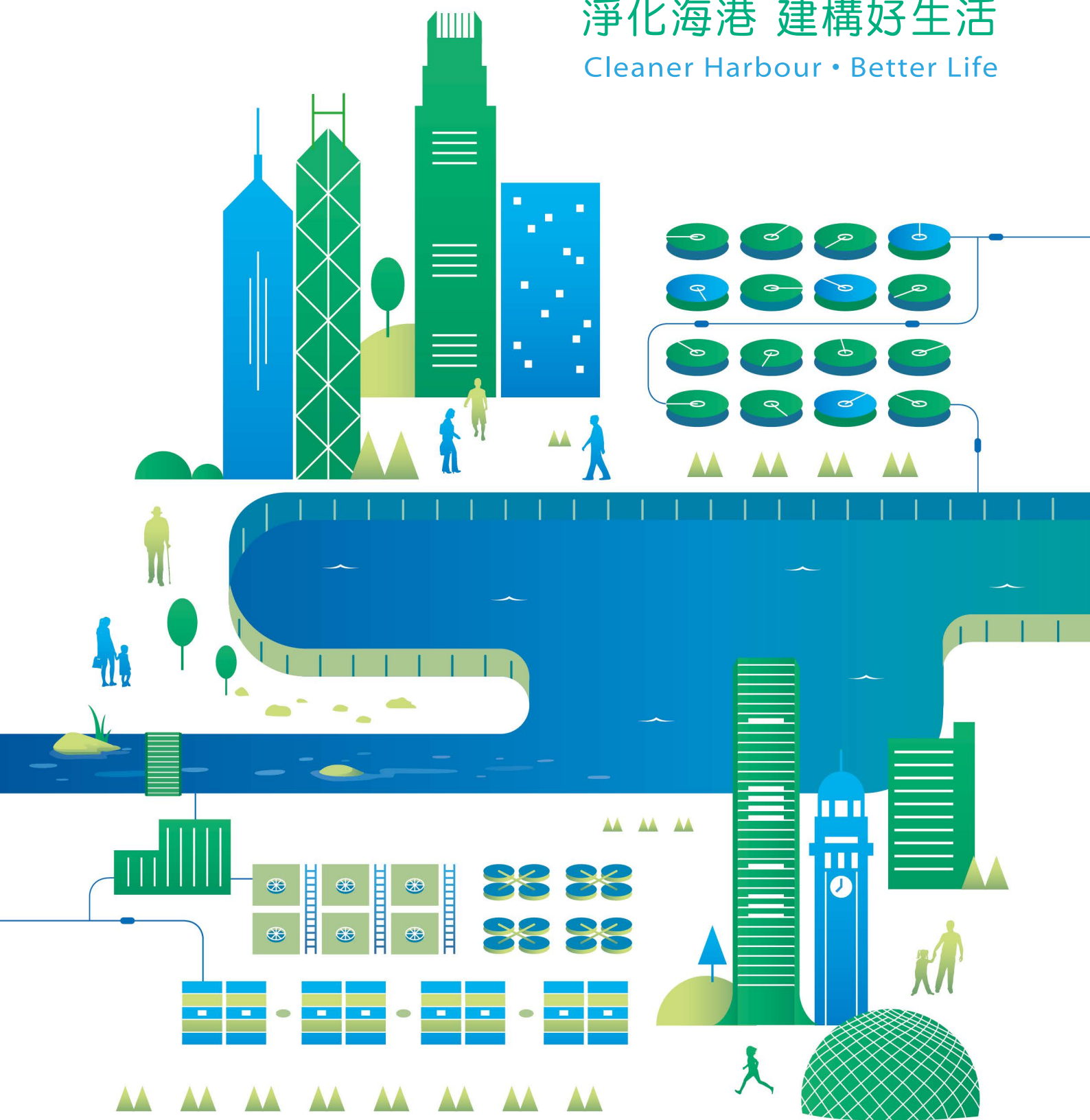


淨化海港 建構好生活

Cleaner Harbour • Better Life



2015-16

可持續發展報告

Sustainability Report



淨化海港 建構好生活
Cleaner Harbour · Better Life



目錄

Contents



2	署長序言 Director's Statement	84	與工作夥伴攜手合作 Joining Hands with Working Partners
6	關於本報告 About the Report	90	關愛員工 Care for Our Staff
12	年度大事 重點輕描 Highlights of the Year	100	完成目標 Meeting the Targets
16	管治方針 Governance Approach	108	核實聲明 Verification Statement
28	渠務署主要職責 Our Core Responsibilities	110	附錄一 — 主要統計數據 Appendix 1 — Key Statistics and Data
48	環境管理 Environmental Management	123	附錄二 — 全球報告倡議組織內容索引 Appendix 2 — GRI Content Index
66	持份者參與活動 Stakeholder Engagement Activities	129	回應表格 Feedback Form

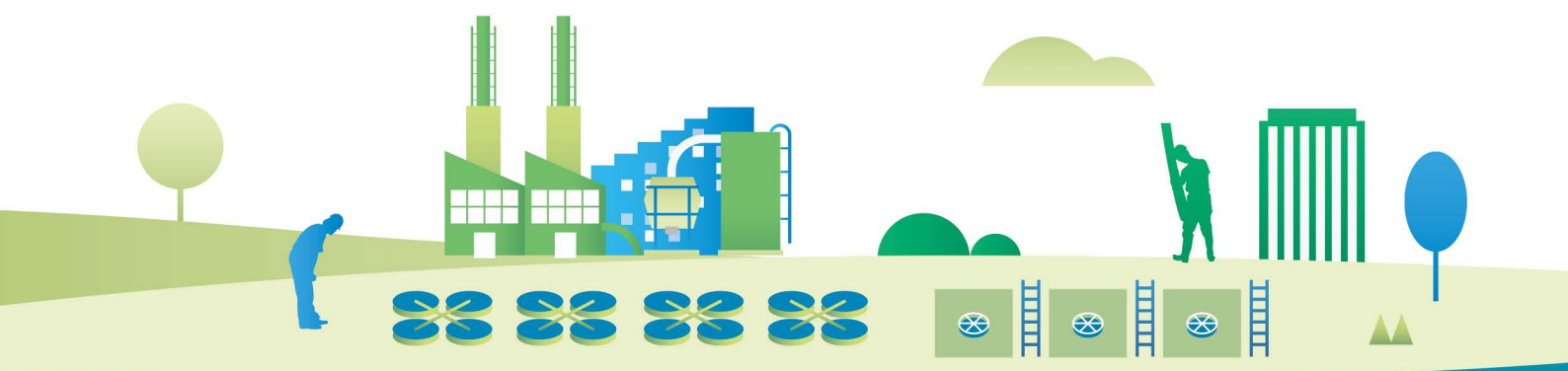


署長序言



Director's Statement





2015-16年度，又是渠務署碩果豐收的一年。各項污水和防洪工程均進展順利，而「淨化海港計劃第二期甲」設施更於2015年12月全面啟用，著實令人振奮！

「淨化海港 建構好生活」

我們將今年度可持續發展報告的標題定為「淨化海港 · 建構好生活」，正正是要道出部門上下一心保護海港的使命和決心。

「淨化海港計劃」是香港歷來最龐大的環保基建項目，兩期工程歷經二十年建造，總費用高達258億元。工程利用超卓技術突破限制，在深達海平面以下160米建造合共超過44公里長的深層污水隧道，並在昂船洲污水處理廠原址提升廠房的污水處理量至每年九億立方米，足以為超過五百萬人處理污水。

「淨化海港計劃」因此於2013年獲香港工程師學會譽為「21世紀香港十大傑出工程項目」之一，而近年亦屢獲國際專業機構頒發工程獎項¹。

早於1994年，我已有幸開始參與「淨化海港計劃第一期」的工作。當年，工程團隊在地面須突破原址擴建昂船洲污水處理廠的困難，同時要在極端複雜多變的地底開挖深層隧道。過程雖然極其艱巨，但我們憑藉群策群力、迎難而上的精神，第一期工程最終於2001年完竣。轉眼十多年，「淨化海港計劃第二期甲」順利走過規劃、設計、施工、試行運作等里程碑，我亦回到渠務署並親身見證工程設施全面投入運作。我想特別指出，兩期工程橫跨10個區議會的範圍，包括西貢、觀塘、九龍城、油尖旺、葵青、東區、灣仔、中西區、南區及深水埗；我們由始至終用心聆聽市民意見、盡力回應關注，有賴所有持份者對「淨化海港計劃」的支持和包容，令工程順利完成。

現時維港兩岸的污水已全部經深層污水隧道收集至昂船洲污水處理廠進行處理、消毒，然後離岸排放至維港以西海域。經過政府多年努力，海港水質日益改善，停辦超過30年的維港渡海泳亦已於2011年復辦，而以往因水質欠佳而關閉的泳灘亦已先後重開。污水自此不再流入維港，其水質得到進一步改善，將有助成就2015年施政報告中提出推廣親水文化及近水活動的願景，為香港市民「建構好生活」！

The year 2015-16 was another fruitful year for the Drainage Services Department (DSD). All sewerage and flood prevention works have achieved good progress, and it is indeed encouraging that the facilities under Harbour Area Treatment Scheme (HATS) Stage 2A were fully commissioned in December 2015.

“Cleaner Harbour • Better Life”

This year, we give the Sustainability Report a title of “Cleaner Harbour • Better Life” in order to illustrate our colleagues’ concerted mission and determination to protect the Harbour.

HATS, implemented in two stages, is the largest-ever environmental infrastructure project in Hong Kong, spanning two decades at a total cost of \$25.8 billion. Adopting superb engineering techniques to overcome constraints, the project constructed more than 44 kilometres of deep tunnels at a depth as low as 160 metres below sea level and uplifted the annual sewage treatment capacity of Stonecutters Island Sewage Treatment Works (SCISTW) to 900 million cubic metres within the same footprint, enabling it to serve over 5 million citizens. As such, HATS was bestowed one of the “Hong Kong People Engineering Wonders in the 21st Century” by the Hong Kong Institution of Engineers in 2013 and has received multiple awards from international professional institutions in recent years¹.

As early as in 1994, I was fortunate enough to have begun participating in the works of HATS Stage 1. At that time, the project team had to resolve the constraints and difficulties of expanding SCISTW in-situ and constructing the deep tunnels amidst extremely complex and ever-changing underground environment. Although the task was exceedingly difficult, we grasped the nettle and with great teamwork, HATS Stage 1 was eventually completed in 2001. Now, after over a decade, HATS Stage 2A has smoothly sailed through the many milestones of planning, design, construction, testing and commissioning, etc., and I have also returned to DSD and been able to witness in person the full commissioning of its facilities. I wish to particularly point out that the two stages of the project spanned 10 District Council areas, including Sai Kung, Kwun Tong, Kowloon City, Yau Tsim Mong, Kwai Tsing, Eastern District, Wan Chai, Central and Western District, Southern District and Sham Shui Po. All along, we have listened intently to the views of the public and did our best to address their concerns. Thanks to the support and tolerance of all stakeholders, HATS was successfully completed.

All sewage from both sides of the Victoria Harbour is now collected through the deep tunnels and conveyed to the SCISTW for treatment and disinfection before discharging into the waters west of the Harbour. With the Government's years of effort, the water quality of the Harbour has improved continuously and the Cross Harbour Race was resumed in 2011 after a suspension of over 30 years. Some closed beaches, the water quality of which was poor in the past, were also re-opened successively. Since sewage is no longer discharged into the Harbour, the water quality has been further improved and becomes beneficial for achieving the vision of promoting water-friendly culture and activities, as initiated in the 2015 Policy Address, to create a “Better Life” for the citizens of Hong Kong.

1 2016年全球水獎之「年度污水處理專案卓越大獎」及2016年英國建造業大獎之「年度國際工程項目高度讚揚獎」

“Distinction Award” in the category of “Wastewater Project of the Year” at Global Water Awards 2016 and “Highly Commended Award” in the category of “International Project of the Year” at British Construction Industry Awards 2016.

