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

目錄 Contents

署長序言
Director's Statement

渠務署署長
陳志超

Director of Drainage Services
CHAN Chi-chiu

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。

「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。

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.

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。由於沙田下禾輋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。

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.

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。

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，為改善鄉郊地區的衞生和水質情況，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。

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，我們進一步在沙田污水處理廠開展大型試驗工作。

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。

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。

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.

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 conduct further trials on the SANI Process in a larger scale at Shatin Sewage Treatment Works commencing in April 2013.

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.

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。

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

渠務署署長
陳志超

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.

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 Report to our email address: enquiry@dsd.gov.hk.

Director of Drainage Services
CHAN Chi-chiu

關於本報告
About the Report

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」）。

To demonstrate our commitment to a sustainable future, the Drainage Services Department (DSD) published the first Sustainability Report "Collaboration for a Sustainable Future" (the Report).

報告簡介

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。由本年度開始，本報告會取替我們的年報及環保工作報告，集中報告我們的可持續發展表現，作為向所有渠務署的持份者匯報我們在可持續發展方面成績的重要工具。

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最高應用等級的要求—「A+」應用等級。我們聘用了獨立第三方的核證機構核實本報告的準確性、可靠性和公信性。除此之外，我們亦通過了全球報告倡議組織的應用等級審核，確認此報告的內容涵蓋G3.1指引所要求披露的一系列指標。有關的詳細內容請參閱附錄二 —「全球報告倡議組織內容索引」。

本報告的完整版和報告摘要均以網上版本、PDF版本及純文字版本發布，備有3款文字編制(英文、繁體中文及簡體中文)。而只有報告摘要才備有印刷版本。我們重視您對本報告及我們在可持續發展表現的意見。因此希望您能完成本報告的「回應表格」部分內的問卷，給予我們意見。

報告範圍及邊界

我們通過持份者的參與，從而識別出與我們運作有關的主要範疇。考慮到我們的營運特色、不同持份者的意見，以及全球報告倡議組織G3.1指引建議的披露資料，我們按其重要性綜合出我們報告可持續發展的重點。下表列出本報告涵蓋的主要範疇，在往後的章節中我們詳述了當中的承諾和成果。

Report Profile

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). Focusing on our sustainable performance, the Report replaces our Annual Report and Environmental Performance Report starting from this year. This Report serves as an important tool to communicate with all DSD's stakeholders of our sustainability achievement.

The Report 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. We have commissioned a third party to carry out an independent report assurance to enhance the accuracy, reliability and creditability of the Report. In addition, we have gone through the Application Level Check conducted by GRI to confirm that the coverage of the Report has addressed the disclosure items in the G3.1 Guidelines. Details of the relevant disclosure items can be found in the GRI Content Index as shown in Appendix 2.

The full version and the executive summary of the Report are published in online web-based version, PDF version and text-only version with three types of characters available (English, Traditional Chinese and Simplified Chinese). Hard copy of the executive summary of the Report is also available. We treasure your opinions on the Report and our sustainability performance. You may provide us the feedback by filling out the questionnaire in the Feedback section in the Report.

Reporting Scope and Boundary

We have performed stakeholder engagement where appropriate to identify key aspects in relation to our operations. With due consideration of the feature of our operations together with the views of various stakeholders and the suggested disclosures in GRI G3.1 Guidelines, we have prioritised our sustainability focus for reporting. The key aspects are presented in the table below in which our commitments and achievements are detailed in the following chapters.

主要範疇 Key Aspects

環境 Environment

- 綠化 / Greening
- 生態保育 / Conserving Ecology
- 能源管理 / Energy Management
- 排放控制 / Emission Control
- 善用資源 / Resources Conservation
- 氣味管理 / Odour Management

主要範疇 Key Aspects

社會 Social

- 員工發展 / Staff Development
- 員工關係 / Staff Relationships
- 職業健康與安全 / Occupational Health & Safety

主要範疇 Key Aspects

經濟 Economic

- 企業管治 / Corporate Governance
- 與工作夥伴合作 / Collaboration with Working Partners
- 營運效率 / Operation Efficiency

本報告的數據和資料涵蓋我們具重大可持續發展影響的工程項目，當中包括渠務署、我們的顧問公司及承建商的日常運作。除非特別註明，本報告的所有數據和資料屬於本財政年度，而數據亦盡量規範化，以方便作出比較。

The data and information presented in the Report cover the operations of DSD and our major consultants and contractors in relation to our project activities with significant sustainability impacts. Throughout the Report, all the data or information presented are for fiscal year unless stated otherwise and statistics are normalised into comparable terms as far as practicable.

年度大事　重點輕描
The Year's Highlights

25

2012-13年度獲得的獎項數目

No. of Awards Received in 2012-13

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 have repeatedly enabled us to receive local and international prizes and recognition.

獎項殊榮
Awards At a Glance

May 5月

2012

- 渠務署總部於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，表彰我們的員工不斷努力，矢志為公眾提供合符環保原則的渠務服務。

DSD Headquarters won the Certificate of Merit in the 2011 Hong Kong Awards for Environmental Excellence under the Public Organisations and Utilities Sector to recognise our commitment and continual effort of the staff to deliver drainage services in an environmentally friendly manner.

- 本署3項工程項目於高空綠化大獎2012獲獎，嘉許我們高空綠化與建築環境的努力。「沙田污水處理廠綠化天臺」及「大坑東雨水泵房垂直綠化」分別榮獲政府項目組別銀獎及優異獎；「沙田污水處理廠垂直綠化研究」則獲得規劃研究項目組別優異獎。

Three of our projects received accolades at the presentation ceremony of Skyrise Greenery Awards 2012 to recognise our efforts in integrating skyrise greenery into the built environment of Hong Kong. "Green Roofs at Shatin Sewage Treatment Works" and "Vertical Greening at Tai Hang Tung Stormwater Pumping Station" won the Silver Award and Merit Award respectively under the Government Projects Category; while "Vertical Greening Study at Shatin Sewage Treatment Works" was awarded with the Merit Award under the Planning / Research Projects Category.

我們在「2011年公德地盤嘉許計劃」合共奪得8個獎項，得獎項目如下：

- 設計、建造及操作望后石污水處理廠
- 太子道東啓德明渠改善工程
- 北區及吐露港區域污水收集系統 — 馬料水、大埔及北區的主幹渠改善工程
- 西貢福民路明渠改善計劃
- 榕樹灣和索罟灣污水處理廠建造工程
- 佐敦谷箱形雨水渠污水截流工程
- 淨化海港計劃第二期甲 — 昂船洲污水處理廠改善工程 — 污泥脫水設施
- 淨化海港計劃第二期甲 — 昂船洲污水處理廠連接隧道及主泵房隔膜牆建造工程

- We won eight Awards in "Considerate Contractors Site Award Scheme 2011" in the following projects:
  - Design, Build and Operate Pillar Point Sewage Treatment Works
  - Kai Tak Nullah Improvement Works at Prince Edward Road East
  - North District and Tolo Harbour Regional Sewerage - Upgrading of Trunk Sewers at Ma Liu Shui, Tai Po and North District
  - Improvement of Fuk Man Road Nullah in Sai Kung
  - Construction of Sewage Treatment Works at Yung Shue Wan and Sok Kwu Wan
  - Provision of Interception Facilities at Jordan Valley Box Culvert
  - Harbour Area Treatment Scheme Stage 2A - Upgrading Works at Stonecutters Island Sewage Treatment Works - Sludge Dewatering Facilities
  - Harbour Area Treatment Scheme Stage 2A - Construction of Interconnection Tunnel and Diaphragm Wall for Main Pumping Station at Stonecutters Island Sewage Treatment Works

Jul 7月

- 我們的跑馬地地下蓄洪計劃憑着優越創新的可持續發展防洪方案，榮獲2012年國際水協會項目創新大獎的東亞地區（規劃組別）大獎。

Our Happy Valley Underground Stormwater Storage Scheme won the 2012 International Water Association Project Innovation Awards (East Asia Regional Awards) in Planning Category for its excellent, innovative and sustainable flood prevention approach.

- 由渠務署、水務處、香港科技大學等機構合組的團隊奪得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）。獲獎項目「善用海水作另類資源」提倡以更可持續的方法，利用海水作冷卻及沖廁用途，藉此減少污泥產生及棄置。

A team comprising the DSD, Water Supplies Department, The Hong Kong University of Science & Technology and other members was awarded with the Global Honour Awards of the 2012 International Water Association Project Innovation Awards under the category of Applied Research. The winning project was "Making Use of Seawater as an Alternative Resource" and it was about the use of seawater for cooling and toilet flushing and treating the wastewater in a more sustainable way by producing much less sludge for disposal.

Oct 10月

- 我們的2010-11年報從逾5,500份參賽年報中脫穎而出，在美國傳媒專業聯盟2011 Vision Awards年報大獎奪得兩項殊榮，包括銀獎（政府機構組別）及2011年度中國地區最佳年報首25名。

  Our Annual Report 2010-11 won two accolades in 2011 Vision Awards including Silver Award (Government Category) and Top 25 Chinese Annual Reports of 2011 by League of American Communications Professionals LLC, amongst more than 5,500 entries received by the organiser.

- 本署兩位同事榮獲2012年申訴專員嘉許獎計劃 — 公職人員獎，表揚他們處理投訴時秉持專業態度。

  Two of our staff members have been awarded with the Ombudsman's Award 2012 for Officers of Public Organisations to applaud their professionalism in complaint handling.

Nov 11月

- 我們的2010-11年報亦同時榮獲第23屆國際Galaxy Awards銀獎（政府機構年報）。

  Our Annual Report 2010-11 also won the 23rd Annual International Galaxy Awards – Silver Award (Annual Reports – Government).

Dec 12月

- 我們於香港園境師學會設計大獎2012榮獲兩項殊榮。我們的「移植啟福道苦楝樹」獲頒設計/綠化項目組別優異獎，而「沙田污水處理廠垂直綠化研究」則獲頒規劃與綠化研究組別優異獎。

We won two accolades in Hong Kong Institute of Landscape Architects Design Awards 2012. "Transplanting a Gigantic Tree at Kai Tak Development" was awarded with Merit Award under the Environmental Design/Greening Category, while "Vertical Greening Study at Shatin Sewage Treatment Works" was awarded with Merit Award under the Landscape Planning/Research Category.

- 在員工同心協力下，我們於2012年12月成功取得OHSAS 18001職業健康及安全管理系統認證。

With the effort of all staff, we successfully obtained certification of OHSAS 18001 Occupational Health and Safety Management System in December 2012.

Mar 3月

2013

- 我們以「岩洞萬花筒」為題的展品參展由康樂及文化事務署舉辦的香港花卉展覽2013，奪得園林景點組別最佳設計金獎。

Our display "Kaleidoscopic Cavern" was awarded the Gold Award for Design Excellence under the Landscape Display category in Hong Kong Flower Show 2013 organised by the Leisure and Cultural Services Department.

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

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12日舉行啟用典禮，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。

為紓緩水浸風險和配合大埔區的未來發展，我們於2007年9月開始在上述河道進行拉直、擴闊和挖深工程以改善河道。工程全面兼顧水利和環保兩方面，加強防洪能力的同時也充份保護這些天然河道的生態價值。工程進行期間，我們遇到不少障礙，例如惡劣天氣、工地出入受阻等，全賴本署一眾員工和承建商齊心協力，河道改善工程於2012年12月順利完成。更重要的是，透過本項目，我們與鄉民及環保組織建立了互信互諒的關係。

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

The commissioning ceremony of River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River was held on 12 January 2013 which declared the rivers had attained a flood protection standard of 1 in 50 years.

In order to alleviate the flooding risk and cope with the future development in Tai Po area, we commenced construction of the river improvement works through straightening, widening and deepening of these rivers in September 2007. Apart from increasing their flood protection capacity, the ecological values of these natural rivers were also maintained. During construction, we encountered difficulties such as inclement weather and limited site access, etc. With the joint efforts of our staff members and our contractor, the river improvement works was completed smoothly in December 2012. Most importantly, we developed mutual trust and understanding with the villagers and green groups in this project.

於2013年1月12日舉行的啟用典禮
Commissioning Ceremony on 12 January 2013

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

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。我們更特別安排在市區邊陲動工，避免在繁忙道路進行挖掘，務求將工程對公眾、道路交通和商業活動的影響減至最低。

港島西雨水排放隧道

港島西雨水排放隧道橫跨大坑至數碼港，全長約11公里，直徑介乎6.25米至7.25米。隧道啟用後可紓緩港島北部，特別是中環、金鐘、灣仔及銅鑼灣低窪地區的水浸風險。本工程開創了多項技術先河，其中包括廣泛採用反井鑽機由下而上挖鑽進水口豎井。這項技術能把挖出的泥石經地下隧道運走，大大減低工程造成的滋擾，並大幅減少工程車輛經狹窄繁忙路面運送碎石的需要。項目團隊在工程期間遇到不少嚴峻的挑戰，最後都一一克服，更憑着卓越成就，榮獲由英國工程雜誌《New Civil Engineer》及《Ground Engineering》合辦的「2011年國際隧道工程獎」之「年度隧道工程」（造價介乎一億美元至十億美元項目類別）大獎。於2013年，港島西雨水排放隧道在由香港工程師學會舉辦的「21世紀香港十大傑出工程項目」選舉中，成為得票最高的頭3個項目之一。

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

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. Works were carried out on the urban fringes, reducing the need for road excavation in busy urban areas and thus minimising disruptions to the communities, traffic and commercial activities.

Hong Kong West Drainage Tunnel

HKWDT, running from Tai Hang to Cyberport, is about 11 kilometres long and of diameter varying from 6.25 metres to 7.25 metres. The project will relieve flooding in Northern Hong Kong Island, in particular the low-lying areas along Central, Admiralty, Wan Chai and Causeway Bay. One of the technological firsts of the project is the extensive use of Raise Boring Machines to excavate drop shafts of intakes from the bottom upwards. This method, which enabled transportation of excavated materials through the tunnel, had greatly reduced the construction nuisance and eliminate truck trips on narrow congested roads in delivery of spoil. With its exemplary achievements in overcoming various challenges during construction, the project was awarded with Tunnelling Project of the Year (US$100million to US$1billion category) in the "International Tunnelling Awards 2011", organised by British engineering magazines of "New Civil Engineer" and "Ground Engineering". The project was also elected as one of the top three projects in "The Hong Kong People Engineering Wonders in the 21st Century" election organised by The Hong Kong Institution of Engineers in 2013.

港島西雨水排放隧道於2012年8月22日舉行啟用典禮，慶祝香港創領防洪新技術，寫下歷史新一頁
The commissioning ceremony of the HKWDT was held on 22 August 2012 to celebrate the debut of a flood prevention masterpiece in Hong Kong history

啟用後的荔枝角雨水排放隧道連接隧道及主隧道的接合點
Commissioned Lai Chi Kok Drainage Tunnel at an adit and tunnel junction

行政長官梁振英先生於2012年10月18日主持荔枝角雨水排放隧道啟用典禮
Chief Executive, Mr. C Y Leung, officiated the commissioning ceremony of the LCKDT on 18 October 2012

荔枝角雨水排放隧道

荔枝角雨水排放隧道全長3.7公里，直徑4.9米，截取九龍西北部高地上游的雨水，提高荔枝角、長沙灣及深水埗下游地區的整體防洪能力。工程採用多項創新技術，其中之一是全港首次以單一台隧道鑽挖機，建造兩段位處截然不同地質，一段位處堅硬岩石，另一段位處於軟土的隧道。相對於傳統上須採用兩台隧道鑽挖機，這創新方法一方面減少建造成本，同時可減省製造另一台鑽挖機的物料及相關使用的能源，從而減低碳足印。此外，為確保地下設施不受影響，工程人員須在4.2倍大氣壓力的環境下施工，氣壓之高打破香港隧道建築史上的紀錄，而安全方面亦實現了零減壓病的最高安全標準，為隨後香港開展的隧道項目開闢安全高壓施工新路向。

此工程憑着創新技術及持續改善服務，於2013年榮獲「香港工程師學會-工程創意獎」及「公務員優質服務獎勵計劃-一般公共服務銀獎」。

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。

荃灣雨水排放隧道

全長5.1公里、直徑為6.5米的荃灣雨水排放隧道，截取荃灣及葵涌半山上游集水區的雨水，然後輸送至油柑頭附近海域排放，有助紓緩下游市區現有排水系統的負荷。荃灣雨水排放隧道的排放量為香港所有雨水排放隧道之冠，最高流量時可在11秒內注滿一個奧林匹克標準泳池。為確保下游有充足水流維持生態平衡，所有進水口只會在黃色或更高暴雨警告信號生效時才發揮截流作用。

Lai Chi Kok Drainage Tunnel

LCKDT, 3.7 kilometres in length and of diameter 4.9 metres, intercepts stormwater from the upland areas of Northwest Kowloon. It serves to raise the overall flood protection level of the downstream areas in Lai Chi Kok, Cheung Sha Wan and Sham Shui Po. One of the technological breakthroughs of the project is the first use in Hong Kong of a single Tunnel Boring Machine (TBM) for boring two sections of tunnel with distinct ground conditions, one in hard-rock and the other in soft-ground. When compared with conventional approach of using two TBMs, this results in significant savings in cost, plus knock-on saving in materials and associated energy input, leading to a reduction in carbon footprint. Besides, in order to protect the underground facilities, the construction workers have to work in a hyperbaric environment up to 4.2 bars, which breaks the record of Hong Kong tunnelling history. Safety performance of the hyperbaric operations was remarkable, attaining zero decompression illness. This successful experience in using hyperbaric operations paves a new way forward for the Hong Kong construction industry in using hyperbaric technology.

With achievements in technological breakthroughs and continuous improvement in service, the project was awarded "HKIE Innovation Award for the Engineering Industry" and "Civil Service Outstanding Service Award Scheme – Silver Prize in General Public Service" in 2013.

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.

Tsuen Wan Drainage Tunnel

The 5.1 kilometres long TWDT, with diameter of 6.5 metres, intercepts surface runoff from the uphill catchment of Tsuen Wan and Kwai Chung for direct discharge into the sea near Yau Kom Tau, thereby relieving the loading of the existing drainage system in the downstream. The design capacity of TWDT is the highest among all the drainage tunnels in Hong Kong. The flow of floodwater at peak can fill up a Olympic-size swimming pool in 11 seconds. In order to maintain a certain amount of flow for downstream ecological needs, all intakes will intercept floodwater only when amber rainstorm signal or above is in force.

荃灣雨水排放隧道啟用典禮於2013年3月28日舉行，標誌着香港流量最高的雨水排放隧道正式投入服務。

The commissioning ceremony of TWDT was held on 28 March 2013 which marked the launch of a drainage tunnel with the highest flow rate in Hong Kong.

發展局常任秘書長（工務）韋志成先生（右五）與渠務署署長陳志超先生（左三）於2013年3月28日主持荃灣雨水排放隧道啟用典禮
Permanent Secretary for Development (Works), Mr. Wai Chi-sing (fifth right), and Director of Drainage Services, Mr. Chan Chi-chiu (third left), officiated at the commissioning ceremony of the TWDT on 28 March 2013

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，剔除了沙田下禾輋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。

餘下的13個水浸黑點將分階段整治，其中6個黑點的改善工程已完成，並正監察其成效，其餘7個水浸黑點的改善工程現正在規劃、設計及建造階段。我們繼續在雨季密切監察餘下的水浸黑點的情況，並期望在其他改善工程完竣後逐步剔除餘下的水浸黑點。

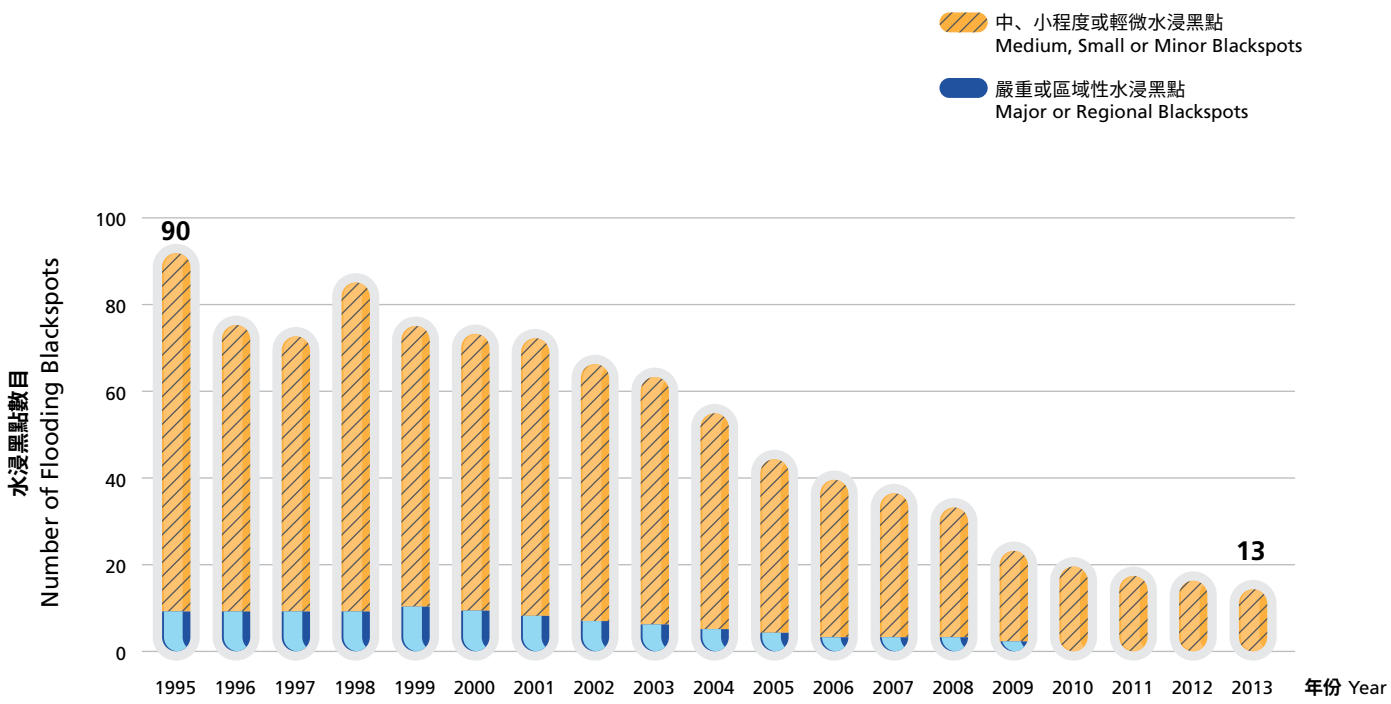
Removal of Two More Flooding Blackspots

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.

The remaining 13 flooding blackspots are being tackled in phases – drainage improvement works for six blackspots have been commissioned, and their effectiveness is being monitored; and drainage improvement works at various stages, namely planning, design and construction are being implemented for the other seven blackspots. We keep on closely monitoring these locations during rainy seasons and we expect to remove the remaining flooding blackspots progressively when we complete other improvement projects.

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

概要

「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和污水輸送系統建造工程。年內，已批出工程合約的各項工程均進展順利。

第一部份：昂船洲污水處理廠改善工程

2012年7月，新主泵房的連接隧道及隔膜牆建造工程順利竣工，而且創下零工地意外的紀錄。連接隧道直徑3.9米，全長236米，深30米，由隧道鑽挖機「維多利亞」以土壓平衡方式建造。工程完成後，能夠將現有和新主泵房貫通綜合使用，令整個污水處理系統更完善可靠。

新主泵房的連接隧道
Interconnection tunnel for new main pumping station

Latest development of Harbour Area Treatment Scheme Stage 2A

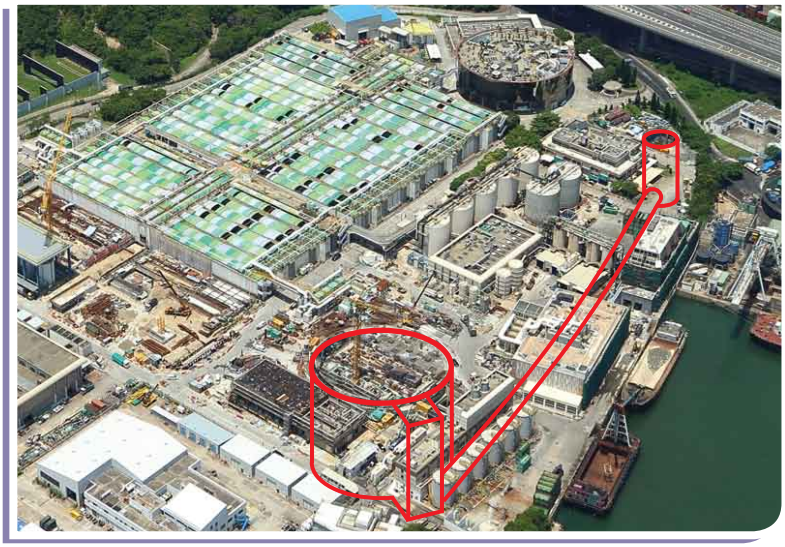
Overview

The Harbour Area Treatment Scheme (HATS), consists 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 Stage 2A, now in progress, is targeted for completion in end 2014.

The 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.

Part 1: Upgrading Works for Stonecutters Island Sewage Treatment Works

In July 2012, the construction of interconnection tunnel and diaphragm wall for the new main pumping station were successfully completed with the gratifying result of zero site accident. The tunnel of 3.9 metres in diameter, 236 metres long and 30 metres deep, was excavated and lined by "Victoria", an earth-balanced tunnel boring machine. Such completion enables the integrated use of the existing main pumping station and the new main pumping station, and will in turn enhance the reliability of the whole sewage treatment system.



「維多利亞」成功鑽挖長236米的隧道，操作安全無誤
"Victoria" completed her 236 metres long journey safely

另一項昂船洲污水處理廠主要改善工程，包括建造一所內徑約55米及深約40米的新主泵房。圓拱形設計的新主泵房能提供足夠空間放置8台新污水泵，每台泵每秒可處理4立方米污水，只須10分鐘便能填滿一個奧林匹克標準游泳池。這8台污水泵可更快捷地處理維港兩岸產生的污水，將污水處理量由目前每日170萬立方米增加至245萬立方米。昂船洲污水處理廠改善工程現正全速進行，預計於2015年啟用。

Another major upgrading works at SCISTW include the construction of a new main pumping station, with an internal diameter of about 55 metres and a depth of about 40 metres. The circular-shaped new main pumping station will be able to house eight sets of new pumps with capacity of four cubic metres per second each. The additional flow can fill up a Olympic-size swimming pool in 10 minutes. The combined design capacity of the eight pumps can boost the daily sewage handling capacity from the current 1.7 million cubic metres to 2.45 million cubic metres. The upgrading works are now in full swing and it is anticipated to be commissioned in 2015.

新主泵房的結構部分現已建至地面水平，而主污水泵正在裝配中
The construction of the new main pumping station structure has been completed up to the ground level and the main pumps are being fabricated

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

位於北面的污泥餅儲存缸、兩個污泥儲存缸及污泥脫水樓的加固混凝土結構工程均已完成，現正進行機電裝置、屋宇裝配及裝修工程
The reinforced concrete structures of the northern sludge cake silos, two sludge storage tanks and the sludge dewatering building have been completed. The electrical and mechanical installation, architectural builders works and finishes are underway

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。

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.

- 北角及中環基本污水處理廠正建造幼隔篩及除砂大樓，預計於2013年年中啟用
  Construction of fine screen and grit trap building at North Point and Central PTW is in progress with commissioning tentatively scheduled in mid 2013

- 華富、香港仔及鴨脷洲基本污水處理廠現正進行幼隔篩及除砂設施建造工程
  Construction of fine screen and grit trap structure at Wah Fu, Aberdeen and Ap Lei Chau PTW is in progress

第三部份：污水輸送系統建造

污水輸送隧道全長21公里，最深處位於海平面以下160米，是目前全球最深的污水輸送隧道之一。

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。

橫跨昂船洲至西營盤長910米的隧道；灣仔東至西營盤長870米的主隧道；以及灣仔東伸展至北角長1,900米的隧道之挖掘工程經已完成。

Part 3: Construction of the Sewage Conveyance System

The 21 kilometre-long sewage conveyance tunnel, with depth of maximum 160 metres below sea level, is one of the deepest sewage tunnel in the world.

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.

Excavation has been completed for the 910 metre-long tunnel from Stonecutters Island to Sai Ying Pun, 870 metre-long main tunnel from Wan Chai East to Sai Ying Pun and 1,900 metre-long tunnel from Wan Chai East to North Point.

- 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

- 連接數碼港至沙灣的隧道於2012年10月22日貫通。其他隧道正採用鑽爆方法繼續鑽挖工程
  Tunnel between Cyberport and Sandy Bay was broken through on 22 October 2012. Excavation of other tunnels by drill-and-blast method is underway

昂船洲污水處理廠氣味密封系統正式啟用

覆蓋昂船洲污水處理廠的沉澱池和安裝兩台辟味裝置的工程已於2012年6月完成，並於2012年9月順利完成測試及啟用，確保鄰近地方的空氣質素不會受到影響。

Odour Containment System at Stonecutters Island Sewage Treatment Works Completed

The installation of covers for the sedimentation tanks and construction of two deodorisation units at SCISTW were completed in June 2012 and testing and commissioning was completed satisfactorily in September 2012. This assures a better air quality to the surrounding environment.

昂船洲污水處理廠氣味密封系統於2012年12月12日舉行啟用典禮
The commissioning ceremony for the odour containment system at SCISTW was held on 12 December 2012

氣味密封系統設計先進，系統包括面積廣達25,000平方米的玻璃纖維強化塑膠覆蓋面，全面覆蓋46個沉澱池及絮凝池和相關設施。系統亦設有每小時抽氣量高達112,000立方米的抽氣管道系統，和兩台採用生物滴濾塔技術的辟味裝置，能有效去除高達99%的硫化氫，效率超卓。

The state-of-the-art odour containment system, comprising fiberglass reinforced plastic covers with total area of 25,000 square metres, covers all the 46 sedimentation and flocculation tanks and related facilities. The system also consists of an air extraction ductwork with an extraction rate of 112,000 cubic metres per hour, as well as two deodorisation units adopting biotrickling filter technology with hydrogen sulphide (H_2S) removal efficiency up to 99 per cent.

昂船洲污水處理廠擴建工程
Expansion of SCISTW

完成安裝玻璃纖維強化塑膠覆蓋面工程後，我們邀請附近居民到現場視察氣味管理措施，並先後於2012年10月12日及2012年11月24日接待了深水埗區議會代表及美孚居民到昂船洲污水處理廠實地參觀。

After the completion of the fiberglass reinforced plastic covers installation, we invited the local residents to inspect our odour management measures. Site visits were organised for Sham Shui Po District Council and residents from Mei Foo on 12 October 2012 and 24 November 2012 respectively.

美孚居民參觀已覆蓋的沉澱池及辟味裝置
Visit by the Mei Foo residents to the covered sedimentation tanks and deodorisation units

工作人員向深水埗區議員講解已覆蓋的沉澱池及相關辟味裝置的運作
Briefing to Sham Shui Po District Councillors the operation of the covered sedimentation tanks and associated deodorisation units

管治方針
Governance Approach

1,856

員工人數

No. of Staff

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。截至2013年3月，渠務署共有約1,800位員工，團隊由專業、技術及一般輔助人員組成。

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. As at March 2013, it had about 1,800 staff comprising professional, technical and general supporting staff.

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

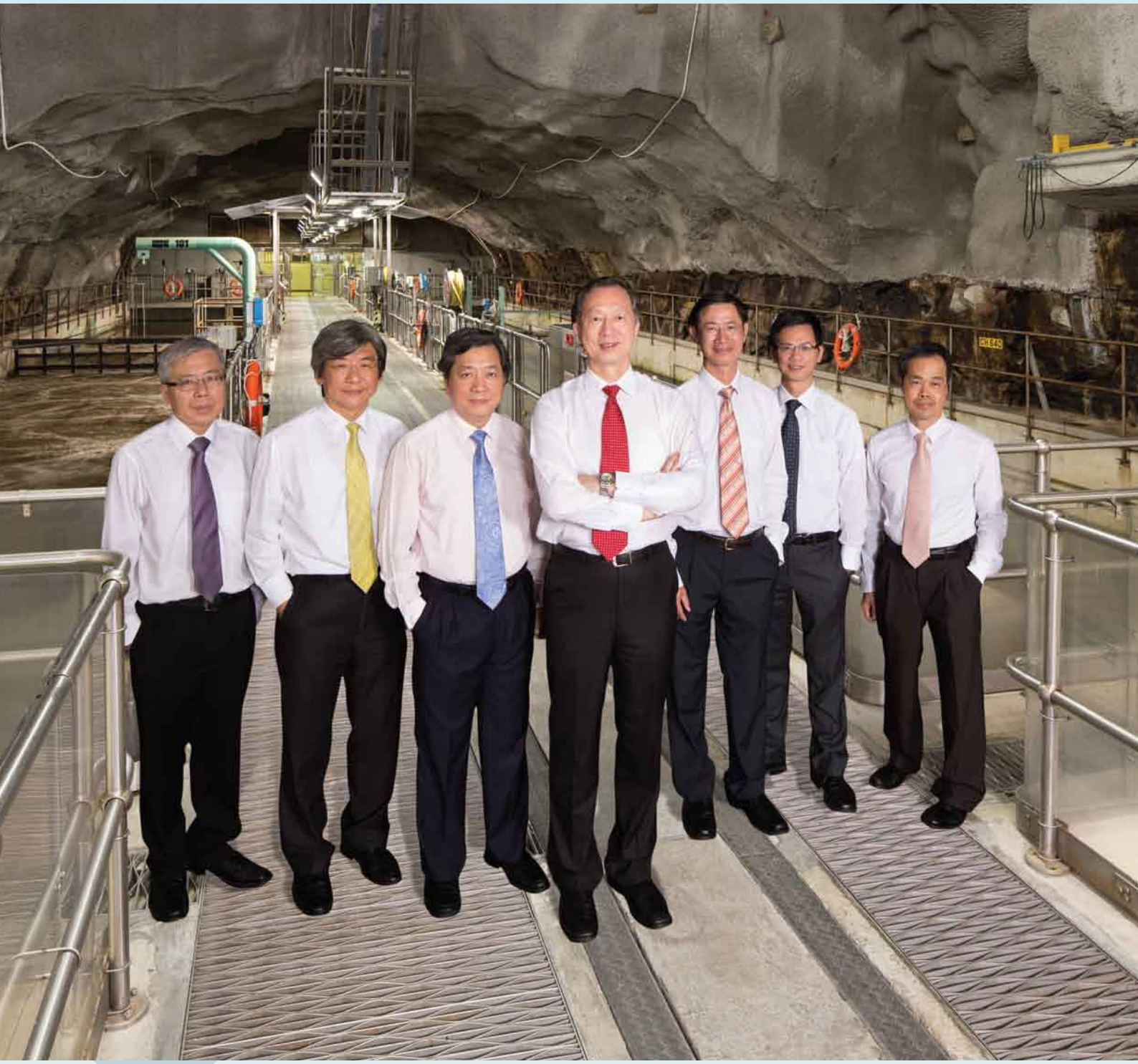
信念 Our Values

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

管治架構
Governance Structure

污水處理及防洪是我們的主要職責，部門由渠務署署長帶領，在1位副署長和4位助理署長的協助下，統籌這兩項核心服務。渠務署共有4個分科，包括污水處理服務科、操作維修科、設計拓展科及機電工程科，下設15個不同功能的分部。此外，總部另設各組，分別負責技術支援、會計及行政工作。

Supporting our two core services namely sewage treatment and flood prevention, our Department is headed by a Director with the assistance of a Deputy Director and four Assistant Directors. There are four branches within the department, namely the Sewage Services Branch, the Operations and Maintenance Branch, the Projects and Development Branch and the Electrical and Mechanical Branch, comprising fifteen functional Divisions/Sections. There are also individual sections at the headquarters rendering technical, accounting and administrative support.



渠務署高層管理人員 DSD Senior Management

署長 Director

1. 陳志超 CHAN Chi-chiu

副署長 Deputy Director

2. 徐偉 TSUI Wai

助理署長/操作維修 Assistant Director/Operations and Maintenance

3. 麥嘉為 MAK Ka-wai

助理署長/污水處理服務 Assistant Director/Sewage Services

4. 陳柏強 CHAN Pak-keung

助理署長/機電工程 Assistant Director/Electrical and Mechanical

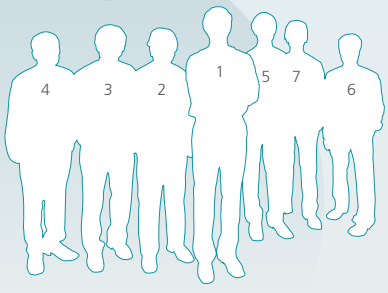
5. 佘少權 SHE Siu-kuen

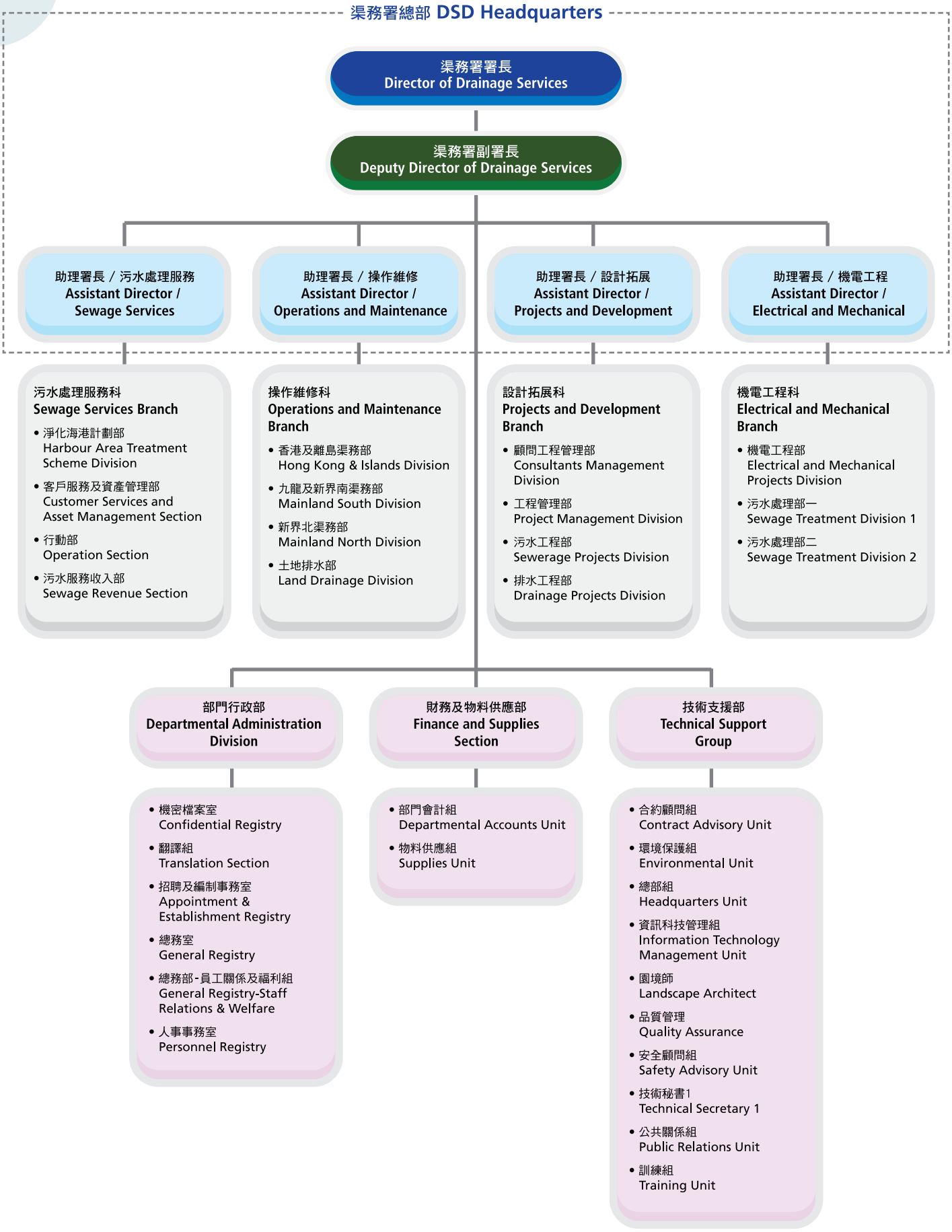
助理署長/設計拓展 Assistant Director/Projects and Development

6. 鄭鴻亮 CHENG Hung-leung

主任秘書 Departmental Secretary

7. 黃球年 WONG Kau-nin




渠務署總部 DSD Headquarters
渠務署署長
Director of Drainage Services
渠務署副署長
Deputy Director of Drainage Services
助理署長 / 污水處理服務
Assistant Director / Sewage Services
助理署長 / 操作維修
Assistant Director / Operations and Maintenance
助理署長 / 設計拓展
Assistant Director / Projects and Development
助理署長 / 機電工程
Assistant Director / Electrical and Mechanical
污水處理服務科
Sewage Services Branch
• 淨化海港計劃部 Harbour Area Treatment Scheme Division
• 客戶服務及資產管理部 Customer Services and Asset Management Section
• 行動部 Operation Section
• 污水服務收入部 Sewage Revenue Section
操作維修科
Operations and Maintenance Branch
• 香港及離島渠務部 Hong Kong & Islands Division
• 九龍及新界南渠務部 Mainland South Division
• 新界北渠務部 Mainland North Division
• 土地排水部 Land Drainage Division
設計拓展科
Projects and Development Branch
• 顧問工程管理部 Consultants Management Division
• 工程管理部 Project Management Division
• 污水工程部 Sewerage Projects Division
• 排水工程部 Drainage Projects Division
機電工程科
Electrical and Mechanical Branch
• 機電工程部 Electrical and Mechanical Projects Division
• 污水處理部一 Sewage Treatment Division 1
• 污水處理部二 Sewage Treatment Division 2
部門行政部
Departmental Administration Division
• 機密檔案室 Confidential Registry
• 翻譯組 Translation Section
• 招聘及編制事務室 Appointment & Establishment Registry
• 總務室 General Registry
• 總務部-員工關係及福利組 General Registry-Staff Relations & Welfare
• 人事事務室 Personnel Registry
財務及物料供應部
Finance and Supplies Section
• 部門會計組 Departmental Accounts Unit
• 物料供應組 Supplies Unit
技術支援部
Technical Support Group
• 合約顧問組 Contract Advisory Unit
• 環境保護組 Environmental Unit
• 總部組 Headquarters Unit
• 資訊科技管理組 Information Technology Management Unit
• 園境師 Landscape Architect
• 品質管理 Quality Assurance
• 安全顧問組 Safety Advisory Unit
• 技術秘書1 Technical Secretary 1
• 公共關係組 Public Relations Unit
• 訓練組 Training Unit

設計拓展科

設計拓展科負責實施基本工程項目，包括設計及建造雨水渠、防洪及排洪工程、污水收集系統及污水處理設施。

Projects and Development Branch

The Projects and Development Branch is responsible for the implementation of capital works projects. These include the design and construction of drains, flood control and relief works, sewerage network and sewage treatment facilities.

