泥沙徑流和處理不當的廢物等。



## THE CHALLENGES

The environmental challenges faced by us as the Works Bureau are two folded. One is the environmental impact during the construction of a project. The other is the long term environmental effect of the existence and operation of a project. For the former, our objective is to require works departments to take all necessary measures to mitigate the impact during their construction. For the latter, we have a role to play if the project is concerned with one of our policy areas of water supply, flood control or slope stabilization. In these cases, long term operational effect on the environment are carefully evaluated during the planning stage and all are done in accordance with, or even exceed where desirable, the requirements of the environmental legislation.

The environmental problems associated with the construction stage of a project faced by us is in common with any project in the construction industry, yet, the environmental problem of construction industry is unique amongst all industries in its difficulty in implementing control measures economically due to its temporary nature, scale of operation, and highly variable environment.

Major pollutants or nuisances arising from construction activities include noise pollution, dust emission, vibrations, contamination by wastewater, muddy runoffs and improper disposal of wastes.



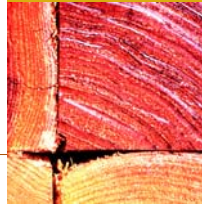
### 藉公共工程政策減低環境影響

工務局旨在透過改善管理及控制措施，不斷加強在工務計劃中維護環境。為了達成這個目標，我們針對多項重要的環境問題，制定政策，並發出技術通告，要求工務部門遵行。



### CONTROLLING ENVIRONMENTAL IMPACTS BY PUBLIC WORKS POLICIES

The Works Bureau aims to ensure that the environmental integrity of the PWP projects is continually strengthened through improved management and control measures. To achieve this, we establish and promulgate our policies through the issuing of Works Bureau Technical Circulars for works departments to follow. The environmental policies set out in these Circulars address a wide range of important environmental issues.



## 減少廢物和管制原材料的使用

我們要求公共工程所產生的建築廢物必須在工地分類。由於提供堆填區費用高昂，我們的目標是要在若可以運到公眾卸泥區的情況下，確保不會有大量的惰性拆建物料給運送到堆填區棄置。

大型公共工程若要處置剩餘的填料，必須向公眾填料委員會登記。公眾填料委員會負責管理公眾填土區的容量。他們會把有剩餘填料的和有需求填料的工程配對，並有秩序分派公眾填土區的容量。

為確保拆建物料得到適當處理，我們實施了運載記錄制度，讓工程組進行稽核時有所依據，防止非法棄置拆建物料。



我們要求倡議工程的部門，在申請把工程提升至甲級時，必須在提交予立法會工務小組委員會的文件中，交代他們在規劃和設計階段預備採取哪些減少廢物的措施。至於大型填方工程，則必須向公眾填料委員會登記，以便接受公眾填料。

為鼓勵減少工地廢物，承建商必須為每項工程，提交一份廢物管理計劃。計劃一經提交，承建商便須依照擬定的方法和系統，減少和妥善處理工地的廢物。此外，承建商也須透過落實廢物管理計劃，保持工地整潔。

一般來說，我們已禁止了以熱帶硬木製作工作架、模板、臨時支架和類似用途。我們要求所有圍板必須以金屬製造，並以螺栓固定，以便增大回收量。

我們已制備規範，容許以拆建物料再造的碎石用作填土和混凝土墊層。其使用範圍將會逐步放寬到較高標號的混凝土。

## WASTE REDUCTION, MANAGEMENT AND CONTROL ON USE OF RAW MATERIALS

We require our projects to have on-site sorting of construction waste. Our objective is to ensure that no excessive amount of inert construction and demolition (C&D) materials go to landfills which are expensive to provide, if they can go to public fills.

We require our major projects with export of surplus fill to register with the Public Fill Committee, who manages public fill capacity in the territory. The Public Fill Committee will match the surplus fill with projects that have a demand on the material. It also distributes public fill capacity orderly for such projects.

To ensure proper disposal of C&D materials, we implement the trip ticket system with an aim to provide an audit trail for verification by the project team to prevent illegal dumping.

We require our project proponents, as part of their submission to the Public Works Subcommittee for upgrading to Category A, demonstrate what measures have been taken to minimize waste in the planning and design stages. Major earth filling projects are required to register with the Public Fill Committee to accept public fill.

To promote waste reduction on construction sites, contractors are required to provide a waste management plan (WMP) for each project. Through the submission of WMP, contractors shall commit on the method and system to reduce and properly dispose of wastes at construction sites. In addition, contractors are also required to maintain the Site in a clean and tidy condition by the implementation of WMP.

In general, we have prohibited the use of tropical hardwood in false work, formwork, temporary supports or work of a like nature. We require all hoardings be made of metal, and they should be bolt fixed to enable maximum recovery.

We have specification allowing the use of recycled aggregates made from construction and demolition materials to be used initially in filling works, beddings etc. This will be gradually widened to higher grade concrete.



## 2001 年取得的成果

我們已發出技術通告，准許以再造碎石生產訂明配料的低標號混凝土。

我們對採用再造碎石生產設定配合比例的標號25至35混凝土進行的測試，進度如期。

我們與另一個決策局已獲准在屯門第38區設立拆建物料再造廠。我們亦成功取得多份公共工程合約同意採用再造廠生產的石料。

我們已開始檢討有關工地採用碎石機的政策，研究它們是否能夠減省拆建物料在得到再造機會前所需運送的路程。



## Policy Achievements in 2001

We had issued a Technical Circular allowing the use of recycled aggregates in production of low grade of prescribed mix concrete.

We were on programme in our tests on the use of recycled aggregates in Grade 25 to 35 designed mix concrete.