防洪有道 活化水體

我們也在防洪和活化水體方面有長足的進展。年內，我們剔除了上水丙崗及大埔南華莆兩個水浸黑點，全港水浸黑點減至8個。我們會再接再厲，繼續推展雨水排放系統改善工程，當中包括治理深圳河第四期工程、啟德河改善工程及跑馬地地下蓄洪計劃；我們同時正檢討各區的雨水排放整體計劃，以應對全球氣候變化帶來的影響，而東、西九龍的檢討研究亦已於本年度完成。

我在此特別一提，渠務署在提升河道排洪能力之餘，亦在設計中加入適當的生態保育元素，為市民營造更美好的生活環境。舉例而言，啟德河改善工程正呈現了「藍綠建設」的理念，項目完成後將既展現「藍」色水體，亦同時以「綠」化景觀令河道融入社區環境之中。就此，我們於去年發布《河道設計的環境和生態考慮指引》，與業界分享活化水體的經驗。

精益求精 邁步向前

渠務署致力推動環保，並把環保理念套用到設施營運之中。我們繼續在多個污水處理設施中應用國際能源管理系統，而年內完成碳審計的污水處理廠亦增至8間。我們同時透過提升廠房設施、建造綠化天台、利用生物氣發電、採用節能設備，以及安裝太陽能板等，進一步節能減排。2015年年底，渠務署九龍城一、二號污水泵房榮獲「綠建環評新建建築」的最高評級——鉑金級，是首個獲此殊榮的政府基礎設施！

要成功落實以上各項工作，必須依賴我們的最強後盾——渠務署每一位員工。員工是部門最重要的資產，所以我們一直積極為員工提供培訓，以提升其知識技能及專業服務水平；我們亦十分關注員工及合作夥伴的職業安全健康，不時舉辦工地考察活動和經驗分享會，以利營造一個安全的工作環境。

轉眼間，渠務署服務香港市民，已悄然進入第28個年頭。未來，我們在工程項目、設施營運及應對氣候變化各方面，將繼續克盡己任、積極面對各項挑戰。我深信，部門上下一心，憑藉以「以客為本、優質服務、勇於承擔、群策群力」的信念，必能克服所有困難，為市民提供更優質的服務。

渠務署署長
唐嘉鴻
2016年11月

Effective Flood Protection and Revitalisation of Water Bodies

We have also taken a big stride in our initiatives of flood protection and revitalisation of water bodies. During the year, we eliminated two flooding blackspots at Ping Kong, Sheung Shui and Nam Wa Po, Tai Po, reducing the number of flooding blackspots in the territory to eight. We will continue the implementation of drainage improvement works, including Regulation of Shenzhen River Stage 4, Kai Tak River Improvement Works and Happy Valley Underground Stormwater Storage Scheme. Meanwhile, we are conducting review studies of the Drainage Master Plans of each district to address the impacts of global climate change. The review studies for Kowloon East and West were completed this year.

Apart from enhancing the capacity of drainage channels, I wish to specifically mention that DSD would also include appropriate ecological features in the designs to cultivate a better living environment for the public. For instance, Kai Tak River Improvement Works have squarely demonstrated the concept of “Blue-Green Infrastructure”. On completion of the project, Kai Tak River will exemplify “Blue” water bodies while “Green” landscape features will integrate the river with the community and its environs. In this connection, we promulgated the “Guidelines on Environmental and Ecological Considerations for River Channel Design” last year to share our experience of revitalizing water bodies with the industry.

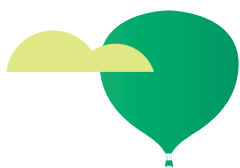
Striving for Excellence and Achieving Greater Success

DSD is committed to promoting environmental protection and incorporating such concepts into facility operation. We will continue to apply international energy management systems at various sewage treatment facilities, and the number of sewage treatment works with carbon audit has increased to eight in the year. At the same time, through enhancing plant facilities, building green roofs, utilizing biogas for generating electricity, adopting energy-saving equipment and installing solar panels, we have further saved energy and reduced carbon emissions. In late 2015, our Kowloon City No. 1 and No. 2 Sewage Pumping Stations were bestowed the highest Platinum rating under the BEAM Plus Assessment for New Buildings, a first-time award for government infrastructure facilities.

The successful implementation of all the above work of DSD hinges on our mainstay – each and every DSD staff member, our most precious asset. Therefore, we have continued to proactively provide them with training to enhance their knowledge, skills and standard of professional services. We are also mindful of the occupational safety and health of our staff and working partners, and have organized site visits and experience-sharing sessions from time to time to facilitate cultivation of a safe working environment.

Time flies and DSD has quietly embarked on its 28th year of service for the Hong Kong citizens. Looking ahead, we will continue to do our best to take up the challenges arising from works projects, facility operation and climate change. I trust, with strong cohesion and by upholding our values of “Customer Satisfaction, Quality, Commitment and Teamwork”, we are able to surmount all the difficulties and provide the public with higher quality services.

Edwin TONG Ka-hung
Director of Drainage Services
November 2016



關於本報告

About this Report



渠務署透過這份可持續發展報告，總結過去一年的工作成果，並向持份者展示我們對可持續發展的願景及承諾。

Through this Sustainability Report, we conclude the achievements of DSD during the year under review, and show to our stakeholders our vision and commitment to sustainable development.







報告簡介 Report Profile

香港特別行政區政府渠務署^[1]發表題為「淨化海港 建構好生活」的第4份可持續發展報告（本報告），闡述2015-16財政年度期間（即2015年4月1日至2016年3月31日），我們在經濟、環境及社會三方面的表現。本報告是我們向持份者匯報可持續發展表現的重要溝通工具。

本報告參照全球報告倡議組織（GRI）G4指引的「核心選項」編撰。為確保本報告的準確性、可靠性和公信力，以及報告內容符合有關指引的規定，我們聘用獨立核證機構，核實報告內容。此報告亦通過了GRI G4的「實質性議題審核」，確認報告按要求匯報及標示「一般標準披露」G4-17至G4-27的內容，以便讀者閱覽。

本報告以網上、PDF及純文字版本發布，並備有3款文字（英文、繁體中文、簡體中文）。本報告摘要亦備有印刷本，以供讀者閱覽。

我們非常重視你對報告內容、報告方式，以及本署在可持續發展表現的意見。你的寶貴意見和建議，有助改善我們的工作及表現。請填妥本報告末端的回應表格，並將之交回本署。

The Drainage Services Department (DSD) of the Hong Kong Special Administrative Region Government (HKSARG)^[1] publishes its fourth Sustainability Report, titled “Cleaner Harbour • Better Life” (“the Report”), in which we describe our economic, environmental and social performance during the fiscal year 2015-16 (i.e. 1 April 2015 to 31 March 2016). The Report is an important means of communication for we reporting our sustainability performance to our stakeholders.

The Report was compiled in accordance with the “Core Option” of the Global Reporting Initiative (GRI) G4 Guidelines. In order to ensure the accuracy, reliability and credibility of the Report, and that its contents comply with the requirements in the relevant Guidelines, we engaged an independent accreditation agency to verify the contents of the Report. Furthermore, the Report has passed the GRI G4 “Materiality Disclosures Service”, which ensured that “General Standard Disclosures” G4-17 to G4-27 were disclosed and labelled in the Report in line with the requirements and can be found by readers.

The Report is available online in web-based HTML, PDF and text-only versions with three types of characters (English, Traditional Chinese, Simplified Chinese). The Executive Summary of the Report is also available in print for all readers.

Your views on the report content, report approach and our sustainability performance are very important to us. We very much appreciate your suggestions and comments to help us continue improving our work and performance. Please complete the feedback form appended to the Report and return it to us.



報告範圍及邊界 Reporting Scope and Boundary

GRI G4指引強調議題的「實質性」，鼓勵機構匯報對自身及其持份者影響較大的議題。為釐定這些議題，自2013-14年度起，我們每年均舉辦持份者參與計劃，分階段邀請不同組別的持份者，共同探討對渠務署工作的關注事項^[2]。今年，我們透過焦點小組會議及問卷調查，加強顧問及公眾兩個組別的參與程度，收集並分析他們的意見^[3]。

GRI G4 Guidelines emphasise the “materiality” of each aspect under review, and encourage organisations to report on aspects which have greater impact on themselves and their stakeholders. In order to identify these aspects, we have been holding stakeholder engagement exercises every year since 2013-14. We have invited various groups of stakeholders in stages to explore their concerns about our work^[2]. This year, we strengthened the participation of two groups, “consultants” and “the general public”, and collected and analyzed their views through focus group meetings and surveys^[3].

「實質性」議題評估過程 Material Aspects Assessment Process



邀請顧問及
公眾參與發表意見
Inviting consultants and
the general public to raise
their concerns



透過焦點小組會議和問卷
調查收集持份者意見^[4]
Collecting stakeholders'
views through focus group
meetings and surveys^[4]



得出實質性議題
Identifying material
aspects



確認實質性議題及邊界
Validating material
aspects and boundaries

[1] G4-17 [2] G4-25 [3] G4-24 [4] G4-26

過程中，我們邀請持份者按其對渠務署可持續發展議題的關注程度評分，從而擬訂議題清單。總結所得的實質性議題，會提交本署高級管理層及可持續發展報告工作小組，供最終審定^[5]。

下表載列出本報告涵蓋的實質性議題範圍及邊界：^[6]

During this process, we invited stakeholders to rate DSD's sustainability issues according to their level of concern, thereby arriving at a list of topics. Having collated all views, the material aspects derived were submitted to DSD's senior management and the sustainability reporting team for final review and validation^[5].

The material aspects and boundaries covered in the Report are tabulated below^[6]:

類別 Category	主要範圍 [7] Material Aspects [7]	邊界 [8] Boundaries [8]	
		本署的運作 Operations of DSD	本署主要顧問及承建商的運作 Operations of Our Major Consultants and Contractors
環境 Environment	● 生態保育 Ecological Conservation	✓	✓
	● 能源管理 Energy Management	✓	✓
	● 污水及廢物處理 Effluents and Waste Treatment	✓	✓
	● 氣味控制 Odour Management	✓	
	● 物料使用 Use of Materials	✓	✓
	● 水資源管理 Water Resources Management	✓	
	● 運輸 Transport	✓	
經濟 Economic	● 財務表現 Financial Performance	✓	
	● 間接經濟影響 Indirect Economic Impacts	✓	
	● 部門採購政策 Procurement Practices	✓	
社會 Social	● 客戶滿意度調查結果 Results of Surveys Measuring Customer Satisfaction	✓	
	● 職業安全與健康 Occupational Safety and Health		✓
	● 內部溝通渠道 Internal Communication Channel	✓ ^[9]	

本報告涵蓋的實質性範圍，包括渠務署辦事處和設施，以及主要工程顧問和承建商的日常運作^[8]。本署竭力提供準確數據和資訊，惟當中部分數據和信息有賴相關機構提供，非由我們直接控制。

The Report covers material Aspects arising from operations of DSD's offices and facilities, as well as our major consultants and contractors^[8]. DSD has made every effort to ensure the accuracy of all data and information provided herein, however parts of them had to be obtained from relevant parties that are beyond our direct remit.

[5] G4-18 [6] G4-27 [7] G4-19 [8] G4-20, G4-21 [9] G4-23 本報告新涵蓋範圍 Newly covered in this Report



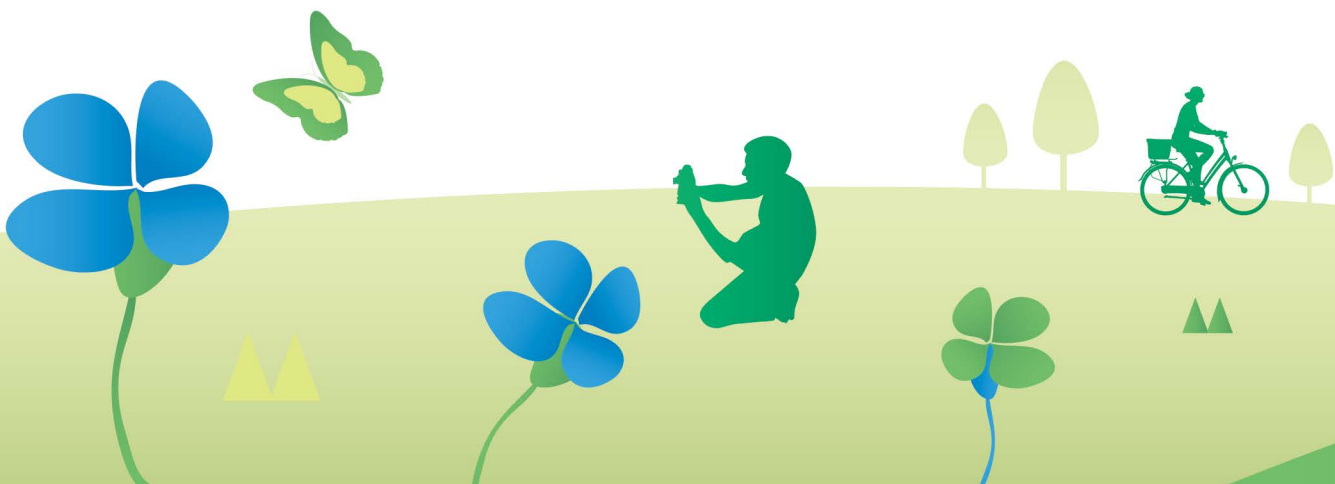
年度大事 重點輕描

Highlights of the Year



渠務署淨化海港計劃昂然踏入新里程，加上多項工程項目榮獲國際獎項，使2015-16年度成為難忘的一年。渠務署同事團結一致、群策群力，使我們能克服挑戰，為香港的可持續發展作出貢獻。我們很榮幸能在本章節，與大家分享渠務署的年度大事。

2015-16 has been an unforgettable year, as we celebrate a sparkling milestone for the Harbour Area Treatment Scheme (HATS) along with multiple construction projects which have garnered international accolades. DSD staff has always been a tight-knit team that strategises and strives together, and that has enabled us to overcome every challenge as we do our part in Hong Kong's sustainable development. In this chapter, we are honoured to share the following highlights at DSD during the past year.





