



渠務署

Drainage Services Department

持續發展 共創未來

Collaboration for a Sustainable Future



可持續發展報告
Sustainability Report
2012-2013
摘要 Executive Summary

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關於本報告

香港特別行政區政府轄下的渠務署為了展現對積極推動可持續發展的承諾，本年度出版第一份可持續發展報告——「持續發展 共創未來」（「本報告」）。本報告闡述我們於2012年4月1日至2013年3月31日財政年度期間在經濟、環境及社會各方面的成就和表現。本報告是參照全球報告倡議組織的可持續發展報告G3.1指引編寫，報告的內容亦符合指引釋定的最高應用等級的要求——「A+」應用等級。

本報告摘要概述我們主要工作的成果和可持續發展方面的表現。如欲查看報告全文，請瀏覽本署網頁www.dsd.gov.hk。

About the Report

To demonstrate our commitment to a sustainable future, the Drainage Services Department (DSD) of the Hong Kong Special Administrative Region (HKSAR) published the first Sustainability Report "Collaboration for a Sustainable Future" (the Report). The Report presents our achievements and performance in the economic, environmental and social aspects during the fiscal year (i.e. 1 April 2012 to 31 March 2013). It is prepared in accordance with the Global Reporting Initiative's (GRI) G3.1 Sustainability Reporting Guidelines and fulfills the requirements of the highest Application Level, "A+" Application Level.

This executive summary of the Report provides you with an overview of our key achievements and sustainability performance. To view the full report, please visit our website at www.dsd.gov.hk.





渠務署署長
陳志超

Director of Drainage Services
CHAN Chi-chiu

署長序言 Director's Statement

歡迎閱覽渠務署首份《可持續發展報告》。本報告介紹本署於2012-13年度在污水收集和處理與防洪工作的主要成果和新項目，以及我們的工作展望。

Welcome to our first Sustainability Report. This report shares with you our major achievements and initiatives for 2012-13 and our future commitment to sewage collection and treatment as well as flood prevention.

「提供世界級的污水和雨水處理排放服務，以促進香港的可持續發展」，是我們的抱負。要實踐抱負，我們必須有效管理各項渠務工作，使污水處理與雨水排放服務能配合人口增長帶來的轉變，又同時減低對環境的影響。為促進可持續發展，我們積極應用先進科技並優化工作流程，以制訂能讓環境、持份者和市民同樣受惠的解決方案。

Our vision is “to provide world-class wastewater and stormwater drainage services enabling the sustainable development of Hong Kong”. To achieve this, we have to efficiently manage our operations, while meeting the ever-changing sewerage and stormwater drainage needs of an increasing population, and at the same time minimizing their environmental impact. Our commitment to sustainability drives us to improve our use of advanced technology and workflow in order to deliver solutions which benefit the environment, our stakeholders and the people of Hong Kong.

防洪 Flood Prevention

在2012-13年度，渠務署的防洪工作成績美滿。自港島西雨水排放隧道、荔枝角雨水排放隧道及荃灣雨水排放隧道相繼落成啟用，有效截取上游集水區的地面徑流，使港島北部、西九龍、荃灣和葵涌市區一帶的整體防洪水平大幅提升。此外，多個重點防洪工程亦有良好進展。由於沙田下禾輦村和梅窩嶺咀頭村多項防洪工程已於早年啟用，並取得設計的預期成效，該兩個地點亦已於年內從水浸黑點名單中剔除。

氣候變化會引致極端天氣情況和海平面上升，為防洪工作帶來種種挑戰。有鑑於此，我們會加強覆檢和調整各區雨水排放整體計劃，以制定可行的應對策略。其中一項具體方案是在日後進行的各項「雨水排放整體計劃檢討研究」中，探討採用具透水效能的多孔路面設計的可行性。

2012-13 is a fruitful year for the Drainage Services Department in the area of flood prevention. The commissioning of the Hong Kong West Drainage Tunnel, Lai Chi Kok Drainage Tunnel and Tsuen Wan Drainage Tunnel has substantially improved the overall flood protection level of the urban areas in northern Hong Kong Island, western Kowloon, Tsuen Wan and Kwai Chung districts as sufficient interception of surface runoff at uphill catchments is now in place. A number of flood prevention projects at strategic locations are also in good progress. During the year, we have eliminated two more flooding blackspots at Ha Wo Che Village in Sha Tin and Ling Tsui Tau Tsuen in Mui Wo after satisfying that the flood prevention measures commissioned in previous years are taking effect as designed.

Climate change, which brings extreme weather events and rising sea levels, poses challenges to our flood prevention work. We will, therefore, step up efforts to review and update our Drainage Master Plans so as to formulate viable strategies in response to the challenges. One of our initiatives in this regard is to study the feasibility of incorporating porous pavement design in our upcoming Drainage Master Plan Review Studies.

污水收集、處理及排放 Sewage Collection, Treatment and Disposal

污水處理服務方面，我們現正全力推行多個工程項目。自1990年代起，我們開展了淨化海港計劃，目的是改善維多利亞港的水質，以回應市民的期望。2001年啟用的第一期系統，把從九龍和港島東北部收集得的污水，輸送至昂船洲污水處理廠進行化學強化一級處理，可為450萬市民提供服務。維港水質自此大有改善，維港渡海泳亦得以自2011年起復辦。待第二期甲工程於2014-15年度竣工，整個淨化海港計劃將可為維港兩岸所有市民提供服務。此外，為改善鄉郊地區的衛生和水質情況，我們在北區、大埔、沙田、元朗、錦田、屯門、將軍澳、西貢及離島進行各項鄉村污水收集系統工程。至今，已有逾150條鄉村因新設公共污水收集系統而受惠，並有80多條鄉村正在進行相關工程。

On sewerage services, we are pressing ahead with our sewerage projects. Facing mounting expectations for improving the water quality of Victoria Harbour, we forged ahead with the Harbour Area Treatment Scheme (HATS) since 1990's. The commissioning of HATS Stage 1 in 2001, which conveys sewage collected from Kowloon and the northeastern part of Hong Kong Island to Stonecutters Island Sewage Treatment Works for chemically enhanced primary treatment, can serve a population of 4.5 million. The re-introduction of the Cross Harbour Swim since 2011 was made possible as the water quality of the Harbour has drastically improved. When the Stage 2A completes in 2014-15, HATS will then be able to serve the whole population on both sides of the Harbour. To improve the sanitary condition and water quality in the rural areas of Hong Kong, we have been carrying out village sewerage works in North District, Tai Po, Sha Tin, Yuen Long, Kam Tin, Tuen Mun, Tseung Kwan O, Sai Kung, and the outlying islands. Over 150 villages have benefitted from new public sewerage systems, while sewerage works in more than 80 villages are now underway.

可持續發展 Sustainable Development

不論是污水處理或是雨水排放服務，可持續發展一直以來都是本署考慮各項日常渠務工作的重要因素。我們亦明白，研究和發展，對邁向可持續發展起著關鍵作用。

Sustainability is a concern that has been prominent in all aspects of our daily operations, sewerage and stormwater drainage services alike. We well understand that research and development is one of the keys to sustainability.

優化污水處理過程是我們的主要研究和發展目標之一。自2007年起，我們與香港科技大學合作，在東涌就「硫酸鹽還原、自養反硝化及硝化一體化程序(SANI Process)」進行研究。初步結果顯示，這程序能大幅減少產生的污泥量，並減省污泥處理工序的成本和空間需求，更有助減排溫室氣體。自2013年4月起，我們會進一步在沙田污水處理廠開展大型試驗工作，建造工程將於2013年4月展開。

Optimising the sewage treatment process is one of our key initiatives in research and development. Since 2007, we have collaborated with the Hong Kong University of Science and Technology to study the "Sulphate reduction, Autotrophic denitrification and Nitrification Integrated (SANI) Process" in Tung Chung. Initial results have shown that sewage sludge, subsequent treatment costs and space requirements, as well as greenhouse gas emissions could be significantly reduced. We would start the construction work for further trials on the SANI Process in a larger scale at Shatin Sewage Treatment Works commencing in April 2013.

在節約資源方面，我們首度在九龍城兩個污水泵房試行雨水集蓄計劃，讓寶貴的水資源得到適當貯存和善加利用的機會。

On resources conservation, we have made the first attempt in rainwater harvesting at two of our sewage pumping stations in Kowloon City in order to facilitate collection and utilisation of our precious water resource appropriately.

至於減少碳排放方面，我們正積極實施各項節能措施並進行多項碳審計，以及使用可再生能源。在2012-13年度，我們成功達標，進一步減耗130萬度電，即大約相等於240個四人家庭一年的耗電量。

As for reduction of carbon emissions, we are actively implementing various energy saving measures, conducting carbon audits and using renewable energy. In 2012-13, we successfully met our target and further reduced the energy consumption by 1.3 million kilowatt-hours, which is equivalent to the consumption of approximately 240 four-member families in a year.