We, jointly with other Bureau, have got the approval for setting up a recycling plant for C & D materials at Tuen Mun Area 38. We were also successful in making a start by having a sizable number of public works contracts agree to use the recycled aggregates produced.

We started reviewing our policy on site crushers to see if they have a role to play in help reduce the distance C & D materials have to be transported before they could be recycled.





## 2002 年的目標

我們會擴大我們的規範，准許以再造物料生產標號35甚至更高標號的混凝土。至於屯門的再造廠，則將於 2002 年內啟用。

我們會根據現有規範所容許的範圍，繼續物色更多公共工程合約在施工時使用再造物料。

我們會鼓勵政府僱用的承建商使用工地碎石機，協助再造拆建物料。

工務部門必須在工程規劃初期擬備拆建物料管理計劃。

我們會提升現有有關保持工地整潔的規範，把必須進行的事項列明，而這些作業將在合約中，按量度獨立付款，以反映承建商的努力。保持工地整潔的目標並不止於施工範圍，而包括公眾可以通行和視線所及的地方，務求在公眾心目中建立一個“工地可以是整潔”的形象。

我們會與環境保護署合作，就塵埃、煙霧、噪音、泥沙徑流和廢水等，制定污染改善措施。

我們會提升工地廢物的理管計劃制度，訂明一套標準和目標，以能監控工地上的廢物管理。

我們會檢討和改善運載記錄制度，確保廢物得到妥善處理。



## Objectives and Targets for 2002

We will expand our specification allowing the use of recycled materials up to at least Grade 35 concrete. We will have the Tuen Mun Recycling Plant operational in 2002.

We will continue to identify more public works contracts to participate in the use of recycled materials in their construction works, in accordance with the scope currently allowed by our specifications.

We will encourage government contractors to make use of site crushers to help recycling C & D materials.

Works departments to prepare a C&D material management plan in the early planning stage of a project.

We will enhance our existing specification on site cleanliness and tidiness by codifying what exactly needs to be done, and such activities are made measurable for separate payment in the contract to reflect the contractor's effort. The objective of site cleanliness and tidiness will not only focus on the works areas themselves but also cover areas which the public may have access or visual contact to promote a neat and tidy image as a whole about construction sites in the eyes of the general public.

We will joint hands with Environmental Protection Department to draw up specification on environmental nuisance abatement measures on construction site such as: dust, fumes, noise, muddy runoff and wastewater.

We will enhance our waste management plan system, by specifying standards and targets for monitoring and control of waste management on construction sites.

We will review and improve our trip ticket system to ensure proper disposal of wastes.

## 綠化

我們一向重視綠化。我們明白廣植花草樹木能夠令人身心健康舒暢，並美化香港這個人煙稠密的地方。我們已制定政策，在進行公共工程的同時，安排栽種植物。我們又發出技術通告，公佈有關養護植物、保護林木和美化人造斜坡的政策。多年來，我們在推行工務計劃的同時，也竭力改善香港的城市景觀。



## GREENING

We have always attached great importance to greening. We recognize that trees and plants can offer psychological comfort and relief, and is vital to public health, visual amenity and aesthetic quality of a densely populated place like Hong Kong. We have established policies to take care about planting in public works. We have promulgated through the issue of Works Bureau Technical Circulars our policies covering vegetation maintenance, tree preservation, tree planting and improvement of aesthetic appearance of man-made slopes. Over the years, we have spared no effort in improving the cityscape of Hong Kong at the same time as we are implementing our public works programme.



## 2001 年取得的成果

我們已聯同其他決策局和部門，聯手檢討工務部門的綠化政策和保養樹木責任。

我們已要求轄下工務部門在維修斜坡時，好好照料斜坡上的樹木。

我們感激地鐵公司和九廣鐵路公司，同意在審核公共工程建議時，對於在鐵路保護區內栽種植物，予以從寬。

我們已向工務部門發出指示，作為一般政策，凡在技術上可行的，工程都應該考慮綠化。

工務部門在 2001 年，共種植了超過 400 萬棵樹。



## 2002 年的目標

我們會與工務部門一同探求更多在公共工程項目中進行綠化的機會。

對於要求各工務部門在其管轄範圍內，實施維護植物的明確新政策。我們會盡快完成檢討工作，並持續監察其落實，確保達到理想效果。

我們會繼續與其他決策局和非工務部門合作，為促成政府要把香港變得更為綠化的目標而努力。

## Policy Achievements in 2001

We, in cooperation with other bureaux and works departments, made a head start in the review of greening policy and maintenance responsibilities of works departments.

We had asked our works departments to take good care of the trees on the slopes under their responsibilities as they are maintaining the slopes.

We were grateful to have the agreement from MTR Corporation and the Kowloon Canton Railway Corporation that planting in railway protection areas can be given a sympathetic treatment by them when vetting public works proposals.

We promulgated to works departments a general policy that they should consider greening whenever it is technically feasible in their projects.

Works departments have planted over 4 million trees in year 2001.

## Objectives and Targets for 2002

We will explore with works departments further opportunities for greening in public works projects.

We will finalise the review on and continue to monitor the implementation of our new stated policy of maintenance of vegetation in areas managed by our works departments to ensure they can achieve the desired results.

We will continue our effort with other bureaux and non-works departments in furtherance of government's objective of making Hong Kong a greener city.