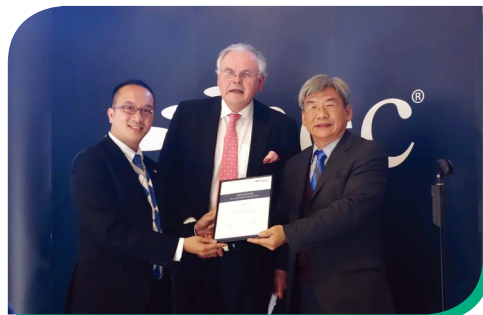
2015

4月
APR

2015年4月20日
20 April 2015

跑馬地地下蓄洪計劃獲英國「新工程合約」用戶組織頒發「大型工程項目高度讚揚獎」

Happy Valley Underground Stormwater Storage Scheme received the "Highly Commended New Engineering Contract (NEC) Large Project of the Year" award from the UK's NEC Users' Group



7月
JUL

2015年7月2日
2 July 2015

「共建啟德河」徵文比賽2015圓滿結束
共收到85份參賽作品

"Building our Kai Tak River" Writing Competition 2015 concluded successfully, with a total of 85 entries



2015年7月16日
16 July 2015

榮獲「管綫安全比賽2014-15」中「實務比賽」總亞軍及「建築資訊模型（基建）比賽」「處理設施組別」亞軍

First runner-up (overall) in the "Practical Competition" and first runner-up in the "Building Information Modelling (Infrastructure) Competition - Process Plant Category" in the "Utility Safety Competitions 2014/15"

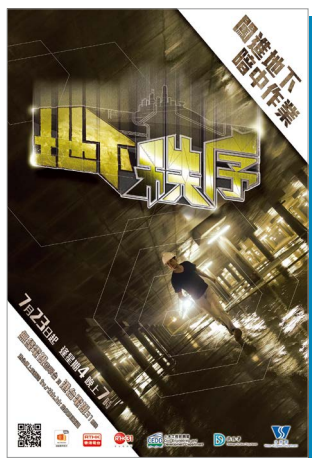


2015年7月20日
20 July 2015

渠務署可持續發展報告2013-14於APEX 2015 Awards，以及美國傳媒專業聯盟（LACP）主辦的2013/14 Inspire Awards 和 2013/14 Vision Awards 中囊括5項殊榮

Five accolades for DSD's Sustainability Report 2013-14 at APEX 2015 Awards, and 2013/14 Inspire Awards and 2013/14 Vision Awards by League of American Communications Professionals LLC (LACP)





2015年7月23日
23 July 2015

渠務署與香港電台合製資訊節目「地下秩序」首兩集－「下水之道」及「深道排污」分別於2015年7月23日及30日播放

"Submarine rules" and "Abyss sewers": two-episode premiere for TV series Beneath, co-produced by DSD & RTHK, were broadcast on 23 and 30 July respectively

9月
SEP

2015年9月4日
4 September 2015

於2015年「公務員優質服務獎勵計劃」中榮獲「隊伍獎（專門服務）－銀獎」及「隊伍獎（一般公共服務）－特別嘉許（誠信管理）」

DSD won Silver Prize under "Team Award (Specialised Service) category" and Special Citation (Integrity Management) under "Team Award (General Public Service) category" in Civil Service Outstanding Service Award Scheme 2015



2015年9月24日
24 September 2015

展開「淨化海港計劃」第二期甲的截污轉流措施（詳見第5章 渠務署主要職責）

HATS Stage 2A commenced flow turning process (see Chapter 5, Our Core Responsibilities for details)



2015

11月
NOV



2015年11月3日
3 November 2015

本署兩位工程師榮獲「2015年申訴專員嘉許獎」（公職人員獎）

Two DSD engineers won Awards for Officers of Public Organisations in The Ombudsman's Awards 2015



2015年11月7日
7 November 2015

《渠務署可持續發展報告2013-14》於香港管理專業協會舉辦的2015年最佳年報比賽中榮獲可持續發展報告獎（非牟利及慈善機構）

DSD's Sustainability Report 2013-14 won "Sustainability Reporting Award: Non-profit Making and Charitable Organizations Category" at the 2015 HKMA Best Annual Reports Awards



2015年11月11日及18日
11 & 18 November 2015

舉辦「2015研究及發展論壇」（詳見第7章持份者參與活動）

Organizing "Research & Development Forum 2015" (see Chapter 7, Stakeholder Engagement Activities for details)

12月
DEC

2015年12月3日
3 December 2015

「搬遷沙田污水處理廠往岩洞」計劃榮獲英國工程雜誌「持續善用地下空間組別」獎

Relocation of Sha Tin Sewage Treatment Works to caverns received "Sustainable Use of Underground Space Category" award from British engineering magazine



2015年12月19日
19 December 2015

淨化海港計劃第二期甲設施全面啟用（詳見第5章渠務署主要職責）

HATS Stage 2A commenced full operation (see Chapter 5, Our Core Responsibilities for details)



2016

2015年12月21日
21 December 2015

搬遷沙田污水處理廠往岩洞計劃第3階段公眾參與活動展開

Stage 3 Public Engagement for Relocation of Sha Tin Sewage Treatment Works to caverns launched



1月
JAN



2016年1月15日
15 January 2016

小濠灣污水處理廠行政樓榮獲「卓越級」室內空氣質素檢定證書

Administration Building of Siu Ho Wan Sewage Treatment Works received "Excellent Class" Indoor Air Quality Certificate

3月
MAR

2016年3月11-20日
11-20 March 2016

以「活水舞台」為題參與「2016年香港花卉展覽」，獲得最佳設計（園林景點）大獎

DSD exhibited "Stream Theatre" at Hong Kong Flower Show 2016, winning the Grand Award for Design Excellence (Landscape Display)



2016年3月22日
22 March 2016

舉行年度簡報會向傳媒簡介防洪及污水處理的最新動向

DSD held Annual Media Briefing to update the media on our flood prevention and sewage treatment efforts





管治方針

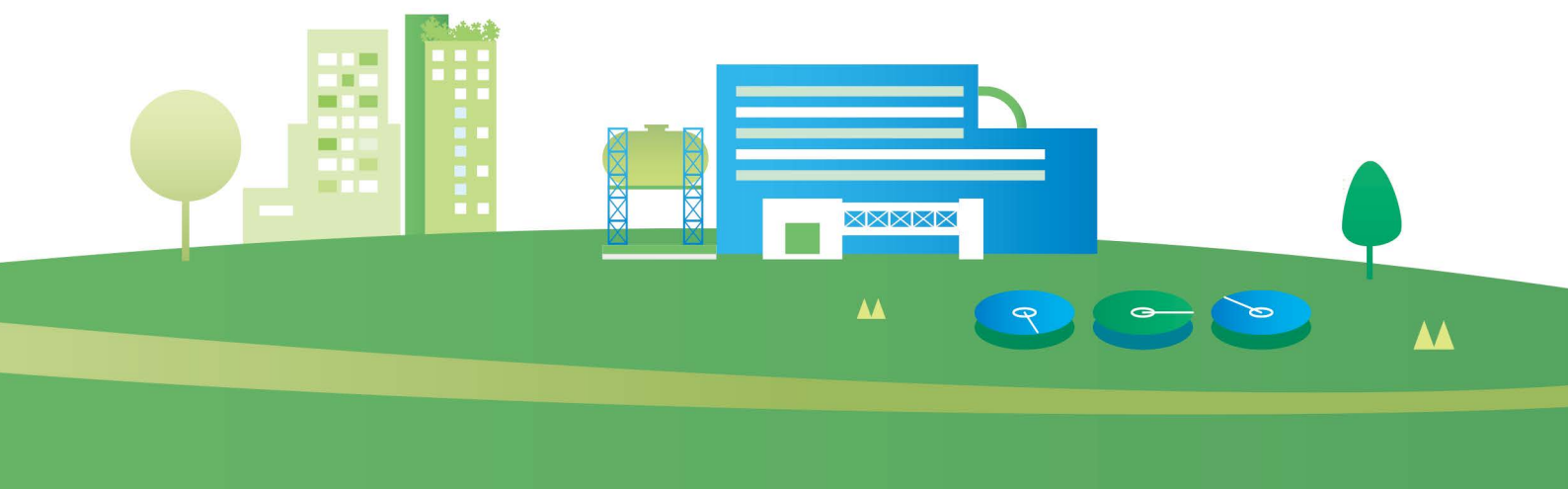
Governance Approach



渠務署自1989年成立至今，一直以公眾利益為依歸，推行項目和提供優質服務，而優秀的機構管治是當中不可或缺的一環。我們恪守嚴謹的管治守則，並設有多個事務委員會及管理系統，一方面維持高水平的機構管治，另一方面力求創新、精益求精。

Since its establishment in 1989, DSD has always executed projects and provided quality services with due consideration of the public interest. We believe excellent corporate governance is an indispensable element among all. We abide by stringent governance principles and establish various committees and management systems, on one hand maintaining a high standard in corporate governance, while on the other hand striving for innovation and perfection.







抱負、使命和信念 Vision, Mission and Values

為適時回應社會需要，渠務署一直與時並進，致力優化我們的管治方針和服務。鑑日益關注香港社會對可持續發展，我們於2007年更新部門的「抱負、使命和信念」，充分反映我們對可持續發展的願景和承擔。

In order to provide timely response to address the needs of our society, DSD always moves with the times by improving our governance approach and services continuously. In view of growing concern for sustainable development within the Hong Kong community, we renewed our departmental "Vision, Mission and Values" in 2007 to fully reflect our aspirations and commitments regarding sustainable development.



- 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

- 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

- 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

本署的高級管理層由署長、副署長和4位助理署長組成，負責制定重大決策和監督部門日常運作，並制定和檢討本署的可持續發展策略及目標。

The Department's senior management comprises the Director of Drainage Services, one Deputy Director and four Assistant Directors, responsible for making important policy decisions and overseeing the Department's daily operations. It also develops and reviews DSD's strategies and targets with regard to sustainable development.



渠務署的高級管理層 DSD's Senior Management

- | | |
|--|---|
| <p>① 渠務署署長
Director of Drainage Services
唐嘉鴻先生 Mr. Edwin TONG Ka-hung</p> | <p>⑤ 助理署長/機電工程
Assistant Director/Electrical & Mechanical
王錫章先生 Mr. WONG Sek-cheung</p> |
| <p>② 渠務署副署長
Deputy Director of Drainage Services
麥嘉為先生 Mr. MAK Ka-wai</p> | <p>⑥ 助理署長/污水處理服務
Assistant Director/Sewage Services
周國銘先生 Mr. Henry CHAU Kwok-ming</p> |
| <p>③ 助理署長/操作維修
Assistant Director/Operations & Maintenance
簡炎輝先生 Mr. Fedrick KAN Yim-fai</p> | <p>⑦ 主任秘書
Departmental Secretary
黃球年先生 Mr. Tony WONG Kau-nin</p> |
| <p>④ 助理署長/設計拓展
Assistant Director/Projects and Development
方學誠先生 Mr. Michael FONG Hok-shing</p> | |

渠務署的組織架構圖 DSD's Organisation Chart



本署設有4個分科，編制有1,914個常額職位。各分科由一位助理署長領導，負責提供所屬範疇的技術及專業支援服務。各分科的職責如下：

DSD consists of four branches with a staff establishment of 1,914. Each branch is led by an Assistant Director and is responsible for providing technical and professional support services in the respective field. The duties of the each branch are as follows:



設計拓展科

Projects and Development Branch

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。

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



操作維修科

Operations and Maintenance Branch

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。

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

Electrical and Mechanical Branch

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。

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

Sewage Services Branch

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。

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



可持續發展管理架構

Sustainability Management Structure

為更有效統籌本署的可持續發展工作，我們就多個特別議題設有委員會及工作小組，專責討論相關事宜、提出適切建議及監督相關工作。

To coordinate our work in sustainable development more effectively, we have set up committees and steering groups for various specific topics to discuss related affairs, give suitable recommendations and supervise associated works.