持份者的參與 Stakeholder Engagement

與公眾保持良好溝通，是以民為本服務的基礎。一直以來，我們透過不同渠道與相關持份者保持緊密聯繫，以收集他們對污水處理和雨水排放工程，以及維修保養工作的意見。年內，我們舉辦了多項公眾參與活動，以便就這些工程和研究找出有利市民和合作夥伴的方案，例如淨化海港計劃第二期甲、啓德河重建及修復工程、搬遷沙田污水處理廠往岩洞的研究等。

Proper communication with the public is the foundation of people-oriented services. We have all along maintained close liaison with relevant stakeholders via various channels to collect their views on our sewerage and stormwater drainage projects as well as maintenance works. During the year, various stakeholder engagement activities were arranged for our projects and studies, viz. HATS Stage 2A, Reconstruction and Rehabilitation of Kai Tak River, Relocation of Shatin Sewage Treatment Works to Caverns, etc. as we are eager to find solutions that are beneficial to the people whom we serve and work together.

愛護同事 Care of Staff

部門的工作取得成績，全賴同事群策群力。為加強同事的工作間安全，我們全力推行OHSAS 18001「職業健康及安全管理系統」，主動以有系統的模式為員工提供更佳保障。多得同事上下一心，本署於2012年12月成功取得OHSAS 18001認證。

Our achievements hinge on our staff. We pride ourselves on our commitment to implement the OHSAS 18001 Occupational Health and Safety Management System, which provides a systematic and proactive approach to enhance workplace safety for our staff. With the concerted efforts of our staff, we successfully obtained the certification of OHSAS 18001 in December 2012.

展望未來 Looking Forward

我們會繼續努力達致低碳效益，並採用最佳的環保作業方式，為市民締造更潔淨、更安全、更美好的生活環境。我們亦會竭盡所能，使本署規劃的解決方案都符合環保原則，達致未雨綢繆，促進可持續發展。

We will continue to strive for low-carbon efficiency and best environmental practices with a view to providing Hong Kong people with a cleaner, safer and better living environment. We will make sure our planned activities are contributing to environmentally-sound solutions that lead to a sustainable future.

希望本報告能為你提供有趣而實用的資訊。歡迎你填寫本報告完整版內的回應表格，並電郵至 enquiry@dsd.gov.hk 表達意見。

I hope you find this Sustainability Report informative and interesting. You are most welcome to let us know your views by completing and returning the feedback form in the full version of the Report to our email address: enquiry@dsd.gov.hk.

渠務署署長
陳志超

Director of Drainage Services
CHAN Chi-chiu



年度大事 重點輕描 The Year's Highlights

2012-13年度是渠務署豐收的一年。抱着專業熱誠、事事全力以赴、追求卓越的態度，我們的努力再次得到肯定，在本港及海外獲得多個獎項和殊榮。

The year of 2012-13 signifies success of our Department. Our professionalism, efforts and passion for excellence has repeatedly enabled us to receive local and international prizes and recognition.

獎項殊榮 Awards At a Glance

- 2011年香港環保卓越計劃榮獲公營機構及公用事業界別優異獎
- 2011 Hong Kong Awards for Environmental Excellence Certificate of Merit (Public Organisations and Utilities Sector)
- 高空綠化大獎2012政府項目組別銀獎及優異獎及規劃研究項目組別優異獎
- Skyrise Greenery Award 2012 - Silver Award and Merit Award (Government Projects Category) and Merit Award (Planning / Research Projects Category)
- 2011年公德地盤嘉許計劃
- Considerate Contractors Site Award Scheme 2011
- 2012年國際水協會項目創新大獎的東亞地區大獎（規劃組別）
- 2012 International Water Association Project Innovation Awards (East Asia Regional Awards) in Planning Category
- 2012年國際水協會項目創新大獎的全球榮譽大獎（應用研究組別）
- 2012 International Water Association Project Innovation Awards (Applied Research Category)
- 2011 Vision Awards年報大獎銀獎（政府機構組別）及2011年度中國地區最佳年報首25名
- 2011 Vision Awards Silver Award (Government Category) and Top 25 Chinese Annual Reports of 2011
- 2012年申訴專員嘉許獎計劃 — 公職人員獎
- Ombudsman's Award 2012 for Officers of Public Organisations
- 第23屆國際Galaxy Awards銀獎（政府機構年報）
- The 23rd Annual International Galaxy Awards – Silver Award (Annual Reports – Government)
- 香港園境師學會設計大獎2012設計/綠化項目組別優異獎及規劃與綠化研究組別優異獎
- Hong Kong Institute of Landscape Architects Design Awards 2012 Merit Award (Environmental Design/Greening Category) and Merit Award (Landscape Planning/Research Category)
- OHSAS 18001職業健康及安全管理系統認證
- Certification of OHSAS 18001 Occupational Health and Safety Management System
- 香港花卉展覽2013園林景點組別最佳設計金獎
- Hong Kong Flower Show 2013 Gold Award for Design Excellence (Landscape Display Category)

防洪

Flood Prevention

林村河上游、社山河及大埔河上游河道改善工程順利完竣

Completion for River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River



- 林村河上游、社山河及大埔河上游河道改善工程於2013年1月舉行啟用典禮，正式宣佈這些河道的防洪水平提升至可抵禦50年一遇的大雨
The commissioning ceremony of River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River was held in January 2013 which declared the rivers had attained a flood protection standard of 1 in 50 years



- 經河道治理工程後的社山河
The engineered She Shan River

港島西雨水排放隧道、荔枝角雨水排放隧道及荃灣雨水排放隧道啟用

Commissioning of Hong Kong West Drainage Tunnel, Lai Chi Kok Drainage Tunnel and Tsuen Wan Drainage Tunnel

為進一步提升本港整體的防洪能力，港島西、荔枝角及荃灣雨水排放隧道3項大型雨水排放隧道工程先後於2012年8月、2012年10月及2013年3月正式啟用。3條雨水排放隧道採用截取上游集水區雨水的方式，能有效地長遠保障下游市區，免受水浸威脅。

To further enhance Hong Kong's overall flood protection capability, we have commissioned three large-scale drainage tunnels including Hong Kong West Drainage Tunnel (HKWDT), Lai Chi Kok Drainage Tunnel (LCKDT) and Tsuen Wan Drainage Tunnel (TWDt) in August 2012, October 2012 and March 2013 respectively. By adopting the interception approach at uphill catchment, the drainage tunnels provide effective and long-term flood protection to the urban downstream areas.



- 荔枝角雨水排放隧道於2012年10月18日舉行啟用典禮，為紓緩九龍西北部水浸問題奠立重大里程碑
The commissioning ceremony of the LCKDT on 18 October 2012 declared the accomplishment of an engineering milestone to relieve the flooding problem in northwest Kowloon

消除水浸黑點再記兩功

我們推進防洪工作不遺餘力，隨著多個主要防洪工程計劃相繼完成，全港所有餘下的嚴重或區域性水浸黑點已於2010年全部消除。

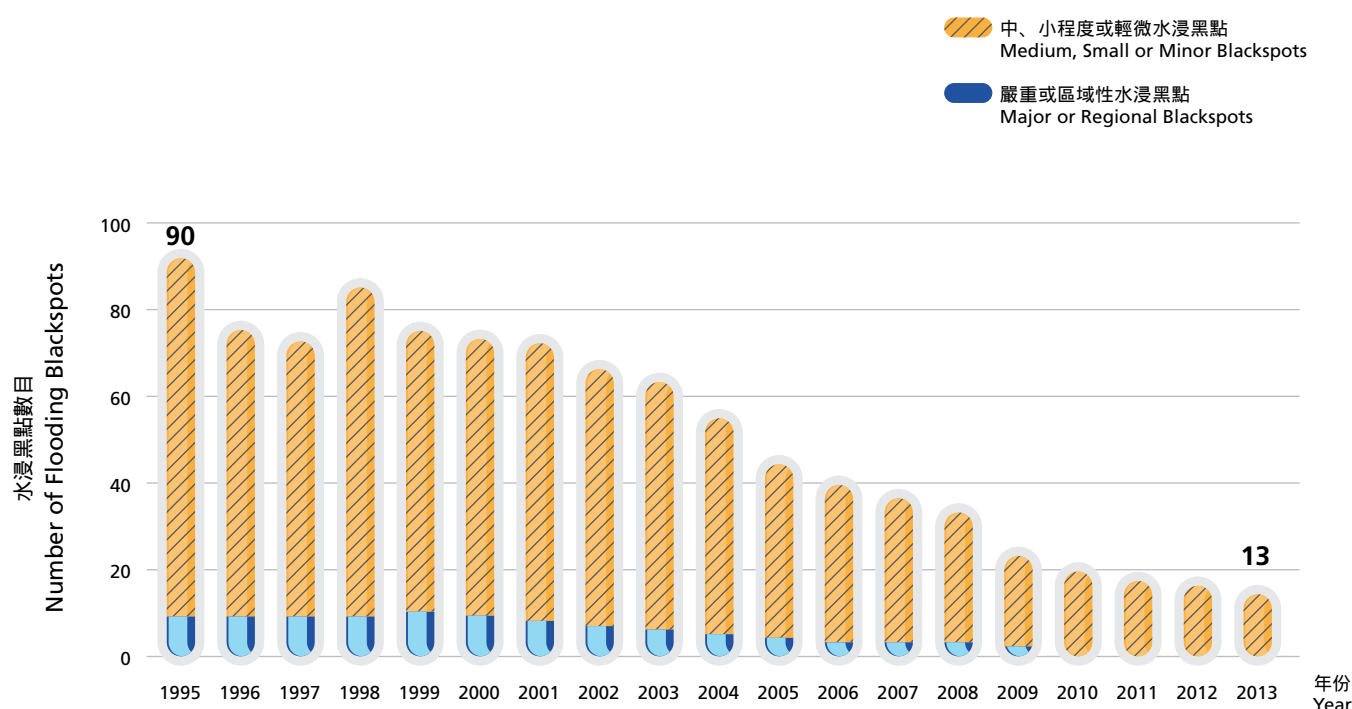
2012-13年，我們再接再厲，剔除了沙田下禾輦村和梅窩嶺咀頭村兩個水浸黑點。令全港水浸黑點由15個減至2013年的13個。

Removal of Two More Flooding Blackspots

With the progressive completion of our flood prevention projects, we have removed all the remaining major or regional flooding blackspots in Hong Kong in 2010.