## 其他環保方面的努力

### 承建商管理

我們明白環保政策成功與否，最終是取決於承建商的環保表現。我們已採取多項措施，確保承建商遵守環境方面的要求。

我們正實施了一套承建商表現指標制度，讓工程組和投標委員會在考慮批出合約之前予以參考。這套指標以計分制為基礎，而環境表現是其中一個重要項目。

我們亦可透過認可名冊制度，管制承建商在環境方面的表現。

### 管制挖掘海床

在海床進行挖泥活動不但會摧毀存在於受挖海床的動物和植物，嚴重影響海洋生態，而且所引起的股流更會對海洋生物構成威脅。此外，挖掘海泥時可能會釋放出有毒物質，使之進入我們的食物鏈，而危及我們愛吃海鮮的老饕。我們認為此類工程應予減少及避免。



## OTHER ENVIRONMENTAL EFFORTS

### Contractor Management

We understand that contractor's environmental performance has an ultimate effect on the successful implementation of our environmental policy. We have installed some tools to ensure contractor's compliance with environmental requirements.

We have a 'contractor performance index' system which is an indicator to project teams and the tender boards when considering the award of contracts. The index is based on a scoring system for which environmental performance is one important aspect.

We also have control on contractor's environmental performance through the management of the Approved List.

### Control on Dredging

Dredging activities not only severely affects marine ecology by damaging the existing flora and fauna of the seabed dredged, but the plumes generated can endanger marine creatures. Besides, dredging of existing mud from the sea bed may cause the release and dispersion of toxic substances which may find their way into our food chain and endanger our sea food lovers. Such works should be avoided and curtailed.





## 2001 年的成果

我們已於2001年4月印發《承建商管理手冊》，把管制承建商表現的措施收緊。環境表現是重要的一環，此環可導致一個劣等的表現紀錄。

## 2002 年的目標

假如工務局認可名冊上的承建商經常觸犯與環境有關的法例，不論其工地是否屬公共工程，一經定罪，我們便會採取規管行動，暫停其投標資格。

我們會發出技術通告，限制公共工程挖掘海泥以保護水質。

我們會在推行建造設計管理試驗計劃時，把對環境友善的措施，納入設計階段的考慮範圍內。

## Policy Achievements in 2001

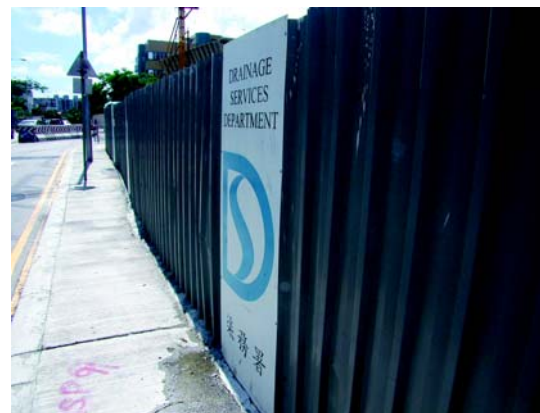
We issued in April 2001 a Contractor Management Handbook, whereby the control on performance on contractors was tightened. Environmental performance was an important aspect which can result in a poor performance record.

## Objectives and Targets for 2002

We are going to have regulatory action in the form of suspension from tendering against any contractor on Works Bureau's Approved List who has been convicted of environmental related offences repeatedly irrespective of whether the site is a public works project.

We will issue a Technical Circular to restrict marine mud dredging activities in public works to protect the water quality.

We will, as part of our exercise to trial implement the Construction Design Management, incorporate environment friendly features as part of the consideration at the design stage of our projects.

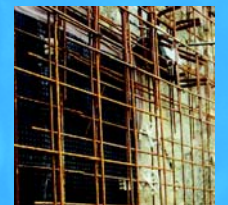
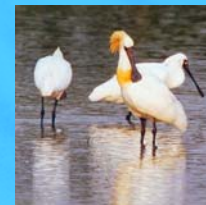




斜坡安全、供水事宜及防洪工程

SLOPE SAFETY, WATER SUPPLY AND FLOOD PREVENTION

3





## 主要的工程計劃

斜坡安全、供水事宜及防洪均在工務局的「主要工程計劃」之內。這些工作計劃緊密地連繫，對形成我們的環境，擔當重要的角色。我們認為這些主要工程計劃的項目必須以環保的方式進行。

## 斜坡安全

香港擁有多山的地形，再加上稠密的樓宇及基礎建設發展項目，形成54,000塊人造斜坡。

對於斜坡，我們主要的目標是透過採用最先進的土木工程技術，使其符合最高的斜坡安全標準。

工務局負責監督斜坡崩塌預防措施計劃，這是一個於2000年3月完成的5年計劃。工務局會繼續監督一個為期10年的延展計劃。整個斜坡崩塌預防措施計劃中，我們提供政策支援，並協助申請資源進行工程，修復本港不合規格的政府斜坡。在以往幾年間，我們採用一個有系統的挑選程序，識別高

風險斜坡，並將這些斜坡崩塌的危險，減少至低於1977年度斜坡崩塌數目的50%。我們的整體目標，是於2010年減少斜坡崩塌危險情況到至低於1977年度斜坡崩塌數25%。



## KEY PROGRAMME AREAS

Slope Safety, Water Supply and Flood Prevention fall within Works Bureau's "Key Programme Areas". The areas are inextricably linked as they all play a role in shaping our environment. We appreciate those projects concerning these key programme areas were undertaken in an environmentally responsible manner.

## SLOPE SAFETY

Hong Kong's hilly terrain coupled with dense building and infrastructure developments has resulted in some 54,000 man-made slopes.



Our key objective regarding slopes is to meet the highest possible standards of slope safety through the use of state-of-the-art geotechnical engineering technologies.