環保管理委員會

Green Management Committee

環保管理委員會由副署長領導，負責檢討環境管理政策、擬定環保工作的方針和目標，以及監察環保計劃和措施的成效。

報告期內，委員會共召開兩次會議，深入討論節能、綠化等議題。

Chaired by the Deputy Director, the Committee is responsible for reviewing the environmental management policy, formulating environmental objectives and targets, and monitoring the effectiveness of environmental programmes and initiatives.

During the reporting period, the Committee held two meetings with in-depth discussions on issues including energy conservation and greening.

能源及排放管理小組

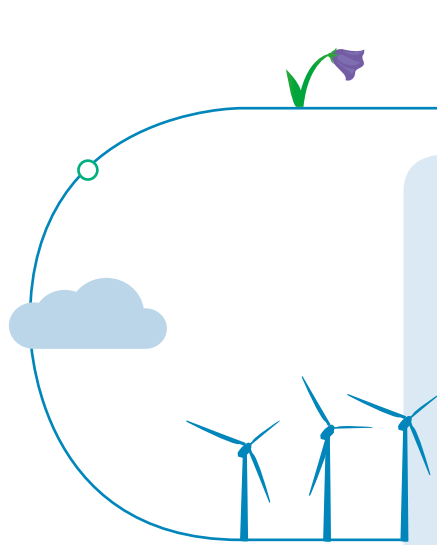
Energy and Emission Management Team

節能及減排是本署重點關注的環保議題。能源及排放管理小組由助理署長/機電工程領導，透過識別排放源頭、訂立基準評估表現、實施改善措施及分享專業知識等方法，改善本署能源及排放方面的表現。

報告期內，小組共召開兩次會議，討論節能源措施及目標、再生能源應用等議題。

Energy conservation and emission reduction are among the key environmental issues for DSD. Chaired by the Assistant Director / Electrical and Mechanical, the Management Team helps improve DSD's energy and emission performance through various means, such as identifying emission sources, benchmarking performance, implementing improvement measures, and sharing professional knowhow.

During the reporting period, the Team held two meetings to discuss various topics, such as energy conservation measures together with targets and applications of renewable energy.



可持續發展報告工作小組 Taskforce on Sustainability Reporting

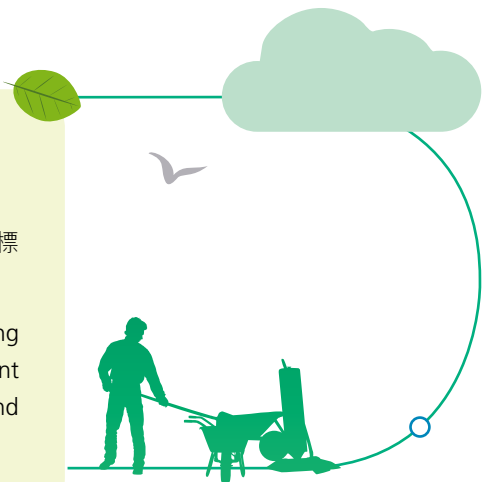
可持續發展報告工作小組由副署長領導，就編制可持續發展報告的事宜給予意見及制定決策，包括決定報告所採用的國際指引、訂定持份者參與活動計劃及確認實質性議題等。

Chaired by the Deputy Director, the Taskforce provides comments and makes decisions related to the preparation of sustainability report. These include determining the choice of international guidelines to be adopted by the report, defining stakeholder engagement plans, and identifying material aspects.

安全督導委員會 Steering Group on Safety

安全督導委員會由副署長領導，監察工地的安全表現，制訂工地的安全標準及指引，擬定改善措施及審視其成效和執行的進度。

Chaired by the Deputy Director, the Group is responsible for reviewing and improving the safety performance at DSD sites, establishing relevant guidelines and improvement measures, and monitoring the execution and effectiveness of these undertakings.



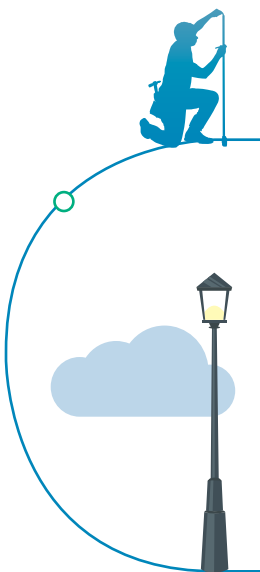
研究及發展督導委員會 Research and Development Steering Committee

研究及發展督導委員會由副署長領導，專責進行研究以支持部門的發展計劃。委員會設有兩個小組，分別統籌土木工程和機電工程的研究工作。

報告期內，委員會共召開6次會議，並統籌渠務署「2015研究及發展論壇」。年內，本署共完成11個研究項目，課題涵蓋綠化、水力學、污水及污泥處理、再生能源、物料科學及工程管理。

Led by the Deputy Director, the Group is responsible for undertaking research in support of DSD's development plans. The Group consists of two teams which coordinate research in civil engineering, and electrical and mechanical engineering respectively.

During the reporting period, the Group held six meetings and coordinated the organisation of the DSD Research and Development Forum 2015. During the year under review, DSD completed 11 research projects on topics ranging from greening, hydraulics, sewage and sludge treatment, renewable energy, material science, and project management.





管理方針

Management Approach

本署積極採用合適的國際標準及管理系統，為管理模式注入新元素，妥善管理風險，並協助達致持續提升可持續發展表現的目標。此外，有鑑於持份者的參與對機構制定及執行可持續發展策略愈見重要，我們於近年積極回應相關國際指引的要求，加強與持份者的互動，聽取並回應他們對本署發展的意見。

綜合管理系統

Integrated Management System

渠務署早於2002年開始建立和落實符合國際標準的管理系統。現時，本署實施由多套系統組成的綜合管理系統，涵蓋範疇包括品質、環境職業健康與安全。我們秉持管理系統的「規劃-實施-檢查-行動」原則，不斷求進。

為提升能源效益及舒緩氣候變化，自2013年起，本署機電工程科實施ISO 50001能源管理標準，以元朗污水處理廠作先導試點，編訂能源管理系統。系統於2014年6月通過認證審核，使本署首次獲得ISO 50001能源管理標準認證。

近年，氣候變化加劇，極端天氣現象更為頻繁，令設計及管理渠務設施更具挑戰。自2013年起，本署分階段實施資產管理系統，加強管理轄下設施。2014年5月，本署轄下多所主要泵房及污水處理廠，通過ISO 55001資產管理標準認證審核，使本署成為首批獲得該認證的政府部門之一。我們的目標是2019年前，分階段在轄下其餘300多所渠務設施推行同類資產管理系統。

DSD actively adopts suitable international standards and management systems, thereby introducing new elements to our management approach and achieving better risk management to steadily improve our sustainability performance. Given the growing importance of engaging stakeholders in planning and executing organisational sustainability strategies, we have actively strengthened our interaction with stakeholders, listening and responding to their feedback on our development, in order to respond to the requirements of relevant international guidelines.

DSD began building and implementing management systems in line with international standards in 2002. At present, we have implemented an integrated management system composed of multiple systems, covering quality, environment, and occupational health and safety aspects. We adhere to the "Plan-Do-Check-Act" approach adopted by the management systems, in order to continuously improve our performance in the respective areas.

The Electrical and Mechanical Branch has adopted the ISO 50001 Energy Management System standard since 2013, with an aim to enhance energy efficiency and alleviate climate change. As a pilot project, an energy management system was implemented at the Yuen Long Sewage Treatment Works. The system passed the certification audit in June 2014, marking the first time DSD received ISO 50001 Energy Management System certification.

Climate change has accelerated in recent years and is bringing out extreme weather phenomenon more frequently, which has made design and management of drainage facilities more challenging. Since 2013, DSD has commenced a staged implementation of an Asset Management System (AMS) to better manage our facilities. A number of major pumping stations and STWs operated by DSD passed the certification audit for ISO 55001 AMS standard in May 2014, making us one of the first government departments to obtain such certification. It is our target to extend similar AMSs to the remaining 300-plus DSD-operated drainage facilities in phases before 2019.

2002

取得ISO 9001品質管理系統認證 Obtained ISO 9001 Quality Management System certification

2007

取得ISO 14001環境管理系統認證 Obtained ISO 14001 Environmental Management System certification

2012

取得OHSAS 18001職業健康及安全管理系統認證

Obtained OHSAS 18001 Occupational Health and Safety Management System certification

2014

元朗污水處理廠取得ISO 50001能源管理標準認證

Obtained ISO 50001 Energy Management System certification for Yuen Long STW

2014

轄下9所設施取得ISO 55001資產管理標準認證



Obtained ISO 55001 AMS standard certification for nine DSD facilities



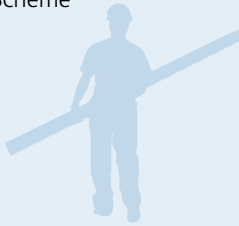

持份者的參與 Stakeholder Engagement

渠務署透過聆聽及回應各持份者的需要，與時並進。為此，我們設立多個渠道，與持份者就工程、日常運作及渠務署發展方針等事宜，保持雙向溝通。相關持份者包括渠務署員工、專業機構、學術團體、環保組織、傳媒、工程顧問及承建商等。詳見第七章持份者參與活動。

By listening and responding to the needs of various stakeholders, DSD is able to move with the times. We established multiple channels to maintain two-way communication with stakeholders on matters such as construction works, daily operations and our development approaches. The stakeholder groups include DSD staff, professional institutions, academia, green groups, the media, and consultants and contractors. For details, please refer to **Chapter 7: Stakeholder Engagement Activities.**

持份者 ¹ Stakeholders ¹	持分者溝通渠道/ 互動方式 ² Stakeholder communication channels/means of interaction ²	關注事項 ³ Issues of concern ³
渠務署員工 DSD Staff	<ul style="list-style-type: none"> 員工激勵計劃 Employee incentive scheme 員工建議計劃 Employee recommendation scheme 署方管理層親善探訪 Goodwill visits by DSD management 部門各協商委員會和討論小組 Consultative committees and discussion groups across DSD 	<ul style="list-style-type: none"> 員工福利 Employee benefits 員工培訓機會 Employee training opportunities
公眾 General public	<ul style="list-style-type: none"> 客戶滿意度調查 Customer satisfaction surveys 參觀渠務署設施及工程工地 Visits to DSD facilities and construction sites 問卷調查 Questionnaire Surveys 	<ul style="list-style-type: none"> 渠務工程對居民的影響 Impact of drainage works on residents 營運效率 Operational efficiency

[1] G4-24 [2] G4-26 [3] G4-27

持份者 ¹ Stakeholders ¹	持分者溝通渠道/ 互動方式 ² Stakeholder communication channels/means of interaction ²	關注事項 ³ Issues of concern ³
工程顧問及承建商 Consultants and contractors	<ul style="list-style-type: none"> 工地考察 Site visits 經驗分享會 Experience sharing sessions 工地整潔獎勵計劃 Construction Sites Housekeeping Award Scheme 	<ul style="list-style-type: none"> 職業安全與健康 Occupational safety and health 工程的建設要求及趨勢 Construction requirements and trends for project 工程的環境效益 Environmental performance of projects
學術團體 Academia	<ul style="list-style-type: none"> 外展活動 Outreach activities 參觀渠務署設施及工程工地 Visits to DSD facilities and construction sites 研究與發展座談會 Research and Development Forum 	<ul style="list-style-type: none"> 工程技術 Engineering technology 渠務設施的環境表現 Environmental performance of drainage facilities
環保組織 Green groups	<ul style="list-style-type: none"> 環保團體會議 Meetings with environmental groups 河道考察 Site visits to river channels 	<ul style="list-style-type: none"> 生態保育 Ecological conservation 能源消耗及碳排放 Energy consumption and carbon emissions 渠務工程中的環保設計元素 Green design elements in drainage engineering works

[1] G4-24 [2] G4-26 [3] G4-27

持份者 ¹ Stakeholders ¹	持份者溝通渠道/ 互動方式 ² Stakeholder communication channels/means of interaction ²	關注事項 ³ Issues of concern ³
專業團體 Professional institutions	<ul style="list-style-type: none"> 渠務署國際會議 DSD International Conference 研究與發展座談會 Research and Development Forum 	<ul style="list-style-type: none"> 工程技術 Engineering technology 資產管理 Asset management
傳媒 Media	<ul style="list-style-type: none"> 傳媒簡報會 Media briefings 	<ul style="list-style-type: none"> 工程進度 Progress of engineering works

除了保持恆常溝通外，我們亦希望可持續發展報告更能適切回應持份者關注的事項，故此自2012-13年度起，我們在編寫報告前，均會另外推行持份者參與計劃以加深了解意見和期望，然後將之納入報告。在本年度的持份者參與計劃，為加強與顧問和公眾的聯繫，我們舉行焦點小組會議及問卷調查，收集他們的意見，詳見第二章關於本報告。

In addition to maintaining ongoing communications, we also hope that our sustainability reports can better address concerns of stakeholders. To this end, starting from 2012-13, we have held an additional stakeholder engagement programme prior to compiling each report. This arrangement helps us better understand our stakeholders' views and expectations, which are in turn reflected in the report. In this year's stakeholder engagement programme, we strengthened our connections with our consultants and the public by collecting their views through focus group meetings and questionnaire surveys. For details, please refer to **Chapter 2: About this Report**.