In 2012-13, we have further eliminated two flooding blackspots at Ha Wo Che Village in Sha Tin and Ling Tsui Tau Tsuen in Mui Wo, reducing the number of blackspots from 15 to 13 in 2013.

水浸黑點總數的改變 Change in Total Number of Flooding Blackspots



污水收集、處理及排放 Sewage Collection, Treatment and Disposal

「淨化海港計劃」第二期甲工程最新進展

「淨化海港計劃」分兩期進行，工程的目的是通過收集和處理來自維多利亞海港兩岸的污水，改善維港的水質。「淨化海港計劃」第一期已於2001年12月啟用，目前計劃正進行第二期甲工程，其主要工程預計於2014年年底完成。

「淨化海港計劃」第二期甲工程共分3部份，包括昂船洲污水處理廠改善工程、8間現有基本污水處理廠改善工程及污水輸送系統建造工程。年內，已批出合約的各項工程均進展順利。

Latest development of Harbour Area Treatment Scheme Stage 2A

The Harbour Area Treatment Scheme (HATS), consisting of two stages, aims to improve the water quality of Victoria Harbour by intercepting and treating sewage generated from both sides of the Harbour. HATS Stage 1 was commissioned in December 2001 and the major engineering works of Stage 2A, now in progress, is targeted for completion in end 2014.

HATS Stage 2A comprises three parts, namely, upgrading works for the Stonecutters Island Sewage Treatment Works (SCISTW), upgrading works for eight preliminary treatment works and construction of the sewage conveyance system. During the year, the works under the awarded contracts are progressing smoothly.

第一部份：昂船洲污水處理廠改善工程

昂船洲污水處理廠的主要改善工程，包括在現有的沉澱池加建上蓋和安裝辟味設施及新主泵房的連接隧道及隔膜牆建造工程已分別於2012年6月及7月相繼完成。其他主要改善工程包括建造一所新主泵房和污泥脫水設施現正全速進行。



- 安裝兩台辟味裝置及覆蓋沉澱池的工程已於2012年6月完成，並於2012年9月順利通過測試並啟用
The two deodorisation units and covers for the sedimentation tanks were completed in June 2012, and testing and commissioning was completed successfully in September 2012

第二部份：8間現有基本污水處理廠改善工程

工程涵蓋改善橫跨港島北岸及西南岸的北角、灣仔東、中環、沙灣、數碼港、華富、香港仔及鴨脷洲的8間基本污水處理廠。所有已批出合約的工程均進展理想。

第三部份：污水輸送系統建造工程

淨化海港計劃第二期工程將會收集和處理餘下源自港島北部及西南部地區的污水，並把收集所得的污水經由全長約21公里、深度介乎海平面以下70米至160米之間的深層污水隧道，輸送至昂船洲污水處理廠。

年內，我們繼續利用鑽爆方法在北角、灣仔東、沙灣、數碼港、香港仔、西營盤及昂船洲工地鑽挖深層隧道。與此同時，位於華富工地的豎井挖建工程亦正在進行。

- 工程人員繼續以鑽爆方法挖鑽隧道
Excavation of tunnels by drill-and-blast method is on-going

Part 1: Upgrading Works for Stonecutters Island Sewage Treatment Works

The major upgrading works at SCISTW, including the provision of covers and deodorisation facilities to the existing sedimentation tanks and the construction of interconnection tunnel and diaphragm wall for the new main pumping station were completed in June and July 2012 respectively. Other major upgrading works, including the construction of a new main pumping station and sludge dewatering facilities are now in full swing.

Part 2: Upgrading Works for Eight Preliminary Treatment Works

This includes the upgrading of the eight preliminary treatment works (PTW) around the northern and southwestern shore of Hong Kong Island at North Point, Wan Chai East, Central, Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau. All works under the awarded contracts are progressing satisfactorily.

Part 3: Construction of the Sewage Conveyance System

Under HATS Stage 2A, the remaining sewage generated from Hong Kong Island's northern and southwestern regions will be collected and conveyed to SCISTW via a total of 21 kilometres of deep tunnels with depths varying from 70 metres to 160 metres below sea level.

During the year, there has been ongoing deep tunnel excavation adopting drill-and-blast method at North Point, Wan Chai East, Sandy Bay, Cyberport, Aberdeen, Sai Ying Pun and Stonecutters Island sites. Excavation of the vertical shaft also continues at the Wah Fu site.



管治方針 Governance Approach

渠務署於1989年9月成立，為香港特別行政區政府發展局轄下9個部門之一，統籌本港污水處理及防洪這兩項核心服務。

Established in September 1989, DSD is one of the nine departments under the Development Bureau of the Government of the Hong Kong Special Administrative Region to provide two core services, namely sewage treatment and flood prevention in Hong Kong.

我們的抱負、使命和信念 Our Vision, Mission and Values

抱負 Our Vision

提供世界級的污水和雨水處理排放服務，以促進香港的可持續發展

To provide world-class wastewater and stormwater drainage services enabling the sustainable development of Hong Kong

使命 Our Mission

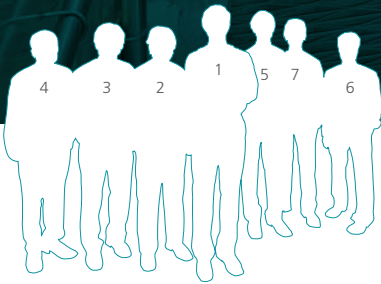
- 以具經濟效益和合乎環保的方式改善服務
- 致力關懷員工，營造安全、和諧及身心健康的工作環境，培育員工的發展和創新思維
- 強化與社區、業界和各地相關機構的關係
- Improving drainage services in a cost-effective and environmentally responsible manner
- Enhancing a caring, harmonious, safe and healthy work environment that fosters staff development and a mindset for change
- Strengthening relationships with community, industry and worldwide counterparts

信念 Our Values

- 以客為本
- 優質服務
- 勇於承擔
- 群策群力
- Customer Satisfaction
- Quality
- Commitment
- Teamwork

渠務署高層管理人員 DSD Senior Management

- | | |
|----------------------|---------------------------------------------------------|
| 署長 Director | 助理署長/操作維修 Assistant Director/Operations and Maintenance |
| 1. 陳志超 CHAN Chi-chiu | 3. 麥嘉為 MAK Ka-wai |
| 副署長 Deputy Director | 助理署長/污水處理服務 Assistant Director/Sewage Services |
| 2. 徐偉 TSUI Wai | 4. 陳柏強 CHAN Pak-keung |
| | 助理署長/機電工程 Assistant Director/Electrical and Mechanical |
| | 5. 余少權 SHE Siu-kuen |
| | 助理署長/設計拓展 Assistant Director/Projects and Development |
| | 6. 鄭鴻亮 CHENG Hung-leung |
| | 主任秘書 Departmental Secretary |
| | 7. 黃球年 WONG Kau-nin |



管理方針 Management Approach

我們矢志不斷提升品質管控、環境管理和職安健多方面的可持續發展績效，特此推行符合國際認證 ISO 9001品質管理系統、ISO 14001環境管理系統及OHSAS 18001職業健康及安全管理系統國際標準的綜合管理系統(IMS)管理內部營運事務。

To continuously improve our sustainability performance over quality control, environmental management as well as occupational health and safety aspects, we have implemented an Integrated Management System (IMS) for internal operation in accordance with the ISO 9001 Quality Management System, ISO 14001 Environmental Management System and OHSAS 18001 Occupational Health and Safety Management System international standards.



策略性規劃

為臻達可持續發展的重大目標，我們制訂了橫跨2011年至2015年的「五年實施計劃」，擬定了一系列倡議措施，承輔渠務署的中至長期發展。截至2013年5月底，我們已完成接近一半於「五年實施計劃」倡議合共90項的工作，並正積極推展其餘工作。

Strategic Planning

In the pursuit of sustainable development, we launched a 5-year Implementation Plan for the period of 2011-2015. The Plan includes a group of initiatives that are considered important for our medium to long term development. As at the end of May 2013, we had completed almost half of the 90 detailed tasks under the initiatives laid down in the Implementation Plan while working on the rest.



渠務署主要職責 Our Core Responsibilities

我們竭力提供可靠專業的防洪及污水處理服務，為安居於香港這個世界級都會的逾700萬名市民創造更優越的生活條件。

To enhance the quality of living in Hong Kong, a world-class metropolitan and home to more than seven million people, we devote ourselves to providing reliable and professional services of flood prevention and sewage treatment.