Works Bureau has overseen the Landslip Preventive Measures (LPM) Programme, a five-year programme completed in March 2000 and will continue to oversee a 10-year extension to the programme. Throughout the LPM programme we provided policy support and helped to bid for resources for the work, to upgrade substandard government slopes in Hong Kong. Through a systematic selection process, we have identified high risk slopes. We have over the years, reduced the landslide risk arising from these slopes to less than 50% of the level in 1977. Our overall target is to reduce this risk level to less than 25% of the 1977 level, by the year 2010.



## 工務局對本港斜坡綠化工作的影響

除了維持斜坡達致最高的安全標準外，我們會利用大部份時間、精力及資源，找出方法以便綠化更多斜坡及用園林藝術使之美化，將它們與四周環境融為一體，避免造成視覺影響。於2000/2001年度有更多斜坡被植物覆蓋，使我們的努力獲得了實現。綠化斜坡的工作是根據工務局改善斜坡外觀的政策進行，該政策要求所有涉及斜坡工程的部門，進行改善現有斜坡工程時，考慮美學及環保事宜。

我們於2000年9月出版以專業人士為對象的「人造斜坡及擋土牆的園藝處理及生物工程技術指引」後，我們計劃在2002年7月左右出版一本「美化人造斜坡及擋土牆的簡易指南」。這簡易指南會以淺白的方式撰寫給非專業人士及公眾使用，以求推動美化斜坡及擋土牆的工作。



## Works Bureau's Influences on Greening Hong Kong's Slopes

Apart from maintaining slopes to the highest standard of safety, a great deal of time, effort and resources is dedicated to making our slopes greener and aesthetically more pleasing, blending them with their surroundings and minimizing their visual impact. Our efforts have been realised throughout 2000/2001 with more and more slopes being covered with vegetation. The direction for this came from our policy on improving the appearance of slopes, which requires that all departments involved in slope works consider the aesthetics and the environment when carrying out improvement works on existing slopes.

Further to the publication of the 'Technical Guidelines on Landscape Treatment and Bioengineering for Man-made Slopes and Retaining Walls' in September 2000 for use by professionals, we will publish a 'Layman's Guide on Landscape Treatments for Man-made Slopes and Retaining Walls' by July 2002. This Layman's Guide will be a simple user-friendly guidance document for use by non-professionals and the general public, in order to further promote landscape treatment for slopes and retaining walls





## 2002 年的目標與指標

- 為將於 2002 年按防止山泥傾瀉計劃進行鞏固工程的斜坡（約 250 幅）進行美化及生物工程，避免破壞景觀。
- 在 2002 年 7 月或之前，制定“美化人造斜坡和檔土牆的簡易指南”。

作為經常工作，我們會繼續致力達成以下目標：

- 繼續採取適當的美化景觀措施，改善所有政府斜坡（包括新建或已經修葺者）的外觀。
- 作為斜坡維修審核的一部分，繼續審核政府斜坡工程對景觀的影響。
- 繼續在現有採用噴漿混凝土護面的斜坡上，進行栽種植物的試驗。
- 繼續在將會進行鞏固工程的斜坡上，進行栽種本土植物的試驗，以期提高植物覆蓋層的生態價值。

## Objectives And Targets For 2002

- To provide landscape treatment and bioengineering measures for all slopes to be upgraded (about 250) in 2002 under the LPM Programme in order to minimise the adverse visual impact.
- To produce a 'Layman's Guide on Landscape Treatments for Man-made slopes and Retaining Walls' by July 2002.

The following objectives will continue to be addressed as part of our routine works :

- To continue to improve slope appearance through the provision of appropriate landscape treatments to all government slopes, newly constructed or upgraded.
- To continue to audit the aesthetic aspect of government slope works, as part of the slope maintenance audit.
- To continue to conduct trials on the use of vegetation on existing shotcreted slope surfaces.
- To continue to conduct trials on the use of native vegetation species on slopes to be upgraded, for enhancing the ecological value of the slope vegetation cover.



## 供水事宜

在2001年，香港每日耗用食水達257萬立方米。就這方面而言，工務局的主要職責是確保供給香港市民的食水充足，可靠及優質。鑒於香港耗水量高，特區政府確有需要向廣東地區購買約達78%的原水。

為達成上述目標，我們聯同水務署，與廣東省當局保持緊密合作，並與水質事務諮詢委員會定期舉行會議。委員會成員包括不同界別的人士，他們在確保食水水質符合標準方面，均有莫大的貢獻。



## WATER SUPPLY

In 2001 Hong Kong's daily consumption of fresh water was 2.57 million cubic metres. The main task of Works Bureau is to ensure that the supply of water to the citizens of Hong Kong meets the demand and continues to be reliable and of good quality. With such great demand it is necessary for the SAR Government to buy about 78% of our raw water from the neighbouring Guangdong Region.

We achieve this by working together with Water Supplies Department, in maintaining a close working relationship with the Guangdong Authorities and by holding regular meetings with the Advisory Committee on the Quality of Water Supplies. The Committee comprises a wide representation of members from the community all of whom have greatly contributed towards the target of ensuring the quality of potable water.