[1] G4-24 [2] G4-26 [3] G4-27



渠務署 主要職責

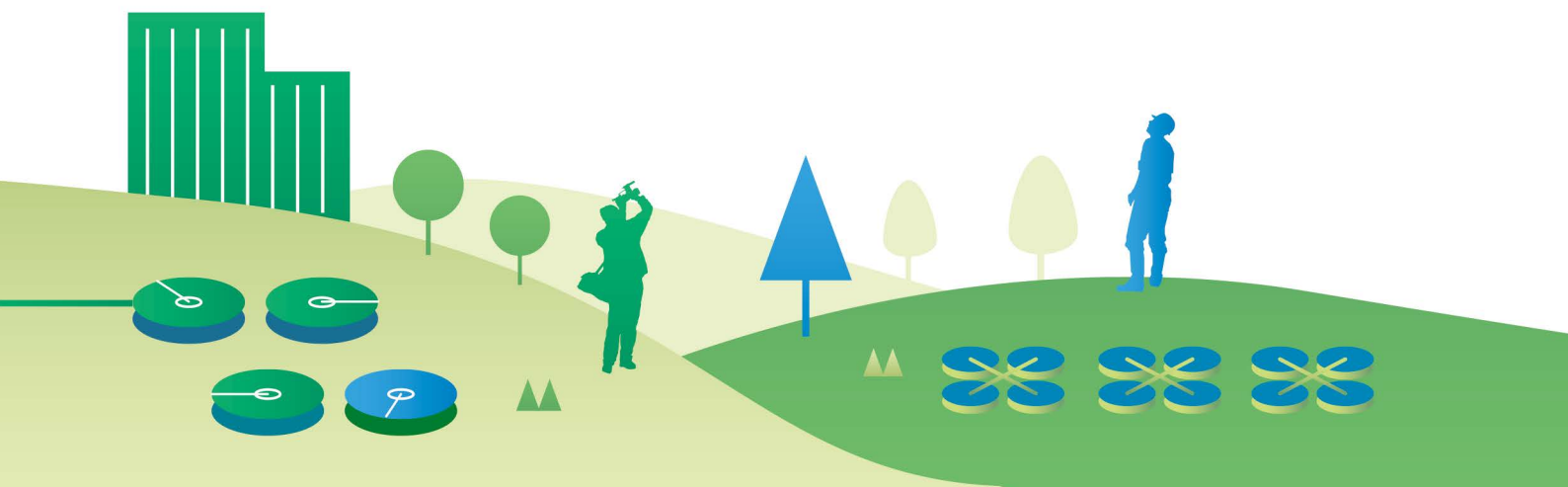


Our Core Responsibilities

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渠務署矢志提供世界級的雨水排放及污水處理服務，促進香港的可持續發展。年內，香港歷來最大型的環保基建項目「淨化海港計劃第二期甲」設施全面啟用，將會全面提升維港的水質，為市民締造更宜人的環境、更美好的生活。

DSD is committed to providing world-class stormwater drainage and wastewater treatment services, enabling the sustainable development of Hong Kong. During the year, the largest environmental infrastructure project in Hong Kong, The Harbour Area Treatment Scheme (HATS) – Stage 2A was commissioned, which would improve the water quality of Victoria Harbour to provide better living environment and quality for the public.







2015-16 污水處理概要

Overview of Sewage Treatment in 2015-16

污水收集、處理及排放是渠務署核心服務之一。透過採用不同的污水處理程序和先進技術，可去除污水中大部分的污染物、有毒物質和細菌。我們一直致力提升污水處理服務的效率及質素，以保護本港海域的水質。

Sewage collection, treatment and discharge is one of the core service of DSD. Through a variety of sewage treatment processes and technological advances, we can remove most of the pollutants, toxins and bacteria from sewage. DSD strives to enhance both the efficiency and quality of our sewage treatment services, in order to safeguard the quality of Hong Kong waters.



渠務署轄下共有**300**所污水處理設施

DSD operates 300 sewage treatment facilities



年內污水總處理量約為**10**億立方米，每日平均處理量約為**280**萬立方米

About 1 billion cubic metres of sewage was treated over the year, i.e. on average 2.8 million cubic metres per day



公共污水收集網絡長度達

1,700公里，服務香港約**93%**人口¹

The public sewerage network runs 1,700 kilometres in length, serving around 93% of Hong Kong's population ¹



年內共處理約

393,000公噸污泥

393,000 tonnes of sludge were processed during the year

2015-16年度污水處理廠位置圖 Location map of STWs in 2015-16



¹ 以用水用戶計算 Based on the number of water accounts

專業的化驗室服務

渠務署轄下設有多個化驗室，提供專業及高質素的化驗服務，確保污水處理過程達到法定要求。沙田中央化驗室和昂船洲化驗室自1999年起，相繼獲得香港認可處頒發「香港實驗所認可計劃」證書。在2015-16年度，沙田中央化驗室增設了一部自動化生化需氧量測試儀器，成為加強化驗室自動化的一項試點，而年內化驗室的認可測試項目達到26項。

我們日常進行的測試種類超過14個種類，而在2015-16年度就完成超過261,000項分析。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。

Professional Laboratory Services

DSD operates multiple laboratories which provide professional and quality laboratory services, ensuring that sewage treatment processes meet the statutory requirements. Since 1999, both Sha Tin Central Laboratory and Stonecutters Island Laboratory have been accredited under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) operated by the Hong Kong Accreditation Services. As a pilot scheme to automate our laboratories, in 2015-16, an automatic Biochemical Oxygen Demand testing device was added at Shatin Central Laboratory. During the year, 26 laboratory tests were accredited.

We run more than 14 types of tests on a day-to-day basis: over 261,000 analyses were carried out in 2015-16. Analysis results for effluent quality at major STWs can be found on our website.



自動化生化需氧量測試儀器
Automatic Biochemical Oxygen Demand Testing Device

管理地下排水及污水收集網絡

Managing Underground Drainage and Sewerage Networks

渠務署現時管理超過4,500公里的地下雨水渠及污水渠，當中不少出現老化及損耗的情況。我們設有定期檢查計劃，以監察管道的情况，並按需要進行復修工程。在2015-16年度，我們復修了總長約22公里的雨水渠及污水渠，工程費用約為7,400萬元。

由於預計未來需要復修的管道將日益增加，我們會推行長遠及全港性的更換及復修策略，務求更完善地管理地下渠務管道。與此同時，我們亦會研究及採用各種先進更換及復修技術，務求有效保養管道網絡，並提高工程的成本效益。

DSD currently manages a total of over 4,500 kilometres of underground drains and sewers. Many of them show signs of wear and tear and we schedule regular inspection plans to monitor the conditions of these underground pipes and conduct rehabilitation works as and when necessary. In 2015-16, we rehabilitated about 22 kilometres of drains and sewers at a cost of about \$74 million.

In anticipation of growing needs for rehabilitation, we will take forward a long-term and territory-wide replacement and rehabilitation (R&R) strategy in order to better manage our underground pipes. At the same time, we also research and apply various cutting-edge R&R techniques to efficiently maintain our underground facilities so as to improve the cost-effectiveness of our works.

「淨化海港計劃第二期甲」設施全面啟用

Full Commissioning of Harbour Area Treatment Scheme Stage 2A

「淨化海港計劃」是香港歷來最龐大的環保基建項目。計劃透過收集和處理維港兩岸的污水，改善維港水質。計劃分兩期進行，建造工程歷時20載，總費用高達258億元。

「淨化海港計劃第二期甲」設施於2015年12月19日全面啟用，標誌著維港的水質將會全面提升，同時見證「淨化海港計劃」踏入新里程。自此，維多利亞港兩岸的污水將全部輸送到昂船洲污水處理廠進行處理和消毒，再排放到維港以西海域。

工程利用超卓技術打破限制，在深達海平面以下160米建造合共超過44公里長的深層污水隧道，並提升昂船洲污水處理廠的污水處理量至每年9億立方米，足以為超過500萬名香港市民提供污水處理服務。

The Harbour Area Treatment Scheme (HATS) is the largest environmental infrastructure project in Hong Kong, with an aim to improve the water quality of Victoria Harbour by collecting and treating sewage generated from both shores. The project has been implemented in two stages, with construction works spanning over two decades at a total cost of \$25.8 billion.

With facilities for HATS Stage 2A came into full operation on 19 December 2015, all sewage from both sides of Victoria Harbour are now conveyed to a sewage treatment plant for treatment, disinfection and discharge into the western approaches of the harbour. This milestone for HATS marks the overall enhancement of water quality across the harbour.

Physical constraints were overcome by cutting-edge engineering techniques adopted in this project, enabling the construction of deep sewage tunnels totalling over 44 kilometres in length at depths up to 160 metres below sea level. HATS also involved upgrading the sewage treatment capacity of Stonecutters Island Sewage Treatment Works (SCISTW) to 900 million cubic metres per year, enabling it to serve more than five million citizens.



昂船洲污水處理廠
Stonecutters Island Sewage Treatment Works



第一期工程 Stage 1

- 於1994年展開，2001年12月投入運作
- 處理75%源自維港兩岸的污水

工程包括：

- 興建昂船洲污水處理廠
- 建造長約23公里的深層污水隧道，把九龍和港島東北部產生的污水輸送到昂船洲污水處理廠進行化學強化一級處理
- 改善位於青衣、葵涌、土瓜灣、觀塘、將軍澳、筲箕灣及柴灣合共7間現有基本污水處理廠

- commenced in 1994 and commissioned in December 2001
- treats 75% of sewage from both sides of the harbour

Major works comprise:

- construction of SCISTW;
- construction of 23.6 kilometres of deep tunnels conveying sewage collected from Kowloon and north-eastern Hong Kong Island to SCISTW for chemically enhanced primary treatment (CEPT); and
- upgrading seven Preliminary Treatment Works (PTWs) at Tsing Yi, Kwai Chung, To Kwa Wan, Kwun Tong, Tseung Kwan O, Shau Kei Wan, and Chai Wan

第二期甲工程 Stage 2A

- 於2009年展開，2015年11月全面啟用
- 處理餘下25%源自港島北部和西南部的污水

工程包括：

- 建造長約21公里的深層污水隧道，把港島北部和西南部產生的污水輸送到昂船洲污水處理廠進行化學強化一級處理
- 改善位於港島北部及西南部合共8間現有基本污水處理廠
- 擴大昂船洲污水處理廠的處理量，並加建消毒設施

- commenced in 2009 and commissioned in December 2015
- treats the remaining 25% of sewage from northern and south-western parts of Hong Kong Island

Major works comprise:

- construction of 21kilometres of deep tunnels conveying sewage collected from northern and south-western Hong Kong Island to SCISTW for CEPT;
- upgrading eight PTW in northern and south-western parts of Hong Kong Island; and
- upgrading the treatment capacity of SCISTW and construction of disinfection facilities



「淨化海港計劃」概覽
HATS Overview

淨化海港計劃之亮點

Highlights of HATS



香港歷來最龐大的環保基建項目

Hong Kong's largest ever environmental infrastructure project



全球最深污水隧道

World's deepest sewage tunnel



亞洲最長的極深層污水隧道

Asia's longest very deep sewage tunnel



世界最大的化學強化一級污水處理廠

World's largest CEPT plant

淨化海港計劃里程碑

為了改善維多利亞港水質，淨化海港計劃(前稱「策略性污水排放計劃」)於八十年代後期開始分階段展開，用以收集及處理維港兩岸區域的污水。這項世界級環保基建項目第一期及第二期甲現已啟用。

HATS Milestone

To improve the water quality of Victoria Harbour, the Harbour Area Treatment Scheme (HATS), formerly known as Strategic Sewage Disposal Scheme, was launched in late 1980's to be implemented in stages to provide treatment for the sewage collected from the urban areas on both sides of the Harbour. Stage 1 and Stage 2A of this world-class environmental Infrastructure project are now in operation.