防洪的概要 Overview of Flood Prevention

為保障廣大市民免受水浸威脅，我們在過去推行了一系列防洪工程，包括河道治理工程、鄉村防洪計劃、蓄洪計劃、雨水排放隧道等，以提高防洪水平及減低各區的水浸風險。為確保雨水排放系統按照設計運作暢順，我們定期巡查及進行預防性維修保養工作。此外，我們亦設有「緊急事故及暴風雨應變組織」(ESDO)，全年專責處理緊急事故及水浸問題。

我們現時正分階段檢討各區域的雨水排放整體計劃研究，並制訂改善雨水排放系統的策略，以應付本港的急速發展及不斷變化的雨水排放需要。首先進行的元朗及北區雨水排放整體計劃檢討研究已於2011年完成。我們亦於2012年展開西九龍及東九龍的雨水排放整體計劃檢討研究，預計於2014年完成。此外，大埔、沙田及西貢的雨水排放整體計劃檢討研究亦已於2013年開始，預計於2015年完成。

為進一步提升香港的防洪水平，我們現正進行多項防洪工程，主要工程包括跑馬地地下蓄洪計劃、啟德河上游改善工程，以及治理深圳河第四期工程（蓮塘/香園圍段）。

To protect the general public against flooding, we have implemented a series of flood prevention projects, including river training works, village flood protection scheme, stormwater storage scheme and drainage tunnels, to enhance flood protection level and reduce flooding risks of different districts. Our Department has also been carrying out routine inspection and regular preventive maintenance works to the stormwater drainage facilities to ensuring them functioning as designed. In addition, we have also established an “Emergency and Storm Damage Organisation” (ESDO) to handle emergency and flooding problems all year round.

Our Department is now conducting Drainage Master Plan (DMP) Review Studies for different regions in phases and formulating drainage improvement strategies to cope with the city's rapid development and changing drainage needs. The first review study for DMPs in Yuen Long and North District was completed in 2011. We also embarked on the review studies for DMPs in West Kowloon and East Kowloon in 2012 for completion in 2014 and started the review studies for DMPs in Tai Po, Sha Tin and Sai Kung in 2013 for completion in 2015.

To further enhance the flood protection level of Hong Kong, we are implementing major flood prevention works including Happy Valley Underground Stormwater Storage Scheme, Kai Tak River Upstream Improvement Works and Regulation of Shenzhen River Stage IV (Liantang-Heung Yuen Wai Section).



- 4條雨水排放隧道啟用後，大幅減少流入下游市區的地面徑流，紓緩地區的水浸風險
The commissioning of the four drainage tunnels has significantly reduced the surface runoff flowing into the downstream urban areas and hence alleviated the flooding risks of the areas

污水收集、處理和排放的概要 Overview of Sewage Collection, Treatment and Disposal

為收集全港各區的污水，我們建立了一個龐大的污水系統網絡，其總長度為1,683公里，約相等於香港與山東濟南市之間的距離。我們這個污水收集網絡現正為全港93%的人口提供服務。

現時，我們正運作292所污水處理設施，當中包括68所污水處理廠和224所污水泵房，每日平均處理從污水收集網絡收集到的約2.74萬立方米污水。

For the collection of sewage from the territory, we have developed a huge sewerage network with a total length of 1,683 kilometres, which is almost equivalent to the distance from Hong Kong to Jinan, Shandong. Our sewerage system is serving 93 per cent of the population in Hong Kong.

At present, we are operating 292 sewage treatment facilities, including 68 sewage treatment works (STWs) and 224 sewage pumping stations. We treat about 2.74 million cubic metres of sewage collected from our sewerage network every day.

污水處理設施及污水收集系統網絡概要 Summary of Sewage Treatment Facilities and Sewerage Network	2009-10	2010-11	2011-12	2012-13
年度污水總處理量(百萬立方米) Annual sewage treatment volume (million m ³)	979	979	981	1,001
公共污水收集網絡覆蓋(佔人口百份率) Coverage of public sewerage (population percentage)	93%	93%	93%	93%
污水收集網絡總長度(公里) Total length of sewerage network (km)	1,622	1,637	1,647	1,683
污水處理設施總數 Total no. of sewage treatment facilities	277	284	287	292



2012-13年度污水處理廠位置圖

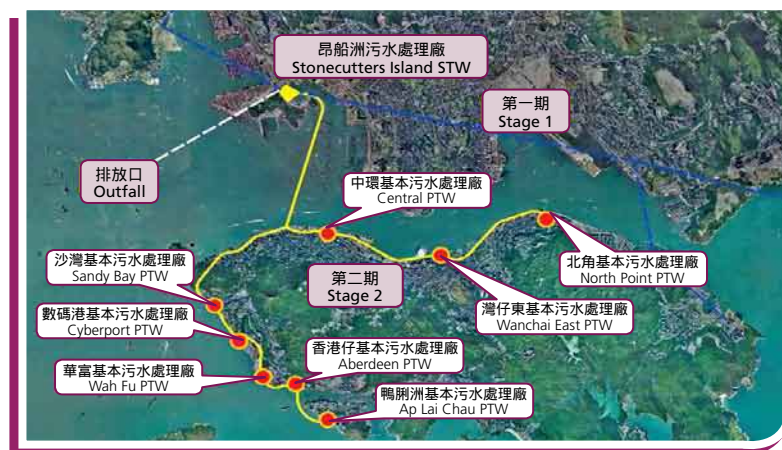
Location Map of Sewage Treatment Works in 2012-13

全面的樣本採集計劃能幫助測量污染物負荷和監察各項處理設施的處理效率，以確保排放水符合排放牌照的要求，亦能提供準確的水質數據。在2012-13年度，化驗室的測試數量大約為235,870個。有關主要污水處理廠的排放水水質分析結果，可瀏覽我們的網頁(www.dsd.gov.hk)。

為促進香港的可持續發展，我們繼續擴大污水收集系統的覆蓋範圍和改善污水處理設施，主要工程包括淨化海港計劃第二期甲、搬遷沙田污水處理廠往岩洞的可行性研究、石湖墟污水處理廠擴建工程，以及擴建鄉村公共污水收集系統。

A comprehensive sampling scheme is in place to provide pollutant loading and monitoring of treatment efficiencies at various treatment units. In 2012-13, the total number of analyses carried out by our laboratories was about 235,870. The analytical results of the effluent quality of major sewage treatment works can be found in our website (www.dsd.gov.hk).

To improve the sewerage coverage and treatment facilities helping the sustainable development of Hong Kong, we commenced several major projects such as Harbour Area Treatment Scheme (HATS) Stage 2A, feasibility study on relocation of Shatin STW to caverns, further expansion of Shek Wu Hui STW and extension of public village sewerage.



● 淨化海港計劃第二期甲概覽
Overview of HATS Stage 2A



● 搬遷沙田污水處理廠的研究範圍
Study area for Shatin STW relocation



環境管理 Managing the Environment

我們和合作夥伴承諾攜手共同努力實施各種環保措施，創造更環保、更可持續發展的環境。

We and our working partners commit to putting concerted efforts in implementing a variety of green initiatives to achieve a greener and more sustainable environment.

綠化與生態保育 Greening and Conserving Ecology

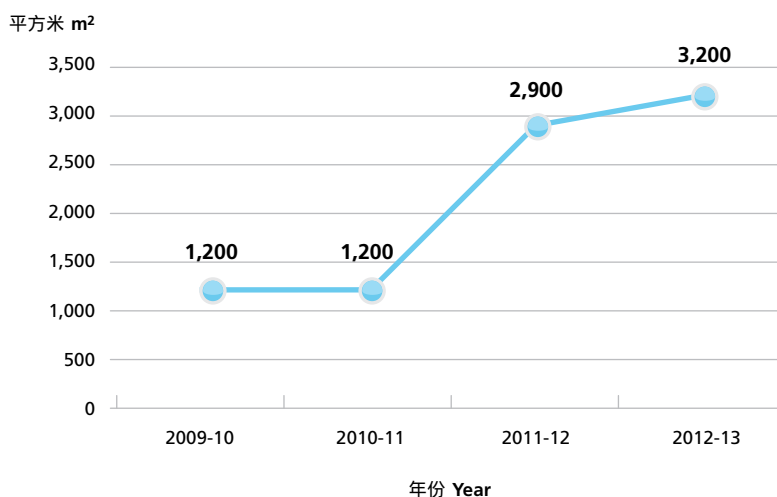
渠務署設施的綠化工作

在2012-13年度，本署繼續在各工程項目積極進行綠化工作，當中包括在新項目及現有設施加入綠化天臺。年內，我們共種植了超過3,300棵喬木和56萬棵灌木，並增設3,200平方米的綠化天臺。

Overall Greening Works in DSD Facilities

In 2012-13, our Department continued to make all efforts in carrying out greening work in various projects, including the incorporation of green roofs in new projects and existing facilities. During the year, we planted more than 3,300 trees and 560,000 shrubs, and provided an additional 3,200 square metres of green roofs in various facilities.