操作維修科

操作維修科負責全港雨水排放及污水收集系統的操作和維修、防洪、策劃雨水排放及污水收集系統、執行土地排水法例，以及管理和保養人工排水道。

Operations and Maintenance Branch

The Operations and Maintenance Branch is responsible for the operation and maintenance of the drainage and sewerage systems in the territory as well as flood control, planning of drainage and sewerage systems, enforcement of land drainage legislation and the management and maintenance of engineered drainage channels.

機電工程科

機電工程科負責污水處理及防洪設施的運作及維修，以及為部門轄下各污水處理及防洪項目提供機電設計及裝置。

Electrical and Mechanical Branch

The Electrical and Mechanical Branch is responsible for the operation and maintenance of sewage treatment and flood protection facilities as well as electrical and mechanical design and installation works in sewerage and drainage projects of the Department.

污水處理服務科

污水處理服務科負責實施包括「淨化海港計劃」等污水處理及系統工程及徵收排污費。

Sewage Services Branch

The Sewage Services Branch is responsible for the implementation of sewerage and sewage treatment projects including Harbour Area Treatment Scheme and collection of sewage charges.

我們特設環保管理委員會和環保先鋒，專責領導部門內部關於可持續發展的溝通工作、合作計劃和措施：

Our Department has established Green Management Committee and The Green Champions to lead internal communication, cooperation and initiatives on sustainability:

環保管理委員會

環保管理委員會就部門的環保管理事宜向高層管理人員提供意見。委員會的職權範圍如下：

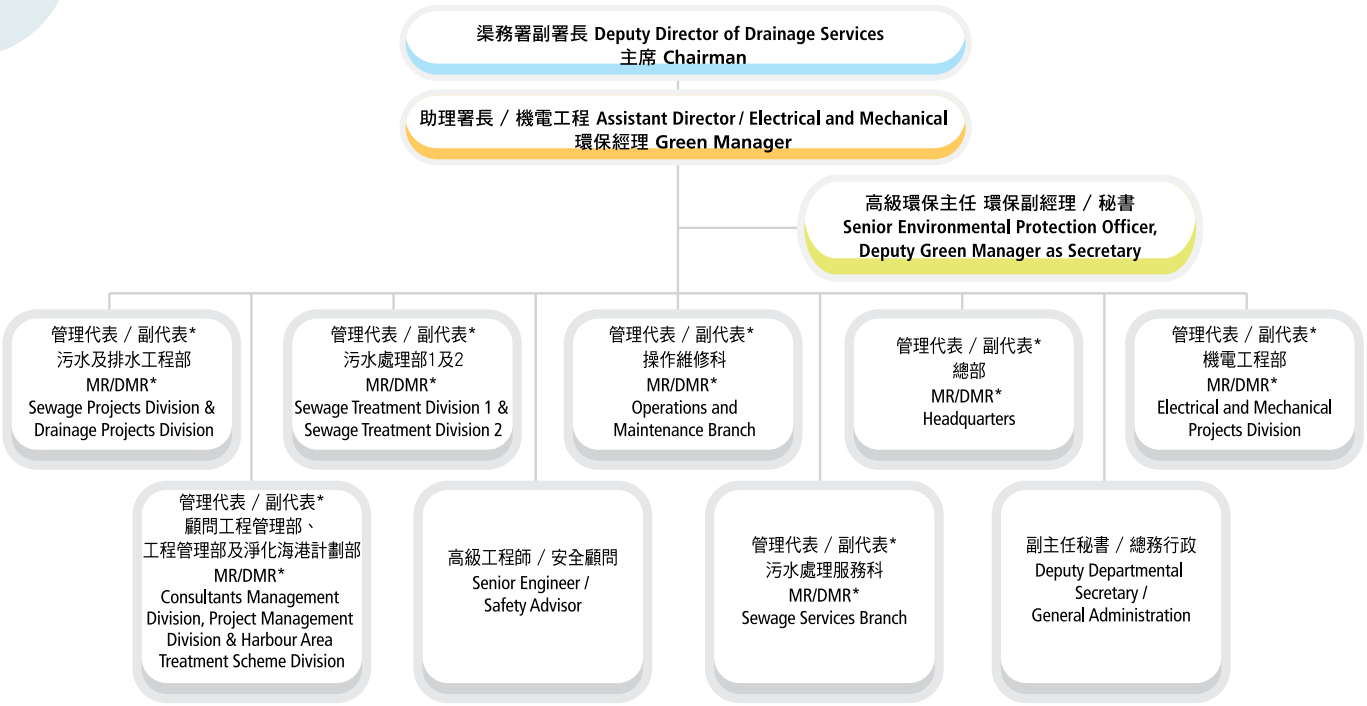
- 制訂及檢討部門的環保管理政策；
- 擬定環境指標及目標，促進持續改善；及
- 透過7個綜合管理系統監察及檢討各環境政策和目標的實施情況。

Green Management Committee (GMC)

The GMC advises the senior management on green management of the Department operations under the following terms of reference.

- To formulate and review departmental policy on green management;
- To set environmental objectives and targets for continual improvement; and
- To monitor and review the implementation of the environmental policies and targets through the seven Integrated Management Systems.

環保管理委員會組織圖
Organisation Chart of Green Management Committee



* 管理代表／副代表：來自ISO 9001、ISO 14001和OHSAS 18001綜合管理系統
MR/DMR: Management Representative / Deputy Management Representative of the ISO 9001, ISO 14001 and OHSAS 18001 Integrated Management System

環保先鋒

環保先鋒組的成員均為有志推廣環保的渠務署員工，致力提倡可持續發展的工作方式。環保先鋒抱持綠色信念，積極傳遞環保訊息，並與同事們分享環保貼士，倡導員工在工作間實踐可持續發展概念。

簡言之，環保先鋒的職責就是以身作則，在日常工作中注重環境保護，作同事們的模範。他們也會鼓勵和協助其他員工培養更環保的工作方式，提升同事們的環保意識及改變工作間文化，促進同事改變行為習慣，提高能源使用效益及減低碳足印。

能源及排放管理小組

繼香港特別行政區政府行政長官在2006年11月簽署《清新空氣約章》後，為貫徹履行《清新空氣約章》6項承諾宣言，本署在2007年年初成立了一個能源及排放管理小組，透過下列行動領導部門完善管理能源及排放：

- 識別排放源頭；
- 訂立基準，評估渠務署的表現；
- 實施減少能源/排放的措施；
- 審計及申報；及
- 分享經驗。

The Green Champions

The Green Champions is a group of our staff who are interested in green issues and endeavour to pursue a more sustainable working style. They are inspired to help promote sustainability issues amongst staff in working area by spreading the green message and sharing green tips.

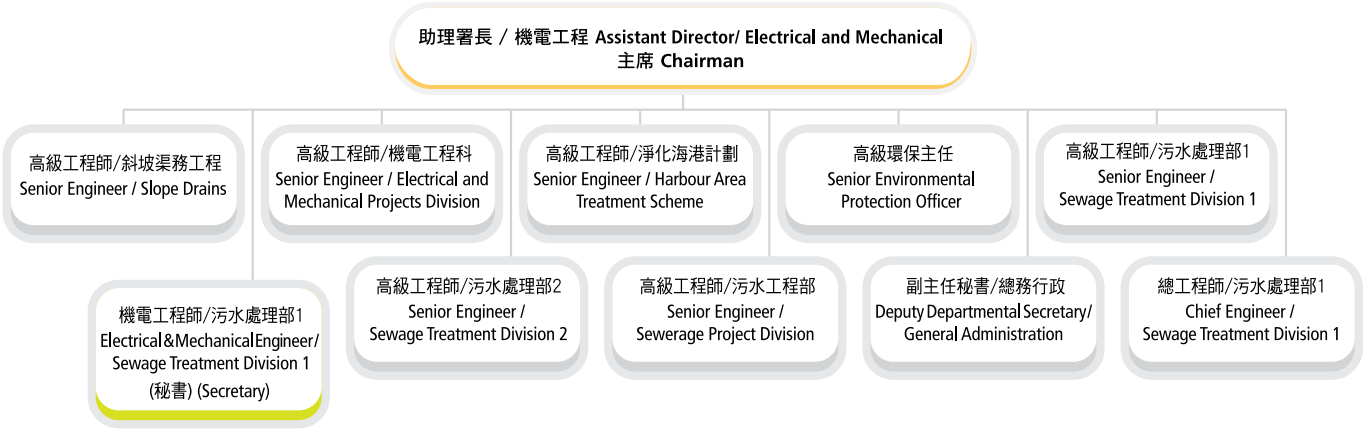
The main role of Green Champions is to set an example to those around by working in an environmentally responsible way, and to encourage and assist colleagues to be more environmentally responsible in their daily work. Through raising awareness of green issues and making small changes in workplace, Green Champions strive to cultivate positive behavioural change towards energy efficiency and reduction of carbon footprint.

Energy & Emission Management Team

Following the signing of the Clean Air Charter by the Chief Executive of Hong Kong SAR Government in November 2006, to fully commit to implementing the Six Commitments under the Clean Air Charter, our Department established an Energy and Emission Management (EEM) Team in early 2007 to help lead the departmental energy & emission management through:

- identifying emission sources;
- assessing DSD's position by benchmarking;
- implementing energy/emissions reduction measures;
- auditing and reporting; and
- experience sharing.

能源及排放管理小組組織結構圖
Organisation Chart of Energy and Emission Management Team



管理方針
Management Approach


Drainage Services Department
Headquarters
ISO 9001, ISO 14001 & OHSAS 18001
Integrated Management System Policy

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。

我們遵循「規劃-實行-檢查-行動」循環模式，本署及轄下大型工程項目均會進行風險評估，以界定相關的潛在風險和部署必要的防範及紓緩措施，將風險控制在可接受水平。

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年年度的「五年實施計劃」，擬定一系列倡議措施，承輔渠務署的中至長期發展：

- 增進員工的健康和工作安全，藉此提高士氣；
- 公開展示傑出工程項目和舉辦外展教育課程，提升部門形象；
- 檢討工作流程及提高日常營運效率；
- 推行「全面資產管理」計劃，優化渠務署設施的長遠使用效益；
- 加強與外界持份者聯繫；及
- 提高能源使用效益，以及減少碳排放和氣味滋擾。

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。

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 ISO 9001 Quality Management System, ISO 14001 Environmental Management System and OHSAS 18001 Occupational Health and Safety Management System international standards.

Following the "Plan-Do-Check-Act" principle, we conduct risk assessment for the Department and major projects to identify potential risks involved and apply necessary preventive and mitigation measures to control the risks within an acceptable level.

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 deemed important for our mid to long term development:

- Enhance staff health and safety for boosting staff morale;
- Enhance departmental image by showcasing successful projects and extending outreaching educational programme;
- Review on workflow and enhance the efficiency of daily operation;
- Establish a "Total Asset Management" plan to optimise the long term utilisation of the DSD's facilities;
- Strengthen linkage with external stakeholders; and
- Enhance efficient use of energy and reduce carbon and odour emissions.

By the end of May 2013, we had completed almost half of the 90 detailed tasks under those initiatives laid down in the Implementation Plan, while working on the rest.

參與本港的協會及委員會

為表我們服務社會的誠志，我們的高級管理人員全情投入社群，積極參與本港多個專業/行業協會及委員會，擔任不同職務，向公眾提供專業意見和分享實務經驗，同時向各業界提倡良好作業守則和輔助擬劃新政策。渠務署人員參與的團體包括：

- 綠化、園境及樹木管理督導委員會
- 顧問工程師委員會
- 建造商委員會
- 國際水協中國香港地區委員會
- 工務小組委員會
- 見習工程師及助理工程師培訓督導委員會
- 工務政策統籌委員會

Participation in Local Associations and Committees

As a direct way to demonstrate our commitment to the community, our senior management members take part actively in a number of local professional/trade associations and committees. Through various roles, they contribute their professional advices and share practical experience with the public, promoting good practices among the industries and facilitating new policy development. Examples are as follow:

- Steering Committee on Greening, Landscape and Tree Management
- Consulting Engineers' Committee
- Building Contractors Committee
- International Water Association Regional Committee of Hong Kong, China (IWAHK)
- Public Works Sub-Committee
- Standing Committee for the Training of Civil Engineering Graduates and Assistant Engineers
- Works Policies Coordination Committee (WPCC)

人權

我們謹遵政府的僱傭及人權政策，嚴禁聘用童工及強迫勞工，並遵守發展局所有指引，例如為員工和渠務署建造及維修合約工程的顧問及承建商提供安全培訓。為了解員工的意見，我們設有多個溝通途徑，例如部門各協商委員會和討論小組，讓員工有需要時可直接與相關的主管人員接觸。這些內部溝通渠道透過定期開會討論影響部門員工福利的事項，以促進管方與員方之間的了解和合作。除此之外，我們亦安排勞資關係主任，協助調解項目承建商與工人之間的重大糾紛。

Human Rights

Observing the government's policies on staff employment and human rights, we strictly prohibit child labour and forced labour. We are also compliant with the guidelines given by the Development Bureau, such as the provision of safety training for our staff, as well as consultants and contractors who are engaged in DSD's construction and maintenance work contracts. In order to obtain feedback from staff, we have provided a number of channels such as Departmental Consultative Committees and Discussion Groups for them to reach relevant authorities directly when necessary. The key objective of establishing these internal communication channels is to achieve better understanding and cooperation between management and staff through regular discussions on matters affecting the well-being of our staff. On the other hand, designated officers specialising in labour relations are assigned to help solve conflicts between contractors and workers for projects with a significant impact.

誠信

我們為員工提供培訓，要求每位渠務署職員遵從《防止賄賂條例》和政府指引，務求道德操守達到最高水平。如有任何懷疑涉及誠信的個案，會立即向廉政公署舉報。於匯報年度，部門並無任何關於賄賂或貪污的個案。

Integrity

We have provided training to staff members and requested them to follow the "Prevention of Bribery Ordinance" and the guidelines set by the government to maintain a high level of ethical code of conduct. Suspected cases, if any, will be reported to the Independent Commission Against Corruption for investigation. During the reporting period, there have not been any reported cases in relation to bribery or corruption.

持份者的參與
Engagement Approach

我們透過日常工作及溝通過程，識別出在本署活動及發展中擁有直接或間接權益的持份者。我們主要的持份者包括員工、客戶、顧問工程公司及承建商、學術團體、環保組織、專業團體、傳媒及公眾。我們的持份者參與活動如下：

We have already identified various stakeholders who have direct or indirect interests in our Department's activities and developments through our daily operations and communication processes. Our major stakeholder groups include staff, clients, consultants & contractors, academic bodies, green groups, professional bodies, media and general public. A list of our stakeholder engagement activities is tabulated below.

持份者 Stakeholder Groups	參與活動 Engagement Activities
渠務署員工 DSD Staff	• 員工激勵計劃 • 員工建議計劃 • 部門各協商委員會和討論小組 • Staff Motivation Scheme • Staff Suggestion Scheme • Departmental Consultative Committee and Discussion Groups
顧問工程公司及承建商 Consultants and Contractors	• 新工程合約 (NEC) • 工地整潔獎勵計劃 • 隧道安全推廣運動 • Implementation of New Engineering Contract (NEC) • Construction Sites Housekeeping Award Scheme • Tunnel Safety Campaign
環保組織 Green groups	• 綠色座談會 • Green Group Forum
法定組織 Statutory Bodies	• 區議會會議 • 立法會會議 • District Councils Meetings • Legislative Council Meetings
傳媒 Media	• 傳媒簡報會 • 透過傳真、電郵及電話的日常查詢 • Media Briefings and Interviews • Daily Enquiries through Fax, Email and Telephone

持份者 Stakeholder Groups	參與活動 Engagement Activities
客戶 Client	• 清理阻塞渠道的客戶滿意度調查 • 透過傳真、電郵及電話查詢排污費事宜 • Clearance of Blocked Sewers and Drains Customer Feedback Survey • Sewage Services Charges Enquiry through Fax, Email and Telephone
學術團體 Academic bodies	• 外展活動 • 參觀渠務署設施及工程工地 • 研究與發展座談會 • Outreaching Program • Visits to DSD's facilities and projects sites • Research & Development Forum
專業團體 Professional Bodies	• 研究與發展座談會 • Research & Development Forum
公眾 General Public	• 問卷調查 • 參觀渠務署設施及工程工地 • 創新科技嘉年華 • 香港花卉展覽 • 透過傳真、電郵及電話的日常查詢 • Questionnaire Survey • Visits to DSD's facilities and projects sites • Innovation Carnival • Hong Kong Flower Show • Daily Enquiries through Fax, Email and Telephone

渠務署主要職責
Our Core Responsibilities

4,466 公里 km

污水收集及雨水排放系統總長度

Total Length of Sewerage and Stormwater Drainage System

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

香港是太平洋周邊地區降雨量最高的城市之一，每年平均降雨量約為2,400毫米，容易受暴雨影響而發生水浸。連場大雨加上熱帶氣旋帶來的風暴潮，往往令低窪地帶和雨水排放系統不足的地區出現水浸。我們肩負著保障廣大市民免受水浸威脅的使命，矢志確保雨水排放系統時刻運作完善，符合世界一級標準。

在過去，我們推行了一系列防洪工程，從而提高防洪水平及減低各區的水浸風險。現時，我們正分階段檢討各區域的雨水排放整體計劃研究，並制訂改善排水系統的策略，以應付本港的急速發展及不斷變化的雨水排放需要。

Hong Kong is vulnerable to flooding due to heavy rainfall. The mean annual rainfall of Hong Kong is about 2,400 millimetres, one of the highest amongst the cities in the Pacific rim. Heavy rainfall, coupled with storm surges during the passage of tropical cyclones, can cause flooding to low-lying areas and those with inadequate drainage systems. With a mission to safeguarding the general public against flooding, we commit to ensuring the drainage system being continuously maintained in good condition and to world-class standard.

During the past years, we have implemented a series of flood prevention projects to enhance flood protection level and reduce flooding risks of different districts. We are 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.

已完成的粉嶺雙魚河改善工程
Completed Sheung Yue River Improvement Works in Fanling

已完成的治理深圳河第一、二及三期工程
Completed Shenzhen River Regulation Project Stage I, II & III

現有設施的運作與維修保養

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。

人工河道

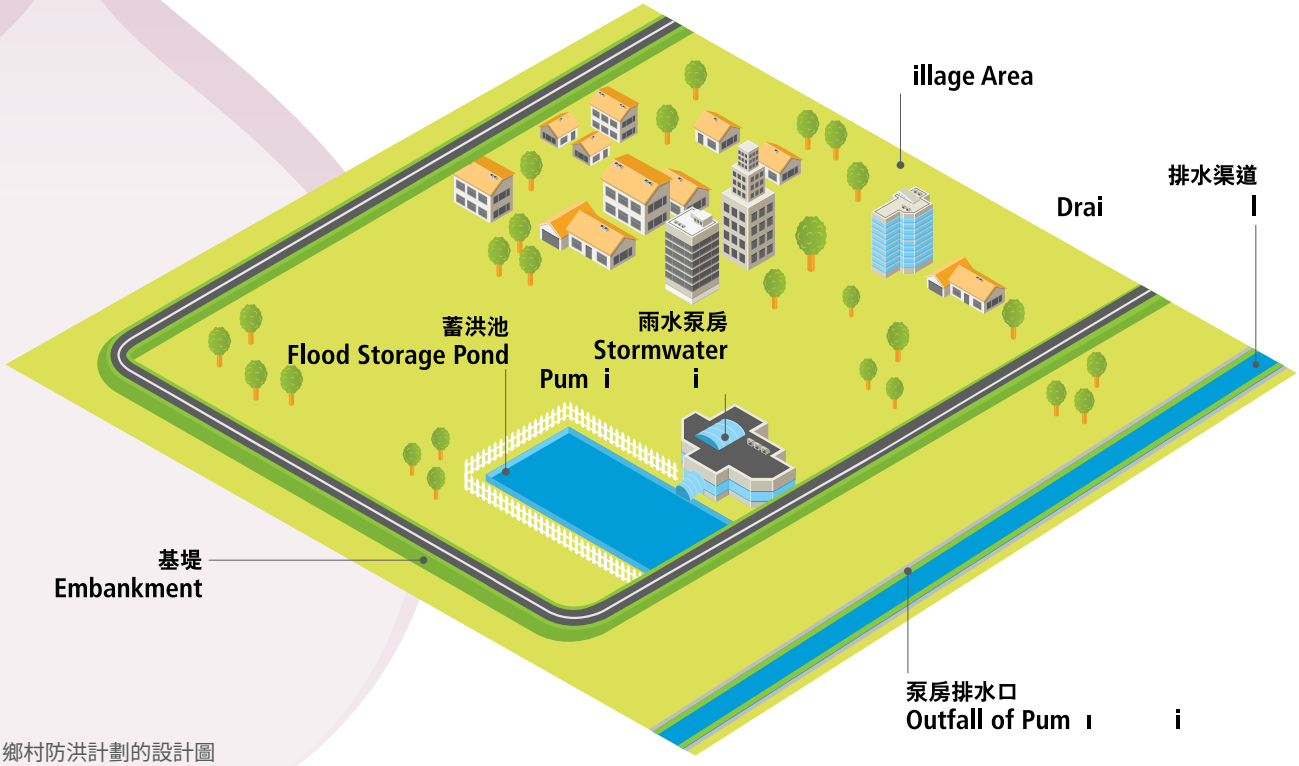
為紓緩新界的水浸問題，渠務署自成立至今先後在區內實施一系列河道治理工程，將現有河道拉直、加闊或挖深，增加河道的排洪能力，並提升相關集水區的防洪水平。現時新界大部份河道治理工程均已竣工，餘下的工程主要集中在上游地區，當中包括治理深圳河第四期工程。

Operation and Maintenance of Existing Facilities

Our Department carries out routine inspection and regular preventive maintenance works to the stormwater drainage facilities to ensure them functioning as designed.

Engineered Drainage Channel

To mitigate the flooding problem in the New Territories (NT), since our establishment, our Department has launched a series of river training works which involve straightening, widening or deepening of existing watercourses to increase drainage capacity and enhance the flood protection level of the relevant catchment areas. Most of the river training works in NT have been completed. The remaining river training works focus on the upstream areas, including Regulation of Shenzhen River Stage IV.



鄉村防洪計劃的設計圖
Layout of Village Flood Protection Scheme

鄉村防洪計劃

現時全港共有27個鄉村防洪計劃，自運作以來，成功保護35條低窪村落免受水浸威脅，並減低這些地區的水浸風險。

一般而言，鄉村防洪計劃包括在位處低窪地帶的鄉村四周建造防洪基堤，將鄉村與鄰近土地分隔以阻截基堤外的雨水流入村內，另於村內建造蓄洪池，在暴雨期間暫時將雨水儲存在蓄洪池內，此外並設置雨水泵房，在暴雨過後將蓄洪池內的雨水抽出至基堤外的渠道。

鄉村防洪計劃採用自動運作模式而無需員工長期駐守監察，因此我們必須定期巡查蓄洪池及排水道、測試和試行雨水泵房，並使用遙測裝置，以確保計劃運作暢順，設施保養完善。

Village Flood Protection Scheme

Our Department is maintaining 27 village flood protection schemes which provide adequate flood protection to and effectively reduce the flooding risks of 35 low-lying villages since commissioning.

In general, a village flood protection scheme involves the construction of an embankment to separate the existing low-lying village from the surrounding land and to prevent external runoff from entering the village, a flood storage pond for temporary storage of stormwater within the bunded area during heavy rainstorms and a stormwater pumping station to pump water from the storage pond to an outside channel after rainstorms.

The village flood protection schemes are designed for unmanned automatic operation. Therefore, we have to conduct regular inspections of the floodwater storage pond and drainage channel, and testing and trial operations of the pumping station. Telemetry devices have also been deployed to ensure proper upkeep and operation of the scheme.

元朗鄉村防洪計劃
Village Flood Protection Scheme at Yuen Long

蓄洪計劃

當下游雨水排放系統的容量不足以應付上游地區因發展而增加的洪峰流量時，便可採用蓄洪池的方法。當上游地區進行開發而下游地區經已完全都市化，採用傳統方法在下游的繁忙道路施工改善現有雨水排放系統，會嚴重影響交通和公眾。公用服務設施亦大大限制渠務設施的建造工程。蓄洪計劃的原理是暫時將暴雨期間的雨水儲存於地下蓄洪池，從而紓緩下游雨水排放系統的壓力。當下游雨水排放系統的雨水退去後，蓄洪池內的雨水便會被抽走，騰出空間以準備下次暴雨。位於大坑東及上環的蓄洪計劃，分別有效地紓緩了旺角和上環的水浸風險。

Stormwater Storage Scheme

Stormwater storage scheme is often adopted when the capacity of the downstream drainage network is inadequate to cope with the increased peak flow rate arising from the developments at upstream areas. When the upstream areas are being developed and the downstream areas have already been fully urbanised, the conventional method of upgrading the existing drainage network at the downstream busy roads will cause severe disturbance to the traffic and public, not to mention congested underground utilities that would cause great constraint to drainage construction. The principle of stormwater storage scheme is to temporarily store stormwater during heavy rainstorm in an underground tank, thus relieving the burden of downstream drainage system. When the stormwater in the downstream drainage system recedes, the stormwater stored in the tank will be pumped out to regain stormwater storage space for the next rainstorm. The stormwater storage schemes at Tai Hang Tung and Sheung Wan have successfully reduced the flooding risks in Mong Kok and Sheung Wan respectively.

大坑東地下蓄洪池內部
Inside view of Tai Hang Tung Underground Stormwater Storage Tank

大坑東地下蓄洪池構思圖
Artist's impression of Tai Hang Tung Underground Stormwater Storage Tank

雨水排放隧道

雨水排放隧道系統將高地集水區的雨水截取，收集並改道直接排放到大海或河道。採用這個方法可減少從上游流入下游市區現有雨水排放系統的雨水，從而減低下游市區的水浸風險，同時減少進行雨水排放系統改善工程所造成的交通阻塞和對公眾的影響。

Drainage Tunnel

Stormwater drainage tunnel system is constructed to intercept and divert stormwater runoff from upland areas for direct discharge to the sea or river. By employing this method, less stormwater from upland areas would enter into the existing drainage systems in the downstream urban areas. Therefore, the flooding risk of the downstream urban areas could be reduced without resorting to extensive drainage upgrading works that would cause disturbance to the traffic and general public.

香港4條雨水排放隧道
Four Drainage Tunnels in Hong Kong

緊急事故控制中心
Emergency Control Centre

目前本署正運作4條雨水排放隧道，包括啟德雨水轉運計劃、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，總長度約22公里。4條雨水排放隧道啟用後，大幅減少流入上環、中環、金鐘、灣仔、銅鑼灣、旺角、荔枝角、長沙灣、深水　、荃灣及葵涌等下游市區的地面徑流，同時大大提高上述地區的防洪水平，並紓緩水浸風險。

雨水渠

為確保排水系統時刻正常運作，我們定期為雨水進水口、雨水渠及河道進行功能性和結構性檢查，以找出問題，並迅速進行保養及維修工作，並特別於雨季前及雨季期間加緊管理。2012－13年度，我們巡查了全港逾2,000公里的雨水渠及河道。

緊急事故及應變措施

除了日常的運作及保養維修工作，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。組織設有由高級專業人員管理的緊急事故控制中心，在緊急狀況時緊急事故控制中心會開始運作，協調全港緊急清理淤塞雨水渠和河道的工作、處理及匯報水浸報告，並向政府內部及在有需要時向市民發放消息。

Currently, our Department is maintaining four drainage tunnels namely Kai Tak Transfer Scheme, Hong Kong West Drainage Tunnel, Lai Chi Kok Drainage Tunnel and Tsuen Wan Drainage Tunnel with a total of about 22 kilometres long over the territory. The commissioning of these drainage tunnels has significantly reduced the surface runoff flowing into the downstream urban areas including Sheung Wan, Central, Admiralty, Wan Chai, Causeway Bay, Mong Kok, Lai Chi Kok, Cheung Sha Wan, Sham Shui Po, Tsuen Wan and Kwai Chung and hence has significantly increased the flood protection level and alleviated the flooding risk of these areas.

Stormwater Drains

To ensure proper functioning of the drainage system, we conduct both functional and structural checks on a regular basis to identify problematic stormwater intakes, drains and watercourses and carry out maintenance and repair works promptly, especially before and during the rainy season. In 2012-13, over 2,000 kilometres of stormwater drains and watercourses were inspected.

Emergency and Response

In addition to routine operation and maintenance, we have established an "Emergency and Storm Damage Organisation" (ESDO) to handle emergency and flooding problems all year round. Under the ESDO, an Emergency Control Centre overseen by senior professionals will be activated when the situation warrants in order to coordinate emergency clearance of blocked drains and watercourses throughout the territory, to respond to flooding reports, and to disseminate information within the Government and, where necessary, to the public.

規劃、設計及建造新工程

雨水排放整體計劃檢討

我們在雨水排放研究方面一直不遺餘力，並積極推行防洪工程，務求保障市民免受水浸威脅。本署自1989年成立至今，已完成8項雨水排放整體計劃研究及3項雨水排放研究，範圍涵蓋全港所有易受水浸影響的地區，同時完成一系列排水工程項目以提升各區的防洪水平。

為配合社區的最新發展和應對氣候變化對雨水排放系統將造成的影響，我們必須適時檢討及更新雨水排放整體計劃，同時構思有效策略以滿足公眾對雨水排放服務日益殷切的需要。本署現正分階段進行各區的雨水排放整體計劃檢討研究。檢討研究將深入檢討和評估雨水排放整體計劃所建議及完成的各項渠務改善工程的成效，如有需要亦會建議及實施進一步的改善措施。

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。為促進九龍的可持續發展和應付區域內多個大型建設項目，我們於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。未來數年，餘下集水區將陸續展開同類的雨水排放整體計劃檢討研究，以滿足不斷增加的雨水排放需要。

未來雨水排放整體計劃檢討將研究具透水效能的多孔路面設計

具透水效能的多孔路面能讓相當流量的雨水滲透到路面下的泥土，它不僅提供結構穩固的路面，其多孔設計更可大幅減少地面的雨水徑流，發揮在源頭控制雨水流量的作用，紓緩下游排水系統的負荷和降低水浸風險。雨水可通過孔口滲透到路面下的泥土，不會積聚於行人路面，同時有助減少暴雨期間雨水排放系統的高峰流量，令雨水排放系統的設計更符合經濟效益，惠澤社會。

我們分別於大埔墟污水泵房及梅窩污水處理廠試驗了此項源頭控制雨水技術，效果令人滿意。我們在檢討雨水排放整體計劃檢討時，將會進一步

Planning, Design and Construction of New Works

Review of Drainage Master Plan (DMP)

Our Department has been proactive in commissioning drainage studies and implementing flood prevention projects to protect the general public against flooding. Since our establishment in 1989, we have completed eight DMP studies and three drainage studies covering the flood-prone areas of the territory as well as completing a series of drainage projects to meet the flood protection level of different districts.

To cope with the latest developments in the community and the climate change impact on drainage system, it is necessary to timely review and update the DMPs, and devise strategies to cope with the city's increasing drainage service needs. Our Department has commenced the review studies for DMPs of different regions in phases. Comprehensive review and evaluation of the completed drainage improvement works recommended in the DMPs will be conducted under the review studies. Further improvement measures would be recommended and implemented as necessary.

The first review study for DMPs in Yuen Long and North District was completed in 2011. To ensure sustainable development of Kowloon and to keep up with the large-scale projects in the region, we embarked on the review studies for DMPs in West Kowloon and East Kowloon in 2012 for completion in 2014. We also started the review studies for DMPs in Tai Po, Sha Tin and Sai Kung in 2013 for completion in 2015. Similar DMP review studies for the remaining drainage catchments will progressively follow in the coming years to cope with the increasing drainage needs.

Porous Pavement Design in Future Drainage Master Plan Reviews

Porous pavement is a type of pavement allowing a certain degree of stormwater to infiltrate into the soil beneath. It not only retains the structural integrity for paving purpose, but also substantially attenuates stormwater surface runoff due to its porosity. It controls stormwater at source, relieves burden of downstream drainage system and thus helps reducing flooding risk. Rainwater infiltrates through the porous pavement, into the soil beneath, instead of accumulating on pavement, and the peak discharge of our drainage system would be reduced during the heavy rainstorm, benefiting the society with a more economical design of drainage system.

This stormwater source control technique has been piloted in Tai Po Market Sewage Pumping Station and Mui Wo Sewage Treatment Works. With the satisfactory trial results, a further study of its application will be conducted under the DMP Review Study. The area of application, the types of porous pavement available in the market and its integration into existing drainage

深入研究這項技術的應用範圍、目前市場可供應的各種具透水效能的多孔路面和這些路面如何與現有雨水排放系統結合。在研究進行期間，我們會與相關部門緊密合作，並初步聯絡及諮詢公眾和有關當局，聽取各界的意見，以成功推行這項技術。

system will be studied in depth. Cooperation with other departments will be necessary for the successful application of this new technique. Preliminary consultation and liaison with relevant authorities and the public will also be conducted during the study.

設計及建造工程

我們現正進行下列主要防洪工程，進一步提升香港的防洪水平：

- **跑馬地地下蓄洪計劃**

  跑馬地地下蓄洪計劃旨在紓緩跑馬地及灣仔一帶的水浸問題。工程包括建造一個容量達60,000立方米的地下蓄洪池、一所綠化泵房、一所配備垂直綠化設計的風扇房、一條長約650米的雙管道箱形暗渠和相關的運動場重建及園境工程。位於跑馬地馬場賽道附近的前期工程已於2012年年中完成，主體合約工程則於2012年9月展開。地下蓄洪池第一期預計於2015年雨季前啟用，而整項工程則預計於2018年雨季前落成。

- **啟德河上游改善工程**

  啟德河上游改善工程旨在提升九龍區的防洪水平。工程包括重建及修復一段由蒲崗村道到東光道長約600米的啟德河上游，以及在啟德河側建造一條長約400米的箱形暗渠。建造工程已於2011年11月展開，預計於2015年至2017年年中分階段落成。此外，我們現正設計啟德河中游改善工程，建造工程預計於2013年年底展開，2017年年底完成。

- **治理深圳河第四期工程（蓮塘/香園圍段）**

  本署現正進行治理深圳河第四期工程，致力提升平原河河口至蓮塘/香園圍口岸一段深圳河的防洪水平。工程包括改善平原河至白虎山一段4.5公里的深圳河，前期工程（即位於有關河段側一段邊境巡邏路的重新定線工程）已於2012年4月展開，主要治河工程預計於2013年動工，2017年年底竣工。

Design and Construction of New Works

To further improve the flood protection level of Hong Kong, we are implementing major flood prevention works including:

- **Happy Valley Underground Stormwater Storage Scheme**

  Happy Valley Underground Stormwater Storage Scheme is designed to alleviate the flooding risk in Happy Valley and Wan Chai districts. The project comprises the construction of an underground storage tank with capacity of 60,000 cubic metres, a pump house camouflaged by green sloping ground, a fan room with vertical greening, a twin-cell box culvert of about 650 metres long, and associated sport pitches re-provision and landscaping works. The advance works located in the vicinity of the race track of the Happy Valley Racecourse were completed in mid-2012. The main contract works commenced in September 2012. The first phase of the underground storage tank is scheduled for commissioning before the rainy season in 2015 and the whole project is scheduled for completion before the rainy season in 2018.

- **Kai Tak River Upstream Improvement Works**

  The Kai Tak River Upstream Improvement Works aim to improve the flood protection level of the Kowloon region. The project comprises the reconstruction and rehabilitation of a 600 metres long upstream section of the Kai Tak River from Po Kong Village Road to Tung Kwong Road; and construction of a box culvert of about 400 metres long besides the Kai Tak River. The project commenced construction in November 2011 and is scheduled for completion in phases from 2015 to mid 2017. In addition, we are designing for the Kai Tak River Midstream Improvement Works. The construction phase of this section of works is scheduled to commence in end 2013 for completion in end 2017.

- **Regulation of Shenzhen River Stage IV (Liantang-Heung Yuen Wai Section)**

  Our Department is implementing Shenzhen River Regulation Project Stage IV to improve the flood protection level of the section of Shenzhen River between the estuary of Ping Yuen River and Liantang/Heung Yuen Wai Boundary Control Point. The project comprises the improvement of 4.5 kilometres of the Shenzhen River between Ping Yuen River and Pak Fu Shan. The advance works of the project (i.e. the realignment of a boundary patrol road alongside the concerned section of river) commenced in April 2012 and the main river training works are scheduled to commence in 2013 for completion in late 2017.

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

污水處理及收集系統的概要

在渠務署為全港提供的服務之中，污水處理擔當著十分重要的角色。透過不同的污水處理程序和先進技術，污水裡大部份的污染物、有毒物質和細菌都會被去除，以符合各項保護環境的標準。

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。

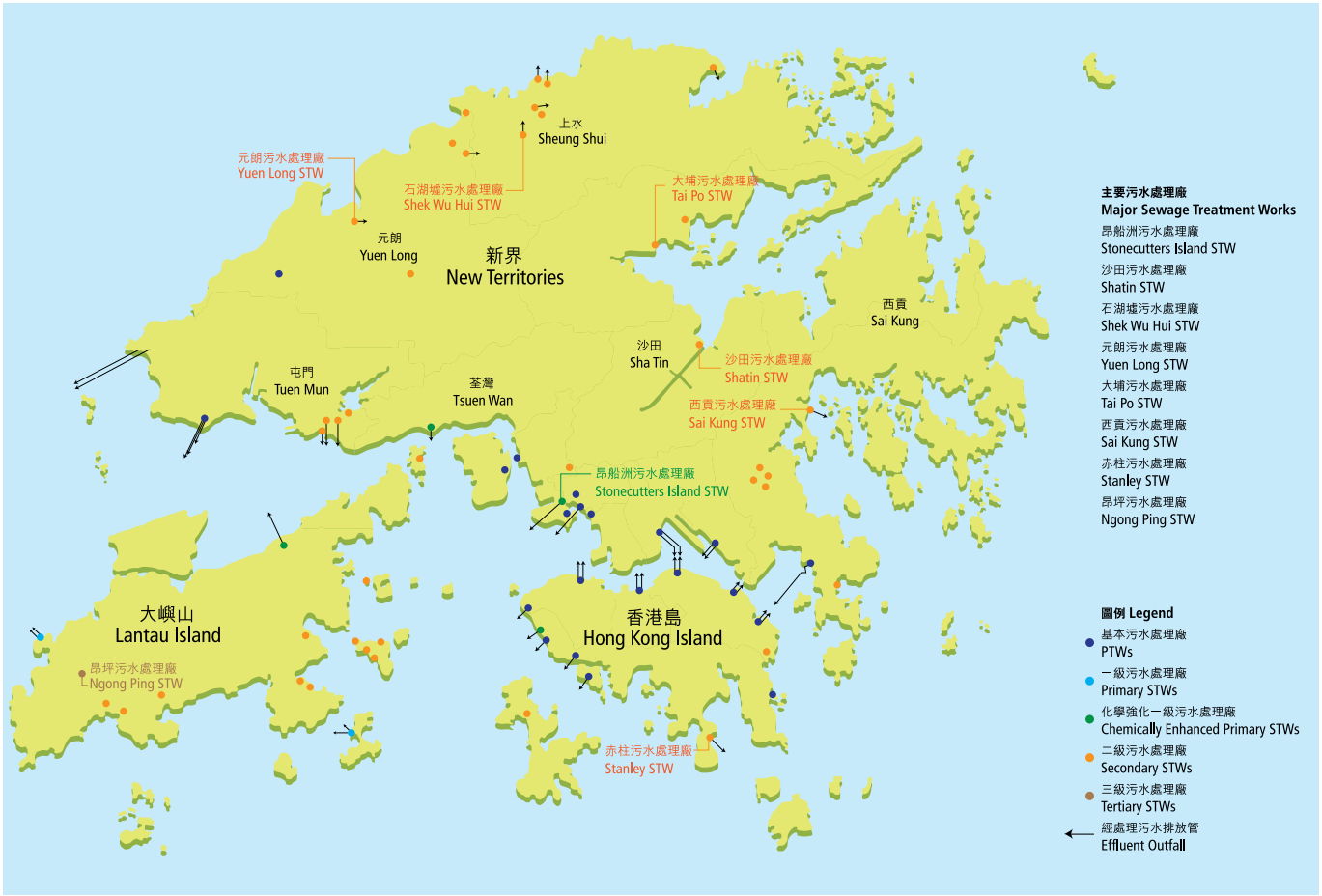
現時，我們正運作292所污水處理設施，當中包括68所污水處理廠和224所污水泵房，每日平均處理從污水收集網絡收集到的約274萬立方米污水。

Overview of Sewage Treatment and Sewerage System

Sewage Treatment plays a crucial role in our services for Hong Kong. By means of different types of treatment processes and advanced technologies, most of the pollutants, toxic materials and bacteria inside the sewage will be removed to a level meeting the environmental standards.

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 (STW) and 224 sewage pumping stations. We treat about 2.74 million cubic metres of sewage collected from our sewerage network every day.