## 確保供水水質符合標準

現時透過廣東省當局安排輸港的用水均來自東江。其實，安排東江水輸港殊不簡單，期間須經多番與廣東省當局磋商。工務局所派出的代表一直盡心竭力，確保各項保障東江水水質的環境管制措施得以制定，並獲廣東省當局採納。這些措施包括在廣東省嚴格執行管制污染的法規、在水質較佳的地點興建新的抽水站、設立生物硝化廠，以及清除深圳水庫的沉積物。實施上述措施後，香港用水的水質自 1999 年以來，明顯大有改善。

目前東江水經由露天的河道輸港，故容易受鄰近環境污染所影響。然而，為消除污染，在廣東省當局通力合作下，密封式輸水渠工程已於 2000 年 8 月展開。第一段密封式輸水渠按計劃會於 2003 年初建成，屆時輸港原水水質將可進一步改善。整項工程預計於 2003 年年底完成。

另一方面，我們亦會密切監察本地集水區的原水水質，以及供水設施工程的施工情況。舉例來說，我們會密切監察新房屋發展項目的供水服務，確保供水水質符合標準。我們亦會定期為水務設施的裝置、廠房及設備進行維修保養，確保供水基礎設施運作正常。



## Ensuring A Quality Water Supply

The water supplied in liaison with the Guangdong Authorities is sourced from the Dongjiang River. Obtaining water from Dongjiang is not a simple task as it seems and has indeed required a great deal of negotiations with the Guangdong Authorities. Representatives from Works Bureau have continued to work hard to ensure that environmental control measures are in place for the protection of Dongjiang water and adopted by the Guangdong Authorities. Controls include strict enforcement



of laws on pollution control within the Guangdong region, the construction of a new intake pumping station at a location of better water quality, the commissioning of a biological nitrification plant and the removal of sediment from the Shenzhen Reservoir. These initiatives have led to noticeable improvements in the quality of water in Hong Kong since 1999.

Dongjiang water is currently delivered through an open channel and is therefore susceptible to pollution from adjacent land uses. With the cooperation of the Guangdong Authorities, the construction of a closed aqueduct commenced in August 2000 to eliminate such pollution. The quality of raw water will be further improved when the first section of the aqueduct is commissioned in early 2003. The target completion date of the whole project is end of 2003.

In addition, we closely monitor the quality of raw water collected in the local catchment areas. We also monitor the implementation of water supply infrastructure projects. For example when new housing developments require a water supply we will monitor and ensure that this is achieved to the required standard. We will also carry out regular maintenance on waterworks installations, plants and equipment to ensure the proper functioning of the water supply infrastructure.

## 2002 年的目標與指標

- 與廣東省當局保持聯繫，以確保能準時建成密封式輸水渠，俾能及早發揮成效。
- 繼續與廣東省當局磋商，以期減少輸入過多的東江水，避免本港水塘出現滿溢的情況。
- 在 2002 年年中，更新木湖抽水站的原水水質數據及食水水質數據。
- 要求廣東省當局提供更多水質數據，以便公布周知。

## 節約食水

多年來，我們一直竭盡所能務求減少使用珍貴的食水。透過以下節約措施，我們在節省食水方面取得可觀成績：

- 使用海水沖廁 — 七成半以上人口獲海水供應作沖廁用途，因而可節省逾兩成的食水用量（約每年 2.2 億立方米）。2001 年，每天平均海水用量為 64 萬立方米；而食水沖廁的用量亦由一九九五年的 6 500 萬立方米減至 2001 年的 3 400 萬立方米。
- 在分配網絡實施主動測漏及水壓管理計劃 — 採用先進科技檢測及減少系統滲漏，從而令 2001 年每天所節省的食水約達 23 萬立方米。
- 採用獨立水錶並藉著累進式用水收費辦法，提倡節約用水。
- 盡量縮短處理水管滲漏及爆裂事故所需的回應時間，以減少食水流失量。
- 把主要濾水廠清潔濾水池的反沖水循環再用，以減低耗水量。

## Objectives And Targets For 2002

- To liaise with the Guangdong Authorities for the timely commissioning of the closed aqueduct so that the benefit of the project can be captured at an earlier stage.
- To continue to liaise with the Guangdong Authorities to reduce importing un-needed Dongjiang water to minimise overflow from local reservoirs.
- To update the water quality data of both raw water at Muk Wu Pumping Station and the treated water in mid 2002.
- To request the Guangdong Authorities to provide more water quality data for publication.

## Conservation of Fresh Water

We have been making every effort over the years to conserve precious fresh water. Considerable savings in fresh water have been achieved through the following conservation measures:

- Use of sea water for flushing - more than 75% of the population is supplied with sea water for flushing which saves more than 20% of fresh water consumption (saving about 220 million cubic metres annually). In 2001, the average daily consumption of sea water was 0.64 million cubic metres (mcm). And fresh water for flushing has been reduced from 65 mcm in 1995 to 34 mcm in 2001.
- Implementing proactive leak detection and pressure management programme in the distribution network - latest technology has been used to detect and reduce the system leakage and the daily saving in fresh water in 2001 was about 0.23 mcm.
- Use of individual metering and tiered tariff system (increasing block rate) to promote water conservation.
- Minimising the response time for attending leaks and bursts to reduce the amount of water loss.
- Recycling filter backwash water in major water treatment works to cut down water loss.



## 2002 年的目標與指標

隨著下列各項新措施的實施，我們預期來年會進一步節省食水：

- 推行長期的水管更換及修復計劃 — 在 20 年內耗資 100 億元，更換或修復約 3 050 公里長的水管；而首階段更換或修復 350 公里的水管工程已於 2000 年 12 月動工。
- 提倡使用低用水量的沖廁水箱和雙沖式水箱。

## 使用水冷式空調系統

工務局與其他決策局和有關部門於 2000 年 6 月推出試驗計劃，嘗試在本港多個地區使用水冷式空調系統。2001 年 6 月進行檢討後，我們決定把試驗計劃的範圍由 6 個地區增至 17 個地區。到目前為止，水務署共接獲 9 份申請，其中 8 份原則上已獲批准，涉及樓面面積約為 338 000 萬平方米，估計每年可節省大約 400 萬千瓦小時的電力。

我們亦同時委託了顧問公司就全港使用水冷式空調系統進行研究，以便制定長遠的政策。目前研究報告即將完成，我們會在下一年度的《環境報告》中報導研究的決定 / 建議。

## 2002 年的目標與指標

- 為本港在空調系統中使用食水冷卻制定長遠的政策。

## Objectives And Targets For 2002

With the implementation of the following new initiatives, further saving is expected in the coming years:

- Implementation of the long-term mains replacement and pipe rehabilitation programme - about 3050 km of mains will be replaced/rehabilitated at a cost of \$10 billion in 20 years and work on the first 350km of mains began in December 2000.
- Promotion of the use of low-flow flushing cistern and dual-flush cistern in toilets.