增設的綠化天臺面積
Area of Green Roof Added



● 沙田污水處理廠的綠化天臺
Green roof at Shatin Sewage Treatment Works (STW)

「淨化海港計劃」二期甲的昂船洲污水處理廠綠化及美化工程

Upcoming Greening and Beautification Works in Stonecutters Island Sewage Treatment Works under Harbour Area Treatment Scheme Stage 2A

昂船洲污水處理廠位於西九龍當眼位置，從北面的荔枝角和東面的大角咀高樓大廈，可俯瞰污水處理廠的面貌，西南面則有植被豐茂的綠林作屏障。為改善污水處理廠的視覺景觀，我們已展開以下的環境改善工程。

Stonecutters Island Sewage Treatment Works (SCISTW) is in a prominent location close to western Kowloon. It is overlooked by the public from the high rise developments around Lai Chi Kok and Tai Kok Tsui from its North and East. The Southwest of the site is screened by a lushly vegetated woodland. Environmental improvement works have been introduced to reduce the visual impact of the site as follows.

- 立面設計
Elevation treatments
- 綠化道路兩旁及天臺，加強綠化效果
Soft landscaping along site roads and roofs to strengthen the greening effect
- 以不同顏色及圖案覆蓋沉澱池
Covering of the sedimentation tanks with randomly coloured pattern
- 進行綠色建築環境評估認證(BEAM Plus)評核
Carrying out BEAM (Building Environmental Assessment Method) Plus assessment



水 水 水 水 水

- 立面設計3個特點包括利用仿木材覆蓋板牆、綠化道路兩旁及天臺及利用3種不同顏色仿效中國象形文字「水」的組合式鑲板以改善視覺感觀

The elevation treatment consists of three main features, namely synthetic timber cladding, green vegetation at ground and roof levels, and a signature series of tricolor render modular panels reflecting the ancient Chinese pictogram for water, which improve the appearance of the buildings

- 為沉澱池安裝不同色彩的密封式玻璃纖維強化塑膠蓋面，這樣不但能提升視覺效果，同時亦能有效控制污水處理過程中所產生的氣味

The sedimentation tanks have been covered with a random pattern of multi-coloured units which enhances the appearance of the tanks and forms part of the odour control system



大埔的綠化工程及生態保育措施

Greening Works and Ecological Conservation Measures at Tai Po

於大埔區的雨水排放改善工程不單紓緩區內的水浸風險，同時亦在區內進行具價值性的綠化工作。為了保育原有河道的生態價值，我們的工程師所設計的雨水排放設施均注入以下所列舉的不同環保元素。

The drainage improvement works at Tai Po not only alleviate the local flooding risk but also make valuable contribution to the local greening efforts. To preserve the ecological values of existing rivers, our engineers have integrated various environmentally friendly elements into our drainage facilities, which are outlined below.

- 模仿原有河道特徵
Simulation of Existing River Characteristics
- 保留原有河道的基底
Retaining the Existing River Bed
- 河岸綠化
Planting along River Channel
- 生態保育工作
Protection of Existing Ecological System



- 河道堤岸兩旁均鋪設石籠或混凝土草格，模仿原有河道環境
The banks of the widened rivers were paved with rockfill mattresses/gabion units or grasscrete aiming to simulate the riparian environment in existing rivers



- 在河床內放置不規則的石塊和卵石
Rip-rap (boulders and cobbles) laid at the channel base



- 河岸兩旁廣植經挑選的樹木
Selected plant species cultivated along trained river channel



- 於河道改善工程進行前，在河道捕捉珍貴的淡水兩棲類動物，並在工程範圍以外的上游河道放生
Capturing valuable freshwater amphibian species before commencement of river improvement works and releasing them at the upstream of the construction site

能源管理及排放控制

Energy Management and Emission Control

進行碳審計

我們在2012年首次在大埔污水處理廠和昂船洲污水處理廠進行碳審計。年內，我們繼續在沙田污水處理廠和石湖墟污水處理廠進行碳審計，以更好地管理我們的碳足跡。

展望未來，渠務署會為更多污水處理廠和建造工程進行碳審計，並採取碳減排措施，以減少我們的碳足跡，冀能用最環保的方法為市民提供優質的雨水排放及污水收集和處理服務。

採用電動車

為支持新能源技術的發展及香港的可持續發展，我們把握每個機會推廣使用電動車。由於電動車是以電池驅動而不涉及汽油燃燒過程，其最大優點是完全不會排放任何廢氣，大大舒緩路面空氣污染問題。目前，我們正在使用合共8輛電動車。我們累積了應用電動車的經驗後，會在各工程項目中推廣其應用。

◆ 在沙田污水處理廠內的電動車
Electric vehicle in Shatin STW



Conducting Carbon Audit

We conducted the first carbon audits for Tai Po STW and Stonecutters Island STW in 2012. We continued to conduct carbon audits for Shatin STW and Shek Wu Hui STW during the year to better manage our carbon footprint.

Looking forward, DSD will conduct carbon audits and adopt carbon emission reduction measures at more STWs and construction works with a view to reducing DSD's carbon footprint, making it more environmentally friendly while also providing high quality drainage and sewage treatment services to the public.

Use of Electric Vehicle

To support the latest development of green transportation and sustainable development of Hong Kong, we have taken every opportunity to promote the use of electric vehicle (EV). As EV is powered by batteries without involving any combustion process, its greatest advantage is producing zero emissions and helping improve roadside air quality in Hong Kong. At present, there are eight EVs in our fleet. With more experience accumulated in the application of EVs, we target to promote a wider use of EVs in our projects.

實施多項節能措施

在過去5年，我們成功節省了超過1,100萬度電。我們採取了各項措施大幅減少能源使用，當中包括優化污水處理流程；在各污水處理廠採用熱電聯供設施；將各廠內的T8光管與戶外照明燈分別更換為T5光管和發光二極管燈；以及我們的處理設施內使用高效率的水泵電動機。在2012-13年度，最大型的節能項目是沙田污水處理廠的污泥混合沉澱與污泥處理優化程序，以及在石湖墟污水處理廠採用生物氣供給熱電聯供設施進行操作。

使用可再生能源

此外，本署轄下各類主要設施，例如元朗污水處理廠、石湖墟污水處理廠、沙灣基本污水處理廠、昂船洲污水處理廠等，均實施採用大規模的獨立或接駁電網太陽能光伏系統，為廠內設備供電。我們準備在未來兩年於另外5所污水處理設施安裝總發電量為39千瓦的光伏板。

Implementing Various Energy Saving Measures

We have managed to save more than 11 million kilowatt-hour (kWh) electricity over the last five years. This is achieved with the implementation of measures including the optimisation of sewage treatment processes, the use of combined heat and power (CHP) plants at various sewage treatment works, the replacing of T8 fluorescent lamps and outdoor lights with T5 lamps and LED respectively at various plants, as well as the use of high-efficiency pump motors in our treatment facilities. The largest contributors to energy saving in 2012-13 were the co-settling and optimisation of sludge treatment processes at Shatin STW and the utilisation of biogas for the CHP plants at Shek Wu Hui STW.

Use of Renewable Energy

In addition, we have also implemented different large-scale stand alone or grid-connected photovoltaic (PV) systems supplying electricity to part of the equipment at our various major facilities, e.g. Yuen Long STW, Shek Wu Hui STW, Sandy Bay PTW, Stonecutters Islands STW, etc. In the coming two years, we are going to install PV panels in five other sewage treatment facilities with a total capacity of 39 kW.

我們留意到污水處理過程中所產生的污泥，在厭氧消化過程中形成的生物氣是一種可再生能源，因此，過去10年，我們均在探討如何更有效利用所產生的生物氣體，包括在我們的污水廠內安裝熱電聯供發電機和微型渦輪。我們正在沙田和大埔污水處理廠內安裝新的熱電聯供發電機，而在元朗污水處理廠則安裝微型渦輪。加上最近在大埔污水處理廠和石湖墟污水處理廠安裝的熱電聯供發電機，我們預期於2013年可以充分利用從污水處理所產生的生物氣體。

Taking note that biogas from anaerobic digestion of sludge generated from sewage treatment is a renewable energy source, we looked into a better way to utilise the biogas generated including installation of combined heat and power (CHP) generators and Micro-Turbine in our plants in the past decade. We are installing new CHP generators in Shatin and Tai Po STWs, and Micro-Turbine in Yuen Long STW. Together with other recently installed CHP generators at Tai Po STW and at Shek Wu Hui STW, we foresee a full utilisation of all biogas generated from our sewage treatment works in 2013.



● 在污水處理設施安裝太陽能光伏板
Use of photovoltaic solar panels in sewage treatment facilities



● 由雨水回用系統供水的污水泵房的水景設施
Water Feature at SPS with water supplied by Rainwater Harvesting System

節約資源 Resources Conservation

鋪設具透水效能的多孔路面及安裝雨水回用系統

我們深明水資源彌足珍貴，因此在實踐可持續發展的過程中會充分善用水資源，在轄下設施和工程項目採用最適切的節約用水措施。例如在2012-13年度，九龍城兩個污水泵房便鋪設了具透水效能的多孔路面及安裝雨水回用系統，藉此擴大綠化面積和節約灌溉用水。

Installation of porous pavement and rainwater harvesting system

We understand that water is one of the most valuable resources and to make the best use of water resources in the pursuit of our sustainable development, we adopted the most appropriate water conservation measures in our facilities and projects. For example, porous pavement and rainwater harvesting system were installed in 2012-13 at the two sewage pumping stations (SPSs) in Kowloon City which enable extensive green coverage and saving of water for irrigation.