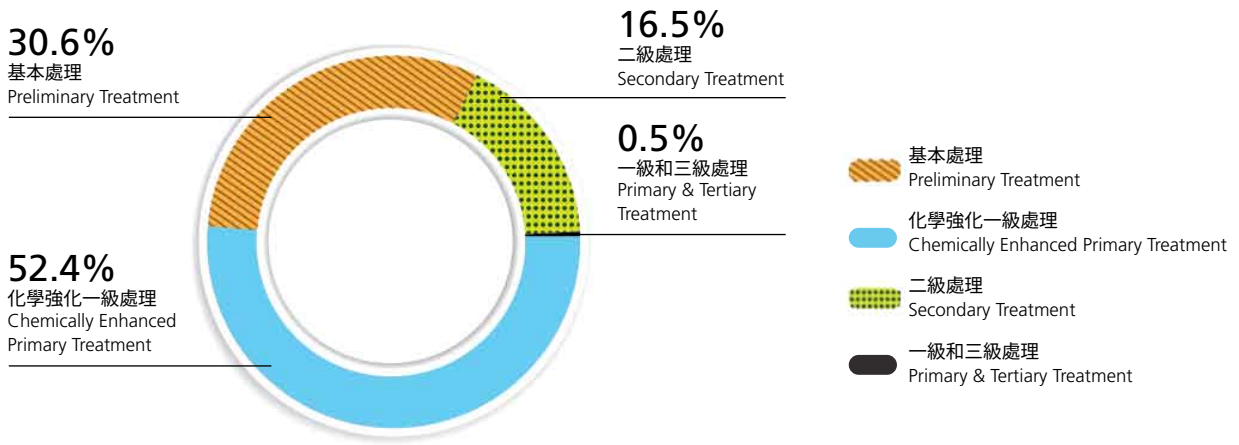
2012-13年度污水處理廠位置圖
Location Map of Sewage Treatment Works in 2012-13

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**

於2012-13年度，我們共處理約10.01億立方米污水。當中30.6%進行基本處理，52.4%進行化學強化一級處理，其餘的16.5%進行二級處理，餘下0.5%的污水進行一級和三級處理。

In 2012-13, we treated 1,001 million cubic metres of sewage in total. 30.6 per cent of the sewage received Preliminary Treatment, 52.4 per cent received Chemically Enhanced Primary Treatment (CEPT), 16.5 per cent received Secondary Treatment and 0.5 per cent received Primary & Tertiary Treatment.

年度污水總處理量10.01億立方米
Annual Sewage Treatment Volume 1,001 million m^3



沙田污水處理廠
Shatin Sewage Treatment Works

沙田污水處理廠鳥瞰圖
Birdview of Shatin Sewage Treatment Works

污泥會在污水處理的過程中產生。2012-13年度我們共收集300,965公噸污泥，需要以26,128架次的貨櫃車運送到堆填區傾倒。

Sludge is produced during the sewage treatment process. The total quantity of sludge collected in 2012-13 was 300,965 tonnes. It required 26,128 container vehicle trips to deliver the sludge for disposal at the landfills.

為確保污水的收集、處理和排放設施維持有效率的運作，我們時刻進行適當的保養及維修，並會繼續擴大污水收集系統的覆蓋範圍和改善污水處理設施，促進香港的可持續發展。

We have been properly maintaining our sewage collection, treatment and disposal facilities to ensure their efficient and effective operation. We will continuously improve the sewerage coverage and treatment facilities, enabling the sustainable development of Hong Kong.

用以分析污水樣本的溶氧量測試儀器
Dissolved Oxygen Meter used for analysis of sewage samples

污水處理成效

專業的化驗室服務

達致嚴謹的品質要求實有賴我們專業的化驗室服務。我們的沙田中央化驗室和昂船洲化驗室自1999年起，已獲創新科技署轄下的香港認可處頒發「香港實驗所認可計劃」(HOKLAS)證書，確認測試水及廢水環境樣本的認可資格。於1999年至2013年間，化驗室的認可測試項目由7項增加到20項。此外，6個測試微量金屬的項目將可望在2013-14年度獲得認可資格。自2007年起，昂船洲化驗室亦已獲得確認測試化學樣本的認可資格，負責測試渠務署購買用於污水處理之化學品的主要成份，確保符合合約要求。

分析服務

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。

我們位於沙田、大埔、西貢、石湖墟及元朗的化驗室負責廣泛的樣本測試，測試的種類超過14個。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)。

Sewage Treatment Performance

Professional Laboratory Services

Strict quality compliance relies on the support from our professional laboratory services. Our Shatin Central Laboratory and Stonecutters Island Laboratory have gained accreditations since 1999 for testing of environmental samples (water & wastewater) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) operated by the Hong Kong Accreditation Services of the Innovation & Technology Commission. The number of tests accredited increased from seven to twenty in the period between 1999 to 2013. Six more tests in relation to trace metal are expected to be accredited in 2013-14. Stonecutters Island Laboratory has also gained accreditation since 2007 for testing of chemical samples to assure that the procured chemicals for sewage treatment are complying with the contract specifications.

Analytical Services

A comprehensive sampling scheme is in place to provide pollutant loading measurement and monitoring of treatment efficiencies at various treatment units. This is to ensure effluent is treated to meet mandated discharge license conditions and precise data are provided for quality compliance.

Extensive laboratory testing, which covers more than 14 types of analyses, has been carried out in our laboratories in Sha Tin, Tai Po, Sai Kung, Shek Wu Hui and Yuen Long. 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).

規劃、設計及興建新設施

淨化海港計劃第二期甲

淨化海港計劃旨在通過收集及處理維多利亞港兩岸的污水以改善維港水質。此計劃分兩期推行，第一期的設施已於2001年12月啟用，採用化學強化一級處理方法處理約75%源自維港兩岸的污水。第二期分甲、乙兩期推行。現正進行的第二期甲工程，將會收集和處理餘下源自港島北部及西南部地區的污水，然後排放出海。第二期甲的主要工程預計於2014年年底完成。第二期乙工程旨在將排放水進行生物處理，環境保護署現正就該項目的落實時間表進行檢討。

Planning, Design and Construction of New Works

Harbour Area Treatment Scheme Stage 2A

The Harbour Area Treatment Scheme (HATS) aims to improve the water quality of Victoria Harbour by intercepting and treating sewage generated from both sides of the Harbour. HATS consists of two stages. Stage 1 was commissioned in December 2001 treating about 75 per cent of the sewage generated from both sides of the Harbour by chemically enhanced primary treatment. Stage 2 is divided into Stages 2A and 2B. The former is now in progress and will collect and treat the remaining sewage generated from Hong Kong Island's northern and southwestern regions before discharge. Stage 2A's major engineering works are anticipated to be completed in end 2014. The implementation programme of HATS 2B, which aims to add biological treatment to the effluent, is now being reviewed by Environmental Protection Department.

搬遷沙田污水處理廠往岩洞的可行性研究

沙田污水處理廠是香港最大規模的二級污水處理廠。將它遷往岩洞可以騰出現址約28公頃土地作興建房屋和其他用途，從而改善市民的生活質素。此外，這項計劃亦可移除與周邊不協調的設施，優化社區及環境。

我們已於2012年5月展開搬遷沙田污水處理廠往岩洞的可行性研究，預計約於24個月內完成。經過覆檢，我們已再確定亞公角女婆山是重置沙田污水處理廠的最佳選址。我們已初步探討適合重置於岩洞內沙田污水處理廠的污水及污泥處理方案，並於2012年11月至2013年3月期間舉行第一階段公眾參與活動，以收集公眾及持份者的意見。就市民對搬遷計劃的關注事項，我們已大致完成相關的初步影響評估。我們計劃於2013年7月至10月舉行第二階段公眾參與活動，與市民分享初步影響評估的結果及有關緩解措施的建議。

赤柱污水處理廠是香港首個建於岩洞內的污水處理廠，自1995年啓用以來，均能融合周邊環境和社區。我們會繼續安排不同團體參觀赤柱污水處理廠，以便公眾及持份者親身體驗於岩洞內建設污水處理廠的好處。

Feasibility Study on Relocation of Shatin Sewage Treatment Works to Caverns

Shatin Sewage Treatment Works (STW) is the largest secondary STW in Hong Kong. Its relocation to caverns could release the existing site of about 28 hectares for housing and other purposes that would enhance our living quality. This proposal will also help remove incompatible land uses with the surroundings and enhance the community and environment.

We commenced the feasibility study on relocation of Shatin STW to caverns in May 2012 for completion within about 24 months. After review, we have re-affirmed that Nui Po Shan of A Kung Kok is the most suitable relocation site for Shatin STW. We have preliminarily investigated the sewage and sludge treatment options suitable for the relocated Shatin STW inside caverns. To solicit comments and opinions from the public and stakeholders, we conducted the Stage 1 public engagement exercise between November 2012 and March 2013. We have substantially completed the preliminary impact assessments to address the public's concerns about the relocation proposal. We plan to conduct the Stage 2 public engagement exercise from July to October 2013 to share with the public the results of the preliminary impact assessments and the proposed mitigation measures to address their concerns.

To facilitate the understanding of the public and stakeholders on the benefits of housing a STW inside caverns, we have continued to arrange site visits for various parties to Stanley STW which is the first STW built in caverns in Hong Kong and has integrated well with the surrounding environment and community since its commissioning in 1995.

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

沙田污水處理廠現址以及建議的搬遷選址
Existing Shatin STW and Proposed Reloction Site

赤柱污水處理廠
Stanley STW

石湖墟污水處理廠擴建工程

現有的石湖墟污水處理廠於1984年投入服務，負責為上水、粉嶺及鄰近地區收集到的污水提供二級污水處理。未來數年內，石湖墟污水處理廠即將達到每日93,000立方米的設計負荷。為應付該區預期增加的污水量和配合鄉村公共污水收集系統擴建工程，以及為建議的粉嶺北及古洞北發展計劃作好準備，我們現正計劃分階段逐步提升污水處理廠的污水處理量。石湖墟污水處理廠的污水處理級別將會逐漸提升至三級，藉以確保污水經處理後最終排放到后海灣時不會增加污染量。另外，為促進可持續發展，提升至三級污水處理水平的石湖墟污水處理廠有機會可為上水、粉嶺及新發展區提供處理後的再造水，以作沖廁和其他非食水用途。2012年12月，我們已就污水處理廠的進一步擴建展開勘測研究，範圍涵蓋污水及污泥處理程序的設計、多項影響評估、場地勘探、編製改善工程初步設計、園境及綠化計劃、制訂實施策略及時間表，以及展開公眾參與活動諮詢意見。研究預計於2014年年中完成。

Further Expansion of Shek Wu Hui Sewage Treatment Works

Commissioned in 1984, the existing Shek Wu Hui STW provides secondary treatment to sewage collected from Sheung Shui, Fanling and the adjacent areas. In the coming years, Shek Wu Hui STW will reach its design capacity of 93,000 cubic metres per day. To cope with the forecast increase in sewage flow from the local neighbourhoods and the extension of public village sewerage, as well as the proposed new developments in Fanling North and Kwu Tung North, we plan to further increase the STW's capacity in phases. In order to ensure no increase in pollution load to Deep Bay, which is the ultimate discharge point of the effluent from Shek Wu Hui STW, the sewage treatment level of Shek Wu Hui STW will be upgraded progressively to tertiary level. To promote sustainable development, the upgraded STW will also provide an opportunity for possible re-use of effluent for toilet and other non-potable uses in Sheung Shui, Fanling and the new development areas. We have commissioned an investigation study in December 2012, the scope of which will cover design of sewage and sludge treatment process, various impact assessments, ground investigations, preparation of a preliminary design for the upgrading works, landscaping and greening plan, formulation of implementation strategies and programme, and public engagement for the further expansion of the STW. The investigation study is planned to be completed in mid-2014.

石湖墟污水處理廠
Shek Wu Hui STW

擴建鄉村公共污水收集系統

多年來，我們致力把公共污水收集系統擴展到更多鄉村地區，以改善尚未設有污水收集系統的鄉村之衛生情況及附近河道和收水體的水質。現時，我們正為北區、大埔、沙田、元朗、錦田、屯門、將軍澳、西貢、以及離島等地區的鄉村污水收集系統進行不同階段的規劃、設計及建造工程。截至2013年3月，我們已為超過150條鄉村完成公共污水收集系統，並正為逾80條鄉村進行有關工程，另有逾230條鄉村的污水收集系統則已進入規劃及設計階段。

Extension of Public Village Sewerage

Over the years, we have been making efforts to extend public sewerage to more villages in order to improve the sanitary conditions of the unsewered villages and the water quality of the nearby streams and receiving water. At present, our village sewerage works at North District, Tai Po, Sha Tin, Yuen Long, Kam Tin, Tuen Mun, Tseung Kwan O, Sai Kung, and Outlying Islands are being carried out and are under different stages of planning, design and construction. Up to March 2013, we have completed public sewerage for over 150 villages while sewerage works for more than 80 villages are in progress. More than 230 villages are under planning and design stage for sewerage works.

進行中的鄉村污水收集系統工程
DSD's Village Sewerage Works under construction

污水處理服務收費的概要
Overview of Sewage Services Charges

污水處理服務收費

「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均須繳費。污水處理服務費包括排污費和工商業污水附加費兩種，而現時須繳付工商業污水附加費的行業，已由原先的30種減少至27種。

Sewage Services Charges

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, which have two components: the Sewage Charge (SC) and the Trade Effluent Surcharge (TES). At present, the number of trades that are required to pay TES has been reduced from the original 30 to 27.

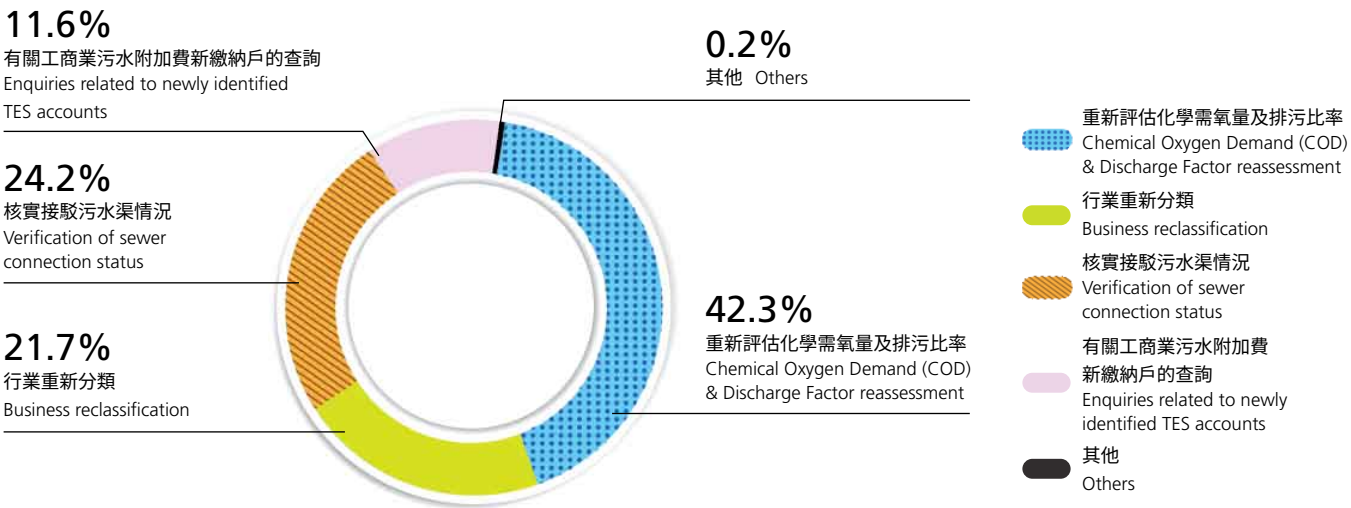
客戶查詢

2012-13年度，我們共接獲6,749個電話及書面查詢。我們積極履行本署的服務承諾，超過98%的書面查詢在接獲後一個月內獲發出正式回覆。

Customer Enquiries

In 2012-13, we received 6,749 telephone and written enquiries. More than 98 per cent of our replies to the written enquiries were issued within one month, achieving our Department's performance pledge.

2012-13年度所接獲的各類書面查詢
Written Enquiries Received in 2012-13 by Types



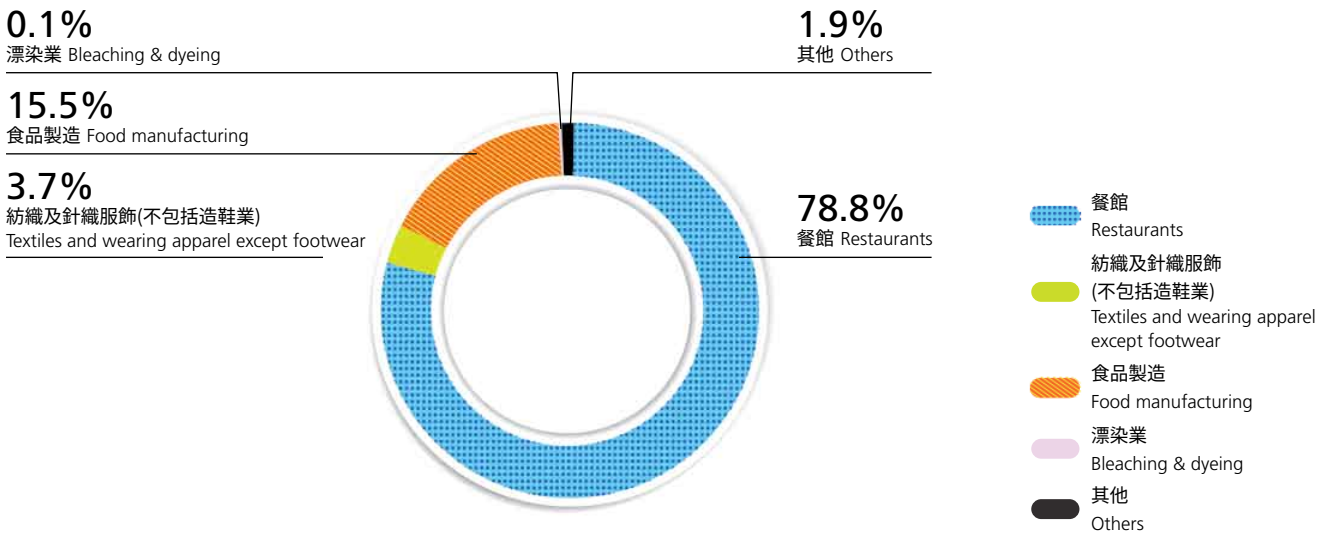
帳單及用水量統計數字

全港自來水用戶約有282萬個，其中大約261萬個用戶須繳付排污費。非住宅用戶中，約有22,000個用戶經營污水處理服務（工商業污水附加費）規例所指定的27種行業之一，因此須額外繳付工商業污水附加費。工商業污水附加費繳納戶所屬行業的分佈見下圖。

Billing and Consumption Statistics

There are about 2.82 million water accounts, of which about 2.61 million are liable to pay sewage charge. In the non-domestic category, about 22,000 accounts are liable to pay TES as they are operating one of the 27 trades designated in the TES Regulation. The distribution of TES accounts by trade types is shown in the following chart.

2012-13年度工商業污水附加費繳納戶的所屬行業
Distribution of TES Accounts by Trade Types in 2012-13



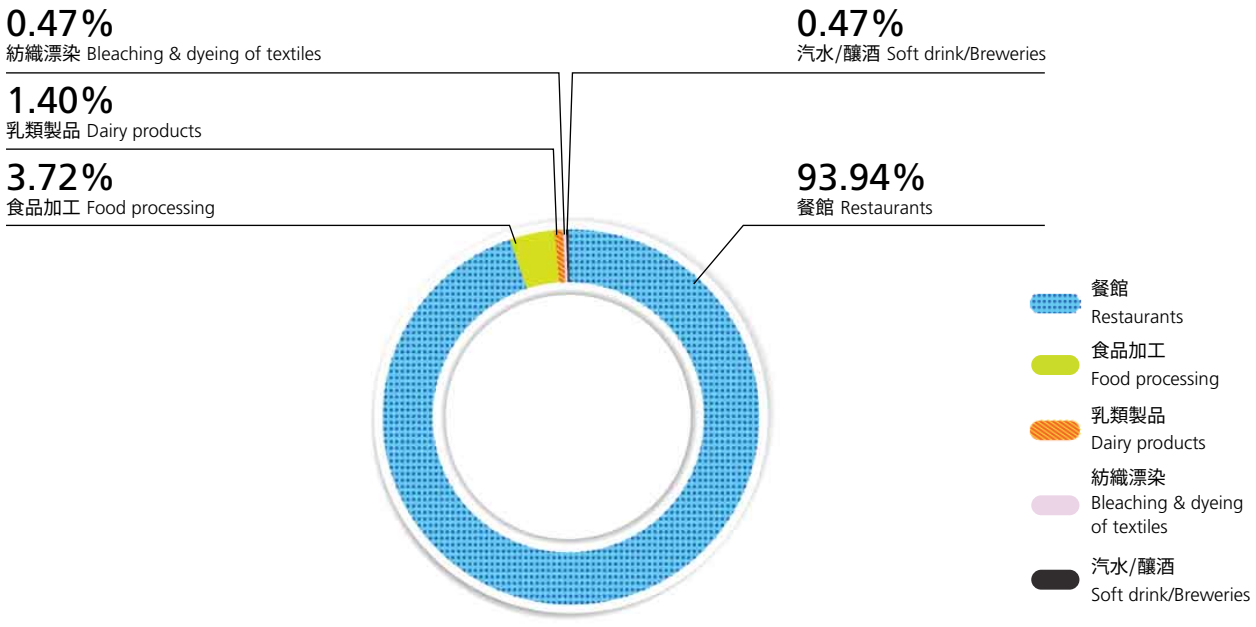
重新評估工商業污水附加費收費率及排污比率

非住宅用戶如認為其所排放的污水濃度或排污比率低於法例所列明的相關數值，可申請重新評估工商業污水附加費收費率或排污比率，重新評估的收費率有效期為3年。

Reassessment of TES Rate and Discharge Factor

Non-domestic consumers may apply for reassessment of the TES rate or discharge factor if they consider that their effluent strength or discharge factor is lower than the corresponding values specified in the Ordinance. The validity period for the reassessed TES rate is three years.

2012-13年度申請重新評估化學需氧值的所屬行業
Distribution of COD Reassessment Applications in 2012-13 by Business Classification



環境管理
Managing the Environment

560,000

種植灌木數量

No. of Shrubs Planted

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

「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

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。

立面設計

立面設計的主要面貌包括利用仿木材覆蓋板牆、綠化道路兩旁及天臺及利用3種不同顏色的組合式鑲板以改善視覺感觀。當中的組合式鑲板特別仿傚中國古字「水」為題材。

綠化道路兩旁及天臺，加強綠化效果

道路兩旁將放置不同形狀及組合的花槽，種植一些本地植物。天臺亦會以不同組合的灌木、地被植物及碎石綠化環境。

仿傚中國古字「水」的組合式鑲板
Render modular panels reflecting the ancient Chinese pictogram for water

綠化道路兩旁模擬圖
An image of soft landscaping along site roads

Upcoming Greening and Beautification Works in Stonecutters Island Sewage Treatment Works under HATS 2A

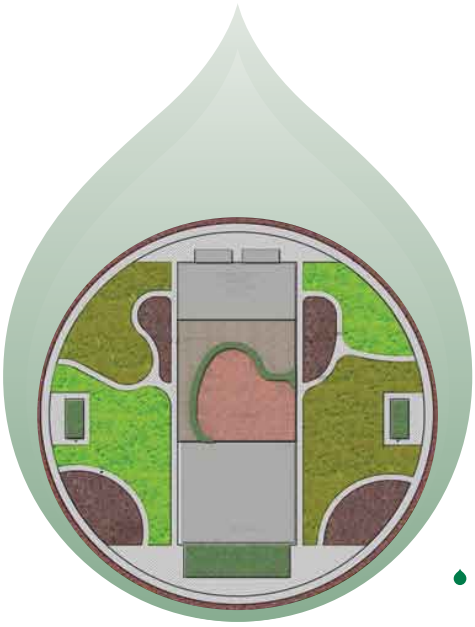
Stonecutters Island Sewage Treatment Works (SCISTW) is in a prominent location close to western Kowloon. It is overlooked by the public from the high rise developments around Lai Chi Kok and Tai Kok Tsui from its North and East. The Southwest of the site is screened by a lushly vegetated woodland. Environmental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

Elevation treatments

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.

Soft landscaping along site roads and roofs to strengthen the greening effect

Site roads will be enhanced by the introduction of local plant species in a combination of planting boxes and beds next to the existing tanks. Roofs will be turned into a series of vividly green landscapes with a mixture of shrubs, groundcover plants and gravelled paths.



綠化天臺模擬圖
An image of green roofs

以不同顏色及圖案覆蓋沉澱池

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。

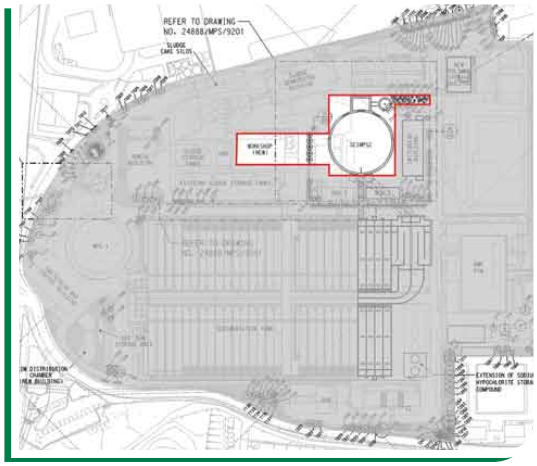
Covering of the sedimentation tanks with randomly coloured pattern

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.

已覆蓋的沉澱池
Covered sedimentation tanks

除此之外，我們矢志推進可持續發展，昂船洲污水處理廠新建的工場及主泵房現正進行綠色建築環境評估認證(BEAM Plus)評核，參與綠色建築環境評估認證計劃的建築物會獲得一個標籤，顯示樓宇的整體質素。為展示我們致力保護環境的決心，我們在現有建造合約上對樓宇效能作出多項調改和提升。改善工程包括設置廢物回收室、利用玻璃混凝土作鋪路物料、重用拆卸工程廢物、增設太陽能光伏板和使用發光二極管(LED)燈具節省能源、選用分槽式沖水廁所節約用水，以及加裝通風機改善室內空氣質素。

In addition, a BEAM (Building Environmental Assessment Method) Plus assessment is being carried out for a designated area of the SCISTW site in order to demonstrate our commitment to sustainability. The assessment covers the new workshop and the new main pumping station building. BEAM Plus provides building users with a single performance label that demonstrates the overall quality of a building. To demonstrate our commitment in protecting the environment, we are planning to implement number of enhancements of building performance through the current construction contracts. The enhancement works include the provision of refuse recycling rooms, use of glasscrete as porous pavement, reuse of demolition waste, addition of solar panels and use of LED lighting for energy saving, use of WC split-tanks for water conservation, and addition of intake ventilation-fans for improving indoor air quality.



綠色建築環境評估認證評估範圍
BEAM Plus Assessment Area

昂船洲污水處理廠外貌
An Overview of SCISTW

建議於啟德河改善工程工地進行綠化及生態保育工程

啟德河是東九龍的主要排水道之一，起點位於黃大仙蒲崗村道，經彩虹道及毗鄰東頭邨和東匯邨的東光道流至太子道東轉入地底，橫越啟德發展區，最後流入維多利亞港。啟德河全長約2.4公里，早於數十年前配合前啟德機場一同興建，已不足以符合現行的防洪標準。在暴雨期間，彩虹道經常發生水浸，嚴重影響黃大仙和鄰近地區的交通。啟德河改善工程現正進行中，目的是提高啟德河的排洪能力，紓緩鄰近地區的水浸風險。

為鼓勵公眾參與啟德河的規劃，我們於2010年及2011年先後舉行兩個階段的「共建啟德河」公眾參與活動。從諮詢結果可見，公眾冀盼啟德河在發揮重要的防洪作用之餘，也可活化為翠綠宜人的河道及優美的城市特色。為達到市民的期望，我們在啟德河改善工程加入了多項園境、綠化及生態環境保育元素，希望活化啟德河成為一條富吸引力的城市綠化河道。有關的綠化工程包括沿着河堤裝設花槽及人工仿石，並於河床種植經挑選的水生植物，以營造自然景致。河道兩旁上現有的花崗石矮牆將盡量保留作文物保育。雖然現有的河岸環境生態價值較低，但我們準備在啟德河河床加設魚洞穴和天然石塊，藉此改善微生境及優化物種的多樣性。西貢蠔涌河進行河道改善工程時亦有加設這類設施，成效甚佳。

啟德河位置
Location of Kai Tak River

Proposed Greening and Ecological Conservation Works in Kai Tak River Improvement Works

Kai Tak River is one of the major drainage channels in East Kowloon. It originates from Po Kong Village Road at Wong Tai Sin, flows parallel to Choi Hung Road and Tung Kwong Road adjacent to Tung Tau Estate and Tung Wui Estate, runs underneath Prince Edward Road East before traversing the Kai Tak Development (KTD) area and finally discharges into Victoria Harbour. The total length of Kai Tak River is about 2.4 kilometres. It was built in tandem with the former Kai Tak Airport some decades ago and found inadequate to meet the current flood protection standard. Flooding incidents have occurred along Choi Hung Road during heavy rainstorms and severely affected the traffic of Wong Tai Sin and its adjacent districts.The Kai Tak River Improvement Works are being implemented , which aim to improve its drainage capacity and mitigate flooding risk to the surrounding areas.

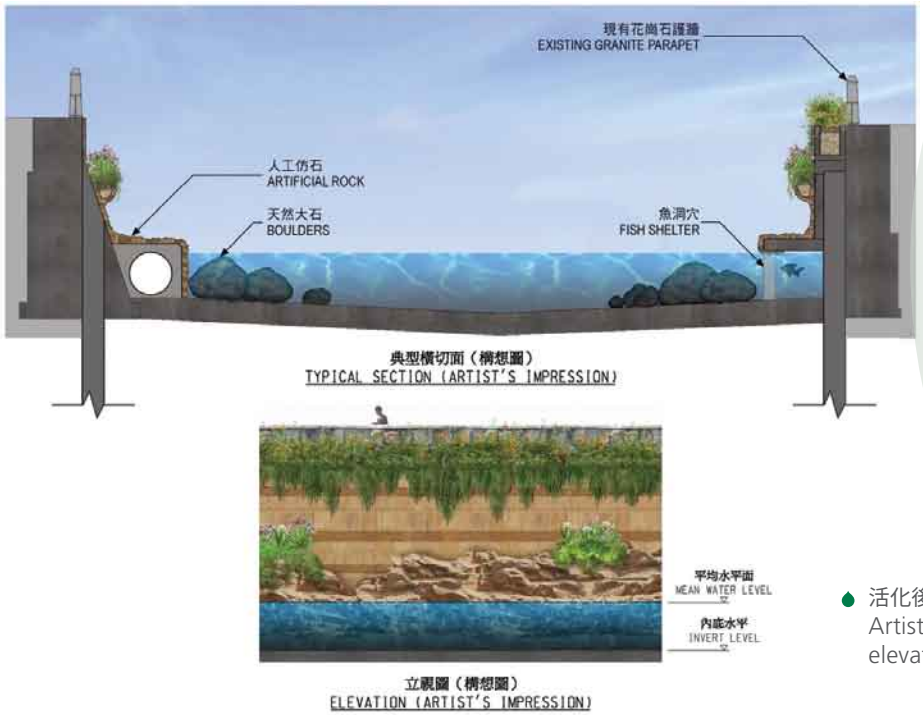
To engage the public on the planning of Kai Tak River, we conducted a two-stage public engagement exercise on "Building our Kai Tak River" in 2010 and 2011. According to the engagement results, there are strong public aspirations for revitalising Kai Tak River into an attractive green river and townscape feature to enhance its visual quality and image, in addition to its prime objective for flood protection. To meet such aspirations, we have incorporated various landscape, greening and ecological elements in the Kai Tak River Improvement Works with a view to rehabilitating the Kai Tak River into a green river corridor in urban areas. Greening works include installation of planters and artificial rock along the river walls. Selected species of submerged plants will also be cultivated at river bed to foster a natural environment. The existing granite parapets along the river walls will be retained in general for heritage conservation purpose. Though the ecological value of the existing riparian habitat is relatively low, we will introduce fish shelters and boulders on river bed to enhance the micro-habitat and species diversity. These have been proven successful in the river improvement works at Ho Chung River in Sai Kung.

啟德河改善工程現正分階段進行。啟德河上游(蒲崗村道至東光道)的建造工程已於2011年10月動工，預計於2017年完竣。此外，我們亦計劃於2013年年底展開中游(東光道至太子道東)的建造工程。土木工程拓展署已於2013年年初展開位於啟德發展區的下游改善工程，預計於2018年竣工。

Kai Tak River Improvement Works are being carried out in stages. We have commenced the construction works for Kai Tak River's upstream (from Po Kong Village Road to Tung Kwong Road) since October 2011 for completion in 2017. We have also planned to commence the construction works for the midstream (from Tung Kwong Road to Prince Edward Road East) in end of 2013. The Civil Engineering and Development Department has commenced the downstream upgrading works within KTD in early 2013 for completion in 2018.

在蠔涌河建造溪內保護區，供魚類、無脊椎動物和其他水生動物在河水流速高時棲身
In-stream refugia are provided at Ho Chung River for providing shelters for fishes, invertebrates and other aquatic animals when the flow at the River is fast

沿蠔涌河裝置導流石塊，以改變下游的流向和流速，藉此創造多元化生境／保護區
Flow deflectors are provided along Ho Chung River to alter flow direction and velocity downstream thus providing a variety of habitat/refugia



活化後啟德河的切面及立視構想圖
Artist's impression of typical section and elevation of the revitalised Kai Tak River

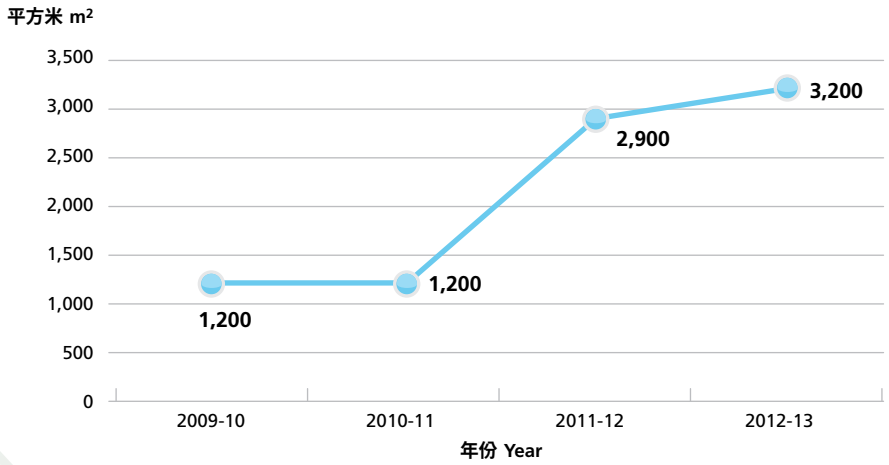
渠務署設施的綠化工作

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天臺綠化。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 works 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



於2012年落成的綠化天臺工程包括大元污水泵房、長沙灣污水泵房、水船街污水泵房及土瓜灣基本污水處理廠。這些綠化天臺不僅美化環境，更能在夏季時降低建築物頂層的溫度，有助緩減熱島效應。

The most recent examples of completed green roofs in 2012 were Tai Yuen Sewage Pumping Station (SPS), Cheung Sha Wan SPS, Waterboat Dock SPS and To Kwa Wan Preliminary Treatment Works (PTW). These green roofs not only help create a pleasant environment, but also lower the building temperature and alleviate the heat island effect during summer.

土瓜灣基本污水處理廠的綠化天臺
Green roof at To Kwa Wan Preliminary Treatment Works

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

舊墟污水泵房的綠化天臺
Green roof at Kau Hui Sewage Pumping Station Compound

兆康污水泵房的綠化天臺
Green roof at Siu Hong Sewage Pumping Station

水船街污水泵房的綠化天臺
Green roof at Water Boat Dock Sewage Pumping Station

渠務署設施的垂直綠化與相關的研究和發展

本署自2009年6月起與香港大學合作，於沙田污水處理廠內的4個污泥貯存缸外牆進行垂直綠化研究，探討不同攀緣植物的綠化表現及它們對外牆散熱的成效。研究成功於2013年3月完成，結果顯示被植物覆蓋的外牆表面，在夏天的溫度可減低攝氏7度。此研究項目榮獲「香港園境師學會設計大獎2012」規劃與綠化研究組別優異獎。

此外，我們有系統地研究了以兩種攀緣模式生長的20種攀緣植物，即依靠鋼網支架生長的模式與自行在混凝土上攀爬的模式。研究顯示，依靠鋼網支架生長的垂直綠化模式與自行攀爬模式的綠化效果非常理想。研究為期30個月，期間記錄了20種攀緣植物的生長特性及表現，這些資料對日後的綠化項目有很大幫助。由於安裝簡單、保養容易、安裝成本較低及有良好的綠化效果，我們會鼓勵工程人員在新工程及現有的設施加設以上兩類攀緣植物。

Vertical Greening in DSD Facilities and related Research and Development Work

Our Department has collaborated with the University of Hong Kong since June 2009 to carry out a vertical greening study on the external walls of four sludge storage tanks at Shatin Sewage Treatment Works (STSTW). The objective is to study the greening effects of different climber species and their effects on temperature reduction. The study was successfully completed in March 2013 and the result revealed that the temperature of exterior green wall with vegetation cover could drop by seven degree Celsius in summers. The study received the Merit Award under Landscape Planning/Research Category of "Landscape Design Awards 2012" organised by the Hong Kong Institute of Landscape Architects.

20 climber species of two different climbing modes i.e. trailing plants in mesh mode (mesh climbers) and self-climbing plants in concrete mode (concrete climbers) were systematically assessed in the study. The overall result shows that the greening effects of the tested mesh climbers and concrete climbers are very promising. With 30 months of growth monitoring, the growing characteristics and performances of the 20 climber species were recorded and will provide a good reference in our future projects. We will encourage project officers to introduce mesh climbers and concrete climbers in new projects and retrofit existing facilities, as they are simple for installation, easy to maintain, with low initial set up cost and good greening effect.

沙田污水處理廠的垂直綠化
Vertical greening at Shatin Sewage Treatment Works

赤柱污水處理廠的室內垂直綠化
Indoor vertical greening at Stanley STW

除了以上兩種垂直綠化植物攀緣模式外，我們亦嘗試探索利用專屬垂直綠化系統於室內進行垂直綠化的可行性。2013年1月，我們在位於岩洞內的赤柱污水處理廠嘗試種植了逾60米長的室內垂直綠化牆，並安裝了5款不同的垂直綠化系統。我們將與香港中文大學共同研究所安裝的室內垂直綠化系統，測試它們的表現及其成本效益。有關研究預計於2014年完成。

Apart from these two climbing modes, we have also explored the opportunity of indoor vertical greening using proprietary vertical greening (VG) systems. A trial planting of over 60 metres long indoor vertical green wall with five different VG systems was installed at our cavern facility, the Stanley STW, in January 2013. We will conduct research with the Chinese University of Hong Kong to study the performance and cost-effectiveness of these VG systems. The research is expected to be completed by 2014.

大埔的綠化工程及生態保育措施

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。

模仿原有河道特徵

為紓緩當區的水浸風險，我們在現有的大埔河道進行改善工程以增加河道的排水流量，而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。

Greening Works and Ecological Conservation Measures at Tai Po

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.

Simulation of Existing River Characteristics

To alleviate the local flooding risk, the existing rivers at Tai Po have been trained for enhancing their drainage capacity. The banks of the widened rivers were paved with rockfill mattresses/gabion units or grasscrete aiming to simulate the riparian environment in existing rivers.

在河道內兩旁鋪設石籠
Rockfill mattresses at embankments of the trained river channel

有些天然河道的河床是以石塊為主。在進行河道改善工程後，我們採用了亂石基底，模仿原有天然溪澗的環境，促使生物繁衍。亂石基底由不規則的石塊和卵石組合而成，取替單一大小的河床石塊，能使河道形成深池和淺灘，為土生的大小魚類提供棲息空間。

Some of the existing river stream beds were of stony substratum. After river training works, we put rip-rap at the bottom to mimic the profile of a natural stream course. This was to facilitate the re-colonisation of the stream after completion of the drainage improvement works. Instead of placing single-sized rip-rap at channel base, both boulders and cobbles of varied dimensions were laid to form series of pools and riffles for creation of favorable habitats for both adult and juvenile local fish species.

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

保留原有河道的基底

在水浸風險較低的地區進行河道改善工程時，我們沒有採用掘深和擴闊河道的方案。取而代之，我們會在河岸兩旁加建防洪牆，保留原有河道的基底，從而保育原有河道的生態功能。在條件許可的情況下，我們更會將一段原有河道保留，以保育河中生態及減低工程對自然環境的影響。

Retaining the Existing River Bed

For drainage improvement works in areas with lower risk of flooding, we chose to construct flood protection walls at both sides of the stream instead of conducting deepening and widening works for the streams. This will preserve the existing natural stream bed so that the ecology in the existing stream could be preserved. When condition warrants, a particular section of the existing river would be retained for preserving the habitat and minimising disturbance to the natural environment arising from the works.

保留一段約二百米長的原有河道
Retaining a section of approximately 200m long existing stream course

在河岸兩旁加建一米高的防洪牆
Precast panels of one metre height erected as flood protection wall at both sides of the stream course

河岸綠化

為促進河道綠化，我們的工程師及園境師沿河岸兩旁廣植經挑選的植物，以改善河岸景觀及生物多樣性。我們亦小心保護在原有河道四周的樹木，減低河道改善工程對天然環境的影響。

Planting along River Channel

Our engineers and landscape architects have contributed to the establishment of riparian vegetation in local areas by cultivating selected plant species along both sides of the river to enhance its visual appeal and biodiversity. We have also protected and preserved the existing trees and vegetation to minimise disturbance to natural environment.