## Use of Water for Air Conditioning Systems

Works Bureau has worked with the relevant government bureaux and departments and introduced a pilot scheme for the trial use of water-cooled air conditioning systems in Hong Kong in June 2000. Subsequent to a review in June 2001, the covered areas under the pilot scheme were increased from 6 to 17 throughout the territory. Nine applications have so far been received and eight applications have been approved-in-principle by Water Supplies Department, covering a floor area of about 338,000 square metres. The estimated annual saving of electricity would be about 4 million KWh.

In parallel with the pilot scheme, the consultancy study report on the territory-wide implementation study for water-cooled air conditioning system for the formulation of the long-term policy on the use of water for air conditioning systems is being finalised and the decisions/recommendations of the study will be reported in our next Environmental Report.

## Objectives And Targets For 2002

- To formulate the long-term policy on the use of water for air conditioning systems in Hong Kong.



## 防洪工程

新界低窪地區有不少土地曾被用以養魚及種植稻米。現在，每逢雨季來臨，便會發生嚴重水浸。從現時的標準看來，昔日所建的排水系統只能應付鄉郊或近郊地區環境的需要。至於西九龍等市區地方，由於雨水排放系統已建成多年，現時多出現老化的情況，加上市區不斷擴展，導致舊有系統不敷應用，水浸亦時有發生。關於這方面，工務局負責統籌排水及防洪計劃的推行，冀能減少水災及對環境的影響。為使防洪設施達到世界級水平，並確保香港能持續發展，我們會檢討維修及改善全港的雨水排放系統。

### 改善環境的成效 / 措施

我們在2001年進行了多項改善工程。其中尤其重要的，是在梧桐河和雙魚河下游進行的河道治理工程。由於我們已完成多項排水及防洪工程，包括錦田河和深圳河的工程，以及為25條鄉村進行的19項防洪計劃，現時影響新界北部及西北部居民水浸問題已大大紓緩。

為使河道治理工程進行期間，周圍的景觀不致受到破壞，我們已制定清單和相關程序，確保進行排水及防洪工程時，會適當地顧及環境特點。

作為一項表現指標，我們已成功地將溝渠淤塞次數，由去年按年計每公里12.3宗，減至今年的每公里10.69宗。

我們已於2001年完成梧桐河下游及雙魚河下游的河道治理工程，藉以減少上水和河上鄉發生水浸的風險。

在未來幾年內，全面的排水及防洪工程會逐步完成。舉例來說，深圳河治理計劃第三期工程已於2001年年底展開，預計於2005年完成。至於錦田河，牛潭尾河和梧桐河餘下的河道治理工程，則會在2003年完成。現時西九龍的排水系統改善工程亦正在全速進行。此外，耗資約16億元的新的排水及防洪工程會於2002-03年度展開，以改善全港的排水系統。

## FLOOD PREVENTION

During the rainy season flooding is a significant problem in the low-lying areas of the New Territories where much of the land was once dedicated to fish farming and rice planting. By current standard, the drainage systems built in the olden days could only support a rural or semi-urban setting. In urban areas like West Kowloon, flooding can still occur because the stormwater drainage systems were built decades ago and are becoming inadequate due to aging and the continuous urban expansion. Works Bureau oversees the implementation of drainage and flood prevention programmes to minimize the flood risks and to mitigate the environmental impacts. To achieve world-class flood protection standard and to support sustainable development, we review, maintain and upgrade the stormwater drainage systems throughout Hong Kong.

### Environmental Improvement Achievements/Measures

Considerable amount of improvement works were implemented in 2001. Worth mentioning is the river training works at the lower reaches of Indus River and Beas River. Together with the already completed drainage and flood prevention projects including works at the Kam Tin River and Shenzhen River, as well as the 19 flood protection schemes for 25 villages, we have alleviated the flooding problem affecting residents in the North and Northwest New Territories.

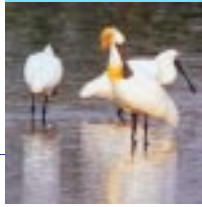
To achieve visual enhancement of river training works, we have formalized an inventory and procedures to ensure that environmental features will be included in drainage and flood protection works as appropriate.

As one of the performance indicators, we have successfully reduced the recurrent drain and sewer blockage incidents from 12.3 of last year down to 10.69 per km per year this year.

Lower Indus River and Lower Beas River training works were completed in 2001 to minimize the risk of flooding in Sheung Shui and Ho Sheung Heung.

In the next few years, extensive drainage and flood prevention projects will be progressively completed. For example, Stage III of the Shenzhen River Regulation project has started at end 2001 for completion by 2005. The remaining river training works at Kam Tin River, Ngau Tam Mei River and Indus River will be completed by 2003. The drainage upgrading works in West Kowloon are currently in full swing. In addition, new drainage and flood prevention projects costing about \$1.6 billion will start construction in 2002/03 to further improve the drainage systems throughout the territory.