使用環保物料/產品

此外，我們於日常營運採用多種環保物料和產品，包括：

- 回收碎玻璃製成再造玻璃磚及行人路磚、渠管墊料、地基墊層混凝土原料和多孔排水物料；
- 再造水；
- 合成沙井蓋、合成進水渠蓋(兩者均設於污水處理廠及泵房的非車輛通道/區域)及聚氯乙烯稀地台物料，特別是含回收再造物料的產品；及
- 回收再造木材。

Use of Green Materials/ Products

Besides, we are currently using a number of green materials and products in our operations. These include:

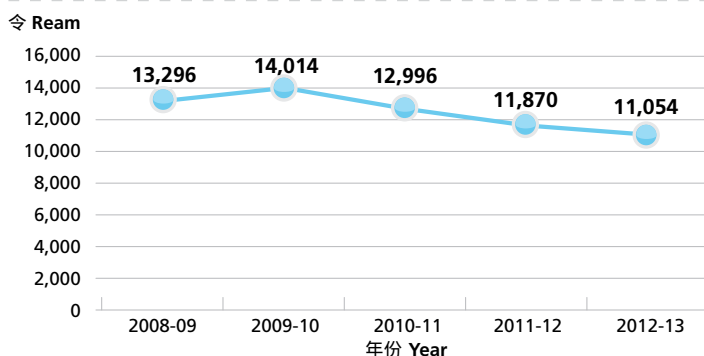
- Recycled glass cullet as recycled glass block and paving block, pipe bedding materials, ingredients of blinding concrete and porous drainage materials;
- Reclaimed water;
- Synthetic manhole covers, synthetic gully gratings (both for use in non-vehicular access/area within the boundaries of Sewage Treatment Works and Pumping Stations) and PVC floor materials, in particular products containing recycled materials; and
- Recycled timber.

環保採購及綠化辦公室 Green Procurement and Green Office

本署積極支持政府提倡的環保採購建議。於2012-13年度，我們購買的環保產品範圍廣泛，當中包括電器產品如電腦、影印機、打印機、電風扇和雪櫃，以及辦公室耗材如再造紙、塗改帶、鉛筆、充電電池、衛生紙和垃圾袋。

多年來我們在辦公室推行多項節能和節約資源的措施，其中包括把室溫設定在攝氏25.5度、減少非必須的照明及在公用設備安裝時間掣。我們亦設立回收點回收打印機碳粉盒、環保充電電池、紙品、塑膠和金屬容器等。為進一步提高員工的環保意識，我們定期發放綠色資訊以及巡查辦公室。隨著無遠弗屆的無線通訊科技，我們推出「無紙會議」系統，使用電子產品，如平板電腦和手提電腦作簡報和討論。我們的用紙量自2009-10年度起持續下降。我們在2012-13年度的用紙量約為11,000令，較2009-10年度減少21%。

用紙量
Paper Consumption



Our Department has actively supported the Government's initiatives on green procurement. We have purchased a wide variety of products following the green procurement specification in 2012-13, ranging from electrical appliances such as computers, copying machines, printers, electric fans and refrigerators to office consumables including recycled paper, correction tapes, pencils, rechargeable batteries, toilet paper and garbage bags.

Over the years, we have implemented a number of energy saving and resource conservation measures in our office. These include setting the room temperature at 25.5 degree Celsius, de-lamping unnecessary lights, installing timers to switch off common office equipment after office hours. We have also set up recycling stations to collect cartridge toners, rechargeable batteries, papers, plastic and metal containers. To further raise the awareness amongst our staff, we have regularly disseminated green tips and conducted environmental inspections in our workplace. With the fast development of wireless communication technology, we have introduced a "paperless meeting" system, using electronic gadgets such as tablet computers and notebooks for presentations and discussions. Paper consumption has continued to drop since 2009-10. Paper usage in 2012-13 was about 11,000 reams, a 21 per cent reduction compared to 2009-10.



● 生物滴濾塔
Biotrickling Filter

氣味管理 Odour Management

在昂船洲污水處理廠內現有沉澱池所採取的緩解氣味控制措施包括以下3個步驟：

1. 在現有沉澱池、流動水槽及分隔槽安裝密封式玻璃纖維強化塑膠蓋面；
2. 安裝抽氣系統收集已覆蓋的沉澱池、水槽和分隔槽內的空氣；及
3. 採用生物滴濾塔技術處理抽出的空氣後才排放。生物滴濾塔技術是既可靠又環保的辟味技術，其營運成本及操作和維修保養的要求皆相對較低。此技術能有效去除空氣中99%或以上的硫化氫，而硫化氫是污水處理廠內最主要的氣味來源。

Three-step mitigation measures for odour control are taken at the existing sedimentation tanks of SCISTW:

1. Installation of fibreglass reinforced plastic (FRP) covers with a gas-seal design on the existing sedimentation tanks, flow channels and chambers;
2. Installation of an air extraction system to collect foul gas within the covered tanks, channels and chambers; and
3. Treatment of foul gas by "Biotrickling Filter" technology before discharge into open air. The "Biotrickling Filter" is a reliable and environmentally friendly biological odour removal technology with a low life-cycle cost and minimum operation and maintenance requirements. It can remove 99 per cent or more of hydrogen sulphide gas (H_2S), the main source of odour in STW, for effective odour control.



與公眾共商同理 Engaging the Community

我們深明渠務署的服務與香港市民的日常生活息息相關，所以早已建立有效的溝通渠道，促進與公眾的瞭解及交流。除了透過籌辦各類推廣活動、團體參觀、外展教育計劃和傳媒報導等活動接觸市民外，我們亦同時尋求不同機會回饋社會，例如提供義工服務和支持慈善公益活動。

We understand that our services are closely related to people's daily life and therefore we establish effective channels to better communicate with the public. Besides organising activities to engage the public through awareness events, group visits, outreaching educational programmes and media exposure, we also seek for other opportunities to contribute directly to the communities by providing voluntary services and participating in charity activities.

社區參與活動 Community Engagement Activities



- 於創新科技嘉年華參與展出
Exhibition at Innovation Carnival



- 安排團體參觀部門的設施
Arranging group visits to sewage treatment works



- 我們於學校推行外展教育計劃，向師生講解渠務署的防洪和污水處理方面的工作
We run an outreaching educational programme by visiting schools to introduce our work on flood prevention and sewage treatment



- 我們主辦了「渠務署研究與發展座談會2012」，共邀請到17位專家學者出席，介紹其研究成果，藉此學習並優化我們營運的技術水平
To learn and achieve technological advancement in our operation, we hosted the DSD Research & Development Forum 2012 and invited a total of 17 scholars/experts to present their research



● 於2012年4月10日舉行的西貢區議會會議
Sai Kung District Council Meeting on 10 April 2012

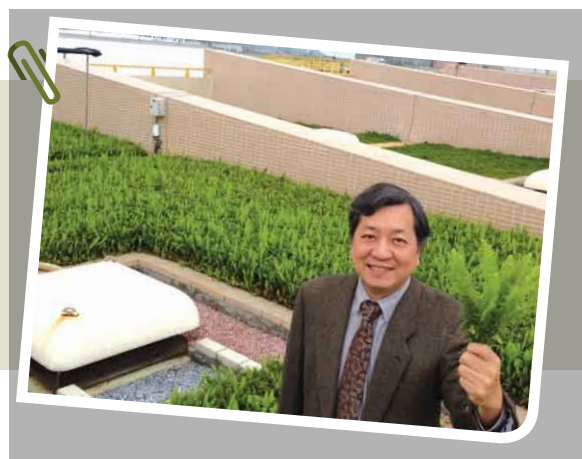


● 與環保組織聯繫，並徵詢他們的意見
Meeting with Green Groups to solicit their opinions

傳媒簡報會及專訪 Media Briefing and Interviews

- 渠務署副署長徐偉先生向傳媒講解有關沙田污水處理廠的綠化天台研究

Deputy Director of Drainage Services, Mr. Tsui Wai, explained the study of green roof at Shatin Sewage Treatment Works to the media



- 我們於2012年7月26日舉行傳媒簡介會，介紹首位進入香港最深污水隧道工作的女爆破監督工程師余小萍

A media briefing was held on 26 July 2012 to introduce the first female Blasting Competent Supervisor (BCS), Ir Edith Sia, who works in the deepest sewage tunnel in Hong Kong

- 渠務署署長陳志超先生帶領傳媒參觀啟德河改善工程(上游)
- Director of Drainage Services, Mr. Chan Chi-chiu, guided the media visiting Kai Tak River Improvement Works (Upstream Portion)



義工服務及慈善活動 Voluntary Services and Charity Activities

渠務署除了為市民提供污水處理及防汛排洪的服務外，我們的員工還積極參與各類義工服務及慈善活動，為社會大眾謀福祉。於2012-13年度，本署員工參與義工活動的總時數為589小時。

In addition to our sewage treatment and flood prevention works, our staff members are devoted to participate in a number of voluntary services and charity activities to contribute to the well-being of society. In 2012-13, total number of voluntary work hours carried out by our staff was 589.