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

保護河岸原有的樹木
Preserving existing riparian vegetation

修改河道岸線以保育原有樹木
Re-alignment of river for preserving existing trees

在九龍坑村的生態保育工作

我們在九龍坑河溪發現了一種稀有的淡水魚，名為「側條光唇魚」。為了保育這珍貴的生態資源，我們在進行河道改善工程前於上流區域建造了一組臨時魚池，遷移河溪中的側條光唇魚至魚池內暫時棲息。在完成河道改善工程及恢復棲息地後，側條光唇魚會從臨時魚池遷回完成治理工程後的河道，繼續繁衍。

Protection of Existing Ecological System at Kau Lung Hang

A rare species of freshwater fish, *Acrossocheilus parallens*, was identified in the streams at Kau Lung Hang during our works. To preserve this important species, we have constructed a set of fish holding tanks at the upstream for temporary accommodation of the *Acrossocheilus parallens* before commencing the drainage improvement works. With the completion of river channels and re-creation of suitable habitats, we will translocate the *Acrossocheilus parallens* from the temporary tanks back to the engineered river channels for re-colonisation.

河道改善工程進行前在河溪捕捉側條光唇魚
Collecting fish (*Acrossocheilus parallens*) before commencement of drainage improvement works

側條光唇魚的特徵為軀幹上有一條深色橫帶及6至7條黑色直條紋
Acrossocheilus parallens is distinguished by the presence of a dark lateral stripe and 6 to 7 short blackish vertical stripes

臨時魚池設有上蓋，防止魚池受陽光暴曬，魚池周邊亦設有圍網，避免人為騷擾
Temporary fish holding tanks with shelters for prevention of overheating; and security fence for avoidance of human disturbance

在林村谷的生態保育工作

林村河是受保護兩棲類動物香港蠑螈的棲息地。為了保育這珍貴的生態資源，在進行河道改善工程前及每年旱季工程重新開展前，我們捕捉工程範圍河道內的香港蠑螈，然後隨即將牠們遷往工程範圍以外的上游河道。

Protection of Existing Ecological System at Lam Tsuen Valley

Lam Tsuen River is the home of a protected freshwater amphibian species namely *Paramesotriton hongkongensis*. To preserve this valuable ecological resource, we have relocated the species to the upstream of the stream course within the construction site prior to the commencement of the river improvement works and before we resume works at the beginning of each dry season. Once captured, the species were immediately released at the river upstream of the construction site.

於河道改善工程進行前在河道捕捉香港蠑螈
Capturing *Paramesotriton hongkongensis* before commencement of river improvement works

香港蠑螈腹部橙色的不規則斑紋
The irregular orange pattern at the abdomen of *Paramesotriton hongkongensis*

於工程範圍以外的上游河道將捕獲的香港蠑螈放生
Releasing *Paramesotriton hongkongensis* 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

碳審計是一套方法，為實體範圍內進行的不同程序的溫室氣體(以二氧化碳為主)排放及減除作出識別、核算及報告。進行碳審計可確定主要排放源，並藉減少消耗量、提高效率、使用可再生能源等，以減少溫室氣體排放量。

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。結果顯示，兩所污水處理廠在2011年分別排放約9,207公噸和36,733公噸二氧化碳當量，即處理每立方米污水，會分別產生約0.27公斤和0.074公斤二氧化碳當量。

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，結果顯示這兩所污水處理廠在2011年分別排放約25,489公噸和7,167公噸二氧化碳當量，即處理每立方米污水，會產生0.31公斤和0.24公斤二氧化碳當量。

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。

Conducting Carbon Audit

Carbon audit is a method to identify, account and report on the emission and removal of Greenhouse Gas (GHG), mainly carbon dioxide (CO_2), from different processes within the boundary of the entity. Carbon audit enables us to identify the major sources of emission and find ways to reduce them through reduction in consumption, improvement in efficiency, use of renewable energy etc.

We conducted the first carbon audits for Tai Po STW and Stonecutters Island STW in 2012. The audit results revealed that about 9,207 and 36,733 tonnes of CO_2 equivalent were emitted respectively from these two plants in 2011. In terms of carbon intensity, it is about 0.27 and 0.074 kilogram of CO_2 equivalent emitted per cubic metre of sewage treated.

We continued to conduct carbon audits for Shatin STW and Shek Wu Hui STW during the year. The results showed that about 25,489 and 7,167 tonnes of CO_2 equivalent were emitted in 2011 respectively from these two plants, which represents 0.31 and 0.24 kilogram CO_2 equivalent emitted per cubic metre of sewage treated.

Looking forward, DSD will conduct carbon audits and adopt carbon emission reduction measures at more of its 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.

2011年的碳足印 (以公噸二氧化碳當量計算)
Carbon Footprint in 2011 (in tonnes of CO_2 equivalent)

污水處理廠名稱 Name of plant	總排放量 Total emission	電力使用而產生的間接排放 Indirect emissions generated from the use of electricity	除氮過程中釋放的氧化氮(以公噸二氧化碳當量計算) N_2O emissions (in tonnes of CO_2 equivalent) through nitrogen removal	直接使用燃料而產生的排放 Emissions generated from direct combustion of fuels	其他 Others
沙田污水處理廠 Shatin STW	25,489	19,374	782	5,171	162
大埔污水處理廠 Tai Po STW	9,207	8,722	368	43	74
石湖墟污水處理廠 Shek Wu Hui STW	7,167	6,777	377	1	12
昂船洲污水處理廠 Stonecutters Island STW	36,733	36,196	0	4	533

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

在沙田污水處理廠內的電動車充電站
Electric vehicle charging station at Shatin STW

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，大大紓緩路面空氣污染問題。目前，我們正在使用合共8輛電動車。截至2013年3月，這些電動車合共日均行駛約600公里。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。

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. The total average daily mileage delivered by our EVs was about 600 kilometres per day as at March 2013. 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

自2007年成立能源及排放管理小組後，本署在運作上的節能和碳減排表現逐漸提升。自香港特別行政區行政長官於2006年11月簽署了「清新空氣約章」後，小組隨之誕生，由一名助理署長領導，成員包括各科別的高級專業代表。

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；以及在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。

Implementing Various Energy Saving Measures

Our Department has made steady progress in saving energy and reducing emission in its city-wide operation subsequent to the formation of the Energy and Emission Management Team in 2007. The team, headed by an Assistant Director and with representatives from all branches at the senior professional level, came into being shortly after the Chief Executive of HKSAR signed the Clean Air Charter in November 2006.

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.

使用可再生能源

污水處理設施裝設太陽能光伏板

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。安裝在污水處理廠的太陽能光伏板的總發電量及每年輸出電量分別約為88千瓦及96,000度電。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。

現時，我們大部份的太陽能光伏系統均安裝在污水處理設施的天臺。為了探索不同光伏系統的應用方案和騰出天臺空間作其他用途，我們正在進行一項使用垂直型建築整合太陽能系統的研究。我們將在沙田污水處理廠安裝垂直型組裝式的光伏系統，並研究各種太陽能電池物料（即單晶體硅、多晶硅及非晶硅）的性能和效率。預期建議的垂直型建築整合太陽能系統不僅可善用天臺空間，每年也可節省用電量約達1,750度及減少相當於約一噸的二氧化碳排放當量。這項試驗研究為我們將來在各種污水處理設施中應用垂直型建築整合太陽能系統提供了有用的參考。

Use of Renewable Energy

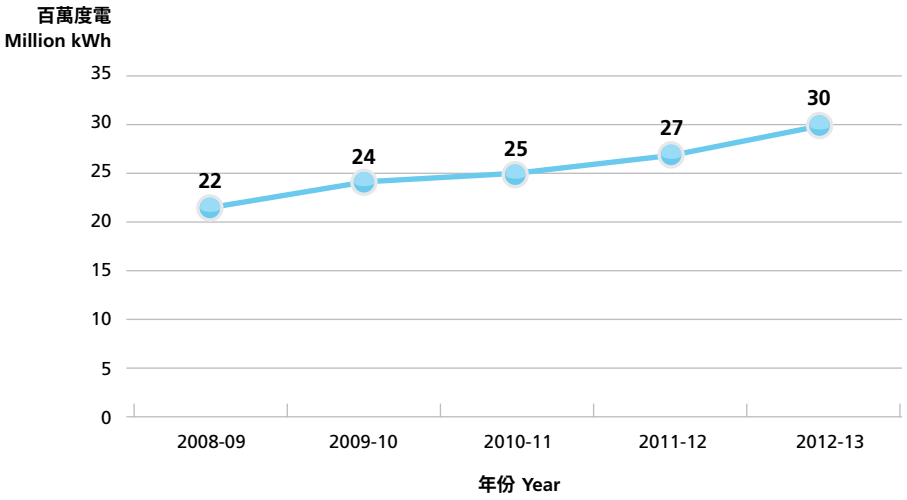
Use of photovoltaic solar panels in sewage treatment facilities

We have 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, Stonecutter Islands STW, etc. The total capacity and annual electricity output of the PV panels were about 88 kilowatt (kW) and 96,000 kWh per year respectively at these plants. 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.

Currently, most of our PV systems are installed at the roofs of our sewage treatment facilities. In order to explore more flexible applications of PV systems and to save the roof spaces for other uses, we are carrying out a pilot study on the application of vertical type Building Integrated Photovoltaic (BIPV) system. We will install a vertical type BIPV system at Shatin STW to investigate the system's performance and efficiency with different solar cell materials (i.e. Mono-crystallite silicon, Poly-crystalline silicon and Amorphous silicon). It is anticipated that the proposed vertical type BIPV system will not only allow better space utilisation, but will also bring around 1,750 kWh annual saving in electricity and reduce around one tonne of CO_2 equivalent per year. This pilot study will provide useful reference for our future applications of vertical type BIPV system in our various facilities.

在元朗污水處理廠天臺上的6.3千瓦太陽能光伏板
6.3 kW PV Solar Panel on the roof of Yuen Long Sewage Treatment Works

生物氣體所產生的電力
Electricity Generated from Biogas



將廢氣轉化為能源

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。熱電聯供發電機和微型燃機系統是從單一的燃料（如生物氣）以獲取能量。通過燃燒，同時產生熱能和電能，從而提高整體能源使用效率。燃燒生物氣的熱電聯供發電機和微型渦輪是碳排放量較低的清潔科技。我們正於沙田及大埔污水處理廠內安裝新的熱電聯供發電機（總容量為2.03兆瓦），而在元朗污水處理廠則安裝微型渦輪（容量為30千瓦）。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（大埔的發電機於2010年進行測試，容量為625千瓦；石湖墟的發電機於2011年進行測試，容量為635千瓦），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。由生物氣體所產生的電力連續5年上升，而2012-13年所產生的電力上升至約3,000萬度電。

Turning Waste Gas to Energy

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. CHP generator and Micro-Turbine system are to obtain energy from a single fuel (for instance biogas) by means of combustion, where heat and power are generated simultaneously, thus improving the overall energy efficiency. CHP generator and Micro-Turbine fueled by biogas primarily is considered to be a cleaner technology with lower carbon emission. We are installing new CHP generators (with a combined capacity of 2.03 megawatts) in Shatin and Tai Po STWs, and Micro-Turbine (capacity of 30 kW) in Yuen Long STW. Together with other recently installed CHP generators at Tai Po STW (commissioned in 2010 and with the capacity of 625 kW) and at Shek Wu Hui STW (commissioned in 2011 and with the capacity of 635 kW), we foresee a full utilisation of all biogas generated from our sewage treatment works in 2013. We recorded an increasing trend in the electricity generated in five consecutive years and the amount of electricity generated from biogas in 2012-13 went up to about 30 million kWh.

沙田污水處理廠的熱電聯供發電機
Combined heat and power generator at STSTW

石湖墟污水處理廠
Shek Wu Hui STW

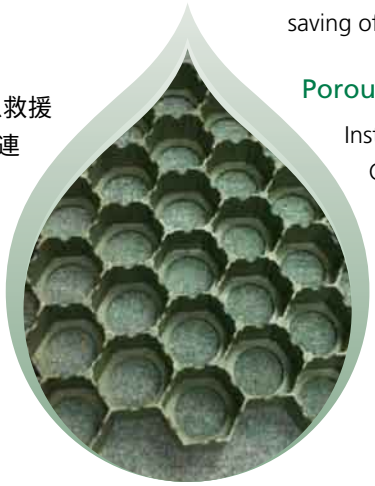
節約資源
Resources Conservation

九龍城污水泵房具透水效能的多孔路面及雨水回用措施

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。

多孔透水路面

九龍城兩個污水泵房的緊急救援車輛通道以高密度聚乙烯連環強化植草磚取代傳統玻璃混凝土，既可擴大污水泵房的綠化面積，亦可承受緊急救援車輛的重量。



高密度聚乙烯連環強化植草磚
HDPE Interlocked Reinforced Grass Paver

雨水回用

我們在兩個污水泵房加設了雨水回用系統，收集天臺的雨水作灌溉用途，從而減少使用食水灌溉園境工程的植物。兩個污水泵房的偌大天臺可用於收集雨水以灌溉植物，有利雨水回用系統的運作。

1號污水泵房緊急救援車輛通道的植草磚種滿植物
Grass planted on Grass Paver at the EVA of SPS No. 1

Porous Pavement and Rainwater Harvesting at Kowloon City Sewage Pumping Stations

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.

Porous Pavement

Instead of using the traditional grasscrete, HDPE Interlocked Reinforced Grass Paver was used for paving at the Emergency Vehicular Access (EVA) of the two SPSs in Kowloon City, which enhanced the green coverage of the SPS area and to withstand loading of emergency vehicles.

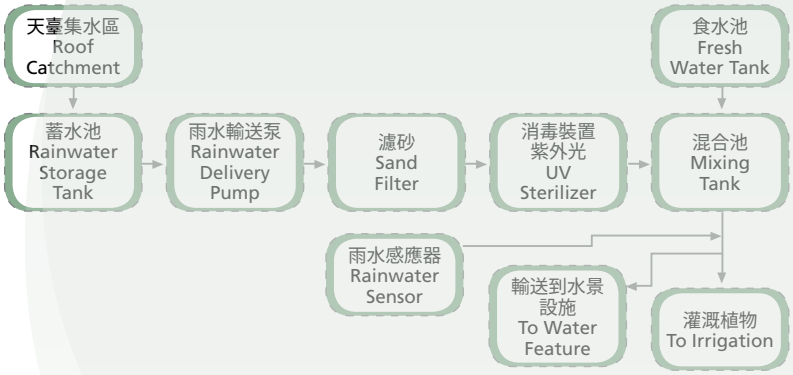
Rainwater Harvesting

Rainwater Harvesting System was added in the two SPSs to supply rainwater collected on the roofs for irrigation, which reduced the fresh water used for irrigation of the landscape works. The large roof area in two SPSs could be used to collect rainwater for irrigation, and provided an advantage for adopting the rainwater harvesting system.

1號污水泵房緊急救援車輛通道鋪設植草磚
Finished Paving Works of Grass Paver at the EVA of SPS No. 1

由雨水回用系統供水的1號污水泵房的水景設施
Water Feature at SPS No. 1 with water supplied by Rainwater Harvesting System

下圖顯示每個污水泵房的雨水回用系統運作流程
The following flow program shows the rainwater harvesting system installed in each SPS



我們裝設了蓄水池收集天臺的雨水，利用雨水輸送泵將雨水輸送至濾砂池，在池內隔去固體粒子，然後進入殺菌裝置以紫外光消毒，再於混合池與食水混和。混合池可確保持續有雨水或食水供應作灌溉用途，當中食水主要在雨量較少的旱季使用。混合池的水除用於灌溉，還可供應1號污水泵房的水景設施。

Rainwater storage tanks were installed to collect the rainwater from the roof. The collected rainwater would be pumped through the rainwater delivery pump to the sand filters. Solid particles would be separated from the filtrated rainwater at the sand filters. The filtrated rainwater would then be sterilised by ultra-violet rays at the steriliser, and would be mixed with the fresh water in the mixing tank. The mixing tank ensured constant supply of water for irrigation from either rainwater or fresh water, with fresh water to be used mainly in dry season when there is less rainfall. The water from the mixing tank would be used for irrigation, and also used for the water feature built in SPS No. 1.

使用環保物料/產品

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

We are currently using a number of green materials and products during 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 boundary 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

為支持環保採購，政府於2011年列出更多供政府部門和政策局選用的環保產品。在符合經濟原則的情況下，所有部門和政策局應盡量選購環保產品，並避免使用用完即棄物品。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、衞生紙和垃圾袋。

室溫設定在攝氏25.5度
Setting the office temperature at 25.5 degree Celsius

多年來我們在辦公室推行多項節能措施，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。為保持辦公室綠化，我們更奉行減少廢物和節約資源的原則。除了訂立指引減少紙張用量外，我們又鼓勵員工重用信封，並設立回收點回收打印機碳粉盒、環保充電池、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。於2012-13年度，本署已進行大約252個無紙會議，當中以電子方式傳閱1,900多份文件。配合多項環保措施如電子傳閱和雙面打印，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%。

辦公室回收箱
Recycling bins in the office

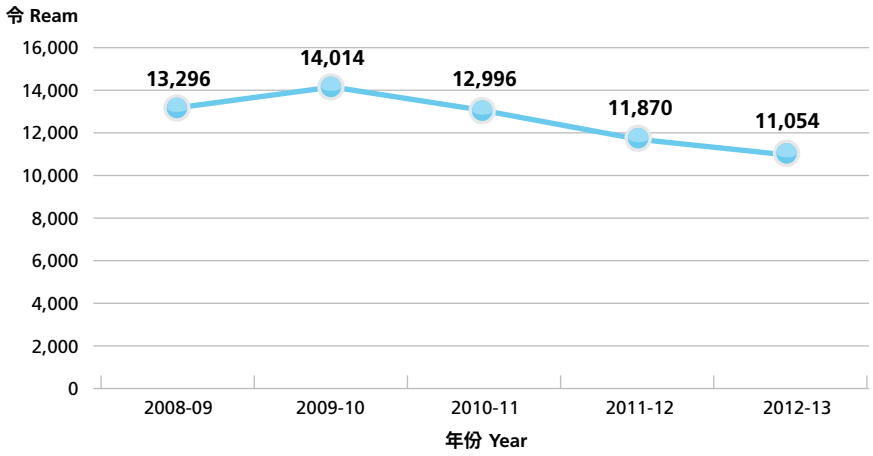
To support green procurement, the Government expanded the list of green products commonly used by bureaux and departments in 2011. Particularly, all bureaux and departments are encouraged, as far as feasible and where economically rational, to preferentially purchase products with green specifications and avoid one-off disposable items. 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 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. To keep our office green, we have adopted the principles of waste reduction and resource conservation. In addition to implementing guidelines on reducing the use of paper, we encourage our staff to reuse envelopes. 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. About 252 paperless meetings were conducted in 2012-13 with 1,900-plus e-documents circulated and viewed through this system. Together with other green measures such as electronic circulation and double-sided printing, 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.

減少不必要的照明
De-lamping to reduce unnecessary lighting

用紙量
Paper Consumption



氣味管理
Odour Management

昂船洲污水處理廠進行環境改善工程，包括在淨化海港計劃第二期甲昂船洲污水處理廠沉澱池安裝蓋面及安裝辟味裝置

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。

Environmental improvement works in Stonecutters Island Sewage Treatment Works (SCISTW), i.e. covering sedimentation tanks, installation of deodouriser in SCISTW under HATS 2A

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.

密封式沉澱池
Covered Sedimentation Tanks

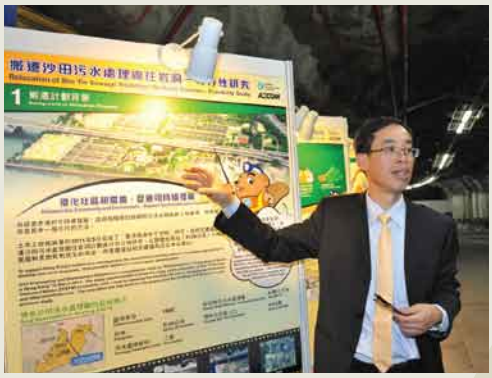
生物滴濾塔
Biotrickling Filter

與公眾共商同理
Engaging the Community

3,300

參觀污水處理設施訪客人數

No. of Visitors to Our Sewage Treatment Facilities



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。我們非常重視公眾的意見，去年，我們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。

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. In order to invite feedback from the community for our continuous improvement, we conducted a number of dedicated stakeholder engagement activities during the last year.

社區參與活動
Community Engagement Activities

於創新科技嘉年華參與展出

2012年11月，本署連同其他4個政府部門參與在科學園舉行的創新科技嘉年華，向公眾介紹本署於沙田污水處理廠的垂直綠化研究和跑馬地地下蓄洪計劃，活動獲踴躍支持，引起參觀市民的興趣。

Exhibition at Innovation Carnival

Together with four other government departments, our Department participated in the Innovation Carnival held at the Science Park in November 2012. We exhibited our Shatin Sewage Treatment Works Vertical Greening Study and Happy Valley Underground Stormwater Storage Scheme, which drew keen interest from the visiting public.

我們於創新科技嘉年華2012的展覽攤位引起參觀市民的興趣
Our exhibition booth at Innovation Carnival 2012 drew keen interest from the visiting public

香港花卉展覽中的「岩洞萬花筒」

於2013年3月，我們第二次參加由康樂及文化事務署在維多利亞公園舉辦的花卉展覽，以「岩洞萬花筒」為題的展品更獲得園林景點組別最佳設計金獎。市民在參觀時，既可欣賞我們色彩繽紛的園藝展品，又可認識搬遷沙田污水處理廠往岩洞之可行性研究。

"Kaleidoscopic Cavern" Display at Hong Kong Flower Show

During the Hong Kong Flower Show 2013 organised by the Leisure and Cultural Services Department at Victoria Park in March 2013, we provided a glamorous horticultural display with a theme of "Kaleidoscopic Cavern" to introduce the feasibility study on relocation of Shatin Sewage Treatment Works to caverns. It was the second time that we participated in this event and our display this year was awarded the Gold Award for Design Excellence under Landscape Display category.

我們的展品「岩洞萬花筒」
Our display of "Kaleidoscopic Cavern"

渠務署副署長徐偉先生(左二)及助理署長(設計拓展)鄭鴻亮先生(右二)代表渠務署接受園林景點組別最佳設計金獎
Deputy Director of Drainage Services, Mr. Tsui Wai (second left) and Assistant Director (Projects & Development), Mr. Cheng Hung-leung (second right) received the Gold Award for Design Excellence under Landscape Display category

參觀污水處理廠、資訊中心及大坑東蓄洪計劃

我們安排學校及其他機構參觀部門的設施，以增加公眾對防洪及污水處理工作的認識。在過去一年，我們共接待了超過3,300位學生、環保團體、海外及內地的商業團體及非牟利團體，參觀我們的大坑東蓄洪計劃和主要污水處理廠及資訊中心。

Group Visiting to Sewage Treatment Works, Information Centre and Tai Hang Tung Stormwater Storage Scheme

We have arranged visits for schools and other organisations to enhance public understanding of the importance of flood prevention and sewage treatment. Over the year, we received more than 3,300 visitors from schools, green groups, commercial and non-commercial organisations in the Mainland and overseas to our Tai Hang Tung Stormwater Storage Scheme as well as major sewage treatment works and information centres.

渠務署人員為學生介紹沙田污水處理廠的天臺綠化
Our staff introduced green roof at Shatin Sewage Treatment Works

學生參觀沙田污水處理廠的設施
Students visited the facilities at Shatin Sewage Treatment Works

在2013年3月，本署接待了寧波市人民政府防汛防旱指揮部的代表團，並安排他們參觀大坑東地下蓄洪池
A delegation from the Ningbo Municipal Flood Control and Drought Relief Office visited the Tai Hang Tung Underground Stormwater Storage Tank in March 2013

外展教育計劃

莘莘學子是我們社會的未來領袖。我們的公共關係組每年均推行外展教育計劃，到訪參與的學校，向師生講解渠務署的防洪和污水處理方面的工作。在這年度，我們先後到訪了39間中小學，均獲校方高度評價，認為活動甚具教育意義，能啟發參加的學生。

Outreaching Educational Programme

Students are the future leaders of our society. Our Public Relations Unit runs an outreaching educational programme every year by visiting schools to introduce our work on flood prevention and sewage treatment. This year we visited 39 schools and received very positive comment from them stating that the programme was very informative and inspiring for the participants.

於本地學校推行外展教育計劃
Outreaching educational programme at a local school

傳媒簡報會及專訪

一如往年，我們定期安排傳媒簡報會及專訪，藉此向公眾提供本署的最新資訊。訪問內容範圍廣泛，從生態保育策略和綠化工作、啟德河改善工程到香港的防洪管理。以下是本年度一些傳媒簡報會、專訪、參觀活動和午餐會的概述。

Media Briefing and Interviews

Similar to previous years, media briefings and interviews were arranged regularly to keep the public updated on our work and recent developments. The interviews and the subsequent news reports covered a wide range of topics, from ecological and greening measures, Kai Tak River Improvement Works to stormwater management in Hong Kong. Some of the media briefings, interviews, visits and luncheons conducted during the year are highlighted below.

渠務署副署長徐偉先生就沙田污水處理廠進行的綠化天臺研究接受傳媒訪問。

Deputy Director of Drainage Services, Mr. Tsui Wai, was interviewed by the media on the study of green roof at Shatin Sewage Treatment Works.

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

我們獲香港電台邀請協助拍攝其新製作的節目《非凡工程夢》。有關節目共有5集，其中第一及第二集分別訪問了本署負責建造「上環雨水泵房」的工程師梁爵麟先生及「港島西雨水排放隧道」的駐地盤工程師甄詠潔女士。該兩集播出後，公眾更深入了解本署的工作。

We were invited by Radio Television Hong Kong (RTHK) to assist in the production of a new feature TV programme named "The Role of Engineers in Hong Kong". The TV programme, consisting of five episodes in total, featured our engineer Mr. CL Leung who was responsible for the construction of "Sheung Wan Stormwater Pumping Station" project in Episode 1, and Ms Angela Yan who was Resident Engineer for the construction of "Hong Kong West Drainage Tunnel" project in Episode 2. Through the broadcast of the two episodes, the public acquired a deeper understanding of our work.

香港電台節目《非凡工程夢》的拍攝花絮
Behind the Scenes of RTHK's TV programme named "The Role of Engineers in Hong Kong"

我們於2012年7月26日舉行傳媒簡介會，介紹首位負責全港最深污水隧道爆破工程的女爆破監督工程師佘小萍。佘小萍工程師在簡報會中簡介有關工程項目的資料及分享她成為首位進入香港最深隧道工作的女爆破監督工程師的經驗及感受。此外，她亦陪同傳媒參觀一段位於北角的最深隧道。是次簡報會吸引了超過40名來自不同傳媒機構的人士參加，而佘小萍工程師的故事亦在各電視新聞及報章廣泛報導。

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. In the media briefing, Ir Sia briefed the media on the project information and shared her experience and feeling of being the first female BCS working inside the deepest tunnel in Hong Kong. She also accompanied the media to visit the deepest section of tunnel at North Point. The media briefing attracted over 40 visitors from different media organisations and the story of Ir Sia was widely reported in the TV's news reports and newspapers.

傳媒參觀一段位於北角的最深隧道
Media visit to the tunnel at North Point

佘小萍工程師 - 首位進入香港最深隧道工作的女爆破監督工程師
Ir Edith Sia - the first female BCS working in the deepest tunnel in Hong Kong

2012年9月5日，傳媒採訪了我們的「跑馬地地下蓄洪計劃」主體工程合約簽署儀式。這項工程是政府至今批出最大規模的「新工程合約」項目，標誌着改善灣仔和跑馬地區防洪工程發展的新里程碑。簽署儀式後本署向參與傳媒詳細介紹工程項目的規劃、設計和建造詳情。

On 5 September 2012, media covered the contract signing ceremony for our major works of the "Happy Valley Underground Stormwater Storage Scheme", the biggest New Engineering Contract (NEC) project ever awarded by the Government, marking a new milestone in the development of the flood prevention project for the Wan Chai and Happy Valley districts. Reporters were briefed on the planning, design and construction of the scheme after the ceremony.

發展局常任秘書長(工務)韋志成先生在「跑馬地地下蓄洪計劃」主體工程合約簽署儀式上發言
Permanent Secretary for Development (Works), Mr. Wai Chi-sing spoke at the contract signing ceremony for the major works of the Happy Valley Underground Stormwater Storage Scheme

於2012年11月8日，我們邀請傳媒到訪首個建於岩洞內的污水處理廠－赤柱污水處理廠，渠務署總工程師（污水工程）黎卓豪先生和總工程師（污水處理）魯建洪先生向傳媒簡介赤柱污水處理廠和海外岩洞污水處理廠實例及優點，以及如何應用這些成功經驗在港發展岩洞污水處理廠。同時，我們亦邀請公眾參與於同月展開的「搬遷沙田污水處理廠往岩洞的可行性研究」第一階段公眾參與活動，就有關可行性研究提出意見。

On 8 November 2012, at a media visit to the Stanley Sewage Treatment Works (STW), Hong Kong's first sewage treatment works built in caverns, our Chief Engineer (Sewerage Projects), Mr. Lai Cheuk-ho, and Chief Engineer (Sewage Treatment), Mr. Lo Kin-hung, talked about the Stanley STW and overseas examples of STW in caverns and elaborated on how these successful experiences apply in the context of Hong Kong. They also invited the public to participate in and provide comments on the Stage 1 Public Engagement activities launched in November 2012 for the "Feasibility Study on Relocation of Shatin Sewage Treatment Works to Caverns".

渠務署總工程師（污水工程）黎卓豪先生（右）和總工程師（污水處理）魯建洪先生（左）向傳媒簡介香港岩洞污水處理廠的發展

Our Chief Engineer (Sewerage Projects), Mr. Lai Cheuk-ho (right), and Chief Engineer (Sewage Treatment), Mr. Lo Kin-hung (left), briefed the media about the development of cavern sewage treatment works in Hong Kong

黎卓豪先生介紹香港首個建於岩洞內的污水處理廠 — 赤柱污水處理廠的運作

Mr. Lai introduced the operation of the Stanley Sewage Treatment Works, Hong Kong's first sewage treatment works built in caverns

於2013年1月3日，我們安排傳媒到訪昂船洲污水處理廠，由渠務署總工程師(淨化海港計劃)周國銘先生向傳媒介紹「淨化海港計劃」第二期甲的最新進展，並於簡報會後帶領傳媒參觀昂船洲污水處理廠現有泵房、新泵房和其他優化工程。

On 3 January 2013, we arranged a visit to Stonecutters Island Sewage Treatment Works (SCISTW), our Chief Engineer (HATS), Mr. Henry Chau Kwok-ming introduced the latest development of the Harbour Area Treatment Scheme (HATS) Stage 2A and took media representatives to see the existing pumping station, the new pumping station and other upgrading works.

總工程師(淨化海港計劃)周國銘先生在傳媒簡報會介紹「淨化海港計劃」第二期甲的最新進展

Media Briefing on Latest Development of HATS Stage 2A by Chief Engineer (HATS) Mr. Henry Chau Kwok-ming

新主泵房建造中的鳥瞰圖

Bird's eye view of the construction of the new main pumping station

於2013年2月5日舉行的「碳審計　助減排」傳媒簡報會，我們向傳媒介紹署方推行碳審計的計劃和成效，並向傳媒展示渠務署於沙田污水處理廠內的減排設施。

A media briefing on "DSD conducts carbon audits in support of reducing greenhouse gas emission" was held on 5 February 2013 to introduce our carbon audit scheme and its effectiveness. Carbon reduction facilities at Shatin Sewage Treatment Works were also shown to the media.

渠務署助理署長(機電工程)佘少權先生(左二)與一眾講者向傳媒介紹渠務署的碳審計及減排措施

Assistant Director (Electrical and Mechanical) of Drainage Services, Mr. She Siu-kuen (second left), together with other speakers, introduced our carbon audits and carbon emission reduction measures to the media

渠務署助理署長(機電工程)佘少權先生(右)及高級化驗師(污水處理)鄧天祐博士(左)向傳媒展示沙田污水處理廠內的減排設施

Assistant Director (Electrical and Mechanical) of Drainage Services, Mr. She Siu-kuen (right), and the Senior Chemist (Sewage Treatment), Dr. Daniel Tang (left), showed our carbon reduction facilities to the media

2013年3月26日，渠務署署長陳志超先生在午餐會上向傳媒講解最新的防洪策略和相關工程項目，雙方並於席間交流意見。其後，我們安排傳媒參觀啟德河改善工程(上游)，介紹工程的防洪措施、工程期間的臨時交通安排，以及美化工程等。

On 26 March 2013, Director of Drainage Services, Mr. Chan Chi-chiu updated the media on the latest flood prevention measures and the related works over a luncheon, during which views from both sides were exchanged. Subsequent to the luncheon, we arranged a site visit to Kai Tak River Improvement Works (Upstream Portion) to media. Media were briefed on the flood prevention measures, temporary traffic arrangement as well as beautification works of the project.

渠務署署長陳志超先生向傳媒簡介署方主要的防洪工作

Director of Drainage Services, Mr. Chan Chi-chiu, briefed the media on the department's major flood prevention works

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。

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 the society.

長者興趣班
Interest Classes for the Elderly

我們的義工隊繼續為麗瑤白普理護老院的長者舉辦興趣班，為長者送上關懷之餘，更與他們一同發揮創意，製作鎖匙扣、心意卡等小禮物。

Our Volunteer Team continued to arrange interest classes for the elderly in Lai Yiu Bradbury Care Home. We showed our care to the elderly and worked with them to explore innovative ideas to make key holders and greeting cards.

長者興趣班
Interest Classes for the Elderly

「香港人・香港心」活動
"Hong Kong Citizen, Hong Kong Heart" Campaign

「香港人・香港心」活動
"Hong Kong Citizen, Hong Kong Heart" Campaign

我們的義工隊響應社會福利署舉辦的「香港人・香港心」活動，製作手工藝品贈予安老院長者，為他們送上貼心的祝福。

Our Volunteer Team joined the "Hong Kong Citizen, Hong Kong Heart" Campaign organised by the Social Welfare Department to make and deliver auspicious gifts with blessing to the elderly.

捐血日
Blood Donation Day

我們每年均與香港紅十字會合辦「捐血日」，鼓勵員工捐血救助有需要人士。

We organised a "Blood Donation Day" annually with the Hong Kong Red Cross to encourage staff to donate blood for those in need.

捐血日
Blood Donation Day

除此以外，我們亦參與並支持以下各項慈善和籌款活動：

- 參加「**健康快車慈善跑步行**」，為「健康快車」眼科火車醫院籌募經費，使中國偏遠地區的貧困眼疾患者也能接受免費白內障手術
- 組織隊伍參加由「苗圃行動」舉辦的「**苗圃挑戰12小時**」慈善馬拉松活動，為「中國基礎教育助學計劃」籌款，本署更獲頒機構參與獎銅獎
- 組織隊伍參加「**樂施毅行者**」遠足籌款活動，以支持樂施會在本港、中國內地、非洲及亞洲其他地區推行扶貧救災和倡議工作
- 組織隊伍參加由「香港青年旅舍協會」主辦的「**昂步棧道**」慈善遠足比賽，以宣揚環境保護及文物保育訊息
- 組織隊伍參加由「綠色力量」舉辦的「**綠色力量環島行**」慈善行山比賽，為推動環境教育工作籌款
- 繼續透過**公益行善「折」食日**、**公益綠「識」日**、**公益愛牙日**及**公益便服日**等活動，籌款支持公益金會員福利機構所提供的服務
- 參加了不同慈善團體的**籌款活動**，當中包括世界宣明會的「饑饉一餐」及樂施會的「樂施米義賣大行動」等

Besides, we also participated in and supported various charity events and fund-raising activities during the year such as the following:

- Participated in the **Lifeline Express Charity Run and Walk** to raise fund for the Lifeline Express, a hospital eye-train that provides free cataract operations to the underprivileged patients in rural China
- Formed teams to join the **Sowers Action Challenging 12 Hours** marathon organised by the Sowers Action to raise fund for the Foundation Education Development Programme in China, and received the Bronze Award of Participation Award for Corporation
- Took part in the **Oxfam Trailwalker** to support Oxfam's various poverty alleviation and emergency relief projects in Africa and Asia, including Hong Kong and mainland China
- Supported the **Ngong Ping Charity Walk** organised by the Hong Kong Youth Hostels Association to promote environmental protection and heritage conservation
- Joined the **Green Power Hike** to raise fund for the promotion of environmental education
- Continued to support the **Community Chest's Skip Lunch Day**, **Green Day**, **Love Teeth Day and Dress Casual Day** to raise fund for the services of the Chest's member social welfare agencies
- **Raised fund** in support of various charitable organisations' services, e.g. the World Vision's "Skip-A-Meal" and the "Oxfam Rice" Sale, etc

苗圃挑戰12小時
Sowers Action Challenging 12 Hours

樂施毅行者
Oxfam Trailwalker

昂步棧道
Ngong Ping Charity Walk

綠色力量環島行
Green Power Hike

持份者參與活動
Stakeholder Engagement Activities

「淨化海港計劃」第二期甲工程公眾參與活動

為致力向各市民推廣「淨化海港計劃」第二期甲工程，我們在2012-13年度舉辦多項公眾參與活動，當中主要包括：

- 向鄰近有關持份者派發季度簡訊；
- 接待本地及海外人士參觀工地並介紹工程最新進展，參觀團體包括香港大學、香港浸會大學、英國土木工程師協會、英國機械工程師學會、香港工程師學會、赴港考察的重慶市城鄉建設委員、韓國交流團、來自新加坡的教授、香港大學工程舊生會及深圳市官員等；
- 到訪不同學校舉行講座，向學生介紹渠務署主要的工作、「淨化海港計劃」第二期甲工程、防洪及污水處理工作；
- 「淨化海港計劃」第二期甲隧道工程的義工不斷參與關懷社區活動，如到訪長者中心/居所及參與慈善義賣活動等；
- 於2012年7月26日邀請了各大傳媒出席簡報會及參觀北角至昂船洲污水輸送系統建造工程的工地，向傳媒介紹建造工程中的女爆破監督工程師；
- 於2012年11月26日向南區區議會環境及衞生事務委員會匯報沙灣、數碼港、華富、香港仔、鴨脷洲基本污水處理廠改善工程進度；
- 分別於2012年12月5日及14日邀請東區及灣仔區區議員，參觀北角至昂船洲污水輸送系統建造工程的工地，介紹工程進度及隧道建造工程；
- 渠務署署長、深水埗民政事務專員、深水埗區議會主席及工程顧問和承建商的高級管理人員於2012年12月12日出席覆蓋昂船洲污水處理廠現有污水沉澱池及安裝辟味設施工程完工典禮。此外，深水埗區議員亦在典禮前到工地參觀。

Public Engagement for Harbour Area Treatment Scheme Stage 2A Project

In order to promote HATS Stage 2A Project to the public, we devoted in public engagement throughout the year of 2012–13. Our key public engagement activities include:

- Newsletters were produced and distributed to the nearby stakeholders quarterly;
- Site visits were conducted throughout the year with local and overseas institutions including University of Hong Kong (HKU), Hong Kong Baptist University (HKBU), Institute of Civil Engineers (ICE), Institute of Mechanical Engineers (IME), The Hong Kong Institution of Engineers (HKIE), delegates of Chongqing Municipal Commission of Urban – Rural Development of China, Korea Study Tour, professors from Singapore, HKU Engineering Alumni Association (HKUEAA) and Shenzhen Officials, etc.;
- School talks on our Department's duties, details of HATS Stage 2A Project, flood prevention and sewage treatment were delivered;
- Volunteers from the HATS Stage 2A Sewage Conveyance System contracts continuously carried out community caring activities such as visiting elderly centers/homes and participating in charity sales of stakeholders;
- Media were invited to have a briefing and site visit to the site of construction of Sewage Conveyance System from North Point to Stonecutters Island on 26 July 2012 to introduce a female Competent Supervisor for Blasting Works working in the project;
- Presentation was conducted in the Committee Meeting of District Development and Environment Committee, Southern District Council on 26 November 2012 to introduce the progress of Upgrading of PTWs at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau;
- Members of Eastern and Wan Chai District Councils were invited to visit the site of construction of Sewage Conveyance System from North Point to Stonecutters Island on 5 and 14 December 2012 respectively to brief them the progress of works including tunnel construction works;
- The Director of Drainage Services, the District Officer (Sham Shui Po), the Chairman of Sham Shui Po District Council and the senior management of the consultants and contractors participated in the completion ceremony of Provision of Covers and Deodourisation Facilities to the Existing Sedimentation Tanks at Stonecutters Island Sewage Treatment Works held on 12 December 2012. A site visit was conducted for the members of Sham Shui Po District Council before the ceremony.