最地盡其用的化學強化一級污水處理廠
Most efficient use of land for providing CEPT



香港橫跨最多區域的環保基建項目
Environmental infrastructure project spanning the most districts in Hong Kong



全球化學強化一級污水處理廠中最強的泵水系統
World's most powerful sewage pumping system in a CEPT plant

2001



第一期
全面啟用
Full
Commissioning
of Stage 1

1994



第一期動工
Commencement
of Stage 1 Works

1989



制訂策略性
污水排放計劃
Formulation of
Strategic Sewage
Disposal Scheme



淨化海港計劃第二期甲污水輸送系統

污水輸送系統是「淨化海港計劃」第二期甲一項主要工程，由相連的污水隧道網絡及豎井組成，收集所得的污水會經由全長約21公里的深層污水隧道，輸送至昂船洲污水處理廠。

HATS Stage 2A Sewage Conveyance System

The Sewage Conveyance System (SCS) is a major component of HATS Stage 2A, comprising a network of interconnected sewage tunnels and vertical shafts. Sewage collected from the PTWs is conveyed to SCISTW via deep tunnels totalling 21 kilometres in length.



隧道豎井
Tunnel Shaft

「淨化海港計劃第二期甲」 污水收集及處理過程 Sewage collection and treatment in HATS Stage 2A

- 1 收集及為污水進行基本處理（即隔篩和除砂處理）。
Collection and preliminary treatment of sewage (screening of large particles and grit removal)
- 2 污水經由深層污水隧道輸送至昂船洲污水處理廠。
Conveyance of sewage to SCISTW via deep tunnels
- 3 污水於昂船洲污水處理廠進行化學強化一級處理。
CEPT at SCISTW
- 4 污水進行消毒程序（去除污水中超過99%大腸桿菌）。
Disinfection to reduce over 99% of E. coli
- 5 經處理的污水最後排放到維多利亞港西面海域。
Discharge of treated sewage to the west of Victoria Harbour



「淨化海港計劃第二期甲」 污水收集及處理過程之切面圖
Cross-section illustration of HATS Stage 2A sewage collection and treatment processes

昂船洲污水處理廠改善工程

「淨化海港計劃第二期甲」另一項核心工程為改善昂船洲污水處理廠。昂船洲污水處理廠是目前世界上最大的化學強化一級污水處理廠，該廠的污水處理量達每日245萬立方米，相等於約1,000個標準游泳池的容量。

污水到達昂船洲污水處理廠後，主泵房會把污水從深層污水隧道抽到地面進行處理。新的主泵房是全球最大的地下污水泵房之一，直徑55米、深40米。新主泵房內安裝了8台大型污水泵，每台泵每秒能輸送4立方米污水，相當於只需約1分鐘便能填滿一個標準游泳池。

當污水被輸送回地面後，會於沉澱池進行化學強化一級污水處理。昂船洲污水處理廠採用了雙層沉澱池設計以減少用地，故此，該廠房雖只佔地10公頃（約半個維多利亞公園的面積），卻可為570萬人提供服務。



二號主泵房
MPS2



污水泵
Sewage Pump

昂船洲污水處理廠亦設有新污泥脫水設施，備有14台離心機去除污泥中的水份，把污泥的固體含量由2%提升至32%，每日共可處理1,200噸污泥。此外，第二期甲建造了兩艘污泥船「淨港一號」及「淨港二號」，以海路把污泥從昂船洲污水處理廠運送往屯門污泥處理設施T.Park [源·區]進一步處理，大大減少於陸路運送污泥時可能對附近居民產生的氣味滋擾。

「淨港一號」及「淨港二號」成為全港首創「柴電推進」的環保貨櫃船；在泊岸後會從岸上取電，不會燃燒柴油，達致靠岸時零排放的效果，使近岸環境空氣質素得以提升。相比一般船隻，兩艘污泥船每年共可減少排放130公噸的二氧化碳，相當於約6,000棵樹木一年的吸碳量。

Upgrading Works for SCISTW

Another core component of HATS Stage 2A is the upgrading works of SCISTW, presently the world's largest CEPT plant, with daily treatment capacity up to 2.45 million cubic metres, equivalent to the volume of about 1,000 Olympic-size swimming pools.

When sewage arrives at SCISTW, it is pumped from the deep tunnels to the surface via Main Pumping Station, one of the world's largest underground sewage pumping stations. With an internal diameter of 55m and a depth of 40m, the new pumping station houses eight sets of mega-size sewage pumps, each with a rated pumping capacity of 4 cubic metres per second (equivalent to filling up an Olympic-size swimming pool within a minute).

Sewage siphoned above ground will be pumped to the sedimentation tanks for CEPT. SCISTW adopts a double-tray sedimentation tank design to reduce the entire STW's footprint down to 10 hectares, about half of the size of Victoria Park, despite serving up to 5.7 million people.

化學強化一級處理池
CEPT tanks



Sludge dewatering facilities were added to handle up to 1,200 tonnes of sludge per day, with 14 centrifuges raising the solid content of the sludge from 2% to 32%. Two special vessels were also built to deliver sludge from SCISTW to a Sludge Treatment Facility "T-Park" in Tuen Mun, minimising potential odour nuisance to nearby residents caused by land transport.

"Clean Harbour 1" and "Clean Harbour 2" are the first diesel-electric propulsion container vessels in Hong Kong. They are connected to on-shore power supplies when berthed, without using diesel and thereby achieving zero emission, which improve the air quality at the shore. Compared to regular vessels, the two sludge carriers release 130 fewer tonnes of carbon dioxide into the atmosphere every year, equivalent to the amount absorbed by 6,000 trees over the same period.



離心機
Centrifuges

淨港一號
Clean Harbour 1



截污轉流設施啟用 2015年9月24日

Flow Turning Facilities Enter into Service 24 September 2015

「淨化海港計劃第二期甲」的截污轉流措施正式啟動，分階段把維多利亞港只經基本處理的污水截流，並轉送到新擴建的昂船洲污水處理廠作化學強化一級處理。當中，位於灣仔東基本污水處理廠的截污轉流程序首先展開，及後位於港島北和西南面的7間基本污水處理廠亦陸續啟動該程序。啟用截污轉流措施，亦標誌著新擴建的昂船洲污水處理廠正式投入服務。

The flow turning process under HATS Stage 2A has commenced. It would progressively intercept the remaining sewage that was preliminarily treated prior to discharge into Victoria Harbour previously, and convey it to the newly expanded SCISTW for CEPT. Wan Chai East PTW was the first plant to begin the process and was followed by the remaining seven PTW at the northern and southwestern sides of Hong Kong Island. Flow turning also marks the full commissioning of the newly expanded SCISTW.



渠務署署長啟動截污轉流措施
Director of Drainage Services activating the flow turning process



香港特別行政區行政長官梁振英先生聯同一眾主禮嘉賓主持「淨化海港計劃第二期甲」啟用禮
Mr. CY LEUNG, Chief Executive of HKSAR, officiating the Grand Ceremony of HATS Stage 2A with other guests



主禮嘉賓於昂船洲污水處理廠進行實地視察
Officiating guests visiting SCISTW



灣仔東基本污水處理廠的污水轉流到旋渦型豎井
Sewage flow diverted to the vortex dropshaft at Wan Chai East PTW



污水首次流入昂船洲污水處理廠的新沉澱池
Inaugural sewage flow at the new sedimentation tank in SCISTW

淨化海港計劃帶來的裨益

第二期甲設施啟用後，所有來自維港兩岸的生活污水，都會經過處理及消毒後才排出維港，去除污水中超過99%的大腸桿菌，70%生物需氧量及80%懸浮固體，相當於每日回收800至1,000噸污染香港水域的污泥。水質得到顯著改善，令停辦多年的維港渡海泳可於2011年於維港東部復辦。另外，荃灣以往暫停開放的部分泳灘，亦由於水質得到顯著改善，現時已全部重新開放予公眾使用。



Benefits of HATS

After the full commissioning of Stage 2A, all sewage from either side of Victoria Harbour is now collected, treated and disinfected prior to discharge. As a result, over 99% of E. coli, 70% of biochemical oxygen demand and 80% of suspended solids are eliminated from the sewage, equivalent to the interception of 800-1000 tonnes of sludge from being discharged to the harbour. With the significant improvements in water quality, cross-harbour races resumed in 2011 after years of suspension at the east of the Victoria Harbour. As water quality of the beaches in Tsuen Wan district has also been improved drastically, closed beaches were reopened for public enjoyment.

維港渡海泳
Cross-harbour Swimming Race



重開荃灣泳灘
Re-opening of beaches in Tsuen Wan

規劃、設計及興建新的污水處理設施

Planning, Design and Construction of New Sewerage Facilities

搬遷深井污水處理廠往岩洞計劃

將深井污水處理廠遷往岩洞，可騰出現址約1.1公頃土地，作有利民生的用途，為社區帶來裨益。2014年12月，我們為計劃批出一項可行性研究顧問合約，費用約為1,000萬元。合約研究範圍包括初步技術和影響評估、擬備工程設計大綱、制定施工策略和時間表，以及進行公眾參與及諮詢活動。

Relocation of Sham Tseng STW to Caverns

Relocating Sham Tseng STW into caverns can release around 1.1 hectares of land for other beneficial uses for the community. We awarded a consultancy agreement for a feasibility study in December 2014 at an approximate cost of \$10 million. The agreement covers research for preliminary technical and impact assessments, preparation of outline design for the engineering works, formulation of implementation strategies and schedule, and carrying out public engagement and consultation activities.

目前進度 Current progress

● 可行性研究顧問合約已批出，現正進行勘測及相關的
● 可行性研究工作，預計在2016-17年度完成。

● We awarded the consultancy contract of the feasibility study for completion
● in 2016-17. Surveys and associated
● studies are in progress.

深井污水處理廠現址
Existing Sham Tseng STW



搬遷西貢污水處理廠往岩洞計劃

將西貢污水處理廠遷往岩洞，可騰出現址約2.2公頃土地，作更有利及合適的用途。2014年8月，我們為計劃批出一項顧問合約，研究範圍包括計劃的可行性、初步技術和影響評估、公眾參與活動，以及工地勘測。

Relocation of Sai Kung STW to Caverns

Approximately 2.2 hectares of land will be freed up for more suitable uses by the relocation of Sai Kung STW to caverns. In August 2014, we awarded a consultancy agreement for a study which will ascertain the feasibility of such movement and conduct preliminary technical and impact assessments, public engagement activities, and site investigations.

目前進度 Current progress

此計劃現正與土木工程拓展署相連的填海計劃同步進行。第1階段的公眾參與活動以及工地勘測經已完成。顧問合約將於2017年度完結。

This project is conducted in tandem with the associated reclamation project managed by the Civil Engineering and Development Department (CEDD). Phase one of the public engagement activities and site investigations are complete. The consultancy agreement will be concluded in 2017.

西貢污水處理廠
Sai Kung STW



搬遷沙田污水處理廠往岩洞計劃

將沙田污水處理廠搬遷往岩洞，可騰出污水處理廠現址約28公頃土地，作有利民生用途；搬遷計劃亦會提升區內的生活環境。

Relocation of Sha Tin STW to Caverns

In addition to releasing some 28 hectares of land, the relocation of Sha Tin STW into caverns can also serve to improve living conditions across the entire district.

目前進度 Current progress

我們已為項目完成了環境影響評估，地質勘探亦進展良好。我們於2015年12月至2016年5月期間進行了第3階段的公眾參與活動，向公眾闡述環境影響評估的結果及初步施工安排。項目的設計工作正在進行，我們會致力盡早完成相關工作，並盡快展開工程。



We have already completed the environmental impact assessment (EIA) for the project, and site investigations are well under way. We held the third stage of our public engagement exercises from December 2015 to May 2016, during which we elaborated on the results of the EIA and the preliminary construction arrangements to the public. We strive to complete the project design as soon as possible, with construction works to follow.

石湖墟污水處理廠擴建工程

為配合北區的迅速發展，我們將會分階段提升石湖墟污水處理廠的處理量，並提升污水處理級別至三級水平，以保護后海灣的生態環境。我們亦藉此機會改善污水處理廠外觀，提升其水資源保育教學功能，將石湖墟污水處理廠打造成為一個具標誌性的設施。

Expansion of Shek Wu Hui STW

To tie in with the rapid development of the North District, we will expand the treatment capacity of Shek Wu Hui STW in phases and upgrade it to a tertiary treatment plant to better protect the ecology at Deep Bay. We will also take this opportunity to revamp its exterior and promote its educational purpose on water conservation, with hopes of a makeover that will turn Shek Wu Hui STW into a landmark facility.