- ◆ 我們的義工隊繼續為長者舉辦興趣班
Our Volunteer Team continued to arrange interest classes for the elderly



- ◆ 我們亦參與並支持各項慈善和籌款活動，例如「昂步棧道」慈善遠足比賽（左）及「綠色力量環島行」（右）
We also participated in and supported various charity events and fund-raising activities during the year such as Ngong Ping Charity Walk (left) and Green Power Hike (right)

持份者參與活動 Stakeholder Engagement Activities

我們非常重視公眾的意見，並為此舉辦了多個與持份者交流的活動，聆聽社會各界不同的聲音，讓我們不斷改進。曾舉辦公眾參與活動的工程項目主要包括「淨化海港計劃」第二期甲工程、啟德河改善工程、搬遷沙田污水處理廠往岩洞可行性研究、跑馬地地下蓄洪計劃，以及鄉村污水收集系統工程。

In order to invite feedback from the community for our continuous improvement, we have conducted a number of dedicated stakeholder engagement activities including public engagement for Harbour Area Treatment Scheme Stage 2A Project, Kai Tak River Improvement Works, Feasibility Study on Relocation of Shatin Sewage Treatment Works to Caverns, Happy Valley Underground Stormwater Storage Scheme as well as the village sewerage works.

「淨化海港計劃」第二期甲工程公眾參與活動

Public Engagement for Harbour Area Treatment Scheme Stage 2A Project



- ◆ 渠務署聯同「淨化海港計劃」第二期甲工程顧問於2013年2月22日在佛教中華康山學校舉行講座
DSD and the consultant of HATS Stage 2A Project conducted a school talk at Buddhist Chung Wah Kornhill Primary School on 22 February 2013

啟德河改善工程公眾參與活動

Public Engagement for Kai Tak River Improvement Works



- 為鼓勵鄰近學校的學生參與項目，我們於2012年舉辦啟德河意念繪畫比賽。得獎畫作在工地圍板公開展覽，美化了工地環境，為工程項目添一份藝術氣息

To engage the participation of students of neighbouring schools, we launched a drawing competition in 2012 on the envisioned Kai Tak River. The winning drawings have been displayed on the site hoardings, giving a hand to visual enhancement of the project

搬遷沙田污水處理廠往岩洞可行性研究的公眾參與活動

Public Engagement for Feasibility Study on Relocation of Shatin Sewage Treatment Works to Caverns

- 我們在沙田和馬鞍山區內16個地點和12個社區中心及社區會堂舉行一系列巡迴展覽，介紹有關可行性研究的資料

A series of roving exhibitions at 16 venues and 12 community centres and community halls in Sha Tin and Ma On Shan areas to disseminate the information of the feasibility study



跑馬地地下蓄洪計劃公眾參與活動

Public Engagement for Happy Valley Underground Stormwater Storage Scheme



- 我們於2012年10月31日舉行了持份者座談會，邀請各關注團體如香港賽馬會、香港足球會、鄰近的各間學校及康樂及文化事務署的代表出席參與，就跑馬地地下蓄洪計劃交流意見

On 31 Oct 2012, a Stakeholder Forum was held to exchange views from DSD and representatives of the Hong Kong Jockey Club, the Hong Kong Football Club, neighbouring schools and the Leisure and Cultural Services Department regarding Happy Valley Underground Stormwater Storage Scheme

鄉村污水收集系統工程公眾參與活動

Public Engagement for Village Sewerage Works

- 於推行建造鄉村污水收集系統工程時，我們會於工程施工前、施工階段及完工後3個階段舉行公眾參與活動，與相關持份者保持溝通及交流意見

In implementation of village sewerage works, we engage relevant stakeholders at the pre-construction, construction and completion stages of the projects





與工作夥伴合作 Collaboration with Working Partners

我們深切明白，渠務署與工作夥伴必須攜手緊密合作，才可確保工程項目水到渠成，為公眾提供卓越服務，以成就更美好的社會和環境。因此我們建立了健全的制度，並依照土木工程管理手冊《Project Administration Handbook for Civil Engineering Works》管理承建商執行的工程。年內，我們亦推行多項計劃，提倡在建築工地奉行良好作業守則，同時加強我們與承建商之間的聯繫。

We realise the importance to work closely with our working partners in order to deliver our projects and services with excellent performance for the betterment of society and the environment. We therefore implement a robust system to manage our contractors' works by following the Project Administration Handbook for Civil Engineering Works. During the year, we also launched various programmes to promote the best practices in construction sites and to strengthen the connection with our contractors.

隧道安全運動

隧道安全推廣運動將安全信息傳遞到每一個參與「淨化海港計劃」第二期甲工程的員工，提升他們的安全意識，以達致「地盤零意外」的終極目標。

Tunnel Safety Campaign

Tunnel Safety Campaign aims at cultivating a safety-first mindset into all stakeholders of the Harbour Area Treatment Scheme Stage 2A project, for achieving the ultimate goal of "Zero Accident".



- 主禮嘉賓於閉幕典禮共慶安全推廣運動圓滿結束
Officiating Guests celebrating the successful completion of the Campaign at the Closing Ceremony

工地整潔獎勵計劃

透過「工地整潔獎勵計劃」，我們成功達到加強本署工地的整潔，以及盡量減少對公眾影響的目的。

Construction Sites Housekeeping Award Scheme

Construction Sites Housekeeping Award Scheme has proven to achieve its purposes of enhancing the cleanliness and tidiness of our sites and minimising nuisance to the public.



● 渠務署署長陳志超先生與得獎者合照

Group photo of Director of Drainage Services, Mr. Chan Chi-chiu, and award winners

新工程合約

渠務署繼成功完成全港首項政府新工程合約（即西貢福民路明渠改善工程）後，再有5項採用新工程合約的工程項目於2012年順利展開。渠務署秉承新工程合約所強調的互信和夥伴合作精神，積極帶領團隊與顧問公司及承建商確立合作夥伴關係。這包括舉辦夥伴合作工作坊、共同使用辦公室及資源、優化工作處理程序、並以智能電話即時通訊應用程式有效地加強溝通等。我們將繼續推動合作夥伴文化，並展望新工程合約會被業界更廣泛採用。

New Engineering Contract (NEC)

Following the successful completion of the Hong Kong's first pilot government NEC project - Improvement of Fuk Man Road Nullah in Sai Kung, our Department commenced five more NEC contracts in 2012. Under these NEC contracts, we have worked closely with our consultants and contractors in a spirit of mutual trust and cooperation to build a partnering and collaborative relationship through arranging partnering workshops, sharing of joint offices and resources, streamlining works procedures and encouraging communication by using instant messenger apps with smart phones, etc. We will continue to promote partnering culture and look forward to working with our partners in industry for a wider adoption of NEC in Hong Kong.



● 新工程合約伙伴合作工作坊
NEC Partnering Workshop

營運效率 Operation Efficiency

本署的運作經費來自政府一般收入帳目及基本工程儲備基金。政府一般收入帳目是政府的主要帳目及提供資源的主要機制，本署營運開支直接由政府一般收入帳目支付。而基本工程儲備基金則用於公共工程計劃、收購土地、資助撥款和建設大型系統及設備。為使公共資金得以有效運用，我們在提升污水處理及雨水排放服務時，務求符合成本效益和環保原則。

The operation of our Department is funded by the General Revenue Account and the Capital Works Reserve Fund. Our Department's operating expenditure is met directly from the General Revenue Account which is the Government's main account and acts as the central funding device, while the Capital Works Reserve Fund was set up to finance public works programmes, acquisition of land, capital subventions and major systems and equipment items. To optimise the use of public funds, we always enhance our sewerage and stormwater drainage services in a cost-effective and environmentally responsible manner.

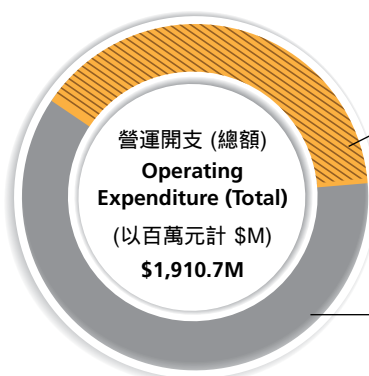
渠務署過去5年的營運開支摘要

Summary of DSD Operating Expenditure for the Past Five Years

渠務署過去5年的營運開支摘要 Summary of DSD Operating Expenditure for the Past Five Years	2008-09	2009-10	2010-11	2011-12	2012-13
	(以百萬元計 \$M)				
營運開支 (總額) Operating Expenditure (Total)	1,657.2	1,736.9	1,776.8	1,838.6	1,910.7
經常開支 - 個人薪酬 Recurrent Expenditure - Personal Emoluments	699.5	693.0	685.9	727.4	769.3
經常開支 - 部門開支(包括強積金及公務員公積金) Recurrent Expenditure - Departmental Expenses (including Mandatory Provident Fund & Civil Service Provident Fund)	957.3	1,035.9	1,083.8	1,111.2	1,141.4
非經常開支 Non-recurrent Expenditure	0.4	8.0	7.1	0.0	0.0

2012-13營運開支

Operating Expenditure in 2012-13



\$769.3M (40.3%)