2012

07 Jul

渠務署於2012年7月26日舉行簡報會，向傳媒介紹一位在「淨化海港計劃」第二期甲工程工作的女爆破監督工程師

We arranged a media briefing on 26 July 2012 to introduce a female Competent Supervisor for Blasting Works working in the HATS Stage 2A Project

10 Oct

香港大學工程舊生會於2012年10月6日參觀工程北角至昂船洲污水輸送系統建造工程及昂船洲污水處理廠連接隧道及主泵房膜壁建造工程的工地

Site visit by HKU Engineering Alumni Association (HKUEAA) was held on 6 October 2012 at the sites of Construction of Sewage Conveyance System from North Point to Stonecutters Island and Construction of Interconnection Tunnel and Diaphragm Wall for Main Pumping Station at SCISTW

12 Dec

東區區議員於2012年12月5日參觀北角至昂船洲污水輸送系統建造工程的工地

The members of Eastern District Council visited the sites of Construction of Sewage Conveyance System from North Point to Stonecutters Island on 5 December 2012

於2012年12月12日，渠務署署長、深水埗民政事務專員、深水埗區議會主席及工程顧問和承建商的高級管理人員出席覆蓋昂船洲污水處理廠現有污水沉澱池及安裝辟味設施工程完工典禮

The Director of Drainage Services, the District Officer (Sham Shui Po), the Chairman of Sham Shui Po District Council and the senior management of the consultants and contractors participated in the completion ceremony of Provision of Covers and Deodorisation Facilities to the Existing Sedimentation Tanks at SCISTW

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

02 Feb

「淨化海港計劃」第二期甲工程顧問於2013年5月4日與一眾中學生探訪南昌邨獨居老人

The Consultant of HATS Stage 2A Project visited the elderly home at Nam Cheong Estate with secondary school students on 4 May 2013

05 May

2013

03 Mar

深圳市官員於2013年3月8日參觀北角至昂船洲及香港仔至西營盤污水輸送系統建造工程的工地

Site visit by Shenzhen officials was held on 8 March 2013 at the sites of Construction of Sewage Conveyance System from North Point to Stonecutters Island and Construction of Sewage Conveyance System from Aberdeen to Sai Ying Pun

04 Apr

建造業議會訓練學院的學生於2013年4月15日參觀北角至昂船洲污水輸送系統建造工程的工地

Site visit by the students of Construction Industry Council Training Academy (CICTA) were held 15 April 2013 at the site of Construction of Sewage Conveyance System from North Point to Stonecutters Island

啟德河改善工程公眾參與活動

為促進公眾參與啟德河的規劃，我們於2010年及2011年安排了兩個階段的「共建啟德河」公眾參與活動，目前正參考諮詢結果將啟德河改建活化，成為翠綠宜人的河道及優美市景，達到防汛排洪的重要作用之餘，同時可改善外觀和形象。

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。3間小學共有54位學生提交作品參賽，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。

Public Engagement for Kai Tak River Improvement Works

To engage the public on the planning of Kai Tak River, we conducted a two-stage public engagement exercise on "Building our Kai Tak River" in 2010 and 2011. Based on the outcome of the exercise, we are reconstructing and revitalising the existing Kai Tak River into an attractive green river and townscape feature to enhance its visual quality and image, in addition to its prime objective for flood protection.

To engage the participation of students of neighbouring schools, we launched a drawing competition in 2012 on the envisioned Kai Tak River. A total of 54 students from three primary schools participated in the competition and the winning drawings have been displayed on the site hoardings, giving a hand to visual enhancement of the project.

「共建啟德河」公眾參與活動
Public engagement exercises on "Building our Kai Tak River"

得獎畫作在工地圍板公開展覽
Winning drawings displayed on the site hoardings

啟德河改善工程動工典禮
Commencement Ceremony for Kai Tak River Improvement Works

鄉村污水收集系統工程公眾參與活動

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。

施工前

在工程進行前，本署會聯同環境保護署（環保署）就有關的建議工程計劃、污水渠的走線和泵房的位置向區議會、鄉事委員會、鄉村的村代表及村民進行諮詢，並同時交代村民於工程完成後需承擔的責任，包括需自行將村屋的污水接駁至公共污水收集系統及繳交排污費等。

施工階段

在施工階段，我們會就工程的安排諮詢鄉村代表及村民，以減低對他們的滋擾，並於村口張貼告示板展示工程範圍及預計施工期。除此以外，我們亦會與屋主取得共識確認終端沙井的位置，以及簡介日後屋主需負責進行接駁污水渠至公用共污水收集系統的工程。

Public Engagement for Village Sewerage Works

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

Pre-construction stage

Prior to the construction works, our Department, together with Environmental Protection Department (EPD), consulted relevant District Councils, Rural Committees, Village Representatives and villagers. They were consulted of the proposed sewerage schemes, sewer alignment and the proposed locations of sewage pumping stations while the responsibilities of villagers after the completion of works, e.g. the connection works to the public sewerage system and payment of sewage services charges, were also introduced.

Construction stage

During construction, we liaised with the Village Representatives and villagers on the construction arrangements to minimise nuisance to them, and posted notices/signboards at the village access to indicate clearly the extent of works as well as the anticipated works period. We would agree with the house owners regarding the locations of terminal manholes. We also briefed the house owners for the connection works to the public sewerage system which they would be required to carry out in future.

在施工前與村民進行諮詢會議
Consultation Meeting with Villagers Prior to Construction

完工後

當渠務署為村民建設的污水收集系統工程接近完工時，本署聯同環保署會到村內逐戶拜訪，諮詢並了解個別住戶的接駁污水渠問題，然後舉行簡介會向全體村民詳細解釋是項接駁污水渠計劃的技術及責任。環保署隨後會按照政府指引和規格及《水污染管制（排污設備）規例》，發信要求居民在指定時間內完成接駁污水渠工程（通常為期6至12個月）。期間本署及環保署仍會繼續向有需要的業主聯絡，協助解決接駁問題。

Completion stage

When the sewerage works were close to completion, EPD, with our Department's assistance, visited each house in the village to understand their potential difficulties of the connection works. Our Department and EPD then held briefing sessions for all villagers to provide detailed explanation on the technicality and responsibility of the connection works required. After the briefing session, EPD would issue letters to the villagers requiring them to carry out the connection works within a specified period (typically 6 to 12 months) according to government's guidelines and specifications as well as the Water Pollution Control (Sewerage) Regulation. Our Department and EPD would continue to liaise with the house owners and provide necessary assistance in the connection works during this time.

在工程完工後為村民舉行的簡介會
Briefing Session for Villagers upon Completion of Works

搬遷沙田污水處理廠往岩洞可行性研究的公眾參與活動

我們於2012年11月至2013年3月舉行第一階段公眾參與活動，與公眾及持份者攜手優化搬遷計劃。

我們首先於2012年11月初在赤柱污水處理廠舉行了傳媒簡報會，並得到傳媒廣泛報導。然後，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。在巡迴展覽期間，我們亦邀請市民進行問卷調查，收集他們對搬遷計劃的意見及關注事項。市民亦可以透過電話熱線、電郵、傳真或郵寄等途徑，就搬遷計劃提出意見。

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

To work with the public and stakeholders together to optimise the relocation proposal, we conducted the Stage 1 public engagement exercise between November 2012 and March 2013.

The Stage 1 public engagement was kicked off by a media briefing at Stanley STW in early November 2012, and the media briefing received extensive media coverage. This was followed by 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. During the roving exhibitions, the public were invited to complete questionnaires to collect their views and concerns on the relocation proposal. They could also provide their comments and opinions via various channels including hotline, email, fax and mail.

展示小型辟味設施
Mini-Deodouriser display

巡迴展覽
Roving Exhibition

為了與市民分享計劃的最新資訊及進展，我們於2012年11月成立了研究計劃網站(www.STSTWinCaverns.hk)及Facebook專頁(STSTWinCaverns)。我們並於2012年11月及2013年3月分別出版了第一及第二期通訊，除了把通訊上載至研究計劃網站供市民下載外，我們亦郵寄通訊至擬議重置選址及現有沙田污水處理廠附近的住戶及其他持份者。我們亦安排於電視頻道、九巴和港鐵車廂內播放宣傳短片，以及把宣傳短片上載至研究計劃網站和Youtube網站供市民觀看。

於2013年3月，我們舉行了3場社區小組會議，以諮詢擬議重置選址及現有沙田污水處理廠附近的居民及其他持份者。同月，我們亦舉行了一場焦點小組會議，與環保團體及專業團體交換意見。我們計劃於2013年7月至10月舉行第二階段公眾參與活動，繼續與公眾及持份者攜手優化搬遷計劃。

To share the latest information and progress of the project with the public, we launched a project website (www.STSTWinCaverns.hk) and a facebook page (STSTWinCaverns) in November 2012. Also, we published two issues of newsletters in November 2012 and March 2013. Apart from uploading onto the project website, we distributed the newsletters to the residents in the vicinity of the proposed relocation site and the existing Shatin STW as well as other stakeholders. Publicity video was also broadcast in TV channels, Roadshow in buses and MTR trains and uploaded to the project website and Youtube.

To consult the residents in the vicinity of the proposed relocation site and existing Shatin STW as well as other stakeholders, three community group meetings were held in March 2013. A focus group meeting was also held in March 2013 to exchange views with the green groups and professional organisations. The Stage 2 public engagement exercise is tentatively scheduled to be carried out between July to October 2013. We will continue to work with the public and stakeholders together to further improve the relocation proposal.

社區小組會議
Community Group Meeting

焦點小組會議
Focus Group Meeting

跑馬地地下蓄洪計劃公眾參與活動

本署向來高度重視與公眾的溝通，所以跑馬地地下蓄洪計劃工程推行以來，我們一直致力與鄰近工程的各個持份者及市民保持緊密的聯繫。務求於參考各界不同的意見後，工程能進行得更完善及更能照顧到各界不同的需要。我們更希望於工程進行期間，能同時提升社區的生活環境及加強與社區的關係。公眾參與活動包括與跑馬地區內的關注團體和學生進行聯繫。

Public Engagement for Happy Valley Underground Stormwater Storage Scheme

Our Department places great emphasis in communicating closely with stakeholders and the public under the Happy Valley Underground Stormwater Storage Scheme (HVUSSS) project so that their views are taken into account in the course of delivering the project. We also aim to enhance the living environment for the community and to further strengthen its ties with the community while the project is being constructed. The engagement activities included connecting with the concern groups and schools in the Happy Valley area.

與關注團體聯繫
Connecting with the Concern Groups

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 the project

渠務署署長陳志超先生首先於座談會致辭歡迎各界的參與
Director of Drainage Services, Mr. Chan Chi-chiu gave an opening speech to kick-off the Stakeholders Forum

為提高工程的施工質素，各參與者正絞盡腦汁優化施工安排
The participants were 'Brainstorming' different ideas to enhance the quality of the works arrangement

高級工程師曾國良先生向各界闡述工程的設計理念
Senior Engineer, Mr. Anthony Tsang, elaborated the design concept behind the project

Connecting with Schools
與學校聯繫

在2013年1月22日，我們於聖保祿中學舉行工程簡介講座，向同學們介紹工程計劃之餘，亦希望藉此激發同學們將來成為專業工程師的興趣
School talk was conducted at St. Paul's Secondary School on 22 January 2013 to introduce the scope of the project and to inspire the students' interest of the engineering profession

我們亦於2013年4月26日於天主教聖瑪加利大幼稚園舉行工程簡介講座，講解有關工程計劃及防洪的基本概念
A school presentation was conducted in St. Margaret Mary's Catholic Kindergarten on 26 April 2013 to introduce the project and some basic concepts about flood prevention

幼稚園學生分組討論紓緩鄰近幼稚園的跑馬地地區水浸問題的方法
The kindergarten students were split into small groups to discuss the solutions to alleviate the flooding problem at Happy Valley adjacent to their school

聖保祿中學鄔校長與工程團隊合照
Group photo of Ms. Deborah Wu, the Principal of St. Paul's Secondary School and the project team

與區議員聯繫

為了確保我們能與社區保持緊密聯繫，並聆聽他們的意見，多年來我們均有出席區議會會議。在2012-13年度內，渠務署署長聯同相關同事先後出席西貢、葵青、沙田、屯門、大埔和元朗的區議會會議，以介紹本署在該區的工作和主要工程項目，並徵詢他們的意見。

Meeting with District Councillors

To maintain close ties with the local community and ensure that public views are heard, we always attended District Council meetings over the years. In 2012-13, our Director and relevant colleagues were presented at different District Council meetings, including those of Sai Kung, Kwai Tsing, Sha Tin, Tuen Mun, Tai Po and Yuen Long, to brief members on our work and major projects in their districts and to solicit their opinions.

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

於2012年11月1日舉行的大埔區議會會議
Tai Po District Council Meeting on 1 November 2012

於2012年12月13日舉行的元朗區議會會議
Yuen Long District Council Meeting on 13 December 2012

座談會首天嘉賓合照，包括發展局常任秘書長(工務)韋志成先生(左六)、渠務署署長陳志超先生(左七)、各位演講嘉賓和出席嘉賓
Group photo of the Forum on Day 1, including Permanent Secretary of Development (Works), Mr. Wai Chi-sing (Left 6), Director of Drainage Services, Mr. Chan Chi-chiu (Left 7), guest speakers and honorable guests

約300名來自本港和海外不同政府部門、業界和學界的嘉賓和代表參與座談會
About 300 guests of local and overseas representatives from different government departments, industry, and academia participated in the Forum

渠務署研究與發展座談會2012

科技對於提升我們的表現尤為重要，因此我們十分重視聽取專家的寶貴意見，藉此優化我們營運的技術水平。在2012年11月，我們主辦了以「可持續的排水設計」及「污水處理」為主題的「渠務署研究與發展座談會2012」。為期兩天的座談會共邀請到17位專家學者出席，介紹其研究成果，範疇包括(i)水文學和水力學、(ii)可持續的都市排水系統、(iii)設計和物料、(iv)廢水和污泥處理、(v)氣味管理，以及(vi)可再生能源。專家於會上分享其研究工作的知識及經驗，我們會善用研究所得，進一步探討應用於本署轄下工程和設施的可行性。

DSD Research & Development Forum 2012

Technologies are very important to enhance our performance; we therefore greatly treasure expert views and opinions to achieve technological advancement in our operation. In November 2012, we hosted the DSD Research & Development Forum 2012 on "Sustainable Drainage Design" and "Wastewater Treatment". A total of 17 scholars/experts were invited to present their research in this two-day forum on aspects including (i) Hydrology and Hydraulics, (ii) Sustainable Urban Drainage System, (iii) Design & Materials, (iv) Wastewater & Sludge Treatment, (v) Odour Management, and (vi) Renewable Energy. The expertise and knowledge in their research were shared and we would study their findings for suitable application to our projects and facilities.

座談會第二天嘉賓合照，包括環境保護署副署長林啟忠先生(右三)、渠務署署長陳志超先生(右四)、各位演講嘉賓和出席嘉賓
Group photo of the Forum on Day 2, including Deputy Director of Environmental Protection, Mr. Albert Lam Kai-chung (third right), Director of Drainage Services, Mr. Chan Chi-chiu (fourth right), guest speakers and honourable guests

與環保組織聯繫

為進一步提高本署各部門同事於進行河道治理工程時對環境生態的保育意識，本署的排水工程部邀請了多個綠色團體，包括綠色力量、嘉道理農場暨植物園及世界自然基金會香港分會，於2013年3月21日共同舉辦有關城市河道生態的一天訓練課程。

Communication with Green Groups

In order to further raise the awareness of our colleagues on the ecological impact when implementing the works under river training projects in Hong Kong, our Drainage Projects Division invited green groups, including Green Power, Kadoorie Farm & Botanic Garden Corporation, and WWF-Hong Kong to jointly conduct a one-day training course for Ecology of Urban Stream on 21 March 2013.

各綠色團體的代表深入淺出地介紹香港河道生態，並指出香港河道治理工程中常見的生態問題及對自然環境的影響。排水工程部亦於當日下午安排實地考察，使各綠色團體能更具體地向參加者解說於天然河道進行河道治理工程時需注意的事項及如何優化工程中的生態保育措施。

Representatives from green groups introduced the stream ecology in Hong Kong during the training course and highlighted the common ecological problems and their associated environmental impacts during the works implementation at natural stream. Our Drainage Projects Division also organised site visit in the afternoon session so that the green groups could more specifically explain the ecological concern for the works implementation at natural stream and how to enhance the ecological protection measures.

綠色力量、嘉道理農場暨植物園及世界自然基金會香港分會代表講授河道治理工程對天然河道的影響及相關的保育措施
Representatives from Green Power, Kadoorie Farm & Botanic Garden Corporation, and WWF-Hong Kong explained the ecological concern for the works implementation at natural stream and the relevant ecological protection measures

世界自然基金會香港分會代表簡介香港河溪生態
Representative from WWF-Hong Kong introduced the stream ecology in Hong Kong

綠色力量代表講授於天然河道進行河道治理工程時需注意的保育事項
Representative from Green Power explained the ecological concern for the works implementation at natural stream

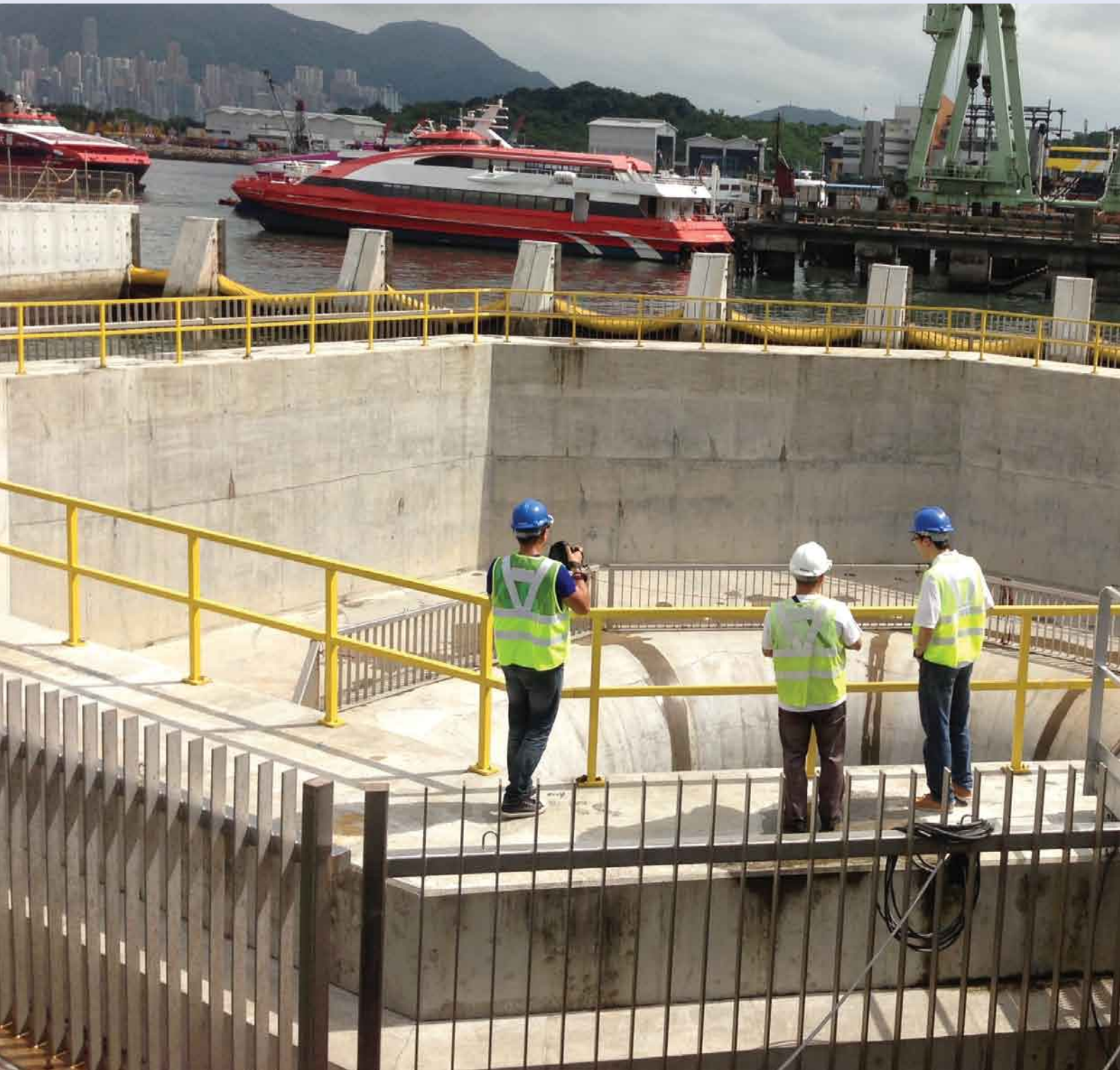
此外，本署於2012年5月17日舉辦了為期一天的「對城市河流的生態代價研討會」，分享及整合我們在蠔涌、林村及梅窩的雨水排放系統改善工程上，獲得有關生態河道設計的經驗，和探索在香港城市河流生態的新興概念的理解。來自多個環保團體，包括綠色力量、世界自然基金會香港分會、長春社、嘉道理農場暨植物園和香港觀鳥會的代表應邀出席是次研討會，並在會上提出他們的意見和建議，讓本署研究和應用於未來的項目上。

Besides, our Department organised a "One-Day Workshop on Ecological Consideration of Urban Stream" on 17 May 2012 to share and consolidate experience gained from incorporating ecological features in its previous drainage improvement projects in Ho Chung, Lam Tsuen and Mui Wo; and to explore the understanding of the emergent concept of ecology of urban stream in Hong Kong. Representatives from green groups including Green Power, World Wide Fund for Nature Hong Kong, Conservancy Association Hong Kong, Kadoorie Farm and Botanic Garden and Hong Kong Bird Watching Society were invited to participate in the event to provide their views and advice, which will be studied and applied to our future projects, where appropriate.

小組討論
Group Discussion

綠色團體經驗分享
Experience Sharing by Green Groups

與工作夥伴合作
Collaboration with Working Partners



53

工作夥伴參與工地整潔獎勵計劃的隊伍數目

No. of Teams from Our Working Partners Participated in Our Construction Sites Housekeeping Award Scheme

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.

推動職業安全健康
Promotion of Occupational Health and Safety

隧道安全運動

鑑於過往幾年建造業意外率偏高，以及於淨化海港計劃第二期甲隧道工程極深及狹窄的工作環境所帶來的高危特質，本署於2012年11月至2013年1月，聯同3個淨化海港計劃第二期甲隧道工程合約的工程顧問及承建商，舉辦了隧道安全推廣運動，希望將安全訊息傳遞到每一個參與工程的員工，提升他們的安全意識，以達致「地盤零意外」的終極目標。

為了使隧道安全推廣運動收到實質效果，我們和相關工程顧問和承建商在2012年11月組成了一個工作小組，籌備推廣運動的細節，並在11月22日舉行了啟動禮。啟動禮由本署署長陳志超先生致辭揭開序幕，並由渠務署、隧道工程合約的工程顧問和承建商的高級管理人員逐一簽署安全約章，承諾全力以赴，推廣隧道工程安全。本署署長亦於啟動禮後率先親自到北角施工地盤視察，和承建商就安全措施和安排交換意見。

Tunnel Safety Campaign

In view of the high accident frequency rate in construction industry in the past few years and the inherent high risk nature of working in the Harbour Area Treatment Scheme (HATS) tunnels, our Department launched the Tunnel Safety Campaign jointly with the consultants and contractors of the three tunnel contracts under HATS Stage 2A from late November 2012 to the end of January 2013. The campaign aims at cultivating a safety-first mindset into all stakeholders of the project, for achieving the ultimate goal of "Zero Accident".

To get the campaign rolling, we established a working group with the relevant parties in November 2012 to formulate the campaign details. A kick-off workshop was conducted on 22 November 2012 beginning with a welcome speech delivered by Mr. Chan Chi-chiu, Director of Drainage Services. It was then followed by the endorsement of the Safety Charter by the senior management of the Department and the representatives of project consultants and contractors, demonstrating their commitment in safety campaign. Our Director visited the North Point site right after the workshop and exchanged views on the safety measures and arrangement with the contractors.

渠務署、隧道工程合約的工程顧問和承建商的高級管理人員於啟動禮簽署安全約章
Endorsement of the Safety Charter at Kick-off Workshop by the senior management of DSD, project consultants and contractors

地盤安全比賽冠軍 - 禮頓—利安聯營
Leighton – LNS Joint Venture-Champion of the Inter-Contract Safety Competition

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

安全推廣運動實有賴淨化海港計劃3項隧道建造工程整個建造團隊的合作及積極參與。安全運動推廣期間，工作小組安排了一連串的推廣活動，包括施工前早操練習及安全簡介、工具箱講座、問答遊戲、安全比賽、參觀承建商的培訓中心、工地巡查等。而部門的高級管理人員均積極參與有關活動，包括助理署長(污水處理服務)陳柏強先生、總工程師(淨化海港計劃)周國銘先生及各工程師亦身體力行，除參與各項活動外，亦與前線員工直接溝通，令員工士氣大振，大大提升安全意識，提高工地的安全水平。

安全推廣活動之一的地盤安全比賽旨在提升3項隧道工程合約的工地安全表現。比賽由助理署長(污水處理服務)陳柏強先生和高級工程師(安全顧問)戴尚信先生負責評審，在巡查了各施工地盤之後，選出最佳安全表現的承建商，結果禮頓—利安聯營憑其卓越表現，從3項工程合約中脫穎而出，奪得冠軍。隧道安全運動的閉幕典禮於2013年1月30日舉行。渠務署署長陳志超先生在致辭總結時表示：「今天的閉幕典禮只是隧道安全推廣路上的一個里程碑，我們需要繼續致力提高隧道工程的安全標準，時刻保持警覺，從現在起直到『淨化海港計劃第二期甲』工程竣工為止，繼續推廣隧道施工安全，正如我們的推廣口號：『隧道環境限制多，施工安全要做妥』。」

The campaign calls for the collaborative efforts and active participations of all parties involved in the construction of three HATS tunnels. The working group has arranged a number of activities including pre-work exercises and safety briefings, toolbox talks, quizzes and games, safety competitions, visits to contractor's training centers and site visits, etc. Our senior management has been heavily involved in these activities: Mr. Chan Pak-keung, Assistant Director (Sewage Services), Mr. Henry Chau Kwok-ming, Chief Engineer (HATS), and other DSD engineers have joined many of these activities to demonstrate our commitment and deliver safety messages to the frontline workers. This has not only boosted the workers' morale and raised their safety awareness, but also enhanced the overall safety level of the site.

Under the campaign, an Inter-Contract Safety Competition was conducted to raise the site safety performance amongst the three tunnel contracts. The competition involves site safety inspections conducted by Mr. Chan Pak-keung, Assistant Director (Sewage Services), and Mr. Tai Sheung-shun, Senior Engineer (Safety Advisor), at different sites. Leighton – LNS Joint Venture had the best safety performance and won themselves the Champion of the competition. The Closing Ceremony of the Tunnel Safety Campaign was successfully held on 30 January 2013. Mr. Chan Chi-chiu, Director of Drainage Services, concluded that, 'The Closing Ceremony is only a milestone of the Tunnel Safety Campaign. We must strive to continue our effort to further improve the standard of safety in our tunneling works, stay alert and promote what have been stated in our campaign slogan: "Good practice on site, safe work in tunnel" from now until the completion of HATS 2A tunneling works'.

承建商表現
Contractor's Performance

工地整潔獎勵計劃

「工地整潔獎勵計劃」自2004年開始推行以來，我們成功透過計劃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。

市民大眾是我們主要的服務對象，而在道路上進行的渠務工程難免會對鄰近市民日常生活造成不同程度的影響。因此我們有賴各位同事、承辦商及工程顧問的合作，在計劃及進行每項工程時從市民大眾的角度作出考慮，以配合市民的期望，為市民提供優質的服務。

2012年工地整潔獎勵計劃頒獎典禮於2013年3月13日舉行。53支參賽隊伍經評核的平均表現為「良好」，成績令人鼓舞。這實有賴各承建商、工程顧問及渠務署的工地監督人員以及前線員工的努力。我們會繼續保持出色的表現，共同實踐渠務署的抱負、使命和信念，用「以心為心．盡力盡心」的態度服務市民。

Construction Sites Housekeeping Award Scheme

The Construction Sites Housekeeping Award Scheme was first launched in 2004. Throughout these years, the Scheme has proven to achieve its purposes of enhancing the cleanliness and tidiness of our sites and minimising nuisance to the public.

The general public is our major customer group and our drainage works on the streets will inevitably affect the nearby communities. In every project we plan and do, we view from the public perspective and deliver our best to meet their expectations with quality services. Such objective can be met only with the tripartite efforts of our Department's colleagues, contractors and consultants.

The Construction Sites Housekeeping Award Scheme 2012 Award Presentation Ceremony was held on 13 March 2013. It is delighted to note that we have been rated "Good" in 2012 in our overall average score amongst the 53 participating teams. Our success was hinged on the concerted efforts of all contractors, consultants, site supervisory staff and every frontline worker. We will continue to work for excellence and to put our Vision, Mission and Values in practice and in line with our principle of "Do it from the Heart".

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

渠務署署長陳志超先生主持「工地整潔獎勵計劃」頒獎典禮
Mr. Chan Chi-chiu, Director of Drainage Services, officiated at the Award Presentation Ceremony of the Construction Sites Housekeeping Award Scheme

與工作夥伴並肩同盟
Alliance with Working Partners

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。渠務署、顧問公司和承建商管理層和前線人員共同舉辦及參與團隊活動，例如龍舟比賽、提升士氣表演、義工探訪和工地清潔日等，以促進夥伴合作文化。渠務署正在籌劃更多新工程合約項目，當中包括顧問合約及機電工程合約。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. In order to further promote a partnering culture, management and frontline staff of our Department, consultants and contractors organised team building activities, such as dragon boat races, team spirit promotion performances, charity visits, site cleaning day, etc. We are planning to launch more NEC pilot contracts, including the adoption of NEC for a new consultancy agreement and an electrical and mechanical (E&M) contract. We will continue to promote partnering culture and look forward to working with our partners in the industry for a wider adoption of NEC in Hong Kong.

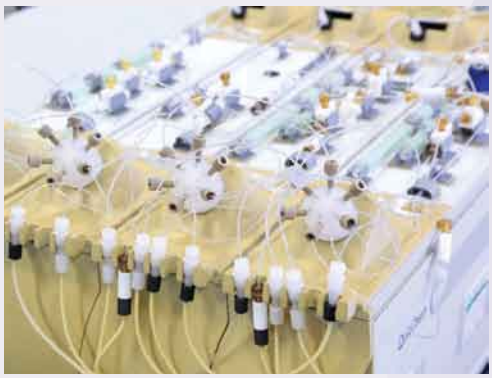
新工程合約伙伴合作工作坊
NEC Partnering Workshop

營運效率
Operation Efficiency

1,001

百萬立方米
million m^3

年度污水處理量
Annual Sewage Treatment Volume



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、資助撥款和建設公共大型系統及設備。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.

部門營運開支

2012-13年度，本署總營運開支約為19億元，其中個人薪酬的開支約為7.7億元，餘款則用於部門開支及非經常開支。

本署過去5年的營運開支摘要如下：

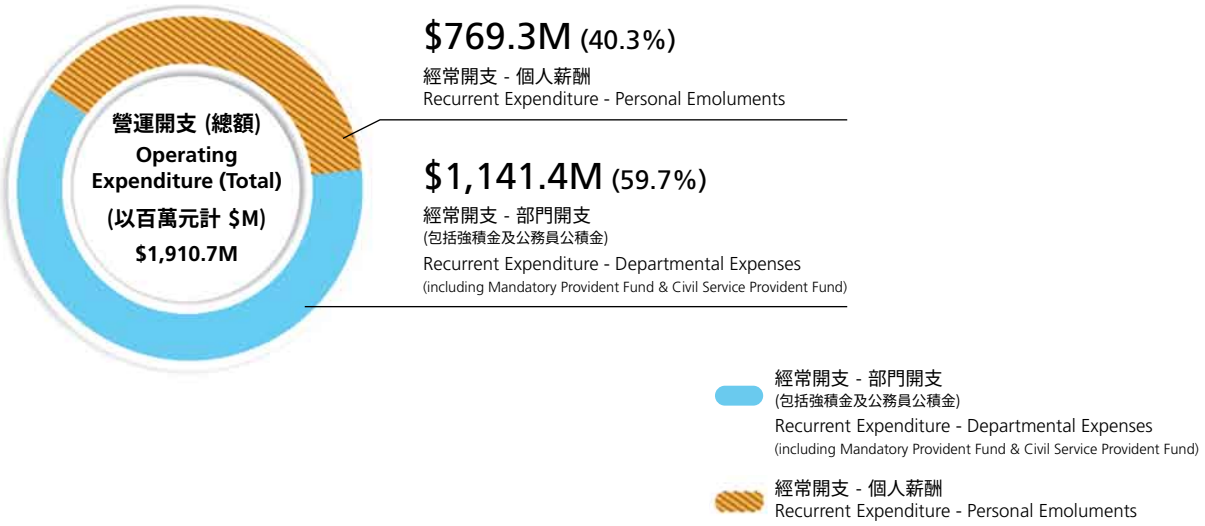
Departmental Operating Expenditure

In 2012-13, the total expenditure of our Department was about $1.9 billion. Of this allocation, salaries accounted for about $770 million, with the rest being contributed by departmental expenses and capital items.

A Summary for the past five years of our operating expenditure is highlighted below:

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年度渠務署的營運開支摘要
Summary of DSD Operating Expenditure in 2012-13



基本工程的項目開支

在一般情況下，我們每年均須進行「基本工程計劃資源分配工作」，估計所有基本工程的項目開支。我們須更新成本預算及以書面形式妥善記錄，內容涵蓋各個工程項目所有階段的現金流量，並要考慮現行市場價格及風險因素。本署並設有部門委員會，負責審核工程的預算費用以納入立法會工務小組委員會的文件，以及審核所有工程合約的估算，當中包括定期合約。我們會緊密監察工程的成本預算，確保不會超出核准工程預算和財經事務及庫務局制訂的行政上限，而且有充分資金完成核准工程。此外，我們亦另設由署長擔任主席的委員會，專門監察所有大型工務工程的進度，並且確保工程善用撥款。

Capital Works Project Expenditure

In general, we have to conduct the Capital Works Resource Allocation Exercise annually to estimate the project expenses for all the capital works. We need to update and well document the cost estimate including cashflow of a project in all stages taking due account of the prevailing market rates and risk factors. Our Department also maintains a departmental committee for vetting the project estimates for inclusion in the LegCo Public Works Subcommittee papers and the vetting of pre-tender estimates of all works contracts, including term contracts. The cost estimate of a project will be closely monitored against the Approved Project Estimate and the administrative cap imposed by the Financial Services and the Treasury Bureau to ensure adequate funds for completing the approved works are available. In addition, we have a committee chaired by the Director to monitor the progress of all major capital works projects and to ensure that the funds allocated are effectively expended.

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**

污水處理服務經營帳目

「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。

Sewage Services Operating Accounts

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.

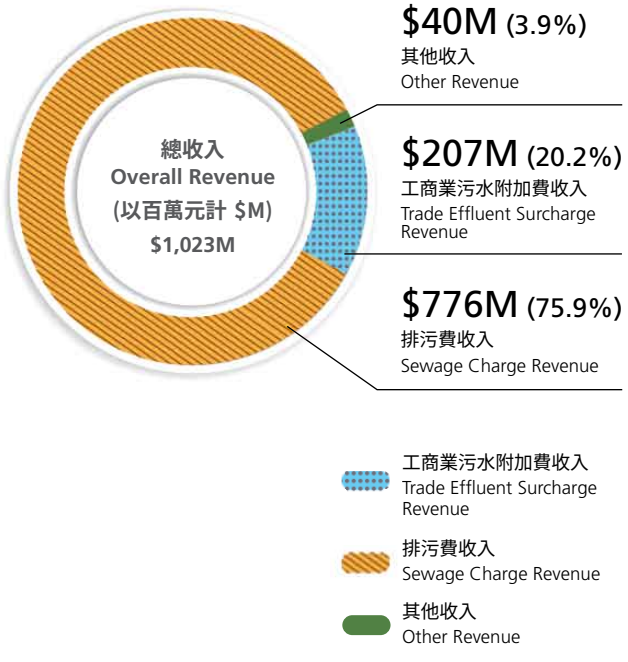
過去5年污水處理服務經營帳目摘要如下：

The revenue and expenditure in the Sewage Services Operating Accounts for the past five years are summarised in the Table below:

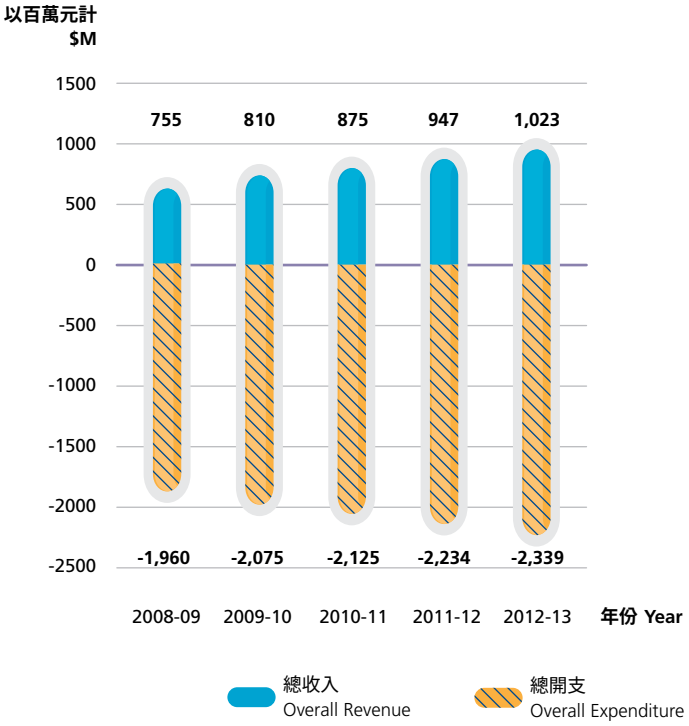
過去5年污水處理服務經營帳目摘要 Summary of Sewage Services Operating Accounts for the Past Five Years	2008-09	2009-10	2010-11	2011-12	2012-13#
	(以百萬元計 $M)				
排污費收入 Sewage Charge Revenue	532	583	639	703	**776**
工商業污水附加費收入 Trade Effluent Surcharge Revenue	189	192	201	204	**207**
其他收入 Other Revenue	34	35	35	40	**40**
總收入 Overall Revenue	**755**	**810**	**875**	**947**	**1,023**
開支 (不包括折舊) Expenditure (excluding depreciation)	(1,273)	(1,377)	(1,402)	(1,483)	**(1,538)**
折舊 Depreciation	(687)	(698)	(723)	(751)	**(801)**
總開支 Overall Expenditure	**(1,960)**	**(2,075)**	**(2,125)**	**(2,234)**	**(2,339)**
(虧損) (Deficit)	**(1,205)**	**(1,265)**	**(1,250)**	**(1,287)**	**(1,316)**

註：# 2012-13年度數據只屬暫定性，確認數據將待污水處理服務帳目委員會確認後上載到本署網頁。
Notes : # The 2012-13 figures are provisional. The final figures will be posted on our website after endorsement by the Sewage Services Accounts Committee.

2012-13年度污水處理服務經營帳目總收入的分佈
Overall Revenue of Sewage Services Operating Accounts Breakdown in 2012-13



污水處理服務經營帳目的總收支
Overall Revenue and Expenditure in the Sewage Services Operating Accounts



污水處理服務收回經營成本比率

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 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.

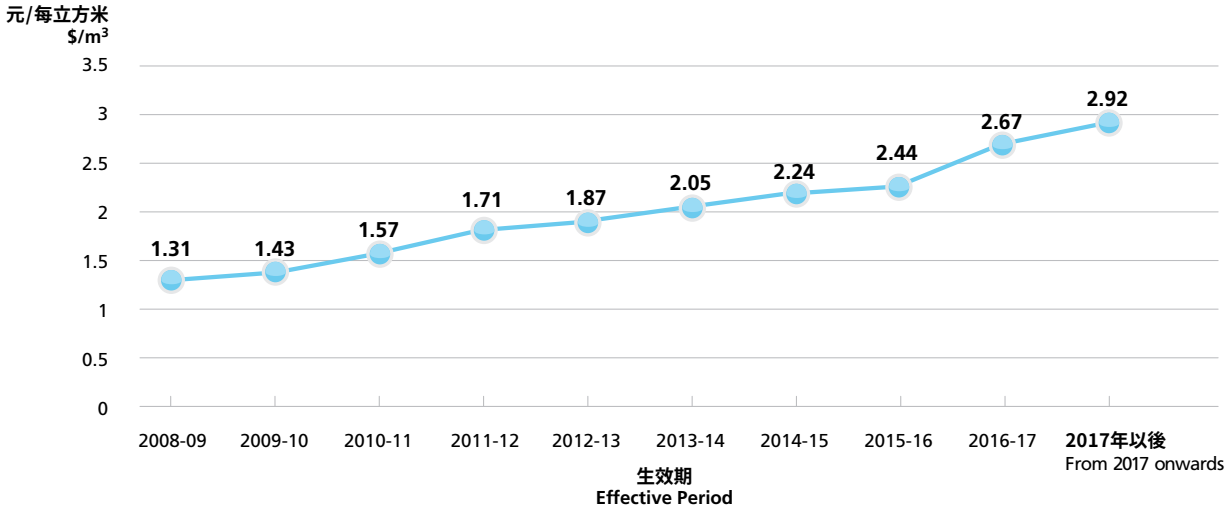
調整排污費

為了堅守「污染者自付」的原則，並鼓勵市民節約寶貴食水，立法會已通過10年遞增排污費，並由2008年4月1日起生效。自當天起修訂的排污費率從原來的每立方米供水量1.20元增至1.31元。然後每年以比率9.3%遞增，直至2017年4月1日的每立方米供水量 2.92元。

Adjustment of Sewage Services Charge

To enhance the "Polluter Pays" Principle and to encourage the public to conserve valuable water, the Legislative Council has approved a gradual increase of the sewage charge for 10 years starting from 1 April 2008. Since that day, the sewage charge rate was revised from the original $1.20 to $1.31 per cubic metre of water supplied. The rate is and then gradually increased by 9.3 per cent per annum until reaching $2.92 per cubic metre on 1 April 2017.

排污費
Sewage Charge Rate



關己及人 愛護員工
Caring Our Staff

52,597

員工培訓總時數
Total Staff Training Hours

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。

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.