## 2002 年的目標與指標

我們的總體目標是要落實排水及防洪工程，藉以避免發生水浸，保障當地居民的性命財產以及周圍的環境。具體目標包括確保新界和西九龍的排水系統改善工程（總值約為 160 億元）能準時完成。我們計劃在 2002 年內，再完成 5 項排水及防洪工程，藉以紓緩上水、錦田、牛潭尾及新田等地的水浸問題。

## 長期的努力

- 我們會繼續為河道及排水系統進行疏浚工程和清除淤塞物，確保水流暢通，水質更佳。
- 在排水系統改善工程中，我們會繼續鼓勵採用符合環保要求的設計，例如採用無坑敷管的技術，以減少工程對環境的影響。為確保香港能持續發展，我們會致力保護和維持本港的生態系統，並在工程設計上，盡可能保育天然資源。
- 我們會繼續支援環境保護署，揭發和拆去非法接駁到雨水排放系統的污水渠。
- 我們亦會繼續以栽種植被方式，鞏固排水道的土堤，以減少影響景觀。



## Objectives And Targets For 2002

Our overall objective is to implement drainage and flood prevention projects to minimize flooding and to provide protection to local inhabitants, property and environment. Specific objective involves the overseeing of the timely delivery of drainage improvement projects for the New Territories and West Kowloon (costing about \$16 billion). In 2002, we plan to complete 5 more drainage and flood prevention projects for alleviating the flooding problems in Sheung Shui, Kam Tin, Ngau Tam Mei and San Tin areas.



## Continuous Efforts

- We will continue to carry our desilting and removal of blockages in river channels and drainage systems to allow the smooth flow of water and to achieve better water quality.
- We will continue to promote the use of environmentally-friendly designs for drainage improvement projects as an ongoing exercise. This involves, for example, the use of trenchless technology for pipe-laying to mitigate environmental impacts. To achieve sustainable development, we endeavour to protect and preserve the natural ecosystems, and to maximize resource conservation in our design.
- We will continue to support EPD in uncovering and removal of illegal connection of waste water discharge into our stormwater drainage systems.
- We will continue to stabilize the embankments of drainage channels with vegetation planting or grasscrete in order to reduce the visual impact.

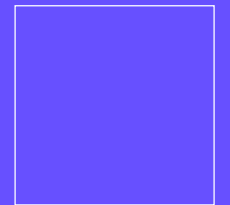
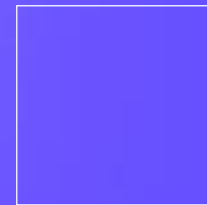
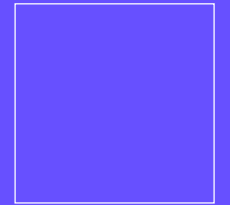




內部環境管理

IN-HOUSE ENVIRONMENTAL MANAGEMENT

4





## 辦公室環保工作

除了在執行各項主要工作範疇時，確保有關項目符合環保要求外，在日常辦公室管理工作方面，我們對於維持環保的辦公室環境，也不遺餘力。這方面的工作包括：

- 有效使用物料 / 資源 — 辦公室使用的紙張、一般文具、傢具；車輛等。
- 節約能源 — 辦公室日常運作所耗用的電力。
- 清新空氣 — 室內及室外的空氣質素。

為使員工享有環保的辦公室環境和善用資源，我們會繼續在局內奉行3-R原則，即“減少使用、重複使用及循環使用”。

## GREENING OFFICE ACTIVITIES

Apart from adopting an environmentally responsible attitude in our key programme areas, we are also mindful about our day-to-day office management and endeavour to sustain a green office environment, which includes:

- Efficient Use of Material/Resource - paper for office use, general stationery, furniture, vehicles etc.
- Saving of Energy - use of electricity for the daily office operation.
- Clean Air - quality of indoor and outdoor atmosphere.

In order to sustain a green office environment and to strive for continual improvement in the efficient use of resources, we continue to follow the 3-R principles 'Reduce, Reuse and Recycle' in the Bureau.



## 控制耗紙量

- 在2001年，局內已增加使用電子媒介溝通，包括利用電郵和電子布告板來發送通告及各項資料。
- 在檢討過內部的用紙分配模式後，我們決定引入中央用紙分配制度，進而加強監察各組別的用紙情況。與2000年比較，2001年的總耗紙量減少了14%。此外，我們正為於2002年建立內聯網而工作，以提供額外的電子媒介，在局內分發資料，進一步減少耗紙量。
- 我們亦已實施下列辦公室環保措施：
  - 盡量使用再造紙，並逐步取締非再造紙。在2001年，再造紙的耗用量已佔總耗紙量的90%；
  - 所有使用熱敏紙的傳真機已給較環保的普通紙傳真機取代。
  - 每部影印機旁均設置紙箱及文件盤，以便回收廢紙和盛載單面紙；以及
  - 鼓勵員工雙面使用紙張、循環使用信封、利用過時的信箋背部草擬文件，並盡量不要用傳真首頁。
- 我們會繼續推行各項辦公室環保措施和活動，更積極節省紙張。



## Managing Paper Consumption

- In the Year 2001, there has been increased use of electronic means of communication, including circulation of circulars and dissemination of information by email and e-bulletin boards.
- We had also reviewed the internal paper distribution practice and, as a result, introduced a centralized paper distribution system to further tighten up the monitoring of paper consumption of each Unit. In 2001, the total paper consumption has decreased by 14% when compared with that of the year 2000. Meanwhile, we are working on setting up an intranet scheduled to be launched in 2002 to provide an additional electronic means to disseminate information within the Bureau so as to further downsize our paper consumption.
- The following green office measures have also been practised:
  - Recycled paper was used wherever practicable and the use of non-recycled paper would eventually be phased out. In 2001, the percentage of recycled paper consumption against total paper consumption has reached 90%;
  - All thermal paper fax machines were replaced with more environmentally friendly plain paper machines;
  - Boxes and trays were placed beside each photocopier for collecting paper for recycling and paper used on one side only; and
  - Staff were encouraged to use paper on both sides, reuse envelopes and use the back of outdated letterhead for drafting, as well as not to use fax leader page as far as possible.
- We shall keep up with our green office measures and initiatives in order to save more paper in the future.