經常開支 - 個人薪酬
Recurrent Expenditure - Personal Emoluments

\$1,141.4M (59.7%)

經常開支 - 部門開支
(包括強積金及公務員公積金)
Recurrent Expenditure - Departmental Expenses
(including Mandatory Provident Fund & Civil Service Provident Fund)

正在規劃、設計和施工階段的雨水排放及污水處理工程項目總值和數目

Value and Number of Drainage and Sewerage Projects under Planning, Design and Construction

	單位 Unit	2008-09	2009-10	2010-11	2011-12	2012-13
正在規劃、設計和施工階段的雨水排放工程項目總值 Value of drainage projects under planning, design and construction	百萬港元 million of HK\$	13,330	13,373	12,707	14,323	11,288
正在規劃、設計和施工階段的污水處理工程項目總值 Value of sewerage projects under planning, design and construction	百萬港元 million of HK\$	33,288	36,635	39,875	41,200	49,872
正在規劃、設計和施工階段的雨水排放工程項目數目 No. of drainage projects under planning, design and construction	數目 No.	34	29	24	22	20
正在規劃、設計和施工階段的污水處理工程項目數目 No. of sewerage projects under planning, design and construction	數目 No.	55	58	70	70	77

污水處理服務收回經營成本比率

「污水處理服務收費計劃」是根據「污染者自付」原則由1995年4月1日起實施，所有已接駁至公共污水渠的單位都必須繳費。所收費用只用以支付公共污水設施的操作及維修成本，至於建造這些設施的開支則仍由政府負擔。

2011-12年度及2012-13年度的污水處理服務收回經營成本比率如下：

Sewage Services Operating Cost Recovery Rates

The "Sewage Services Charging Scheme" was introduced on 1 April 1995 according to the "Polluter Pays" Principle. All premises connected to public sewers are required to pay the sewage services charges. The charges were set to recover only the operating and maintenance costs of the public sewage facilities, while the capital costs of building these facilities will continue to be borne by the Government.

The sewage services operating cost recovery rates for 2011-12 and 2012-13 are as follows:

	總額 Total	
	2011-12	2012-13
排污費及工商業污水附加費收入(以百萬元計) Revenue of Sewage Charge and Trade Effluent Surcharge (\$M)	907	983
排污費及工商業污水附加費開支(不包括折舊)(以百萬元計) Expenditure (excluding depreciation) of Sewage Charge and Trade Effluent Surcharge (\$M)	1,443	1,498
收回經營成本比率 (%) Operating Cost Recovery Rate (%)	62.9	65.6

註：

1. 以上計算不包括「其他雜項服務」。
2. 折舊的開支現時並未透過排污費及工商業污水附加費收回。
3. 上表中2012-13年度數據只屬暫定性，有待污水處理服務帳目委員會確認。

Notes:

1. "Miscellaneous services" are excluded from the above calculation.
2. Depreciation is at present not recovered through the Sewage Charge and Trade Effluent Surcharge.
3. The 2012-13 revenue and expenditure are only provisional and are subject to endorsement by the Sewage Services Accounts Committee.



關己及人 愛護員工 Caring Our Staff

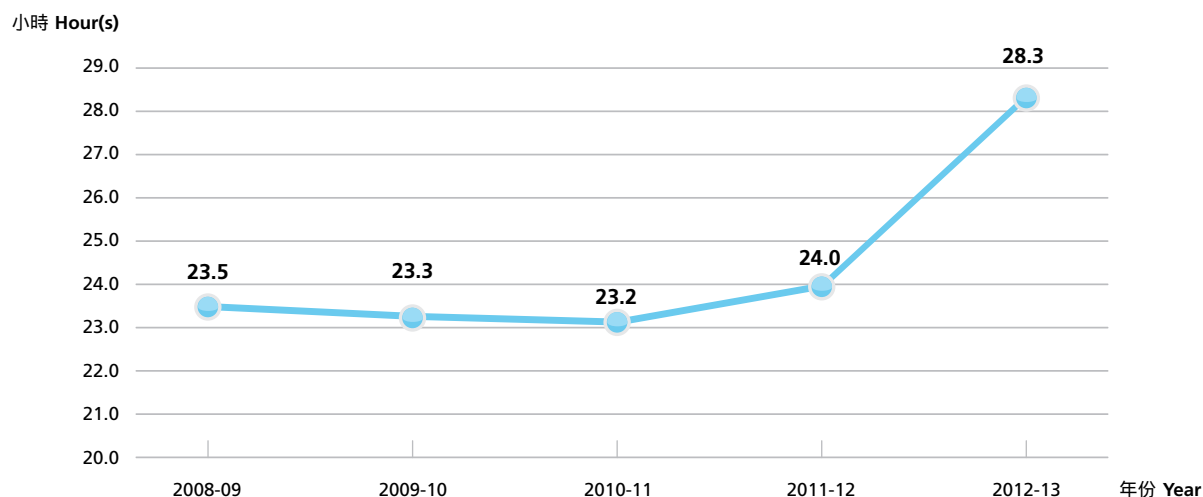
我們關愛每位員工，並以創造和諧、安全和健康的工作環境為使命，讓同事們各展所長，孕育勇於求變的創新精神。我們深明部門不僅要提供優質服務，還要讓員工精誠團結，培養深厚的歸屬感，才稱得上真正成功。為此，我們為員工提供多元化的培訓機會，務求滿足不同的需要，扶植他們的事業發展。年內，我們亦舉辦各類康樂活動，照顧員工的身心福祉。於2012年，我們成功取得OHSAS 18001職業健康及安全管理系統認證，通過完善系統，全面管控工作間安全。

One of our missions is to enhance a caring, harmonious, safe and healthy work environment that fosters staff development and a mindset for change. We fully understand that the success of our Department does not merely refer to the provision of quality services, but also maintaining a committed workforce with high sense of belonging. We therefore have provided a wide range of training opportunities to cater for the needs and career development of our staff. We have also arranged various recreational activities to care for the well-being of our staff during the year. In 2012, we were awarded with the OHSAS 18001 Occupational Health and Safety Management System certification to manage and control our workplace safety in a systematic manner.

本署員工2012-13年度的平均培訓時數為28.3小時，高於香港人力資源管理學會「2012年僱員培訓及發展需求調查」公佈的全港僱員平均培訓時數19.1小時。

On average, our staff received about 28.3 hours of training in 2012-13. The figure is higher than the territory-wide average training hours per employee which was 19.1 hours according to the "2012 Training and Development Needs Survey" conducted by the Hong Kong Institute of Human Resource Management.

員工平均培訓時數
Average Training Hours per Staff



員工康樂活動 Staff Recreational Activities



● 地質公園旅行
Hong Kong Geopark Tour



● 龍舟競賽
Dragon Boat Race



● 聖誕聯歡會
Christmas Party

職業健康與安全 Occupational Health & Safety

確保工作安全與健康是我們日常營運的首要重任。我們矢志安全有效地完成所有事務，盡力愛護環境。為達到此目標，我們確保具備足夠的資源為員工提供必要的培訓。此外，我們並設有多個安全委員會，不斷改善渠務署的職安健表現。於2012-13年度，本署並沒有發生致命意外。

Occupational safety and health at work are always our top priority in daily operation. We aim at accomplishing all our undertakings safely and efficiently with due consideration of the environment. In this regard, we allocate adequate resources and provide necessary training to our staff. We also established various safety committees to improve our performance continually. In 2012-13, there was no fatal case reported during the year.

2012-13年度職業健康與安全目標

Occupational Health & Safety Targets 2012-13

盡量減低渠務署員工的工傷意外率

Minimising accident rate for DSD staff

渠務署員工的工傷意外率每年每1,000名員工應少於10宗職業工傷
Accident rate for DSD staff should be not more than 10 occupational injuries per 1,000 staff per year

盡量減低渠務署合約工程的工傷意外率

Minimising the accident rate in DSD contracts

渠務署合約工程的工傷意外率應低於每100,000工時0.6宗職業工傷
Accident rate in DSD contracts should be less than 0.6 reportable accident per 100,000 man-hours worked

年底成果

End-year Achievements

達標

Target Met

每年每1,000名員工6.6宗職業工傷
6.6 occupational injuries per 1,000 staff per year

達標

Target Met

每100,000工時0.19宗職業工傷
0.19 reportable accident per 100,000 man-hours worked

本小冊子是渠務署《可持續發展報告2012-2013》的摘要。本報告的完整版及所有附頁可於以下網址下載：

This brochure provides an executive summary of "DSD Sustainability Report 2012-13". The full version of the report with appendices can be downloaded at the following link:

http://www.dsd.gov.hk/TC/Publicity_and_Publications/Publicity/DSD_Sustainability_Report/index.html (繁體中文版)

http://www.dsd.gov.hk/SC/Publicity_and_Publications/Publicity/DSD_Sustainability_Report/index.html (簡體中文版)

http://www.dsd.gov.hk/EN/Publicity_and_Publications/Publicity/DSD_Sustainability_Report/index.html (English Version)

服務查詢 Service Enquiries

渠務熱線 Drainage Hotline: 2300 1110

排污費服務查詢 Sewage Charges Customer Services Enquiries: 2834 9432

一般查詢 General Enquiries: 2877 0660

電郵地址 Email Address: enquiry@dsd.gov.hk



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