員工培訓與發展
Staff Training and Development

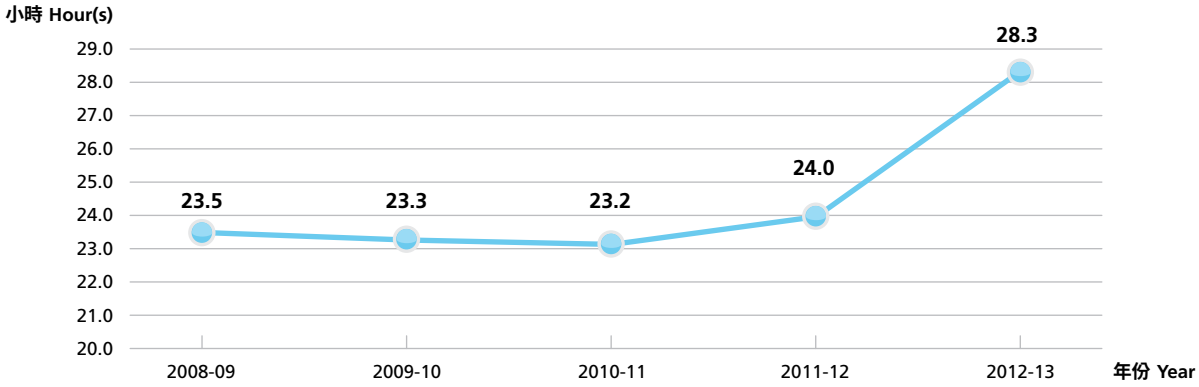
我們相信培訓對員工和部門同樣重要，它是我們提供優良渠務服務的基礎，以滿足公眾日益殷切的需求和迎合現今可持續發展的趨勢。2012-13年度，我們一共為員工舉辦278個與環境及可持續發展主題相關的培訓課程，有關的活動涵蓋新入職人員參觀考察、內部培訓、職務考察、海外會議和各類研討會及工作坊。

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。

We believe that training is important for both staff and the Department to provide quality services on drainage services to meet the escalating demand from the public and the growing attention for sustainability. In 2012-13 we organised a total of 278 training courses relevant to environmental and sustainability matters for our staff, in the form of induction visits, in-house training, duty visits, overseas conferences, as well as seminars and workshops.

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



內部培訓

員工入職訓練

為使新入職本署人員加深對政府及部門工作的認識，從而加強他們對「服務市民」的承擔，我們會安排所有新入職本署人員參加為期一天的入職訓練課程。於2012-13年，本署共舉辦了3次入職培訓課程，共有142名員工參加。

In-house Training

Staff Induction

All new comers to our Department are required to join a one-day Induction Course to enhance their understanding of the Government and the work nature of the Department, in order to foster a mindset to "serve the public" with dedication. In 2012-13, three Induction classes were held for a total of 142 colleagues.

參觀昂船洲污水處理廠
Visit to Stonecutters Island STW

渠務署新同事參加入職訓練
Induction course for new comers to DSD

《歐洲規範》

《歐洲規範》是一系列關於建築設計、其他土木工程和建築產品的「歐洲標準」(即EN 1990 - EN 1999)，訂明相關的通用作業方針。2012-13年，我們安排了多次關於《歐洲規範》的培訓活動，約有380位員工參與，有關的活動摘要如下：

Eurocodes

Including a series of European Standards (i.e. EN 1990 - EN 1999), the Eurocodes offer a common approach with regard to building design, other civil engineering works and construction products. In 2012-13, a number of training events on Eurocodes were organised for about 380 participants as summarised below.

課程名稱 Course Title	參加人數 No. of Participants
如何完善鋼及鋼混凝土組合結構設計以符合《歐洲規範4》要求的技術研討會 Technical Seminar on Effective Design of Steel and Steel-Concrete Composite Structures to Eurocode 4	2
《歐洲規範》研討會 Eurocodes Seminar	15
《歐洲規範EC2》鋼筋混凝土結構設計專業培訓課程 Professional Course on Design of Reinforced Concrete Structures to Eurocode EC2	4
應用《歐洲規範》設計渠務及污水結構工作坊 — 第一節 Workshop on Application of Eurocodes for Design of Drainage and Sewerage Structures - Session 1	199
應用《歐洲規範》設計渠務及污水結構工作坊 — 第二節 Workshop on Application of Eurocodes for Design of Drainage and Sewerage Structures - Session 2	160

職業安全與健康

本年度，本署舉辦以下關於OHSAS 18001職業健康及安全管理系統的培訓課程：

- 意識推廣培訓：共20節培訓，約1,100位員工參加 (2012年4月)；
- 體系實施簡介：共30節培訓，約1,700位員工參加 (2012年4-5月)；及
- 內部審核員培訓：共7節培訓，約160位員工參加 (2012年6月)。

除介紹OHSAS 18001職業健康及安全管理系統外，我們於2012-13年度內亦舉辦了6次職安健培訓活動，合共166位員工參加。詳情如下：

Occupational Safety and Health

During the reporting year, our Department has held the following training sessions regarding OHSAS 18001 Occupational Health and Safety Management System:

- Awareness Training: 20 sessions for about 1,100 colleagues (April 2012);
- Implementation Briefing: 30 sessions for about 1,700 colleagues (April - May 2012); and
- Internal Auditor Training: 7 sessions for about 160 colleagues (June 2012).

In addition to OHSAS 18001, we organised six staff training events dedicated to occupational safety and health in 2012-13, with 166 participants in total. Details are outlined below.

課程名稱 Course Title	參加人數 No. of Participants
樹藝工作職安健研討會 Seminar on Occupational Safety and Health in Arboriculture	15
顯示屏幕設備評估合格證書課程 Certificate of Competence in Display Screen Equipment Assessment	27
經理及督導人員體力處理課程 Manual Handling Course for Managers and Supervisors	6
污水處理廠作業基本職安健講座 Basic Occupational Health and Safety Talk for Working at Sewage Treatment Works	75
人力提舉及體力處理 Manual Lifting and Handling	33
樹藝工作職安健工作坊 Workshop on Occupational Health and Safety in Arboriculture	10

年內為員工安排的其他安全培訓包括：

Examples of other safety training events provided to our staff during the year include:

課程名稱 Course Title	參加人數 No. of Participants
如何避免在工作中被狗隻咬傷 (11節) Dog Bite Safety (11 Sessions)	107
輻射防護一天課程 (6節) One-day Training on Radiation Protection (6 Sessions)	235
輻射防護半天課程 (7節) Half-Day Training on Radiation Protection (7 Sessions)	176

職務考察

考察德國污泥輸送泵生產廠

為防止污泥在輸送期間洩漏和減少氣味，以及加強工作安全，我們計劃在昂船洲污水處理廠裝設污泥輸送泵系統，取代現有的污泥輸送鏈。為了解污泥輸送泵系統的生產程序，以及有關設備的維修和系統測試技術，我們的同事在2012年10月中旬遠赴設於德國漢堡的生產廠房參觀考察。此外，他們亦順道參觀了區內的污水處理廠，蒐集污水處理設施的操作及保養心得，增廣見聞，獲益良多。

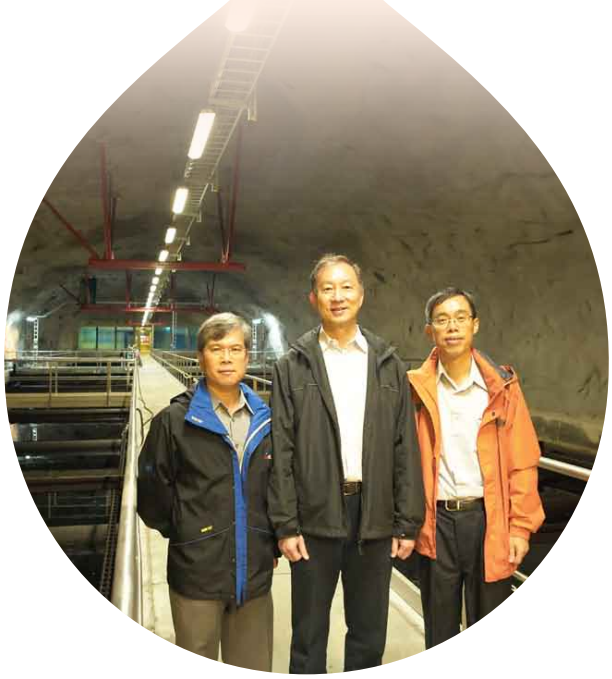
Duty Visit

Sludge Conveyance Pumping System Production Facility in Germany

In order to prevent leakage during sludge conveyance, reduce odour and enhance work safety, we planned to adopt sludge conveyance pumping system to replace the existing sludge conveyance belt in Stonecutters Island Sewage Treatment Works. To understand its production process and techniques on system testing and maintenance, our colleagues visited the system production facility in Germany in mid-October 2012. Moreover, the colleagues benefited greatly from the tours to the nearby sewage treatment works, where they learned about valuable knowledge and first-hand experience in facility operation and upholding.

參觀威斯巴登市污水處理廠
Visit the Sewage Treatment Works in Wiesbaden City

德國製造商講解污泥輸送泵的生產和測試程序
Introduction on Production and Testing of the Sludge Conveyance Pumping System by the German Manufacturer



渠務署署長陳志超先生(中)、總工程師(污水工程)黎卓豪先生(右)及總工程師(污水處理)譚利星先生(左)攝於瑞典夏帕拉污水廠
Director of Drainage Services, Mr. Chan Chi-chiu (middle), Chief Engineer (Sewerage Projects), Mr. Lai Cheuk-ho (right) and Chief Engineer (Sewage Treatment), Mr. Tam Lee-shing (left) at Kappala Plant in Sweden

與當地居民交談了解情況
Discussion with Local Residents

工程師(排水工程)梁爵麟先生(左)與英國採用新工程合約的項目團隊合照
Engineer (Drainage Projects), Mr. Leung Cheuk-lun (left) with UK's project team adopting NEC

北歐岩洞設施考察

為輔助沙田污水處理廠遷入岩洞的可行性研究，我們積極借鏡世界各地的良好作業典範。2012年8月，渠務署署長陳志超先生特別率領訪問團到訪北歐多個國家考察。考察團共參觀了5間建於岩洞內的污水處理廠，考察人員亦藉此機會與當地工程專家交流，並了解到透過實施一系列完善控制措施，令建於岩洞內的污水處理廠能與社區協調融合。

Caverns Facilities in Nordic Countries

To learn from international best practices and provide reference for the feasibility study on relocation of Shatin Sewage Treatment Works to caverns, a group led by Director of Drainage Services, Mr. Chan Chi-chiu, paid a special visit to several Nordic countries in August 2012. The delegation visited a total of five sewage treatment works built inside caverns and held discussion sessions with local engineering experts. It was also learned that these sewage treatment works had integrated with the communities satisfactorily due to the implementation of a set of effective control measures.

英國新工程合約工作研習

因應未來更多採用新工程合約形式的工程項目，本署在2012年4月至5月期間安排3位項目工程師到英國參與為期4星期的工作研習計劃，讓他們從經驗豐富的新工程合約倡導者，學習合約管理的實踐和合作方式。他們獲得的知識都會應用於本地新工程合約項目上，並與本署其他同事分享。

New Engineering Contract (NEC) Attachment in the United Kingdom

In the anticipation of more upcoming New Engineering Contract (NEC) projects, our Department organised a 4-week attachment programme in the United Kingdom (in April - May 2012) for three project engineers to acquire useful knowledge of the contract management practices and collaborative working style from experienced NEC practitioners. The knowledge gained has been applied in the local NEC projects and shared amongst colleagues in our Department.

韓國及日本河道復修工程

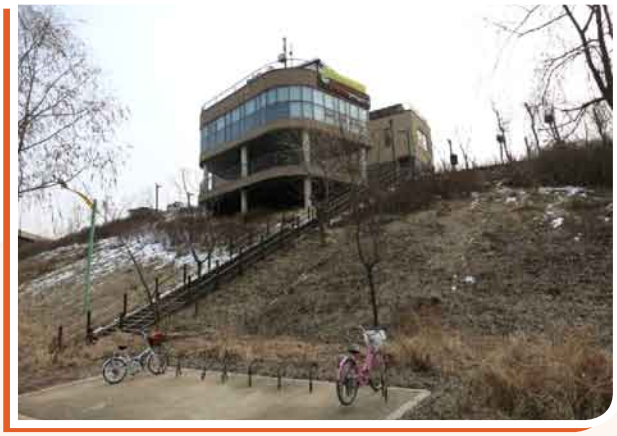
本署聯同阿特金斯顧問有限公司及莫特麥克唐納香港有限公司人員於本年度前往韓國及日本考察多個河道復修及防洪項目。在Korean River Restoration Network 及 Japan River Restoration Network的全力支持和配合，同事們都獲益良多。透過是次考察我們的同事汲取了許多關於實施河道改善工程紓緩水浸風險的寶貴知識。同事們參觀的地點包括：

- 首爾良才川
- 首爾京仁阿拉航道
- 首爾清溪川
- 東京隅田河及舊中川
- 東京大落古利根川
- 東京越谷Lake Town

River Rehabilitation Projects in Korea and Japan

A joint duty visit by our Department, Atkins China and Mott MacDonald HK Limited was arranged to visit the river restoration and flood control projects in Korea and Japan, which was kindly supported by both Korean River Restoration Network and Japan River Restoration Network. Throughout the visit, our colleagues gained valuable knowledge in implementing river improvement works to reduce flooding risk. The areas we visited included:

- Yangjaecheon (良才川) River in Seoul
- Gyeongin Ara Waterway (京仁阿拉航道) in Seoul
- Cheonggyecheon (清溪川) in Seoul
- Sumida River (隅田河) and Old Na Ka River (舊中川) in Tokyo
- Ootoshi-furutonegawa River (大落古利根川) in Tokyo
- Koshigaya Lake Town (越谷Lake Town) in Tokyo



首爾良才川展覽中心 (從河床向上眺望)
Yangjaecheon River Exhibition Centre in Seoul (view from river bed)

完成河道改善工程的京仁阿拉航道外貌
General View of completed Gyeongin Ara Waterway

在清溪川內的人工瀑布
Waterfall in Cheonggyecheon

隅田河河堤
Super levee for Sumida River

員工康樂活動
Staff Recreational Activities

我們設有由員工自發成立的職員康樂會，義務為所有員工籌辦康樂活動。年內，這群熱心的同事繼續作出貢獻，為我們安排林林總總的活動，維繫同事間的友好感情。

We have a Staff Club initiated by our staff members on a voluntary basis to organise recreational activities for all DSD staff. Thanks to their contributions, we launched a wide range of activities to foster the relationship amongst our staff during the year.

龍舟競賽

2012年我們的同事組隊積極參加了多項龍舟競賽。為了爭取冠軍，龍舟隊進行了連串的刻苦練習。這項活動不但可提升同事的團隊合作精神，更可鍛鍊員工的體魄，保持身心健康。

Dragon Boat Race

In 2012, we actively participated in different dragon boat races. With an aim to strive for the championship, the team underwent a series of arduous practices. This activity not only enhanced the team spirit amongst staff members, but also served as a good way for them to keep fit and healthy.

龍舟競賽
Dragon Boat Race

香港馬拉松2013

本署約200名員工及親屬一同參加香港馬拉松2013，連同工程項目合作夥伴包括顧問公司及承建商計算，參加總人數高達760人。在練習及比賽期間，參賽者彼此互勵互勉，促進團隊合作精神。

Hong Kong Marathon 2013

About 200 staff of our Department and their relatives joined the Hong Kong Marathon 2013. The total number of participants reached 760 when counting in our project partners including our consultants and construction contractors. The encouragement for each other helped maintain the high morale throughout the whole run.

香港馬拉松2013
Hong Kong Marathon 2013

運動比賽

在過去一年，職員康樂會除了組隊參加香港馬拉松及各項龍舟競賽外，亦舉辦了多項球類比賽，包括足球、籃球、乒乓球、壁球、桌球、高爾夫球、網球、羽毛球、保齡球和飛鏢等。

Sports Competitions

Apart from teaming up to take part in the Hong Kong Marathon and dragon boat races, our Department's Staff Club also arranged a number of sports competitions in the past year, which included tournaments of football, basketball, table-tennis, squash, snooker, golf, tennis, badminton, bowling and darts.

戶外活動及興趣班

年內，我們亦舉辦多項活動包括遠足、太極練習、一天野戰體驗團、地質公園旅行、參觀立法會綜合大樓及紅酒入門工作坊等，旨在讓同事有更多機會接觸大自然以及增進有趣課題的知識。

Outdoor Activities and Interest Classes

Many activities were organised to enable staff to enjoy the nature and interesting topics during the year. These activities included hiking, practice sessions for Tai Chi, one-day war game outbound training, Hong Kong Geopark tour, visit to the Legislative Council Complex and a red wine workshop for beginners, etc.

紅酒入門工作坊
Red Wine Workshop for Beginners

地質公園旅行
Hong Kong Geopark Tour

參觀立法會綜合大樓
Visit the Legislative Council Complex

野戰體驗團
War Game Outbound Training

行山樂
Hiking Fun

行山樂
Hiking Fun

部門聖誕聯歡會

逾520位同事和嘉賓出席部門聖誕聯歡會，場面非常熱鬧。助興節目既有詩歌唱詠又有遊戲耍樂，同事更在表演環節上，以「品質管理、環境保護、職業健康與安全」為題盡展創意。各組演出精彩絕倫，全場掌聲此起彼落。

Christmas Party

Over 520 colleagues and guests joined the Department's Christmas Party. Apart from singing hymns and playing games, colleagues developed and demonstrated their full creativity to bring out the importance of "quality management, environmental protection, and occupational health and safety" in their performances. Their impressive presentation received loud applause.

部門聖誕聯歡會
Christmas Party

周年晚宴

職員康樂會舉行的周年晚宴，節目豐富。除頒發各項運動比賽獎項外，大會還安排了集體遊戲及邀得同事於才藝表演環節獻唱及吹奏中樂，台上台下全情投入，反應熱烈。

Annual Dinner

A variety of programmes were delivered in the Annual Dinner organised by the Department's Staff Club. In addition to prize presentation for various sports competitions, there were collective games and talent shows in which colleagues performed singing and played Chinese instrument. All the colleagues and guests enjoyed the Dinner very much.

周年晚宴
Annual Dinner

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。

周全管理督導職安健事務

為完善監察和審核本署的工作安全及健康表現，我們特別設立由渠務署副署長領導的渠務署安全督導委員會。委員會定期召集各分部主管舉行會議，不時檢討內部安全政策與程序和發出新的渠務署安全指令。

為保障工程工地人員的健康和安全，我們與工程顧問及承建商通力合作，積極向他們推廣安全意識，亦不時透過分部安全協調經理發佈有關建築工地安全的最新資料和警示。

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。

健康與安全推廣活動

我們明白推廣安全訊息是提高員工個人安全意識及提倡安全文化的重要途徑。年內，我們舉辦及參加了下列健康與安全宣傳活動、推廣和獎勵計劃：

- 34項工程項目參與發展局主辦的2012年「公德地盤嘉許計劃」；
- 53項工程項目參與渠務署舉辦的「工地整潔獎勵計劃」；
- 為本署員工、駐工地人員及承建商人員舉辦4個安全講座及2次培訓中心參觀活動，宣傳在密閉空間和供電電纜附近作業的工地安全須知事項；及
- 與淨化海港計劃工程承建商及顧問聯合舉辦「淨化海港計劃隧道安全推廣運動」，宣傳隧道作業安全。

內部職業健康與安全

我們設有4個委員會，專責監察及保障員工的健康和安全。4個委員會分別是職業健康與安全委員會、工地安全及環境管理委員會、污水處理廠安全管理委員會及直屬員工隊安全管理委員會。委員會成員來自渠務署不同職能領域和職級，他們會定期舉行會議檢討現有的健康與安全管理系統，尋求進一步改良優化的空間。

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.

Governance and Supervision of Health and Safety

To monitor and audit the safety and health performance of the Department, DSD Safety Steering Group chaired by Deputy Director of Drainage Services was established. Regular meetings were held amongst the Division Heads to report and review the in-house safety policy and procedures as well as deliver new safety directives within the Department from time to time.

To enforce health and safety practices in projects, we have collaborated with projects consultants and contractors to promote safety awareness to site staff. Latest information and alerts on construction site safety were disseminated to them through our Divisional Safety Coordinators timely.

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.

Promotional Activities of Health and Safety

We believe that safety promotion is important to enhance safety awareness of individuals and to instil a safety culture among staff. During the year, we organised and participated in various health and safety promotion activities, campaigns and award schemes which are highlighted as follows:

- Participation of 34 projects in the DEVB's Considerate Contractors Site Award Scheme (CCSAS) 2012;
- Participation of 53 projects in the DSD's Construction Sites Housekeeping Award Scheme (CSHAS);
- Organised four safety talks and two training centre visits for in-house colleagues, Resident Site Staff and contractors' staff on site safety in confined space and safety working near electricity supply lines; and
- Partnering with contractors and consultants of the HATS Division in holding a HATS Tunnel Safety Campaign to promote tunneling works safety.

In-house Occupational Health and Safety

We have established four committees to monitor and safeguard the health and safety of our staff. These include Occupational Health & Safety (OHS) Committee, Site Safety and Environmental Management Committee, Sewage Treatment Works Safety Management Committee and Direct Labour Force Safety Management Committee. These committees consist of members from different discipline and grades of staff from DSD. Meetings are held regularly to review if further improvement and enhancement of our health and safety management system are required.

完成目標
Meeting the Targets

為持續改善可持續發展的表現，渠務署在不同範疇已訂立目標和承諾以衡量我們的表現。年內，我們達成了大部分環境保護、社會工作表現和服務質量的目標及承諾。下表列出2012-13年的目標和取得的成果，以及2013-14年的目標。

To continually improve our sustainability performance, we have established a number of targets and pledges to gauge our performance in different aspects. During the year, we achieved most of our targets and pledges in relation to environmental protection, social performance and service quality. The following tables presented the targets and achievements in 2012-13 as well as the targets for 2013-14.

環保事務
On Environmental Issues

2012-13年度環保目標 Environmental Targets 2012-13	年底成果 End-year Achievements
節約能源 Energy Conservation	**達標 Target Met**
減少能源耗用量，節省102萬度電 To reduce energy consumption by 1.02 million kilowatt-hours	達標；實際節省130萬度電 Target met and actual saving achieved was 1.30 million kilowatt-hours
額外進行兩次污水處理廠的碳審計 To conduct two additional carbon audits in sewage treatment works (STW)	達標；2012年年底於昂船洲污水處理廠及大埔污水處理廠完成碳審計 Target met and the carbon audits for Stonecutters Island STW and Tai Po STW were completed in end 2012
在2013年前充份使用生物氣 To aim at full utilisation of biogas by year 2013	生物氣使用率由2011年的79%漸增至2012年的90% Utilisation of biogas was gradually increased from 79 per cent in year 2011 to 90 per cent in year 2012
節約用水 Water Conservation	
維持經處理污水的使用量每日1,320立方米 To maintain the use of treated effluent at 1,320 cubic metres per day	每日共產生1,194立方米再造水作非食水用途 Reclaimed water produced for non-potable use was 1,194 cubic metres per day
節約用紙 Paper Conservation	**達標 Target Met**
減少每年用紙量3%至14,450令 To reduce annual paper consumption by three per cent to 14,450 reams	共耗用11,054 令，即僅目標用量的76.5% 11,054 reams consumed, which accounts to 76.5 per cent of target consumption
廢物回收 Waste Recovery	**達標 Target Met**
增加打印機碳粉盒回收率至98% To increase the recycle rate of printer cartridges to 98 per cent	打印機碳粉盒回收率為100% 100 per cent printer cartridges were recycled
增加充電池回收率至98% To increase the recycle rate of rechargeable batteries to 98 per cent	充電池回收率為100% 100 per cent rechargeable batteries were recycled
綠色採購 Green Procurement	**達標 Target Met**
增加再造紙用量至本署印刷紙總用量的98% To use recycled paper up to a level of 98 per cent of DSD's total printing paper consumed	本署的印刷紙100%為再造紙 100 per cent of printing paper consumed was recycled paper
符合環保法規 Environmental Compliance	
使轄下所有污水處理廠和雨水及污水收集系統全面符合環境法規及標準 To aim at achieving full compliance with legal and environmental requirements at our STW, and stormwater and sewage collection systems	2012-13年度有兩宗超標事件：大欖涌水警基地污水處理廠及羅湖懲教所污水處理廠的污水大腸桿菌含量分別於2013年1月及2013年2月超出每月幾何平均數 Two exceedances in 2012/13: the effluent *E.coli.* level of Tai Lam Chung Marine Police Headquarters Sewage Treatment Plant (STP) and Lo Wu Correctional Institution STP exceeded the monthly geometric mean limit in January 2013 and February 2013 respectively
保育生態 Ecological Enhancement	**達標 Target Met**
種植1,500棵樹及270,000叢灌木 To plant 1,500 trees and 270,000 shrubs	已種植2,700棵樹及340,000叢灌木 2,700 trees and 340,000 shrubs were planted
推廣環保意識 Environmental Awareness	**達標 Target Met**
舉辦兩次署內環保活動提高員工的環保意識，鼓勵員工積極參與環保活動 To organise two in-house green campaigns to promote staff awareness and active participation in greening activities	已舉辦兩次署內環保活動： (i) 2012年5月28日舉行「辦公室盆栽植物比賽」；及 (ii) 2012年11月舉行「安全、整潔、環保辦公室比賽2012」 Two in-house green campaigns have been organised: (i) "Potted Plant in Office Competition" on 28 May 2012; and (ii) A "Safe, Tidy and Green Office Competition 2012" in November 2012

2013-14年度環保目標 Environmental Targets 2013-14
採用先進的低污染技術和污染預防措施 **Adopting state-of-the-art clean technologies and pollution prevention measures**
在未來3年採用3項新穎的低污染技術或污染預防措施 Adopt three new clean technologies or pollution prevention measures in the next three years
開展3項關於低污染技術的研發項目 Conduct three R&D items for clean technologies
設計、建造及運作本署設施時充分考慮可持續發展因素 **Integrating sustainability considerations into the design, construction and operation of our facilities**
達致100%符合法定環境影響評估程序的要求 Achieve 100 per cent compliance with the statutory environmental impact assessment (EIA) process
每年最少與環保團體/學者會面兩次，研討可持續發展事務 Meet with green groups/academics at least twice each year to consider sustainability matters
再造水使用量每日1,400立方米 Use reclaimed water at 1,400 cubic metres per day
進行5次新的碳審計 Conduct five new carbon audits
盡量減低及紓緩建造和運作本署設施期間的環境影響 **Minimising and mitigating environmental impacts arising from the construction and operation of our facilities**
建造4,900平方米綠化天臺 Build 4,900 square metres green roof
種植1,900棵樹及320,000叢灌木 Plant 1,900 trees and 320,000 shrubs
達到所有適用於渠務署事務的環保工作法規要求 **Meeting all statutory and regulatory requirements on environmental performance that are applicable to the activities of the department**
達致100%遵守環保法例 Achieve 100 per cent compliance under environmental legislation
妥善設計及安排內部營運活動，務求符合環保原則 **Devising and conducting internal operations in an environmentally responsible manner**
進一步減少用紙量2% Reduce paper consumption by another 2 per cent
節約212萬度電，即2006-07年度能源消耗量基準數的0.9% Save energy of 2.12 million kilowatt-hours which is equivalent to 0.9 per cent energy consumption of the base level in 2006-07
增加電動車總行車里數20% Increase the total mileage of electric vehicles by 20 per cent

社會事務
On Social Issues

2012-13年度社會工作目標 Social Targets 2012-13	年底成果 End-year Achievements
盡量減低渠務署員工的工傷意外率 **Minimising accident rate for DSD staff**	**達標** **Target Met**
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	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
盡量減低渠務署合約工程的工傷意外率 **Minimising the accident rate in DSD contracts**	**達標** **Target Met**
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	每100,000工時0.19宗職業工傷 0.19 reportable accident per 100,000 man-hours worked

2013-14年度的社會工作目標 Social Targets 2013-14
盡量減低本署員工的工傷意外率 **Minimising accident rate for our 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 our 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's 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's contracts should be less than 0.6 reportable accident per 100,000 man-hours worked
舉行內部簡報會，確保專業、技術及工地督導人員、顧問和承建商時刻具有職安健意識 **Maintaining safety and health awareness of professional technical and site supervisory staff, consultants and contractors with in-house briefing**
最少舉辦兩次署內職安健工作坊 At least two in-house workshops on safety and health should be organised
提高承建商的職安健意識 **Promoting the awareness on safety and health amongst contractors**
達致最少80%渠務署合資格新工程合約工程及30%合資格維修定期合約工程參加發展局的「公德地盤嘉許計劃」 At least 80 per cent of DSD eligible new works contracts and 30 per cent of eligible maintenance term contracts would participate in Development Bureau Considerate Contractors Site Award Scheme (CCSAS)

常規服務
Our Routine Services

承諾 Pledge	2012-13年度 工作目標 Performance Target 2012-13	年底成果 End-year Achievement
清理堵塞污水管/排水渠 Clearance of blocked sewers/drains		**達標 Target Met**
於即日回應下午一時前接獲的投訴 Respond within the same day for complaints received before 1 pm	99%	99.89%
於翌日正午前回應下午一時後接獲的投訴 Respond before noon of next day for complaints received after 1 pm	99%	99.41%
市民對清理工作的滿意程度[1] Customers satisfy with the clearing work[1]	95%	97.45%
公共渠務/污水系統接駁渠管的技術審核 Technical audit for connection to the public drainage/sewerage systems		**達標 Target Met**
於接獲HBP1表格後9個工作天內回應 Reply to the applicant within nine working days upon receipt of HBPI application	95%	100%
回應關於污水處理服務帳項的書面查詢 Response to written enquiries on sewage services accounts		**達標 Target Met**
於兩個工作天內作出初步回應 Initial respond within two working days	100%	100%
於一個月內詳細回覆 Full reply within a month	98%	99%
回應投訴 Response to complaints		**達標 Target Met**
於10天內回應 Respond within 10 calendar days	98%	99.42%

1. 透過隨機選擇受訪者，每星期進行一次市民對清理淤塞的污水渠/排水渠滿意度調查。
   The customer satisfaction survey on the clearance of blocked sewers/drains is conducted once a week by selecting the respondents randomly.

承諾 Pledge	2013-14年度 工作目標 Performance Target 2013-14
清理堵塞污水管/排水渠 **Clearance of blocked sewers/drains**	
於即日回應下午一時前接獲的投訴 Respond within the same day for complaints received before 1 pm	99%
於翌日正午前回應下午一時後接獲的投訴 Respond before noon of next day for complaints received after 1 pm	99%
市民對清理工作的滿意程度 Customers satisfy with the clearing work	95%
公共渠務/污水系統接駁渠管的技術審核 **Technical audit for connection to the public drainage/sewerage systems**	
於接獲HBP1表格後9個工作天內回應 Reply to the applicant within nine working days upon receipt of HBPI application	99%
回應關於污水處理服務帳項的書面查詢 **Response to written enquiries on sewage services accounts**	
於兩個工作天內作出初步回應 Initial respond within two working days	100%
於一個月內詳細回覆 Full reply within a month	98%
回應投訴及查詢 **Response to complaints and enquiries**	
於10日內回應 Respond within 10 calendar days	98%
提供渠務記錄圖則 **Provision of drainage record plans**	
於即日安排查閱 Allow inspection of drainage record plans within the same day	95%
於確認付款的4個工作天內提供影印本 Provide photocopy of drainage record plans within four working days upon confirmation of payment	95%
在需要挖掘道路的渠務工程工地張貼告示，說明工程目的及預計竣工日期 **On-site display of the purpose and anticipated completion date of drainage works involving road excavation**	
在工地張貼告示，簡介渠務工程及預計竣工日期，讓公眾了解需要施工的原因及工程將於何時完成 A simple description of drainage works with anticipated completion date will be displayed on site to enable the public to understand why the works are necessary and when they will be completed	98%

GRI應用等級審核聲明

GRI 聲明 香港特別行政區政府渠務署 已將其報告 持續發展 共創未來（2013）提交给 GRI 報告服務工作小組，經過審核，工作小組確認此報告已達到應用等级 A+ 的全部要求。

GRI 應用等級說明了所提交的永續發展報告符合 G3.1 指南的程度。GRI 應用等級審核是一個確認報告是否涵蓋該應用等級所要求揭露的一系列指標及其他重要訊息的過程；而 GRI 內容索引表則反映報告揭露的指標和訊息之具體情況。有關審核方法，詳見：
https://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf

應用等級不代表該機構報告中訊息的質量，也不代表該機構的永續發展表現。

阿姆斯特丹, 2013年10月2日

Nelmara Arbex
副總執行官
全球報告倡議組織（GRI）

此應用等級含有"+"號，因爲 香港特別行政區政府渠務署 已經將此（或部分）報告進行過外部審核。GRI 接受報告機構對外部審核提供者和查核範圍的判斷和選擇。

全球報告倡議組織（*GRI*）是一個非營利國際組織，它透過全球多利害關係人的參與和達成共識的工作流程，率先開發出目前全球最爲廣泛使用的永續報告框架。這個永續發展報告框架的基礎是 *G3* 指南，有超過 *25* 種語言的版本供免費使用。*GRI* 將不遺餘力繼續推廣該框架的改進和在全球的普遍使用。*G3* 指南提供一系列原則和指標，各類型的機構都可以使用這些原則和指標來報告他們的經濟、環境和社會績效。
www.globalreporting.org

免責聲明：對於該報告所包含的外部連結，包括對影像或音像材料的連結，此聲明僅考慮到在審核日期 2013年9月17日 前所提交的材料， *GRI* 強烈反對將此聲明用於任何其它在審核日期後變更的材料。

Statement
GRI Application Level Check

GRI hereby states that **Drainage Services Department (HKSARG)** has presented its report "Collaboration on a Sustainable Future" (2013) to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 2 October 2013

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative

The "+" has been added to this Application Level because **Drainage Services Department (HKSARG)** has submitted (part of) this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

***Disclaimer:** Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 17 September 2013. GRI explicitly excludes the statement being applied to any later changes to such material.*

bsi.

獨立保證意見聲明書

Statement No.: **SRA – HK 603178**

2012-13 年度渠務署企業可持續發展報告

英國標準協會與渠務署為相互獨立的公司及組織，英國標準協會除了針對渠務署2012-13 年度企業可持續發展報告進行評估和核查外，與渠務署並無任何財務上的關係。

本獨立保證意見聲明書的目的，僅作為對下列有關渠務署可持續發展報告所界定範圍內的相關事項進行保證之結論，而不作為其他之用途。除對核查事實提出獨立保證意見聲明書外，對於關於其他目的之使用，或閱讀此獨立保證意見聲明書的任何人，英國標準協會並不負有或承擔任何有關法律或其他之責任。

本獨立保證意見聲明書基於渠務署提供予英國標準協會之相關信息審查所作成之結論，因此審查範圍乃基於並局限在這些提供的信息內容之內，英國標準協會認為這些信息內容都是完整且準確的。

對於這份獨立保證意見聲明書所載內容或相關事項之任何疑問，將全部由渠務署回覆。

核查範圍

渠務署與英國標準協會協議的核查範圍包括:

1. 整份報告內容及渠務署在2012年4月1日-2013年3月31日的所有營運。
2. 依照AA1000保證標準(2008)的第2應用類型評估渠務署遵循AA1000當責性原則標準的本質和程度，包括對於報告披露的信息/數據之可信賴度的核查。

本聲明書以英文作成並已翻譯為中文以供參考。

...making excellence a habit.™

bsi.

意見聲明

我們總結渠務署企業可持續發展報告內容，對於渠務署的相關運作與績效則提供了一個公平的觀點。我們相信有關渠務署 2012-13 年的經濟、社會及環境等績效指標是被正確無誤地展現。報告所披露的績效指標展現了渠務署對識別利益相關方的努力。

我們的工作是由一組具有依據 AA1000 保證標準(2008)核查能力之團隊執行，以及策劃和執行這部分的工作，以獲得必要的訊息數據及說明。我們認為就渠務署所提供的足夠證據，表明其依循 AA1000 保證標準(2008)的報告方法和他們的自我聲明符合全球報告倡議準則係屬公允的。

核查方法

為了收集與作成結論有關的證據，我們執行了以下工作：

— 對來自外部團體的議題相關於渠務署政策，進行高階管理層的審查，以確認本報告中聲明書的合適性

— 與渠務署管理者討論有關利益相關方參與的方式，然而，我們並無直接接觸外部利益相關方

— 訪問與可持續發展管理、報告編制及信息提供有關的員工

— 審查有關組織的關鍵性發展

— 審查有關財務和非財務報告的賬戶系統的範圍和成熟度

— 審查報告中所作宣告的支持性證據，及

— 針對公司報告及其相關 AA1000 保證標準(2008)中描述有關包容性、實質性及回應性原則的流程管理進行審查

結論

針對包容性、實質性及回應性之 AA1000 當責性原則與「全球可持續發展報告第三代綱領(GRI G3.1)」之核心指標的詳細審查結果如下:

...making excellence a habit.™

bsi.

包容性

本報告反映了渠務署正在通過多種渠道尋求其利益相關者的參與，如內部和外部的反饋系統以及利益相關者的活動。本報告涵蓋了利益相關者的問題，公正地報告與披露經濟、社會和環境的訊息。

以我們的專業意見而言，這份報告涵蓋了渠務署的包容性議題。然而，未來的報告可以進一步加強以下的項目：

— 導入具策略性之組織層級利益相關方參與方案，使能全面考慮利益相關方鑑別的優先級
— 建立企業社會責任委員會，負責管理和監督經濟，社會和環境問題
— 在公司內部通過不同的溝通渠道例如通告及指引來推動企業社會責任，以增召內部員工參與
— 在接下來的報告加強財務管理和內部性能表現的記錄和陳述

實質性

渠務署公佈可持續經營相關信息使利益相關方得以對公司的管理與績效進行判斷。以我們的專業意見而言，這份報告適切地涵蓋了渠務署的實質性議題。然而，未來的報告可以進一步加強以下的項目：

— 建立團體或個人在利益相關方參與流程的責任
— 依企業策略來決定實質性議題的優先級
— 制定方法以確定和優先渠務署的實質性問題，使各部門能持續地遵循
— 設立系統和量化標準以體現利益相關者影響力，從而更有效地確定實質性
— 把利益相關方參與流程以文件記錄，並及時傳達給參與者

...making excellence a habit.™

bsi.

回應性

渠務署執行來自利益相關方的期待與看法之回應。實行方法包括客戶滿意度調查和眾多的內部和外部利益相關者的反饋機制。 以我們的專業意見而言，這份報告涵蓋了渠務署的回應性議題。然而，未來的報告可以進一步加強以下的項目：

— 回應議題中增加更多詳細信息及可比較的數據
— 加強量化分析

GRI 報告綱領

渠務署提供有關符合 GRI G3.1 報告綱領的自我宣告，與相當於 A+分級的相關資料。基於審查的結果，我們確認報告中參照 GRI 的社會責任與可持續發展的相關指標已被報告、部分報告或省略。以我們的專業意見而言，此自我宣告涵蓋了渠務署的社會責任與可持續發展議題。然而，未來的報告可以考慮加強以下的項目以進行持續改善：
— 未來的報告可以與同行業之企業進行績效指標的標竿比較
— 建議日常業務及運營中，數據及信息統計應考慮根據 GRI 績效指標的要求分類
— 在報告中加強管理層的方向，以更好地披露組織的戰略計劃及對其內部和外部的影響

保證等級

依據 AA1000 保證標準(2008)我們審查本聲明書為中度保證等級，如同本聲明書中所描述的範圍與方法。

責任

這份企業可持續發展報告所屬責任，如同責任信中所宣稱，為渠務署負責人所有。我們的責任為基於所描述的範圍與方法，提供專業意見並提供利益相關方一個獨立的保證意見聲明書。

...making excellence a habit.™

bsi.

能力與獨立性

英國標準協會於 1901 年成立，為全球標準與驗證的領導者。本核查團隊係由具專業背景，且接受過如 AA1000AS、ISO 14001、OHSAS 18001 及 ISO 9001 之一系列可持續發展、環境及社會等管理標準的訓練，具有主導擔保核查員與碳足跡核查員資格之成員組成。本保證係依據 BSI 公平交易準則執行。

英國標準協會代表:

高毅民博士
BSI 中國董事總經理

AA1000
Licensed Assurance Provider
000-157

陳肇雄
BSI 亞太區可持續發展策劃經理及
香港營運總監

2013 年 9 月 17 日

...making excellence a habit.™

bsi.

INDEPENDENT ASSURANCE OPINION STATEMENT

Statement No.: **SRA – HK 603178**

2012-13 Drainage Services Department Corporate Sustainability Report

The British Standards Institution is independent to Drainage Services Department (hereafter referred to as DSD in this statement) and has no financial interest in the operation of DSD other than for the assessment and assurance of this report.

This Independent assurance opinion statement has been prepared for DSD only for the purposes of assuring its statements relating to its corporate sustainability report (CSR), more particularly described in the Scope, below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the Independent assurance opinion statement may be read.

This Independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by DSD. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to DSD only.

Scope

The scope of engagement agreed upon with DSD includes the followings:

1. The assurance covers the whole report and foci on systems and activities during the 1st April 2012 to 31st March 2013 on all operations of DSD.
2. The evaluation of the nature and extent of the DSD's adherence to all three AA1000 AccountAbility Principles in this report as conducted in accordance with type 2 of AA1000AS (2008) assurance engagement and therefore, the specified sustainability performance information/data disclosed in the report has been evaluated.

This statement was prepared in English and translated into Chinese for reference only.

...making excellence a habit.™

bsi.

Opinion Statement

We conclude that the 2012-13 DSD Corporate Sustainability Report Review provides a fair view of the DSD CSR programmes and performances during 2012-13. We believe that the 2012-13 economic, social and environment performance indicators are fairly represented. The CSR performance indicators disclosed in the report demonstrate DSD 's efforts recognized by its stakeholders.

Our work was carried out by a team of CSR report assurors in accordance with the AA1000 Assurance Standard (2008). We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that DSD 's description of their approach to AA1000 Assurance Standard and their self-declaration of compliance with the GRI guidelines were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- A top level review of issues raised by external parties that could be relevant to DSD 's policies to provide a check on the appropriateness of statements made in the report
- Discussion with managers on DSD 's approach to stakeholder engagement. However, we had no direct contact with external stakeholders
- Interview with staff involved in sustainability management, report preparation and provision of report information were carried out
- Review of key organizational developments
- Review of the extent and maturity of the relevant account systems for financial and non-financial reports
- Review of supporting evidence for claims made in the reports
- An assessment of the company's reporting and management processes concerning this reporting against the principles of Inclusivity, materiality and responsiveness as described in the AA1000 AccountAbility Principles Standard (2008)

Conclusions

A detailed review against the AA1000 AccountAbility Principles of Inclusivity, Materiality and Responsiveness and the GRI G3.1 guidelines is set out below:

Inclusivity

This report has reflected a fact that DSD is seeking the engagement of its stakeholders through numerous channels such as internal and external feedback system and stakeholder engagement activities. This report covers the stakeholder issue together with fair reporting and disclosures for economic, social and environmental information.