目前進度 Current progress

項目的前期工程（包括為隨後主體工程而替部分處理設施進行的升級工程）已於2015年7月開展。而主體工程的詳細設計顧問合約亦已於2015年5月開展。

Advance works including partial upgrade of treatment facilities to facilitate the main works, began in July 2015. The consultancy agreement for detailed design of the main works commenced in May 2015.

石湖墟污水處理廠
Shek Wu Hui STW



吐露港地區污水收集系統建造工程

我們於沙田及大埔區進行污水系統工程，以改善吐露港的水質及11個未有敷設污水設施地區的衛生情況。工程包括在沙田九肚建造一所污水泵房，以及為沙田9個和大埔2個未敷設污水設施的地區敷設長約12公里的污水渠。

Tolo Harbour Sewerage of Unsewered Areas

We are carrying out sewerage works in Sha Tin and Tai Po to improve both the water quality in Tolo Harbour and sanitation conditions for the 11 unsewered communities. The project involves building a sewage pumping station at Kau To and laying around 12 kilometres of sewers for the nine and two unsewered areas in Sha Tin and in Tai Po respectively.

目前進度 Current progress

工程於2013年動工，預計於2017年9月完成。

Construction works commenced in 2013 and are scheduled for completion in September 2017.

梅窩污水處理廠改善工程

為配合未來發展的需要，我們正於梅窩污水處理廠進行改善工程，將污水處理量從每日1,190立方米增加至每日3,700立方米。工程亦包括提升污泥處理及除臭設施，以及園林綠化工作。

Upgrading of Mui Wo STW

In view of future development, we are undertaking improvement works at Mui Wo STW to boost its daily treatment capacity from 1,190 cubic metres to 3,700 cubic metres. The project will also upgrade the sludge treatment and deodorisation facilities and the associated greening works.

梅窩污水處理廠改善工程
Upgrading of Mui Wo STW

目前進度 Current progress

工程於2012年動工，預計於2017年完成。

Construction began in 2012 and is slated for completion in 2017.



擴建鄉村公共污水收集系統

渠務署多年來致力擴建鄉村公共污水收集系統，藉以改善鄉郊地區的衛生環境及其附近水體的水質。目前建造中的鄉村污水工程，分別位於北區、大埔、沙田、元朗、屯門、西貢及離島。

Expansion of Village Sewerage

Over the years, DSD strives to expand public sewerage systems to villages in a bid to improve hygienic conditions in rural areas as well as the quality of nearby water bodies. Construction works for sewerage projects are currently underway in Northern District, Tai Po, Sha Tin, Yuen Long, Tuen Mun, Sai Kung and the Outlying Islands.

目前進度 Current progress

截至2016年3月，我們已為170多條鄉村鋪設了公共污水渠，亦正為另外80多條鄉村籌備相關工程。目前，尚有240多條鄉村的工程在規劃和設計之中。

As of March 2016, we have laid public sewerage for over 170 villages. The works for some-80 villages are underway and the schemes for some-240 villages are under planning and design.

污水處理服務收費概要

Overview of Sewage Services Charges

「污水處理服務收費計劃」根據「污染者自付」原則，自1995年4月1日起實施。所有已接駁至公共污水渠之建築物的用戶均須繳付排污費。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共有27類。

In accordance with the "Polluter Pays" principle, the Sewage Services Charging Scheme came into effect on 1 April 1995 for all users whose premises are connected to public sewerage system. The charge is composed of Sewage Charge (SC) and Trade Effluent Surcharge (TES). There are currently 27 trades under the TES.

客戶查詢

渠務署的服務，不論是污水處理或雨水排放，均與香港市民的日常生活息息相關。為了讓市民得到更優質的服務，我們除了不斷提升轄下設施的表現，亦提供多項常規服務回應市民的需要。2015-16年度，我們共接獲6,719個有關污水處理服務的電話及書面查詢，當中我們在收到所有書面查詢後一個月內已作正式回覆。

Customer Inquiry

DSD's services, whether in relation to sewage treatment or stormwater drainage, are closely intertwined with public life. In order to provide quality services for the public, we provide a range of day-to-day services to cater for their needs in addition to performance enhancements at our facilities. In 2015-16, we received 6,719 written and telephone inquiries in relation to our sewage treatment services, of which all written inquiries were replied within one month.

2015-16 年度收到的各類書面查詢

Written Enquiries Received in 2015-16 by Category

5.29%

行業重新分類
Business Reclassification

28.93%

有關工商業污水附加費新繳納戶
Related to Newly Identified TES
Accounts

0.41%

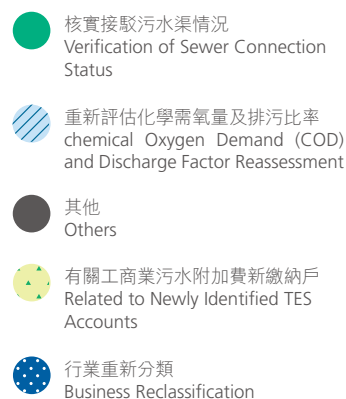
其他
Others

36.58%

核實接駁污水渠情況
Verification of Sewer
Connection Status

28.79%

重新評估化學需氧量及排污比率
chemical Oxygen Demand (COD) and Discharge Factor Reassessment



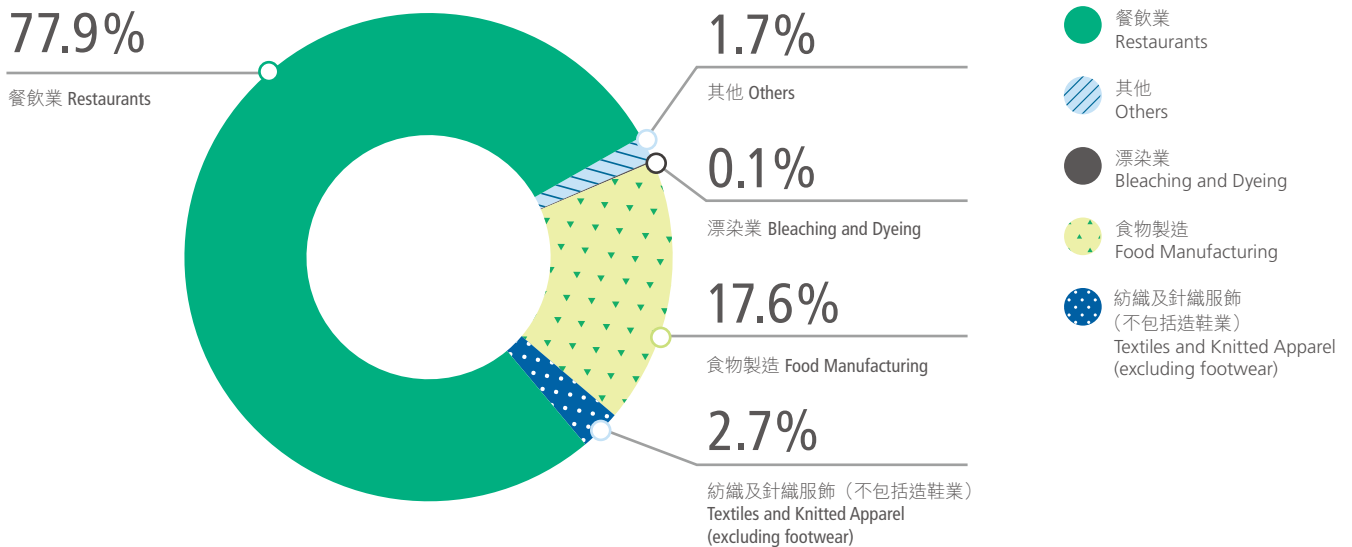
賬單及用水量統計數字

全港約有291萬個自來水用戶，其中大約269萬個用戶須繳付排污費。非住宅用戶中，約有25,800個用戶屬於須繳付工商業污水附加費的27個指定行業。工商業污水附加費繳納戶所屬行業的分佈見下圖。

Billing and Water Consumption Statistics

Of approximately 2.91 million water utility users in Hong Kong, about 2.69 million are liable for SC. There are around 25,800 non-domestic users operating in the under 27 trades which are liable to pay the TES, distribution of which is as follows:

2015-16 年度工商業污水附加費繳納戶的所屬行業 Distribution of TES Accounts in 2015-16, by Sector



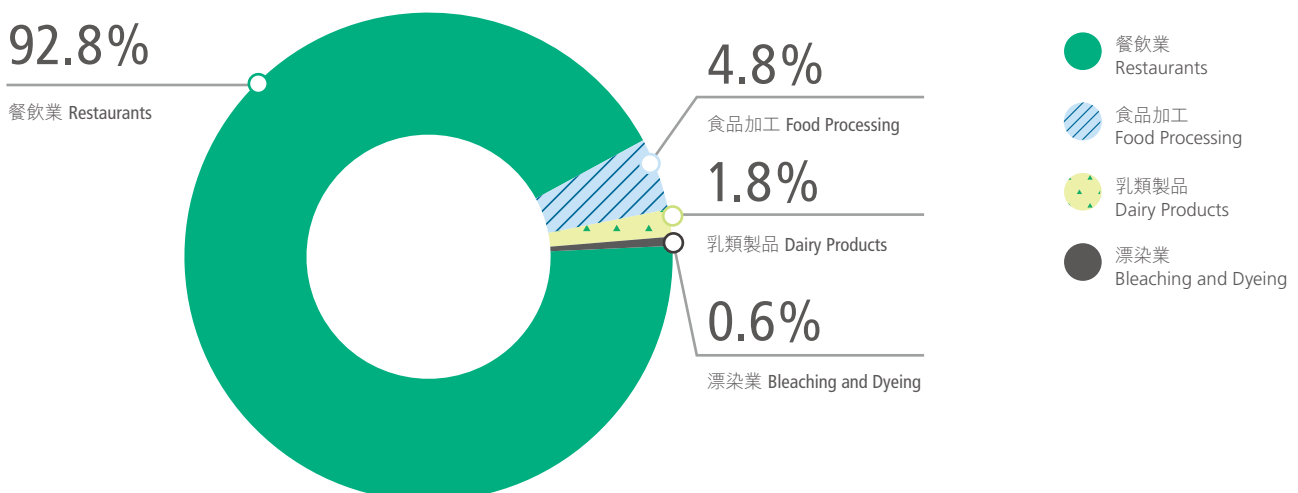
重新評估工商業污水附加費收費率及排污比率

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，獲重新評估的收費率有效期為3年。

Reassessment of TES Rate and Discharge Ratio

Non-domestic consumers may apply for a reassessment of the TES rate or discharge ratio if they consider that their effluent strength or discharge ratio is lower than the corresponding values stipulated by regulations. The reassessed TES rate is valid for three years.

2015-16 年度申請重新評估化學需氧值的所屬行業 Applications for Reassessment of Chemical Oxygen Demand in 2015-16, by Sector





2015-16 防洪概要

Overview of Flood Prevention in 2015-16

為防治洪患及保障公眾安全，我們參考國際標準設計及建造雨水排放系統，並定期巡查及進行妥善維修。2015年的總降雨量只有1,874.5毫米，較1981-2010年每年約2,400毫米的平均降雨量少約22%。於2015-16年度天文台共發出1次黑色、3次紅色及14次黃色暴雨警告信號。縱使今年雨季的降雨量相對較少，但極端降雨情況的出現為防洪工作帶來挑戰。當中，港島西區於2015年7月22日黃色暴雨警告生效接近12小時期間，曾錄得超過300毫米雨量。而於2015年10月7日早上，在沒有發出任何暴雨警告信號的情況下，新界東局部地區出現傾盆大雨，西貢更錄得超過150毫米雨量。另外，於2016年1月5日更發出黃色暴雨警告，是暴雨警告信號系統設立以來首次於1月發出暴雨警告。

於2015-16年度，渠務署繼續進行多項防洪工程，以提升相關地區的防洪能力，減低其水浸風險。我們除了確保轄下設施妥善運作外，亦正分階段檢討各區的雨水排放整體計劃，擬訂相關策略以配合香港未來發展。

To safeguard the general public against flooding, we have designed and constructed stormwater drainage systems with reference to international standards, and carried out regular inspections and timely maintenance works. In 2015, Hong Kong recorded a scant 1,874.5 millimetres in total rainfall, which was some 22% lower than the annual average of approximately 2,400 millimetres between 1981-2010. In 2015-16, the Hong Kong Observatory issued one Black, three Red and 14 Amber Rainstorm Warnings. Despite the comparatively low rainfall recorded in this wet season, the incidence of extreme precipitation events posed challenges to flood prevention. The Amber Rainstorm Signal on 22 July 2015, which lasted nearly 12 hours, was one of such cases in which West Hong Kong Island saw over 300 millimetres of rainfall. In the morning of 7 October 2015, in the absence of Rainstorm Warning Signals, parts of the New Territories East were inundated with torrential rain, with over 150 millimetres recorded in Sai Kung. Another uncommon event was the Amber Rainstorm Warning issued on 5 January 2016, which was the first Rainstorm Warning ever issued in January since the Rainstorm Warning System was established.