### 控制耗電量

- 去年，所有經翻新及新設置的辦公室，均已採用節能燈泡及光管。我們會繼續確保在工作間採用慳電的照明設備。
- 我們所採用的其他節能措施如下：
  - 在各個辦公地方裝置溫度計，以便隨時查核調定溫度(約24°C)；以及
  - 經常提醒員工離開辦公室時關掉電燈及空調。

### 環保的採購方式

- 除推行與用紙及用電有關的環保措施外，在採購文具及傢具方面，我們亦以“環保”產品取代“非環保”產品，供員工使用。比較兩類產品的使用量，環保產品所佔的比例亦逐漸增加。這些產品包括鉛芯筆、可替換筆芯的原子筆及以碎木製造的傢具等。我們通常只會派發鉛筆芯和原子筆芯給員工替換。
- 為加強這方面的工作，我們已決定在日後進行投標時，把環保條款，例如減少包裝物料，加入標書內。



### 清新空氣

- 為確保辦公室內空氣清新，我們會繼續定期清洗地毯和風機盤管。機電工程署在 2001 年為本局進行的室內空氣質素調查，結果顯示情況滿意。
- 此外，我們亦關注到周遭的空氣污染問題。我們會繼續提醒屬下司機，停車等候時關掉引擎，而轄下部門所有車輛則會繼續使用低硫量燃油。

### Managing Electricity Consumption

- Energy-saving light bulbs and fluorescent lights were used in all renovation and new projects undertaken in the past year. We will continue to ensure the use of energy-saving light equipment in our workplace.
- Other energy-saving measures adopted are:
  - Thermometers are placed in various office locations to regularly cross check the temperature setting (around 24°C); and
  - Staff are reminded regularly to switch off the lights and air-conditioning when they were not in office.



### Green Purchasing

- Apart from those environmentally friendly initiatives relating to paper and electricity consumption, we also procure “green” stationery in place of non-“green” ones for office use. There has been increased proportion in the use of green stationery, including clutch pencils, refillable ball pens and furniture made of chip board, to non-green ones. We also issued pencil leads and ball pen refills only to staff for daily use.
- As a further step, we have also decided to include green terms in our tenders, such as reduction of packaging, in our coming tendering exercises.

### Clean Air

- In order to ensure air cleanliness in the office, we continue to carry out cleaning of carpet and fan coils on regular basis. The results of the Indoor Air Quality survey conducted by the Electrical and Mechanical Services Department in 2001 were satisfactory.
- In addition to ensuring satisfactory air quality at our workplace, we also care about the problem of air pollution in our environment. We therefore continue to remind our motor drivers to turn off idle engines and to use low sulphur fuel for all our departmental vehicles.

## 提高員工環保意識

行政部一向有舉辦各類環保活動，來提高員工的環保意識。我們希望透過鼓勵員工採取更多辦公室環保措施，員工會對環境管理工作和善用資源的重要性有更深的認識。

為了促使員工注意辦公室節約能源的方法，我們每一季都會把“10項良好辦公室管理的要訣”以電郵方式分發員工細閱，並將之張貼在各樓層的布告板上，提醒他們時刻注意。

在2001年年底，工務局聯同規劃地政局合辦了一項以“環保與清潔”為主題的標語創作比賽，藉此進一步加強員工對環境管理及保持辦公室清潔的意識。這項比賽甄選了3項優勝作品，獲獎標語會印刷在來年分發給各員工的便條簿上，以加強員工的環保管理意識。

除了自己所舉辦的活動外，我們亦踴躍支持由其他政府部門及機構舉辦的環保活動，例如：

- “停車熄匙”運動
- “工作間不吸煙日”運動
- “綠色三級挑戰”運動

我們會繼續支持其他政府部門及機構所舉辦的環保活動，並會在日後推行更多新措施，使員工的環保意識日益提高。



## PROMOTION OF ENVIRONMENTAL AWARENESS AMONGST STAFF

The Administration Division strives to raise the environmental awareness among staff through introducing various environmental initiatives. By encouraging staff to adopt more green practices in the office, we hope they will become more and more aware of the green management issues and the importance of efficient use of resources.

To draw the staff's attention to the ways for energy conservation in office, the 'Ten Tips for Good Housekeeping' is re-circulated among our staff by email on quarterly basis and posted on the notice board of each floor as a constant reminder.

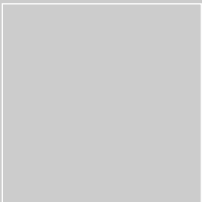
In late 2001, a "Green and Clean" Message Competition was jointly organized by Works Bureau and the Planning and Lands Bureau to further enhance staff awareness on green management and office cleanliness. A total of 3 winning messages were selected. These messages will be printed on memo pads which will be distributed to staff in the coming year to reinforce the green management concept.

Besides our own initiatives, we also supported green initiatives launched by other government departments and organizations, such as:

- "Wait Green, Engine Off" Campaign
- "No-smoking Day in the Workplace" Campaign
- Green Challenge III Campaign

We shall continue to support green events organized by other government departments and organizations and implement new initiatives to further enhance environmental awareness among our staff in the future.





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工務局  
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