In our professional opinion the report covers the DSD inclusivity issues, however, the future report should be further enhanced by the following areas:

...making excellence a habit.™

- Introduce a strategic programme of stakeholder engagement for organization level to better understand how to balance stakeholder priorities
- Establish CSR committee to manage and oversee economic, social and environmental issues
- To promote CSR within the company through different communication channels such as circular and guideline so as to maximize the internal engagement
- Strengthen the financial management and internal performance record in the next report

Materiality

DSD publishes sustainability information that enables its stakeholders to make informed judgments about the organisation's management and performance. In our professional opinion the report covers the DSD's material issues, however, the future report should be further enhanced in the following areas:

- Establish the group or individual responsibility for stakeholder engagement
- Align priority to decision of materiality issues with organization strategy
-Determine the methodology to identify and prioritize DSD's material issues to enable all divisions to follow consistently and continuously
-Set up systematic and quantitative criteria for mapping stakeholder influence so as to better define materiality
-Document the engagement and its output and communicate it to participants of the engagement in timely manner

Responsiveness

DSD has implemented the practice to respond to the expectations and perceptions of its stakeholders. It includes customer satisfaction survey and numerous feedback mechanisms to external stakeholders and internal stakeholders.

In our professional opinion the report covers DSD's responsiveness issues, however, the future report should be further enhanced by the following areas:

- Responsiveness with more detail information and comparative data
- Enhance quantitative analysis

GRI-reporting

DSD provided us with their self declaration of compliance within GRI G3.1 Guidelines and the classification to align with application level A+. Based on our review, we confirm that social responsibility and sustainable development indicators with reference to the GRI Index are reported, partially reported or omitted. In our professional opinion the self declaration covers the DSD's social responsibility and sustainability issues, however, the future report will be improved by the following areas:

bsi.

-Benchmarking the performance indicators from peers practice in the future report
- More evidence shows all levels of the organisation with quantitative information
- Within daily business and operation, data and information statistics should be considered to be classified as per GRI indicator's requirements
- Reinforce the management approach in the report to better disclose the strategic plan and its impact internally and externally

Assurance level
The moderate level assurance provided is in accordance with AA1000 Assurance Standard (2008) in our review, as defined by the scope and methodology described in this statement.

Responsibility
This CSR report is the responsibility of the DSD's Senior Management as declared in his responsibility letter. Our responsibility is to provide an Independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence
The assurance team was composed of Lead auditors and Carbon Footprint Verifiers experienced in industrial sector, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, OHSAS 18001, and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:

Dr. Yi- Min Gao
Managing Director BSI China

Mr. Wilfred Chan
Sustainability Portfolio Manager, BSI Asia Pacific
Operations Director, BSI Hong Kong

17 September 2013

AA1000
Licensed Assurance Provider
000-157

...making excellence a habit.™

附錄一：主要統計數據
Appendix 1: Key Statistics and Data

Environmental Performance 環境工作表現

Electricity Consumption 耗電量

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Total electricity consumption (1) 總用電量 (1)	million kWh 百萬千瓦時	242	241	240	239	240
Total energy consumption equivalent to electricity consumption 相當於用電量的能源總用量	GJ 千兆焦耳	8,712,000	8,676,000	8,640,000	8,604,000	8,640,000
Total CO_2 emission equivalent to total electricity consumption (2) 總用電所產生的二氧化碳總排放量 (2)	Tonnes CO_2e 二氧化碳當量，以公噸計算	169,400	168,700	168,000	167,300	168,000
Average electricity consumption per unit volume of sewage treated 處理每單位體積污水的平均用電量	kWh 千瓦時	0.2431	0.2451	0.2431	0.2426	0.2388
Volume of biogas generated from sewage treatment works 污水處理廠產生的沼氣量	million m^3 百萬立方米	9	10	9	10	10

(1) The total electricity consumption in 2008/09 and 2009/10 did not include the office at Western Magistracy as the data were not available.
2008/09和2009/10年度的總用電量並不包括在西區裁判法院辦公室的數據。

(2) Territory wide default GHG emission factors (0.7) were used based on the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for buildings (Commercial, Residential or Institutional Purpose) in Hong Kong issued by the Environmental Protection Department, HKSAR in February 2010.
根據香港環境保護署在2010年2月編制的《香港建築物(商業、住宅或公共用途)的溫室氣體排放及減除的核算和報告指引》定出本地的排放系數（0.7公噸）。

Water Consumption 耗水量

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Freshwater consumption at flood prevention and sewage treatment facilities 用於防洪及污水處理設施的淡水耗用量	m^3 立方米	1,669,102	1,724,983	1,790,088	2,092,627	2,078,729
Daily reclaimed water produced at STWs 污水處理廠的再造水每日生產量	m^3 立方米	162	202	1,337	1,349	1,194

Sewage Treatment 污水處理

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Volume of sewage treated 經處理的污水量	million m^3 百萬立方米	991	979	979	981	1,001
Biochemical oxygen demand (BOD) removed from sewage 污水移除生化需氧量(BOD)	Tonnes 公噸	116,966	106,131	126,451	107,057	100,677
Suspended solids (SS) removed from sewage 污水移除懸浮固體(SS)量		147,514	144,386	159,265	163,986	146,208
Nitrogen removed from sewage 污水移除氮量		4,769	5,430	5,317	5,541	5,310
Dewatered sludge removed from treated sewage 經處理的污水移除脫水污泥量		294,387	285,759	297,638	301,583	300,965
Screenings removed from treated sewage 經處理的污水移除隔濾物量		Figures not available	12,583	12,379	12,157	13,334
Grits removed from treated sewage 經處理的污水移除砂礫量		未能提供數據	4,930	5,090	4,388	4,741

Fuel Consumption 燃料耗用量

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Total fuel consumption by DSD's pool cars 徵用車隊的總耗用燃油量	Litre 公升	Figures not available 未能提供數據				31,862
Total fuel consumption by DSD's AM cars 部門車隊的總耗用燃油量	Litre 公升	101,343 (4)	104,170 (4)	96,407 (4)	133,967	130,675
No. of DSD's pool cars 徵用車輛數目	No. 輛	Figures not available 未能提供數據				12.42
No. of DSD's AM cars 部門車輛數目	No. 輛	59.30	58.40	57.39	53.00	52.10
Total energy consumption equivalent to total fuel consumption by DSD's pool cars 相當於徵用車隊總耗油量的能源總用量	GJ 千兆焦耳	Figures not available 未能提供數據				1046.19
Total energy consumption equivalent to total fuel consumption by DSD's AM cars 相當於部門車隊總耗油量的能源總用量	GJ 千兆焦耳	3346.50	3439.85	3183.50	4423.79	4315.08
Total GHG emission equivalent to total fuel consumption by DSD's pool cars (3) 徵用車隊耗油而產生的溫室氣體總排放量 (3)	Tonnes CO_2e 二氧化碳當量，以公噸計算	Figures not available 未能提供數據				8675.19
Total GHG emission equivalent to total fuel consumption by DSD's AM cars (3) 部門車隊耗油而產生的溫室氣體總排放量 (3)	Tonnes CO_2 二氧化碳當量，以公噸計算	239.17	245.84	227.52	316.16	308.39

(3) GHG emission factors for mobile combustion are based on the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for buildings (Commercial, Residential or Institutional Purpose) in Hong Kong issued by the Environmental Protection Department, HKSAR in February 2010.
採用的汽車燃燒所產生的溫室氣體排放量預設值是參考香港環境保護署在2010年2月編制的《香港建築物(商業、住宅或公共用途)的溫室氣體排放及減除的核算和報告指引》。

(4) The number of AM cars of Mainland South Division and Mainland North Division were excluded as the records were not available.
數據並不包括新界南渠務部及新界北渠務部的車隊數目。

Paper Consumption 紙張耗用量

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Total paper consumption 紙張總用量	Reams 令(500 張)	13,296	14,014	12,996	11,870	11,054
A4 paper consumption A4紙張用量	Reams 令(500 張)	12,830	13,396	12,455	11,400	10,696
A3 paper consumption A3紙張用量	Reams 令(500 張)	466	618	541	470	358
Purchase of A4/A3 paper with recycled content 購買含再造成份（舊纖維）的 A4／A3紙張	Reams / % of total paper purchased 令（500張）／佔購入紙張的百分率	13,151 / 98.9%	13,854 / 98.9%	12,921 / 99.4%	11,850 / 99.8%	11,054 / 100%
Waste paper collected 廢紙收集量	kg 公斤	13,317	17,480	18,539	14,994	11,900
Paper consumed per staff (By establishment) 每名員工紙張用量(以職員編制計算)	Reams 令(500 張)	7.5	7.9	7.4	6.8	6.4

Waste Management 廢料管理

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Construction & demolition materials 建築及拆卸廢料						
C&D waste disposed of to landfills 運往堆填區的建築及拆卸廢物	10^3 kg 10^3 公斤	3,622	6,529	6,877	7,863	8,525
C&D waste disposed of to public fill areas 運往公眾堆填區的建築及拆卸廢物	10^3 kg 10^3 公斤	139,104	275,754	745,234	854,293	765,105
Recyclable waste collected 可循環再造廢料收集量						
Waste paper 廢紙	kg 公斤	8,488	15,372	14,978	18,679	11,983
Aluminium cans (5) 鋁罐 (5)	kg 公斤	9.04	11.12	12.92	12.94	14.15
Plastic bottles (5) 膠樽 (5)	kg 公斤	17.28	18.13	27.68	28.53	29.92

(5) The amount of aluminium cans and plastic bottles collected did not include the Kowloon Government Offices and Western Magistracy as the data were not available.
數據並不包括於九龍政府合署和西區裁判法院辦公室收集的鋁罐及膠樽數量。

Environmental Convictions of Contractors 承建商違反環保法規被定罪的數字

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Convictions 違規數目	No. 數量	5	2	0	1	4
Monetary value of significant fines 違規罰款	HK$ 港元	41,500	9,000	0	4,000	56,000

Social Performance 社會工作表現

Staff 員工

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Staff Establishment 職員編制	No. 人數	1,869	1,859	1,847	1,845	1,856
Directorate 首長級人員	No. 人數	18	18	18	18	18
Professional 專業人員	No. 人數	270	276	280	283	292
Technical & Site Supervisory 技術人員及工地督導人員	No. 人數	799	805	808	815	820
General & Common Grades 一般職系人員	No. 人數	562	542	533	525	525
Model Scale I 第一標準薪級人員	No. 人數	220	218	208	204	201

Staff (continuous) 員工(續)

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Training 培訓						
No. of training courses (including internal and external seminars/ workshops/ training courses/ visits) 培訓課程數目（包括內部和外界座談會／工作坊／培訓課程／參觀）	No. 數量	414	323	219	256	278
No. of classes 課堂數目	No. 數量	937	751	624	712	768
Numbers of trainees 受訓職員數目	No. 人數	5,022	6,009	6,745	6,978	9,848
Training hours received 員工培訓時數	Hours 小時	43,876	43,285	42,793	44,369	52,597
Total expenditure on training (including internal and external seminars/ workshops/ training courses/ visits) 培訓總開支（包括內部和外界座談會／工作坊／培訓課程／參觀）	HK$ 港元	3,256,568	2,888,974	3,394,224	4,306,329	4,756,800
Injury 受傷						
Staff injury cases (6) 渠務署員工受傷個案 (6)	No. 數量	11	11	24	14	12
No. of sick leave for officers injured on duty (7) 員工因工傷放取病假 (7)	Days 日數	130	313	921.5	920.5	1,237

(6) The definition of staff injury cases is the reported cases of occupational injuries, under Employee's Compensation Ordinance, resulting in death or incapacity for work over 3 days.
員工受傷個案是指在僱員補償條例下接獲導致死亡或喪失工作能力超過3天的工傷個案。

(7) The number includes sick leave days granted in 2011/12 but enjoyed in 2012/13.
數字包括在2011/12年度批出，但在2012/13年度實現的病假日數。

Staff Breakdown (2012/13) 職員編制 (2012/13)

	Unit 單位	2012/13 By Strength 2012/13以實際人數計算
No. of Staff 員工人數	No. 人數	1,739
By Post 以職位分類		
Directorate 首長級人員	%	0.92
Professional 專業人員	%	16.73
Technical & Site Supervisory 技術人員及工地督導人員	%	45.95
General & Common Grades 一般職系人員	%	28.18
Model Scale I 第一標準薪級人員	%	8.22
By Employment Type 以僱用類型分類		
Full-time 全職	%	100
By Employment Contract 以僱用合約分類		
Permanent (male) 永久合約（男性）	%	83.96
Permanent (female) 永久合約（女性）	%	16.04

	Unit 單位	2012/13 By Strength 2012/13以實際人數計算
By Age 以年齡分類		
Age 20-29 20-29歲	%	4.14
Age 30-39 30-39歲	%	20.87
Age 40-49 40-49歲	%	27.43
Age 50-59 50-59歲	%	46.75
Age 60 or above 60歲或以上	%	0.81
By Ethnicity 以國籍分類		
Local 中國	%	100
Non-local 外國	%	0
By Gender 以性別分類		
Male 男性	%	83.96
Female 女性	%	16.04

Senior Management Breakdown (2012/13) 高級管理人員 (2012/13)

	Unit 單位	2012/13 By Strength 2012/13以實際人數計算
No. of Staff 員工人數	No. 人數	7
By Age 以年齡分類		
Age 20-29 20-29歲	%	0
Age 30-39 30-39歲	%	0
Age 40-49 40-49歲	%	0
Age 50-59 50-59歲	%	100
Age 60 or above 60歲或以上	%	0

	Unit 單位	2012/13 By Strength 2012/13以實際人數計算
By Ethnicity 以國籍分類		
Local 中國	%	100
Non-local 外國	%	0
By Gender 以性別分類		
Male 男性	%	100
Female 女性	%	0

Training Hours Breakdown (2012/13) [8] 員工培訓時數 (2012/13) [8]

Type of Staff 職位	Total No. of Staff (The total no. of staff in DSD is 1,739 (By Strength)) 員工總人數 (渠務署員工總數為 1,739(以實際人數計算))	Training Hours Received (Hours) (The total no. of training hours in 2012/13 is 52,597 hours) 接受培訓時數 (2012/13年度總培訓時數為 52,597小時) (小時)	Training Hours Per Staff (Hours) 每名員工培訓時數 (小時)
Directorate Staff 首長級人員	16	1,438	89.94
Professional Grade Staff 專業人員	291	20,773	71.38
Technical, Site Supervisory and General Grade Staff 技術人員/工地督導人員及一般職系人員	1,432	30,386	21.22

(8) As there is no distinct requirement regarding receiving training in terms of gender, therefore we do not report the data broken down by gender.
接受培訓方面沒有特定的性別要求，因此我們不按性別細分相關數據。

Staff Turnover (2012/13) [9] 員工流失量 (2012/13) [9]

	Unit 單位	Male 男性	Female 女性
Age 20-29 20-29歲	No. 人數	0	0
Age 30-39 30-39歲	No. 人數	0	0
Age 40-49 40-49歲	No. 人數	2	0
Age 50-59 50-59歲	No. 人數	6	0
Age 60 or above 60歲或以上	No. 人數	42	1

(9) The staff turnover figures exclude those General/Common Grades' staff on inter-department transfer.
員工流失率數字不包括在部門間轉職的一般職系人員。

New Employee Hires (2012/13) [10] 新入職員工 (2012/13) [10]

	Unit 單位	Male 男性	Female 女性
Total no. of New Employee Hires 新入職員工人數	No. 人數	41	19
By Age 以年齡分類			
Age 20-29 20-29歲	No. 人數	16	9
Age 30-39 30-39歲	No. 人數	23	10
Age 40-49 40-49歲	No. 人數	2	0
Age 50-59 50-59歲	No. 人數	0	0
Age 60 or above 60歲或以上	No. 人數	0	0

(10) The above figures involve staff (position as at 31.3.2013) with their 1st appointment date falling within the period from 1.4.2011 to 31.3.2013.
以上數字（截至2013年3月31日）包括於2011年4月1日至2013年3月31日期間入職的員工。

Retention after Paternity Leave 放畢陪產假留任的員工比率

	Unit 單位	2012/13
No. of employees took paternity leave in 2012/13 2012/13年度申請陪產假的員工人數	No. 人數	39
No. of employees completed paternity leaves in 2012/13 2012/13年度放畢陪產假的員工人數	No. 人數	35
No. of employees leaving the service after paternity leave ended in 2012/13 2012/13年度放畢陪產假離開工作崗位的員工人數	No. 人數	0
No. of employees returning to work after paternity leave in 2012/13 2012/13年度放畢陪產假回到工作崗位的員工人數	No. 人數	35
Retention rate after paternity leave [11] 放畢陪產假留任的員工比率 [11]	%	100

(11) The retention rate is based on the no. of employees who took paternity leave in 2011/12 and the no. of those employees who were still employed as at 31 Mar 2013.
放畢陪產假留任的員工比率是基於2011/12年度申請陪產假的員工人數及當中至2013年3月31日仍然留任的人數計算。

Retention after Maternity Leave 放畢產假留任的員工比率

	Unit 單位	2012/13
No. of employees took maternity leave in 2012/13 2012/13年度申請產假的員工人數	No. 人數	8
No. of employees completed maternity leaves in 2012/13 2012/13年度放畢產假的員工人數	No. 人數	6
No. of employees leaving the service after maternity leave ended in 2012/13 2012/13年度放畢產假離開工作崗位的員工人數	No. 人數	0
No. of employees returning to work after maternity leave in 2012/13 2012/13年度放畢產假回到工作崗位的員工人數	No. 人數	6
Retention rate after maternity leave [12] 放畢產假留任的員工比率 [12]	%	100

(12) The retention rate is based on the no. of employees who took maternity leave in 2011/12 and the no. of those employees who were still employed as at 31 Mar 2013.
放畢產假留任的員工比率是基於2011/12年度申請產假的員工人數及當中至2013年3月31日仍然留任的人數計算。

Accident Rate 意外率

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Number of fatalities 死亡數目						
Total no. of Fatalities 總死亡數目	No. 數量	0	0	0	1	0
Construction and maintenance works carried out directly by DSD's staff 由渠務署員工負責的建築及維修工程	No. 數量	0	0	0	0	0
Construction and maintenance works undertaken by DSD's contractors 由承辦商負責的建築及維修工程	No. 數量	0	0	0	1 (Male) 1 （男性）	0
Fatal accident rate per 100,000 man-hours 每10萬工時發生的致命意外率						
Construction and maintenance works carried out directly by DSD's staff 由渠務署員工負責的建築及維修工程	-	0	0	0	0	0
Construction and maintenance works undertaken by DSD's contractors 由承辦商負責的建築及維修工程	-	0	0	0	0.005	0
Number of non-fatal accidents 非致命意外數目						
Construction and maintenance works carried out directly by DSD's staff 由渠務署員工負責的建築及維修工程	No. 數量	11	11	24	14	12
Construction and maintenance works undertaken by DSD's contractors 由承辦商負責的建築及維修工程	No. 數量	28	46	59	64	36
Non-fatal accident rate per 100,000 man-hours 每10萬工時發生的非致命意外率						
Construction and maintenance works carried out directly by DSD's staff 由渠務署員工負責的建築及維修工程	-	0.16	0.16	0.35	0.21	0.18
Construction and maintenance works undertaken by DSD's contractors 由承辦商負責的建築及維修工程	-	0.28	0.34	0.38	0.34	0.19

Community Work 社區工作

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Total number of voluntary work hours carried out by our staff 員工參與義工活動的總時數	Hours 小時	272	943.8	230	469	589
Number of active Voluntary Service Team members (13) 積極參與義工活動的員工數目 (13)	No. 人數	-	-	-	-	10
Number of staff received commendation for voluntary service (14) 參加義工活動而受表揚的員工人數 (14)	No. 人數	-	-	-	-	4
Number of volunteers 義工人數	No. 人數	47	48	59	60	68
Number of voluntary projects completed 已完成的義工服務數目	No. 數目	17	8	10	14	18

(13) Active Voluntary Service Team member is defined as team member contributes more than 10 hours on voluntary service.
積極參與義工活動的義工服務隊成員指在團隊裏貢獻超過10小時的義工。

(14) Staff who can receive commendation for voluntary service is defined as team member contributes more than 50 hours on voluntary service.
參加義工活動而受表揚的員工指在團隊裏貢獻超過50小時義工服務。

Charitable Contributions 慈善捐款

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Employee fundraising 員工募捐	(HK$ thousands) 千港元	229	83	136	133	56

Legal Compliance 遵守法規

	Unit 單位	2008/09	2009/10	2010/11	2011/12	2012/13
Convicted cases of corruption 被裁定貪污案件數目	No. 數目	0	0	0	1	0

Economic Performance 經濟工作表現

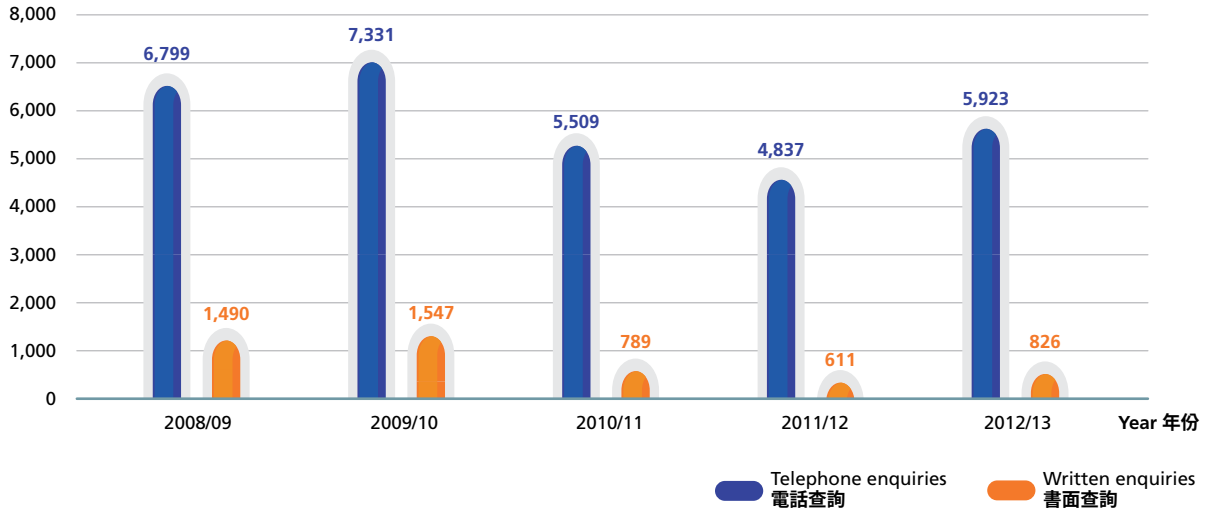
Value and Number of Drainage and Sewerage Projects under Planning , Design and Construction 正在規劃、設計和施工階段的雨水排放及污水處理工程項目總值和數目

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

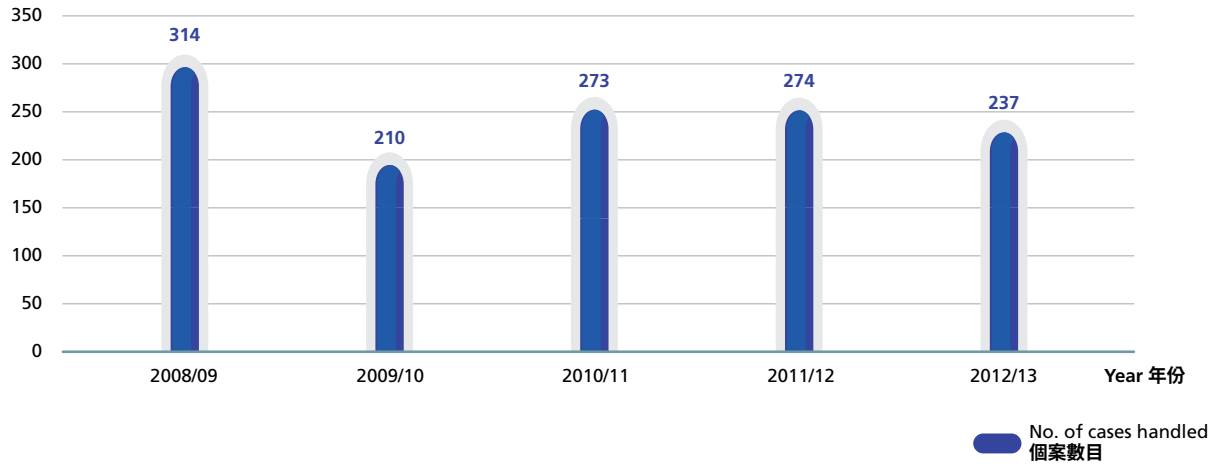
Sewage Service Charge Consumption and Payment Statistics 污水處理服務的使用量和付款統計數字

	2008/09	2009/10	2010/11	2011/12	2012/13
Number of water accounts (in thousand) 自來水用户數目 (以千計)	2,730	2,750	2,770	2,800	2,820
Number of water accounts liable to pay sewage charge (in thousand) 需繳付排污費的用户數目 (以千計)	2,530	2,550	2,570	2,590	2,610
Number of Accounts - Trade Effluent Surcharge (TES) (in thousand) 工商業污水附加費 (TES) 繳納戶數目 (以千計)	18.1	19.8	20.7	21.4	22

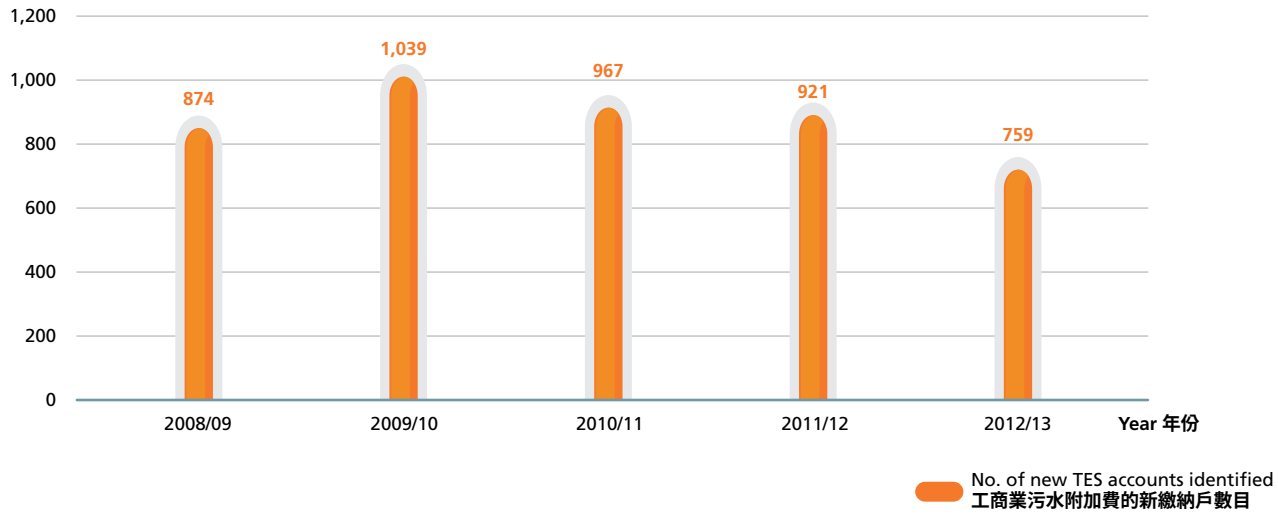
Number of enquiries received for the past five years
過去5年接到的顧客查詢數目



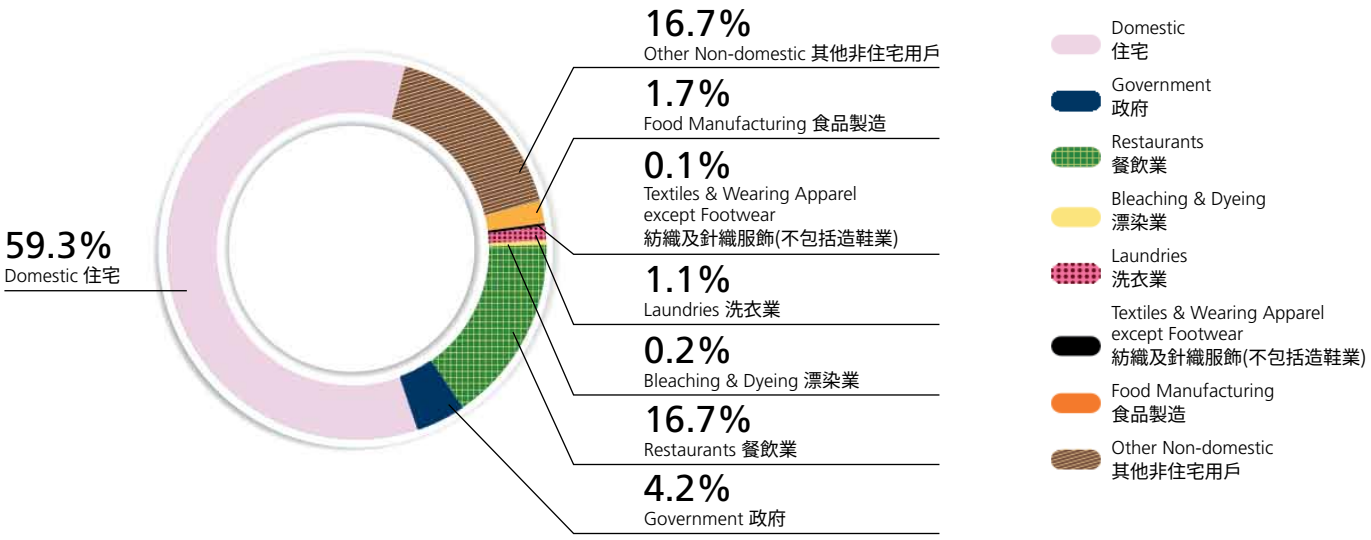
Number of Business reclassification applications handled for the past five years
過去5年所處理有關行業重新分類的申請數目



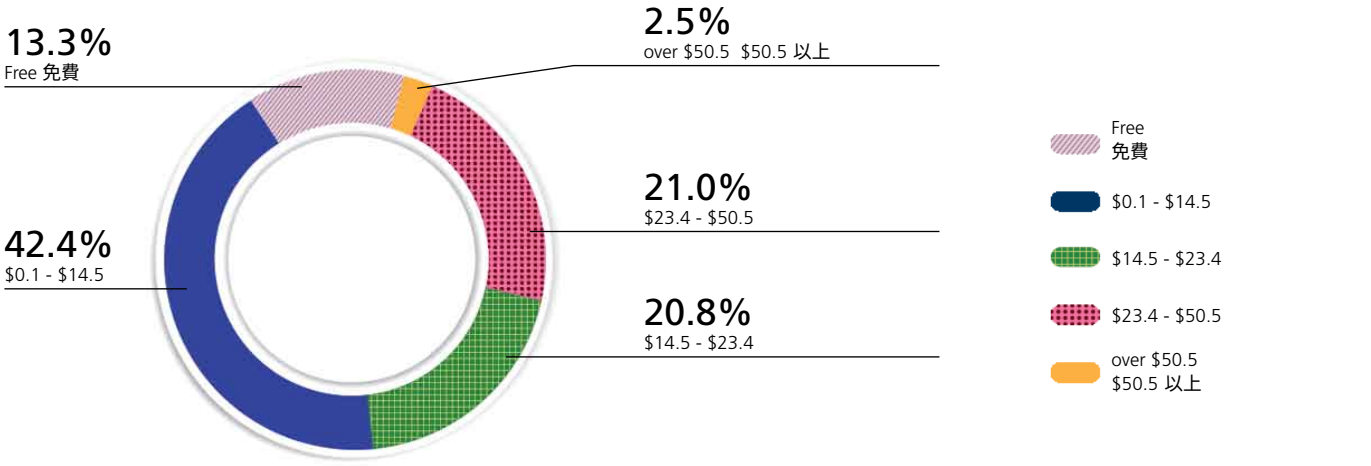
Number of new TES accounts identified for the past five years
過去5年所發現工商業污水附加費的新繳納戶數目



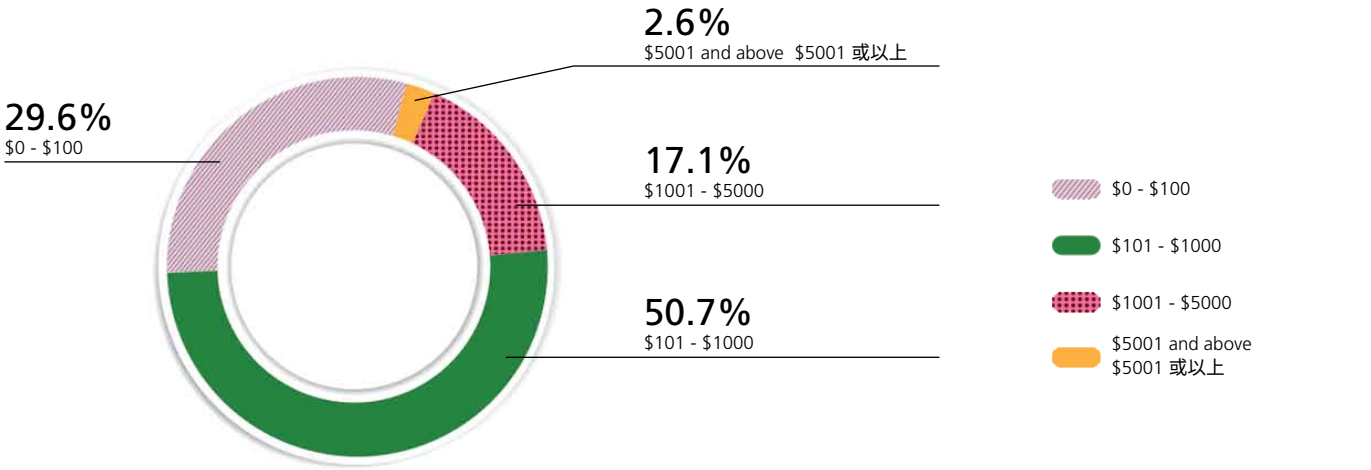
Water consumption of Sewered Accounts (528 million m³) - Customers Pattern
污水排放用戶用水量（528百萬立方米） — 用戶情況



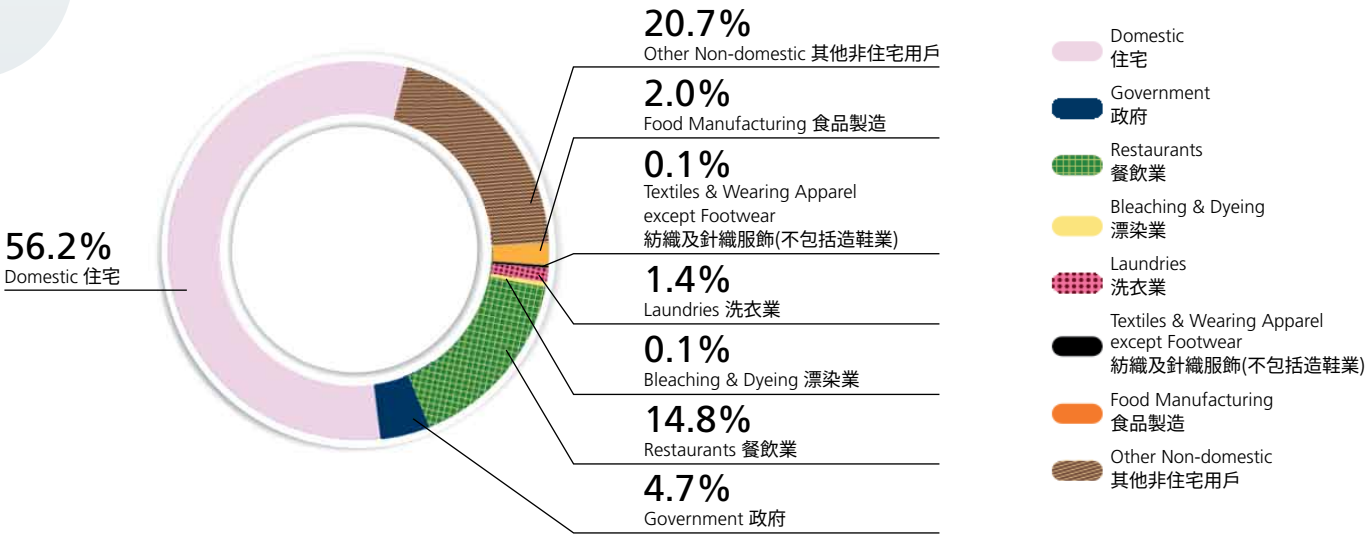
Domestic Accounts - Sewage Charge Payment Pattern (HK$/month)
住宅用戶 — 排污費收費情況（港元/月）



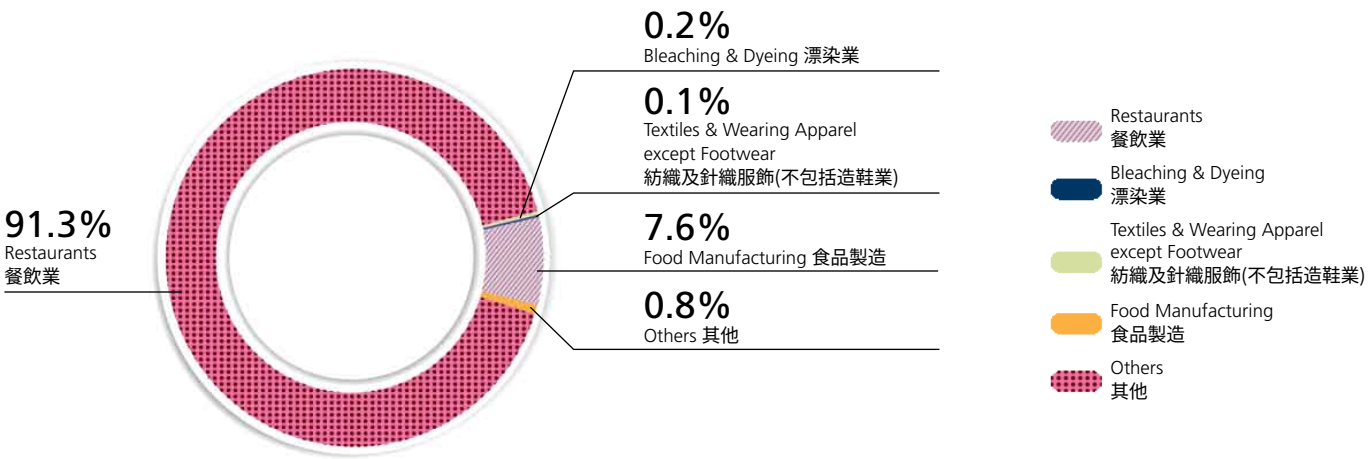
TES Accounts - TES Payment Pattern (HK$/month)
工商業污水附加費用戶 — 工商業污水附加費收費情況（港元/月）



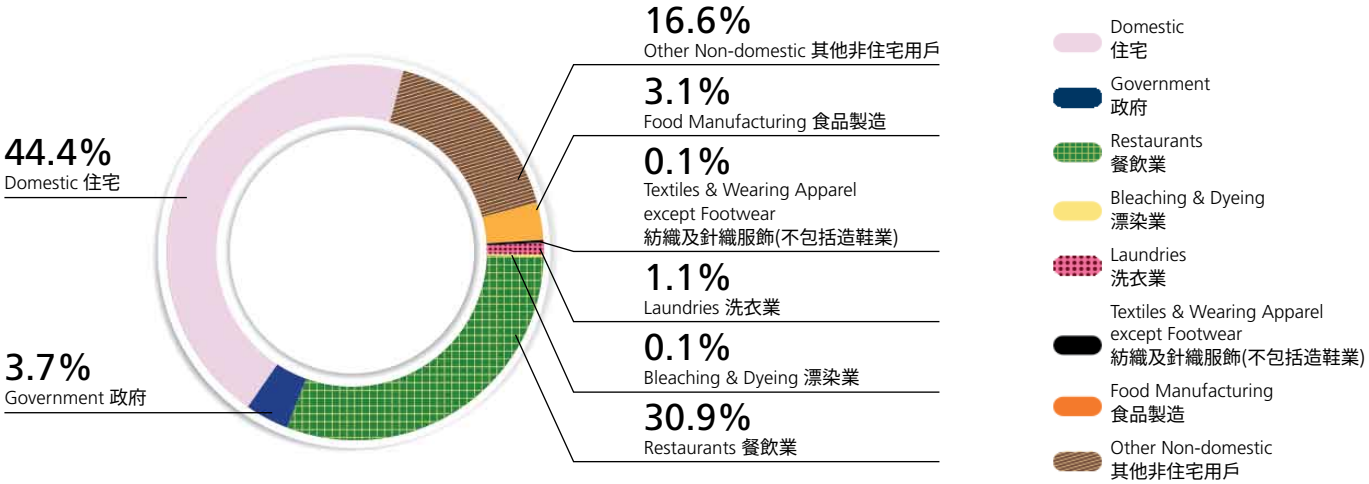
Sewage Charge (HK$776 M) - Revenue Pattern by Type
排污費（776百萬港元） ー 用戶種類收費情況



Trade Effluent Surcharge (HK$207 M) - Revenue Pattern by Type
工商業污水附加費（207百萬港元） ー 用戶種類收費情況



Sewage Charge and Trade Effluent Surcharge (HK$983 M) - Revenue Pattern by Type
排污費及工商業污水附加費（983百萬港元） ー 用戶種類收費情況



Note : The figures are provisional only and are subject to endorsement by the Sewage Services Accounts Committee.
註： 以上數據屬暫定性，有待污水處理服務帳目委員會確認。

附錄二：全球報告倡議組織內容索引
Appendix 2: GRI Content Index

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
STANDARD DISCLOSURES PART I - Profile Disclosures 標準披露第一部份 - 披露概況		
1. Strategy and Analysis 策略與分析		
1.1	Statement from the most senior decision-maker of the organisation 機構最高決策者的聲明	Chapter 1 - Director's Statement 第一章 - 署長序言
1.2	Description of key impacts, risks, and opportunities 主要影響、風險及機遇的描述	Chapter 1 - Director's Statement 第一章 - 署長序言 Chapter 4 - Governance Approach 第四章 - 管治方針
2. Organisational Profile 機構簡介		
2.1	Name of the organisation 機構名稱	Chapter 2 - About the Report 第二章 - 關於本報告
2.2	Primary brands, products, and/or services 主要品牌、產品及（或）服務	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責
2.3	Operational structure of the organisation, including main divisions, operating companies, subsidiaries, and joint ventures 機構的營運架構，包括主要部門、營運公司，附屬公司及聯營企業	Chapter 4 - Governance Approach 第四章 - 管治方針
2.4	Location of organisation's headquarters 機構總部的位置	43/F Revenue Tower, Wanchai, Hong Kong 香港灣仔稅務大樓43樓
2.5	Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report 機構在多少個國家營運，在哪些國家有主要業務，或哪些國家與報告所述的可持續發展事宜特別相關	Hong Kong only 只限香港
2.6	Nature of ownership and legal form 擁有權的性質及法律形式	Part of the Hong Kong SAR Government 屬於香港特區政府的一部分
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries) 機構所服務的市場（包括地域分佈、所服務的行業和客戶/受益人的類型）	Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責
2.8	Scale of the reporting organisation 匯報機構的規模	Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責 Chapter 9 - Operation Efficiency 第九章 - 營運效率 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
2.9	Significant changes during the reporting period regarding size, structure, or ownership 匯報期內機構規模、架構或擁有權方面的重大改變	No significant changes 沒有重大改變
2.10	Awards received in the reporting period 匯報期內所獲取的獎項	Chapter 3 - The Year's Highlights 第三章 - 年度大事 重點輕描
3. Report Parameters 報告規範		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided 信息匯報期（例如：財政年度/歷年）	Chapter 2 - About the Report 第二章 - 關於本報告
3.2	Date of most recent previous report (if any) 上一份報告的日期（如有）	This is the first Sustainability Report of DSD. Last year, we published an Annual Report and an Environmental Performance Report 這是渠務署的首份可持續發展報告。去年，我們出版了年報及環保工作報告。
3.3	Reporting cycle (annual, biennial, etc.) 匯報周期（每年、每兩年等）	Annually 每年

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
3.4	Contact point for questions regarding the report or its contents 查詢報告或報告內容的聯絡點	Feedback 回應表格
3.5	Process for defining report content 報告內容的過程界限	Chapter 2 - About the Report 第二章 - 關於本報告
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers) 報告的界限 （例如：國家、部門、子公司、租用設施、聯營企業、供應商）	Chapter 2 - About the Report 第二章 - 關於本報告 Chapter 4 - Governance Approach 第四章 - 管治方針
3.7	State any specific limitations on the scope or boundary of the report 指出任何有關報告範圍及界限的限制	Chapter 2 - About the Report 第二章 - 關於本報告
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations 根據什麼基礎，報告聯營企業、子公司、租用設施、外判業務及其他可能嚴重影響不同報告期和/或不同機構間可比性的實體	Chapter 2 - About the Report 第二章 - 關於本報告
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols 數據量度技巧及計算基準，包括應用於指標編制跟估算相關的假設和技術及報告中的其他資料 解釋任何不應用，或大幅偏離GRI指標規章的決定	Chapter 2 - About the Report 第二章 - 關於本報告
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement 解釋重整舊報告所載信息的結果及原因	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report 報告的範圍、界限或所用的計算方法與以往報告的重大分別	Chapter 2 - About the Report 第二章 - 關於本報告
3.12	Table identifying the location of the Standard Disclosures in the report 表列各類標準披露在報告中的位置	Appendix 2 - GRI Context Index 附錄二 - 全球報告倡議組織內容索引
3.13	Policy and current practice with regard to seeking external assurance for the report 為報告尋求外部認證的政策及現行措施	Chapter 2 - About the Report 第二章 - 關於本報告 Independent Assurance Opinion Statements 獨立審核聲明
4. Governance, Commitments, and Engagement 管治，承諾及參與		
4.1	Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight 機構的管治架構，包括隸屬最高管治機關，負責特定任務，如制定策略或監督組織的委員會	Chapter 4 - Governance Approach 第四章 - 管治方針
4.2	Indicate whether the Chair of the highest governance body is also an executive officer 指出最高管治機關的主席有否兼任行政職位	Chapter 4 - Governance Approach 第四章 - 管治方針 Secretary for Development is the highest governance body for DSD but he/she is not the executive officer. 發展局局長為渠務署的最高管治人，但他/她並非行政人員。
4.3	For organisations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members 如機構屬單一董事會架構，指出最高管治機關中獨立及（或）非執行成員的人數及性別	HKSAR Government does not adopt unitary board structure. All our members are appointed by the Chief Executive. 香港特區政府不採取單一董事會架構。我們所有的成員由行政長官委任。
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body 股東及僱員向最高管治機關提出建議或經營方向的機制	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 7 - Engaging the Community 第七章 - 與公眾共商同理 Chapter 8 - Collaboration with Working Partners 第八章 - 與工作夥伴合作 Chapter 10 - Caring Our Staff 第十章 - 關己及人 愛護員工

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organisation's performance (including social and environmental performance) 最高管治機關成員、高級經理及行政人員的賠償(包括離職安排)，與機構績效之間的關係，包括社會及環境方面的績效	The appointment and promotion of senior management are to be advised by the independent Public Service Commission in accordance with the Public Service Commission Ordinance. All senior management receives regular performance appraisal which include the consideration of the organisation's sustainability performance. 高級管理人員的聘任和晉升是根據公務員敘用委員會條例，由獨立的公共服務委員會提供建議。所有高級管理人員會接受定期績效評估，其中考慮因素包括機構的可持續發展績效。
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided 避免最高管治機關出現利益衝突的程序	Chapter 4 - Governance Approach 第四章 - 管治方針 No specific processes for the highest government body. All government departments follow internal guidelines. 最高管治機關沒有具體的程序。所有政府部門按照內部指引進行日常工作。
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity 如何決定最高管治機關及其委員會的成員應俱備什麼資格及經驗，包括性別及其他要素的考慮	Chapter 4 - Governance Approach 第四章 - 管治方針 All senior officers in the DSD (at D2 rank and above) are permanent Hong Kong residents. 所有在渠務署的高級管理人員（D2或以上職級）為香港永久性居民。 They are civil servants and their appointment and promotion are to be advised by the independent Public Service Commission in accordance with the Public Service Commission Ordinance. 他們是公務員，其任職及晉升是根據公務員敘用委員會條例，由獨立的公共服務委員會提供建議。
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation 機構內部訂定的使命或價值觀、行為守則及關乎經濟、環境及社會績效的原則，以及其實施現況	Chapter 4 - Governance Approach 第四章 - 管治方針
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles 最高管治機關對匯報機構如何確定和管理經濟、環境及社會績效(包括相關的風險、機遇)，以及對機構有否遵守國際公認的標準、道德守則及原則的監督程序	Chapter 4 - Governance Approach 第四章 - 管治方針
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance 評估最高管治機關本身績效的程序， 特別是有關經濟、環境及社會的績效	Audit Commission and the Legislative Council act as the evaluation framework for general performance of Government, including Development Bureau. 審計署和立法會作為評估政府（包括發展局）績效的框架。
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation 解釋機構有否及如何按謹慎方針或原則行事	Chapter 4 - Governance Approach 第四章 - 管治方針
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses 機構對外界發起的經濟、環境及社會約章、原則或其他倡議的參與或支持	Chapter 4 - Governance Approach 第四章 - 管治方針
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organisations in which the organisation - * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic 機構加入的聯會（如行業協會）及（或）本地／國際倡議組織，而其中組織 - * 有管治機構的職位；* 參與項目或委員會； * 提供超出常規會費的實質性資金；或 * 視會籍為策略性的	Chapter 4 - Governance Approach 第四章 - 管治方針

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
4.14	List of stakeholder groups engaged by the organisation 機構引入的持份群體清單	Chapter 4 - Governance Approach 第四章 - 管治方針
4.15	Basis for identification and selection of stakeholders with whom to engage. 界定及挑選要引入的持份者之根據	Chapter 4 - Governance Approach 第四章 - 管治方針
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group 持份者的參與模式，包括按不同的持份者類型及組別的利益相關方參與頻率	Chapter 7 - Engaging the Community 第七章 - 與公眾共商同理 Chapter 8 - Collaboration with Working Partners 第八章 - 與工作夥伴合作 Chapter 10 - Caring Our Staff 第十章 - 關己及人 愛護員工 Remarks - We have regular engagement with members of each group: (i) annual appraisals for staffs; (ii) quarterly performance reports for consultants and contractors; and (iii) Clearance of Blocked Sewers and Drains Customer Feedback Survey for users. 註 - 我們保持定期與各類持份者聯繫： (i) 員工的年度表現評估； (ii) 顧問/承建商的季度表現報告；及 (iii) 市民對清理淤塞的污水渠及排水渠滿意度調查。
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting 持份者參與過程中提出的主要事項及關注，以及機構如何回應，包括以報告回應	Chapter 6 - Managing the Environment 第六章 - 環境管理 All key topics and concerns raised through stakeholder engagement activities such as questionnaire feedback on site visit, customer feedback survey, staff opinions raised in Departmental Consultative Committee meeting have been included in this report. 持份者在參與活動的過程中提出的主要項目及關注點已列入本報告，如實地考察問卷調查、客戶意見調查、員工在部門協商委員會會議中提出的意見。
STANDARD DISCLOSURES PART II - Disclosures on Management Approach (DMAs) 標準披露第二部份 - 披露管理方針		
Disclosure on Management Approach EC 披露管理方針 - 經濟		
DMA EC Aspects 經濟 管理方針	Economic performance 經濟績效	Chapter 9 - Operation Efficiency 第九章 - 營運效率 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Market presence 市場佔有率	Our staff's salary is based on a pay scale, namely Master Pay Scale, which is above the minimum wage set by the Law of HKSAR. 僱員薪酬是按照公務員總薪級表發放，超過香港法定的最低工資水平。
	Indirect economic impacts 間接經濟影響	Chapter 3 - Year's Highlight 第三章 - 年度大事 重點輕描 Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
Disclosure on Management Approach EN 披露管理方針 - 環境		
DMA EN Aspects 環境管理方針	Materials 物料	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 11 - Meeting the Targets 第十一章 - 完成目標 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Energy 能源	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 11 - Meeting the Targets 第十一章 - 完成目標 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Water 水	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 11 - Meeting the Targets 第十一章 - 完成目標 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Biodiversity 生物多樣性	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 11 - Meeting the Targets 第十一章 - 完成目標 We commit to environmental protection. We conduct Preliminary Environmental Review for all our capital projects during the feasibility study stage. 渠務署致力於環境保護。我們所有基本工程在可行性研究階段進行初步環境審查。
	Emissions, effluents and waste 排放物、污水及廢棄物	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 11 - Meeting the Targets 第十一章 - 完成目標 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Products and services 產品及服務	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責 Chapter 6 - Managing the Environment 第六章 - 環境管理
	Compliance 遵守法規	Chapter 4 - Governance Approach 第四章 - 管治方針 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Transport 運輸	Chapter 4 - Governance Approach 第四章 - 管治方針 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
	Overall 整體情況	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 11 - Meeting the Targets 第十一章 - 完成目標 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
Disclosure on Management Approach LA 披露管理方針 - 勞工措施		
DMA LA Aspects 勞工措施及合理工作管理方針	Employment 僱用	Chapter 10 - Caring Our Staff 第十章 - 關己及人 愛護員工 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Labor/management relations 勞／資關係	Chapter 10 - Caring Our Staff 第十章 - 關己及人 愛護員工 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Occupational health and safety 職業健康與安全	Chapter 10 - Caring Our Staff 第十章 - 關己及人 愛護員工 Chapter 11 - Meeting the Targets 第十一章 - 完成目標 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Training and education 培訓與教育	Chapter 10 - Caring Our Staff 第十章 - 關己及人 愛護員工 Chapter 11 - Meeting the Targets 第十一章 - 完成目標 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
	Diversity and equal opportunity 多元化與平等機會	The Hong Kong SAR Government is not discriminatory about gender differences, age, disabilities, etc. 香港特區政府不存在性別、年齡、殘疾等歧視問題。
	Equal remuneration for women and men 男女同酬	The basic salary and remuneration of our staff are determined based on their qualification, performance, etc. neglecting their gender. We follow the Civil Service Regulations which set out the terms of appointment and conditions of service for public servants. 我們員工的基本工資和薪酬乃根據其資歷、表現等發放，與性別無關。我們按照公務員事務規例中所載列的條款及服務條件委任公務員。
Disclosure on Management Approach HR 披露管理方針 - 人權		
DMA HR Aspects 人權管理方針	Investment and procurement practices 投資及採購措施	Chapter 4 - Governance Approach 第四章 - 管治方針
	Non-discrimination 非歧視	Chapter 4 - Governance Approach 第四章 - 管治方針 All complaint on discrimination will be handled by an independent commission, Equal Opportunities Commission. No incident of discrimination and action has been reported in 2012/13. 任何有關歧視的個案將交由平等機會委員會處理。2012/13年度沒有錄得歧視的個案。
	Freedom of association and collective bargaining 結社自由與集體議價權	No operations have been identified in which the right to exercise freedom of association and collective bargaining may be at risk. 我們沒有發現任何日常作業可能威脅到結社自由和集體談判的行使權。

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
	Child labor 童工	Chapter 4 - Governance Approach 第四章 - 管治方針
	Prevention of forced and compulsory labor 防止強逼與強制勞動	Chapter 4 - Governance Approach 第四章 - 管治方針
	Security practices 保安措施	There is no such practice in DSD. 渠務署沒有相關措施。
	Indigenous rights 原住民權利	No complaint of this nature was reported in 2012/13. 2012/13年度沒有收到有關投訴。
	Assessment 評估	No operations have been subject to human rights reviews and/or impact assessments. 沒有收到有關人權事件的報告。
	Remediation 糾正	Any remediation would follow the procedures and guidelines given by Civil Services Bureau. 任何糾正按公務員事務局的程序和指引跟進。
Disclosure on Management Approach SO 披露管理方針 - 社區		
DMA SO Aspects 社區管理方針	Local communities 當地社區	Chapter 7 - Engaging the Community 第七章 - 與公眾共商同理 Chapter 8 - Collaboration with Working Partners 第八章 - 與工作夥伴合作 Chapter 10 - Caring Our Staff 第十章 - 關己及人 愛護員工
	Corruption 賄賂	Chapter 4. Governance Approach 第四章 - 管治方針
	Public policy 公共政策	Chapter 4. Governance Approach 第四章 - 管治方針
	Anti-competitive behavior 反競爭行為	This aspect is not applicable to DSD since our Department is under the Development Bereau of Government of the Hong Kong Special Administrative Region to provide services of flood prevention and sewage treatment without making profit. 此項並不適用於渠務署，因為我們是香港特別行政區政府發展局轄下的部門，本署提供的防洪和污水處理服務不收取利潤。
	Compliance 遵守法規	No significant non-compliance with law and regulation 沒有違反有關法律法規
Disclosure on Management Approach PR 披露管理方針 - 產品責任		
DMA PR Aspects 產品責任管理方針	Customer health and safety 客戶健康與安全	Chapter 4 - Governance Approach 第四章 - 管治方針
	Product and service labelling 產品及服務標籤	Chapter 6 - Managing the Environment 第六章 - 環境管理 DSD's capital projects are subjected to assessment with Building Environmental Assessment Method (BEAM). 渠務署的基本工程會接受建築環境評估法(BEAM)評估。
	Marketing communications 市場推廣傳訊	As a service provider for the Government, we do not have any market communication plan. 作為服務政府的部門，我們並沒有任何市場推廣計劃。
	Customer privacy 客戶私隱權	There is no report of loss of customer data recorded in 2012/13. 2012/13年度沒有錄得客戶資料記錄遺失個案。
	Compliance 遵守法規	No significant non-compliance with law and regulation 沒有嚴重違反法例或法規的個案

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
STANDARD DISCLOSURES PART III - Performance Indicators 標準披露第三部份 - 績效指標		
Economic 經濟		
Economic Performance 經濟績效		
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments 機構產生及分發的直接經濟價值，包括收入、營運成本、 僱員賠償、捐獻及其他社區投資、留存盈利、支付予資本提供者及特區政府的款項	Chapter 9 - Operation Efficiency 第九章 - 營運效率 No direct economic value generated in DSD's normal operation 渠務署日常運作沒有產生直接經濟價值
EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change 機構活動因氣候轉變而引起的財務負擔及其他風險、機遇	No mechanism to separately capture total environmental expenditure in 2012/13 沒有機制個別記錄2012/13年度的環境總開支
EC3	Coverage of the organisation's defined benefit plan obligations 機構固定福利計劃的賠償界限	On retirement, our staff is eligible for retirement benefits as stipulated in the pensions legislation or specified in his terms of appointment. Details of the retirement plan can be found in the Civil Service Bureau's website. 有關人員退休時，將會享有退休金法例規定或其受聘條款所指定的退休福利。詳細的退休計劃可於公務員事務局網站瀏覽。
EC4	Significant financial assistance received from government 特區政府給予機構的重大財務援助	Chapter 9 - Operation Efficiency 第九章 - 提升營運效率
Market Presence 市場佔有率		
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation 機構在各主要營運地點對當地供應商的政策、措施及支出比例	98% of the purchase for goods of DSD were awarded to local contractors in 2012/13. "Local" defined as companies registered in Hong Kong. 在2012/13年度，渠務署 98%所購買的物品來自本地供應商。「本地」定義為在香港註冊的公司。
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation 機構在各主要營運地點聘用當地人員的程序，以及在當地社區聘用高層管理人員的比例	In accordance with Article 99 of the Basic Law, new recruits appointed to the Civil Service on or after 1 Jul 1997 must be permanent residents. All senior officers in the DSD (at D2 rank and above) are permanent Hong Kong residents. They are civil servants and their appointment and promotion are to be advised by the independent Public Service Commission in accordance with the Public Service Commission Ordinance. 根據《基本法》第99條，在1997年7月1日或以後受聘的公務員，必須是香港特別行政區永久性居民。 所有在渠務署的高級管理人員（D2或以上職級）為香港永久性居民。他們是公務員，其任職及晉升是根據《公務員敘用委員會條例》，由獨立的公務員敘用委員會提供建議。
Indirect Economic Impacts 間接經濟影響		
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement 機構透過商業活動、實物捐贈或免費專業服務，主要為大眾利益而提供的基建投資及服務的發展及影響	Our operations do not involve with infrastructure investments. 我們的業務並不涉及基建投資。
Environmental 環境		
Materials 物料		
EN1	Materials used by weight or volume 所用物料的重量或用量	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
EN2	Percentage of materials used that are recycled input materials 採用經循環再造的物料的百分比	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
Energy 能源		
EN3	Direct energy consumption by primary energy source 按主要源頭劃分的直接能源耗量	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
EN4	Indirect energy consumption by primary source 按主要源頭劃分的間接能源耗量	Chapter 6 - Managing the Environment 第六章 - 環境管理 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
EN5	Energy saved due to conservation and efficiency improvements 通過節約和提高效能節省的能源	Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 11 - Meeting the Targets 第十一章 - 完成目標
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives 提供具能源效益或以可再生能源為本的產品及服務的計劃，以及計劃的節能成效要求	Chapter 6 - Managing the Environment 第六章 - 環境管理
EN7	Initiatives to reduce indirect energy consumption and reductions achieved 減少間接能源消耗的計劃，以及計劃的成效	Chapter 6 - Managing the Environment 第六章 - 環境管理
Water 水		
EN8	Total water withdrawal by source 按源頭劃分的總耗水量	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
EN10	Percentage and total volume of water recycled and reused 循環及再用水的百分比及總量	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
Biodiversity 生物多樣性		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas 機構在環境保護區或具豐富生物多樣性的地區，或在其毗鄰地區，擁有、租賃或管理土地的位置及面積	Chapter 6 - Managing the Environment 第六章 - 環境管理 DSD is committed to environmental protection. We assess the environmental implication for all our capital projects during the planning and design stages in order to fulfill the requirements of Environmental Impact Assessment Ordinance and minimise the impacts to the nature. No mechanism is in place to measure the size of operation sites. 渠務署致力保護環境。我們評估所有資本項目在規劃和設計階段對環境造成的影響，以符合《環境影響評估條例》的要求，並盡量減少其對自然環境的影響。暫時沒有量度相關工地大小的機制
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas 描述機構的活動、產品及服務在生物多樣性方面，對環境保護區或具豐富生物多樣性的其他地區之重大影響	Chapter 6 - Managing the Environment 第六章 - 環境管理
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity 管理對生物多樣性影響的策略、目前行動及未來計劃	Chapter 6 - Managing the Environment 第六章 - 環境管理
Emissions, Effluents and Waste 排放物、污水及廢棄物		
EN16	Total direct and indirect greenhouse gas emissions by weight 按重量劃分的直接與間接溫室氣體總排放量	Chapter 6 - Managing the Environment 第六章 - 環境管理 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
EN17	Other relevant indirect greenhouse gas emissions by weight 按重量劃分的其他間接溫室氣體總排放量	Chapter 6 - Managing the Environment 第六章 - 環境管理
EN19	Emissions of ozone-depleting substances by weight 按重量劃分的臭氧消耗性物質的排放量	Use of materials with ozone-depleting substances has been avoided in our offices. Considering all our refrigerants and fire extinguishing agents used during replacement are environmentally friendly models and comply with the Ozone Layer Protection Ordinance, as well as the insignificant consumption amount, we will not report our ozone depleting substances consumption value. 我們於辦公室避免使用含對臭氧層有損耗的物質。考慮到我們在更換過程中均使用環保並符合保護臭氧層條例的製冷劑和滅火劑，以及微不足道的使用量，我們不會報告對臭氧層有損耗物質的排放量。

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
EN20	NO_x, SO_x, and other significant air emissions by type and weight 按種類及重量劃分的氮氧化物、硫氧化物及其他重要氣體的排放量	No measurement mechanism is in place as our department does not generate significant NO_x, SO_x and other significant air emissions. 暫時沒有量度機制，因為我們沒有排放大量的氮氧化物、硫氧化物及其他重要的氣體。
EN21	Total water discharge by quality and destination 按質量及目的地劃分的總排水量	Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責 Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據 Under the HKSAR Law, all discharged water is collected by the public sewage system to treatment plants before discharging into the sea. The quantity of water discharged in our office (no other water source discharges through our drains) is equal to the amount of fresh water consumed. By means of different types of treatment processes and advances tecnologies, most of the pollutants, toxic materials and bacteria inside the sewage will be removed to a level meeting the environment standards before discharge. 根據在香港特區的法律，所有排出的水經由公共污水系統收集到污水處理廠處理，然後才排出大海。我們辦公室排出的污水量（沒有其他水源通過我們的排水渠排放）與自來水用量相若。 我們透過不同的污水處理過程和先進的技術，除去污水裡大部份的污染物、有毒物質和細菌，在排放前確保達致符合環保要求的水平。
EN22	Total weight of waste by type and disposal method 按種類及排污法劃分的廢棄物總重量	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
EN23	Total number and volume of significant spills. 嚴重溢漏的總次數及漏量	In 2012/13, a total of 12 significant sewage spills were reported and the total volume of sewage spill was 74,500 cubic metres (smaller than 0.01 per cent of our annual sewage treated). Corrective actions were taken immediately without causing any significant environmental impacts. 2012/13年度，共有12宗嚴重溢漏個案，總漏量為74,500 立方米（少於我們每年污水處理量的0.01%）。我們立即採取了糾正行動，沒有對環境造成重大影響。
Products and Services 產品及服務		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation 減低產品及服務環境影響的計劃及其成效	Chapter 6 - Managing the Environment 第六章 - 環境管理
EN27	Percentage of products sold and their packaging materials that are reclaimed by category 按類別劃分，售出產品及回收售出產品包裝物料的百分比	Not Applicable - No products sold 不適用 - 沒有售賣產品
Compliance 遵守法規		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations 違反環境法例及規則被處巨額罰款的總額，以及所受金錢以外制裁的次數	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
Social - Labor Practices and Decent Work 社會 - 勞工措施及合理工作		
Employment 僱用		
LA1	Total workforce by employment type, employment contract, and region, broken down by gender 按僱用類型、僱用合約及地區劃分的僱員總數，並按性別區分	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region 按年齡組別、性別及地區劃分的新入職僱員及僱員流失總數及比率	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
LA15	Return to work and retention rates after parental leave, by gender 按性別劃分，產假/侍產假後留任的比率	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
Labor / Management Relations 勞／資關係		
LA4	Percentage of employees covered by collective bargaining agreements 受集體議價協議保障的僱員百分比	Nil 沒有
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements 有關各類營運改變的最短通知期，包括指出該通知期有否在集體協議中訂明	Minimum notice period is not prescribed in government internal circulars, therefore no minimum notice period is required. But staff are informed and consulted regarding significant changes beforehand, and notices are issued as soon as possible. 特區政府內部通告沒有就最短通知期設定限制，因此，本署沒有相關的最短通知期。不過，在重大改變前，管理層一般會預留足夠時間諮詢員工。
Occupational Health and Safety 職業健康與安全		
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender 按地區和性別劃分的工傷、職業病、損失工作日及缺勤比率，以及和工作有關的死亡人數	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases 為協助僱員、僱員家屬或社區成員而推行，關於嚴重疾病的教育、培訓、輔導、預防與風險監控計劃	Chapter 10 - Caring Our Staff 第十章 - 關己及人　愛護員工
Training and Education 培訓與教育		
LA10	Average hours of training per year per employee by gender, and by employee category 按性別和僱員類別劃分，每名僱員每年受訓的平均時數	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據 As there is no distinct requirement regarding receiving training in terms of gender, we do not report the data broken down by gender. 接受培訓方面沒有特定的性別要求，因此我們沒有報告按性別劃分僱員每年受訓的平均時數。
Diversity and Equal Opportunity 多元化與平等機會		
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity 按性別、年齡組別、少數族裔成員及其他多元性指標劃分，各管治機關成員和各類僱員的詳情	Appendix 1 - Key Statistics and Data 附錄一 - 主要統計數據
Equal Remuneration for Women and Men 男女同酬		
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation 按僱員和主要營運地區類別劃分，男女的薪酬比率	The data is not available currently but will be provided in short-term. However, the basic salary and remuneration of our staff are determined based on their qualification, performance, etc. neglecting their gender. We follow the Civil Service Regulations which set out the terms of appointment and conditions of service for public servants. 目前未能提供數據，但將於短期內提供。我們員工的基本工資和薪酬乃根據其資歷、表現等發放，與性別無關。我們按照公務員事務規例中所載列的條款及服務條件委任公務員。
Social - Human Rights 社會 - 人權		
Investment and Procurement Practices 投資及採購措施		
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening 載有人權條款或已通過人權審查的重要投資協議和合約的總數及百分比	No measurement mechanism is in place as our operations do not involve with investments. As a government department, we strictly follow the policies laid down by the Civil Service Bureau and fully comply with the local ordinances which uphold human rights of citizens. 由於我們的業務不涉及投資，暫時沒有量度機制。作為政府部門，我們嚴格按照公務員事務局所定下的政策，完全符合本地法令，維護公民人權。

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken 已通過人權審查的重要供應商、承建商及其他商業夥伴的百分比，以及機構採取的行動	No measurement mechanism in place as it is not a formal practice in local public agency. We do not report this issue because DSD only use suppliers and contractors registered with the Government Logistic Department and Development Bureau respectively. The registers are used by all the works agent of the HKSAR Government (i.e. Water Services Department, Highways Department, Architectural Services Department, etc.). We do not have the result of any screening conducted by the Government Logistic Department and Development Bureau. 由於這不是本地公營機構的慣常做法，暫時沒有量度機制。我們只會採用已在政府物流服務署註冊的供應商和在發展局註冊的承建商，故此我們不會匯報有關資料。所有政府部門(即水務處、路政署、建築署等)的工程代理也在該註冊名單。本署沒有任何由政府物流服務署及發展局進行人權篩選的結果。
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained 就經營相關的人權政策及程序，僱員接受培訓的總小時數，以及受培訓僱員的百分比	We do not provide such training. 我們未有提供有關培訓。
Non-discrimination 非歧視		
HR4	Total number of incidents of discrimination and corrective actions taken 歧視個案的總數，以及機構採取的糾正行動	No incident of discrimination was recorded in 2012/13. 2012/13年度沒有錄得歧視的個案。
Freedom of Association and Collective Bargaining 結社自由與集體議價權		
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights 已發現可能違反或嚴重危害結社自由及集體議價權的作業或主要供應商，以及保障這些權利的行動	No operations have been identified in which the right to exercise freedom of association and collective bargaining may be at risk. 我們沒有發現任何日常運作可能威脅到結社自由和集體談判的行使權。
Child labor 童工		
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor 已發現可能有聘用童工的高危作業和主要供應商，以及有助杜絕童工的措施	Chapter 4 - Governance Approach 第四章 - 管治方針 No operations and significant supplies are identified having significant risk for incidents of child labor. 沒有發現任何有聘用童工的高危運作和主要供應商。
Forced and Compulsory Labor 強逼與強制勞動		
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor 已發現可能會導致強逼與強制勞動的高危作業和主要供應商，以及有助消除一切形式的強迫與強制勞動的措施	Chapter 4 - Governance Approach 第四章 - 管治方針 No operations and significant supplies are identified having significant risk for incidents of forced or compulsory labor. 沒有發現任何導致強逼與強制勞動的高危運作和主要供應商。
Assessment 評估		
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments 接受人權審查及/或影響評估之營運點的百分比和總數	No operations have been subject to human rights reviews and/or impact assessments. 沒有在營運點進行人權審查及/或影響評估。
Remediation 糾正		
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms 經由正式申訴機制解決與人權有關的申訴數量	No grievance related to human rights received in 2012/13 2012/13年度沒有接獲關於人權方面的申訴。

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
Social - Society 社會 - 社區		
Local Communities 社區		
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs 實施了當地社區參與、影響評估和發展計劃的營運點比例	Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責 Chapter 7 Engaging the Community 第七章 - 與公眾共商同理 DSD only operates in Hong Kong and we engage with the local community through various programmes. Details can be found in Chapter 7. 渠務署只在香港經營業務，我們透過各種活動與本地社區聯繫。詳情可參閱第七章。
SO9	Operations with significant potential or actual negative impacts on local communities 對當地社區具有重大潛在影響或實際負面影響的運作	Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責 Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 7 Engaging the Community 第七章 - 與公眾共商同理
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities 在對當地社區具有重大潛在影響或實際負面影響的運作實施之預防和消除措施	Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責 Chapter 6 - Managing the Environment 第六章 - 環境管理 Chapter 7 Engaging the Community 第七章 - 與公眾共商同理
Corruption 賄賂		
SO2	Percentage and total number of business units analysed for risks related to corruption 已實施賄賂風險分析的業務單位總數及百分比	DSD does not perform corruption risk analysis but the Audit Commission conducts regularity audit from time to time to assure that the Government's financial and accounting transactions are proper and that they conform to generally accepted accounting principles. 渠務署沒有進行賄賂風險分析，審計署定期審核帳目，以確保政府的財務和會計帳項正確無誤，並符合公認的會計標準。
SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures 已接受機構的防止賄賂政策及程序培訓僱員的百分比	All new comers are required to join a one-day induction course to enhance their understanding of the Government and the work nature of the Department, in order to foster a mindset to 'serve the public' with dedication. A topic on anti-corruption is included in the induction course. In 2012/13, three Induction classes were held for a total of 142 colleagues. 所有新入職僱員必須參加為期一天的入職培訓課程，以提高他們對政府和部門工作性質的理解，從而加強他們對「服務市民」的承擔。課程包含防止賄賂的內容。 於2012/13年度，本署共舉辦了三次入職訓練課程，共有142名員工參加。
SO4	Actions taken in response to incidents of corruption 回應賄賂個案所採取的行動	Chapter 4 - Governance Approach 第四章 - 管治方針
Public Policy 公共政策		
SO5	Public policy positions and participation in public policy development and lobbying 對公共政策的立場，以及在發展及游說公共政策方面的參與	Chapter 4 - Governance Approach 第四章 - 管治方針 Chapter 7 - Engaging the Community 第七章 - 與公眾共商同理
Compliance 遵守法規		
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations 違反法例及規則被處巨額罰款的總額，以及所受金錢以外制裁的次數	No significant non-compliance with laws and regulations 沒有嚴重違反法例或法規的個案

GRI Index GRI 索引	Description 描述	The Information Required 相關資料
Social - Product Responsibility 社會 - 產品責任		
Customer Health and Safety 客戶健康與安全		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures 為改良而評估產品及服務在其生命周期各階段對安全與健康的影響，以及須接受這種評估的重要產品及服務類別的百分比	Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責 Chapter 8 - Collaboration with Working Partners 第八章 - 與工作夥伴合作 Chapter 10 - Caring Our Staff 第十章 - 關己及人 愛護員工
Product and Service Labelling 產品及服務標籤		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements 按程序劃分標籤所需的產品及服務信息種類，以及須符合這種信息規定的重要產品及服務的百分比	Chapter 5 - Our Core Responsibilities 第五章- 我們的主要職責 Chapter 6 - Managing the Environment 第六章 - 環境管理 Committed to provide world-class sewage treatment services, we have set a series of strict quality objectives to monitor our performance. In addition, DSD's capital projects are subjected to assessment with Building Environmental Assessment Method (BEAM). 我們已經制定了一系列嚴格的質量目標監測我們的表現，以實現提供世界級污水處理服務的承諾。 此外，渠務署的基本工程項目均會接受建築環境評估法（BEAM）進行評估。
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes 按結果分類匯報違反有關產品及服務信息和標識的法規及自願性準則的事件總數	No significant non-compliance with laws and regulations 沒有嚴重違反法例或法規的個案
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction 有關客戶滿意度的措施，包括調查客戶滿意度的結果	Chapter 11 - Meeting the Targets 第十一章 - 完成目標
Marketing Communications 市場推廣傳訊		
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship 為符合規管市場推廣傳訊（包括廣告、推銷及贊助）的法律、標準及自願守則而設的計劃	As a service provider for the Government, we do not have any market communication plan. 作為服務政府的部門，我們並沒有任何市場推廣計劃。
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes 按結果分類匯報違反有關市場推廣（包括廣告、推銷及贊助）的法規及自願性準則的事件總數	No significant non-compliance with laws and regulations 沒有嚴重違反法例或法規的個案
Compliance 遵守法規		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services 違反規管提供與使用產品及服務的法例及規則所處巨額罰款的總額	No significant non-compliance with laws and regulations 沒有嚴重違反法例或法規的個案

渠務署可持續發展報告2012-13回應表格

感謝您閱讀本報告。您的意見及建議對我們改進可持續發展的表現及匯報十分重要。希望您能抽空完成以下問卷，表達意見，謝謝。

1. 您對以下有關本報告的陳述有多認同：

	十分認同	認同	不認同	十分不認同
這份報告就我們的工作和服務，以及可持續發展策略和表現作出了清晰的闡述。	☐	☐	☐	☐
這份報告的內容平衡及充份。	☐	☐	☐	☐
這份報告的資料很有用。	☐	☐	☐	☐
這份報告的結構清晰。	☐	☐	☐	☐
這份報告的圖像與文字的比例合適。	☐	☐	☐	☐
這份報告的設計美觀。	☐	☐	☐	☐
這份報告易於閱讀及瀏覽。	☐	☐	☐	☐
這份報告有助您增加對渠務署的認識。	☐	☐	☐	☐

2. 請評價我們的可持續發展報告2012-13及可持續發展表現：

	優異	良好	尚可	欠佳
您會如何評價我們的可持續發展報告？	☐	☐	☐	☐
您會如何評價我們的可持續發展表現？	☐	☐	☐	☐

3. 您對我們的報告在以下哪一方面提供的資料最感興趣？

☐ 經濟
☐ 社會
☐ 環境
☐ 管治
☐ 其他，請註明 _____

4. 您認為我們的報告在以下哪一方面提供的資料最有用？

☐ 經濟
☐ 社會
☐ 環境
☐ 管治
☐ 其他，請註明 _____

5. 您希望我們的報告在以下哪一方面提供更多資料？（可選擇多於一項）

☐ 經濟
☐ 社會
☐ 環境
☐ 管治
☐ 其他，請註明 _____

6. 您認為我們於來年的報告應增加哪些內容？

_____

_____

_____

_____

_____

_____

_____

7. 您從何獲取渠務署可持續發展報告的資訊？

☐ 渠務署網頁
☐ 渠務署舉辦的活動
☐ 家人或朋友
☐ 傳媒
☐ 學校
☐ 其他，請註明_____

8. 其他建議或意見：

_____
_____
_____
_____
_____

9. 你屬於下列哪個組別？

☐ 政府部門
☐ 顧問 / 承建商 / 供應商 / 建造業*
☐ 非政府機構社區組織
☐ 學術界
☐ 環保團體
☐ 媒體
☐ 渠務署員工
☐ 學生
☐ 公眾人士
☐ 其他，請註明_____

* 請把不適用者刪除。

10. 您會否希望於將來收取我們的的報告／資訊？

☐ 會
☐ 不會

11. 若日後您想獲得我們發表的報告／資訊，請提供您的聯絡資料：

姓名：_____
團體名稱：_____
電郵：_____
聯絡電話：_____

請從以下途徑交回已填妥的表格給渠務署：
電郵：enquiry@dsd.gov.hk
傳真：2827 8605
郵寄地址：香港灣仔告士打道 5 號稅務大樓 43 樓

多謝您的寶貴意見！

個人資料收集聲明

1. 收集資料的目的
申請人所提供的個人資料，只供渠務署用於作為進行及編印統計及資料分析、處理閣下的意見或建議，及發放渠務署資訊之用。

2. 資料轉交的類別
為了執行上述的目的，你在申請表內所提供的個人資料或許會轉交其他政府決策局和部門，以及其他機構。

3. 查閱個人資料
根據個人資料（私隱）條例第18及22條以及附表1第6項原則，申請人有權查閱及改正其個人資料。你的查閱權利包括在繳交有關費用後，索取你在申請表內所提供的個人資料的副本。

4. 查詢
有關查詢申請表內所收集的個人資料，包括查閱或改正，請聯絡本署社區關係主任 (電話 : 2594 7140/ 地址: 香港灣仔告士打道5號稅務大樓43樓渠務署社區關係組)。

Feedback on DSD Sustainability Report 2012-13

Thank you for reading our report. Your comments and suggestions are important for helping us improve our sustainability performance and reporting. Please take a few minutes to give us your views by completing the following feedback form. Thank you.

1. Please indicate whether you agree or disagree with the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
The report provides a clear understanding of our works and services as well as sustainability strategy and performance.	☐	☐	☐	☐
The content of the report is balanced and adequate.	☐	☐	☐	☐
The information of the report is useful.	☐	☐	☐	☐
The structure of the report is clear.	☐	☐	☐	☐
The proportion of graphics and text is appropriate.	☐	☐	☐	☐
The design of the report is decent.	☐	☐	☐	☐
The report is easy to read and navigate.	☐	☐	☐	☐
The report enables you to understand more about DSD.	☐	☐	☐	☐

2. Please rate our Sustainability Report 2012-13 and sustainability performance:

	Excellent	Good	Fair	Poor
How would you rate our Sustainability Report?	☐	☐	☐	☐
How would you rate our sustainability performance?	☐	☐	☐	☐

3. Which aspect of the report did you find most interesting?

- ☐ Economic
- ☐ Social
- ☐ Environmental
- ☐ Governance
- ☐ Other(s), please specify _____

4. Which aspect of the report did you find most useful?

- ☐ Economic
- ☐ Social
- ☐ Environmental
- ☐ Governance
- ☐ Other(s), please specify _____

5. Which aspect(s) of the report would you like to have more information?

- ☐ Economic
- ☐ Social
- ☐ Environmental
- ☐ Governance
- ☐ Other(s), please specify _____

6. Are there any other topics that you would like to see in our future reports?

_____

_____

_____

_____

_____

_____

_____

7. Where do you learn about the DSD Sustainability Report?

- ☐ DSD website
- ☐ DSD activities
- ☐ Family & friends
- ☐ Media
- ☐ Schools
- ☐ Other(s), please specify _____

8. Other suggestions or opinions:

_____

_____

_____

_____

_____

9. Which of the following best describes you?

- ☐ Government Department
- ☐ Consultant / Contractor / Supplier / Construction Industry*
- ☐ Non-governmental Organisation
- ☐ Academic Sector
- ☐ Green Group
- ☐ Media
- ☐ Staff of DSD
- ☐ Students
- ☐ General Public
- ☐ Other, please specify _____

* Please delete as appropriate.

10. Would you like to receive our reports / information in the future?

- ☐ Yes
- ☐ No

11. If you would like to receive future reports / information from us, please provide your contacts:

Name : _____

Name of Organization : _____

Email : _____

Telephone Number : _____

Please return the completed questionnaire to DSD by the following methods:

Email: **enquiry@dsd.gov.hk**

Fax: **2827 8605**

Mailing address: **43/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong**

Thank you.

Personal Data Collection Statement

1. Purpose of Collection
   The personal data provided by means of this form will only be used for conducting and publishing statistical and data analysis, managing your opinions and suggestions, and distributing information of Drainage Services Department.
2. Classes of Transferees
   The personal data you provide by means of this form may be disclosed to other government bureaux and departments and other organizations for the purposes mentioned in paragraph 1 above.
3. Access to Personal Data
   You have a right of access and correction with respect to personal data as provided in sections 18 and 22 and Principle 6 of Schedule 1 of the Personal Data (Privacy) Ordinance. Your right of access includes the right to obtain a copy of your personal data provided in this form subject to payment of a fee.
4. Enquiries
   For enquiries concerning the personal data collected by means of this form, including the making of access and corrections, please contact our Community Relations Officer (Tel: 2594 7140/ Address: Public Relations Unit, Drainage Services Department 43/F, Revenue Tower, 5 Gloucester Road, Wanchai, Hong Kong)

本報告的完整版及所有附頁可於以下網址下載：
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

採用無氯氣漂染紙漿製造的環保紙印刷
Printed on environmentally friendly paper
manufactured from totally chlorine-free pulp

渠務署
Drainage Services Department

製作：香港生產力促進局
Production: Hong Kong Productivity Council