In 2015-16, DSD continued to implement various flood prevention projects in order to boost the flood protection levels and reduce flooding risks in relevant areas. In addition to ensuring that our facilities are operated properly, we are also reviewing the Drainage Master Plans (DMPs) of various districts in stages, so as to formulate corresponding strategies for Hong Kong's future development.

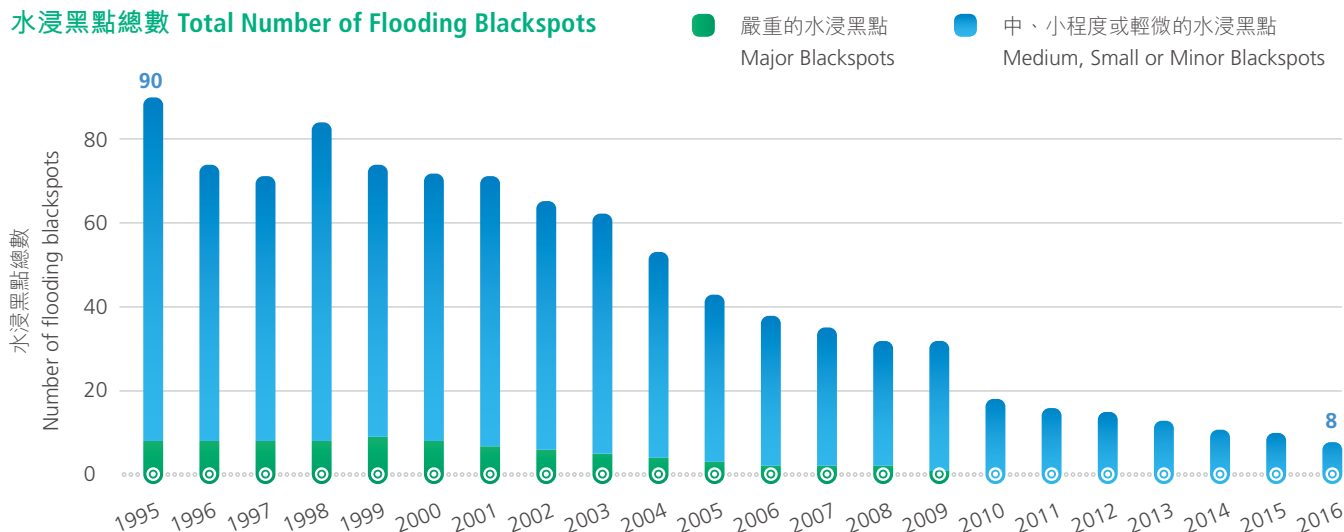
水浸黑點再減兩個

Eliminating Two More Flooding Blackspots

於2016年年初，我們評估各項已完成的排水改善工程的成效後，進一步剔除了上水丙崗及大埔南華莆兩個水浸黑點，令全港水浸黑點由10個減至8個。

Having evaluated the effectiveness of completed drainage improvement works in early 2016, we eliminated two more flooding blackspots at Ping Kong, Sheung Shui and Nam Wa Po, Tai Po which brings the total number of flooding blackspots down from ten to eight.

水浸黑點總數 Total Number of Flooding Blackspots



餘下的8個水浸黑點中，3個黑點的改善工程已經啟用，我們正監察其成效，並會在適當時間剔除。另外1個黑點的改善工程正在進行中，餘下4個黑點的相關工程亦正在規劃和設計中。我們會在雨季期間密切監察這些地方的排水情況，致力盡早剔除所有水浸黑點。

Among the eight remaining flooding blackspots, drainage improvement works for three of them have been commissioned. We are monitoring the effectiveness of these works and the relevant flooding blackspots will be eliminated in due course as appropriate. Improvement works is under way for another blackspot, and planning and design are under way for the rest. In the meantime, we will closely monitor the drainage condition in these areas during the rainy season and do our best to eliminate all of them as soon as possible.

現有排水設施的運作及維修保養

Operating, Repairing and Maintaining Existing Drainage Facilities

渠務署負責管理的地下雨水渠總長度約2,400公里，人工河道長約360公里，並管理36所雨水泵房。在2015-16年度，我們一如既往定期巡查雨水排放設施，以及完成預防性的維修保養工作，確保排水系統運作暢順。我們亦定期檢測設施的功能和結構，並在雨季前及大雨後適時清理淤塞的渠道。過去一年，我們巡查了超過2,000公里的雨水渠及河道。

DSD manages 2,400 kilometres of underground stormwater drains, 360 kilometres of manmade waterways, and 36 stormwater pumping stations. In 2015-16, we continued to carry out regular inspections and preventive maintenance works for our stormwater drainage facilities to ensure smooth operations of the drainage systems. We also conduct regular functional and structural checks and clear blockages before the wet season and after heavy rainstorms. Last year, we inspected over 2,000 kilometres of drains and rivers.



緊急事故及應變措施
Emergency and Response

- 「緊急事故及暴風雨應變組織」全年專責處理緊急和水浸事故
- 緊急事故控制中心在緊急情況下啟動，負責協調全港緊急清理淤塞雨水渠和河道的工作，對水浸報告作出回應，向政府內部提供水浸資訊，以及在有需要時發放水浸相關訊息
- The "Emergency and Storm Damage Organisation" (ESDO) handles emergencies and flooding incidents all year-round
- The Emergency Control Centre will be activated in the event of an emergency in order to coordinate emergency clearance tasks for blocked stormwater drains and rivers in Hong Kong; respond to flooding reports; share flooding information within the government; and issue flooding-related messages and warnings to the general public when needed



蓄洪計劃
Stormwater Storage Schemes

- 暴雨期間，將雨水引流至地下蓄洪池暫時貯存，以舒緩下游地區排水系統的壓力。目前大坑東、上環及跑馬地第一期的蓄洪計劃已經投入運作
- Diverting stormwater to underground storage tanks for temporary storage during heavy rainstorms to relieve the burden of downstream drainage systems. Stormwater storage schemes at Tai Hang Tung, Sheung Wan and Happy Valley (Phase 1) are now in operation



雨水排放隧道
Drainage Tunnels

- 在上游高地截取雨水，然後改道直接排出大海或河溪，從而大幅降低下游地區的水浸風險
- 現有4條雨水排放隧道為啟德雨水轉運計劃、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21公里
- Intercepting stormwater on higher ground at upstream, diverting and directly discharging to the sea or into rivers, thereby substantially mitigating flooding risks in downstream areas
- Four drainage tunnels, including Kai Tak Transfer Scheme, and Hong Kong West, Lai Chi Kok and Tsuen Wan Drainage Tunnels, totaling about 21 kilometres in length, are now in operation



鄉村防洪計劃
Village Flood Protection Schemes

- 在低窪村落四周興建防洪基堤，並於村內建造蓄洪池及雨水泵房，在暴雨期間暫時將雨水貯存，並在暴雨後將雨水抽走
- 現有27個鄉村防洪計劃，為35條低窪鄉村提供防洪保護
- Constructing embankments around low-lying village and Building flood storage ponds and stormwater pumping stations in villages for temporary storage of stormwater during heavy rainstorms and subsequent discharge by pumping
- 27 Village Flood Pumping Schemes are currently in operation, providing flood protection for 35 low-lying villages

規劃、設計及建造新的排水設施

Planning, Design and Construction of New Drainage Facilities

檢討雨水排放整體計劃

渠務署自成立以來，迄今已完成8項雨水排放整體計劃研究和3項雨水排放研究，範圍涵蓋全港所有容易受水浸影響的地區。為配合香港的整體發展及應對氣候變化，我們適時檢討和更新雨水排放整體計劃，以評估排水改善工程的成效，並按需要建議進一步的改善措施。

DMP Reviews

Since its establishment, DSD has completed eight DMP studies and three Drainage Studies, covering all flood-prone areas in Hong Kong. We review and update DMPs in a timely manner to assess the effectiveness of completed drainage improvement works, in order to tie in with the latest development in the city and adapt to climate change. Where necessary, we will recommend further improvement measures.

目前進度 Current progress

元朗、新界北區以及跑馬地的雨水排放整體計劃檢討研究已於2011年完成，研究建議的改善工程亦正在建造或設計中。另外，西九龍及東九龍的檢討研究亦已於2015年完成。我們現正檢討大嶼山及離島、沙田及西貢、大埔和香港島北的雨水排放整體計劃，而餘下的研究亦在籌備中。

The review studies of DMPs for Yuen Long district, Northern New Territories and Happy Valley were completed in 2011, and the improvement works proposed in the studies are under construction or design. DMP Reviews of the West Kowloon and the East Kowloon were also completed in 2015. We are currently reviewing the DMPs for Lantau and Outlying Islands, Sha Tin and Sai Kung ;Tai Po; and Northern Hong Kong Island. Planning for the remaining review studies is underway.

在2015-16年度，我們繼續推展以下大型防洪工程：

In 2015-16, we made further progress in the following major flood prevention projects:

啟德河改善工程

工程旨在提升東九龍的防洪能力，將重建及修復蒲崗村道至太子道東一段長約1.1公里的啟德河，並於河道上游旁建造一條長約400米的箱形暗渠。我們希望藉提升啟德河排洪能力的機會，將它活化為一條綠色河道走廊，供市民觀賞享用。

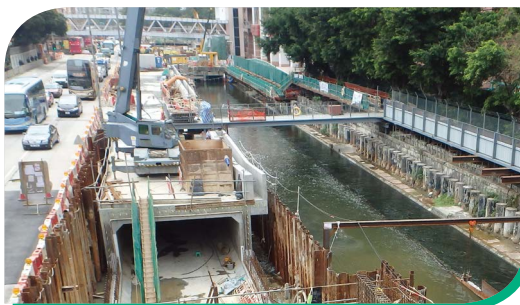
Kai Tak River Improvement Works

The project aims to improve flood protection levels of East Kowloon by reconstructing and rehabilitating a 1.1-kilometre section of the Kai Tak River from Po Kong Village Road to Prince Edward Road East. A box culvert of about 400 metres long will also be constructed alongside the river upstream. We hope to ride on the opportunity to upgrade the river's flood relief capacity and revitalise it as a green river corridor for public enjoyment.

目前進度 Current progress

啟德河上游及中游改善工程分別於2011年10月及2013年12月動工，主要排洪工程預計在2017年年底分階段完成。整項工程的預算費用約為28億元。

Upstream and midstream improvement works of Kai Tak River commenced in October 2011 and December 2013 respectively, with anticipated completion by stages by the end of 2017. The project estimate is about \$2.8 billion.



啟德河上游及中游改善工程的施工情況

Construction of improvement works of the upstream and midstream of Kai Tak River

治理深圳河第4期工程

治理深圳河第4期工程，旨在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至可抵禦50年一遇的暴雨。工程包括改善平原河至白虎山一段長約4.5公里的深圳河，及建造容量達80,000立方米的蓄洪湖泊，並將種植濕地植物來淨化水質及美化景觀。上述設施配合河畔的綠化元素，將豐富深圳河的生態環境。

目前進度 Current progress

- 整項治理深圳河第4期工程預計於2017年完成，工程預算費用約為10億元。
- Shenzhen River Regulation Project Stage IV is slated for completion in 2017 at an estimated construction cost of approximately \$1 billion.

Shenzhen River Regulation Project Stage IV

Shenzhen River Regulation Project Stage IV is designed to enhance flood protection levels for the river section between the Ping Yuen River estuary and Liantang/Heung Yuen Wai Boundary Control Point to withstand rainstorms of a 50-year return period. The project includes improvement works of a 4.5 kilometres section of the Shenzhen River (between Ping Yuen River and Pak Fu Shan), and construction of a flood retention lake of 80,000 cubic metres. Wetland plants for water purification and scenic purposes will be planted. Along with riverbank greening elements, these features will enrich the ecology of Shenzhen River.



治理深圳河第4期工程的鳥瞰圖（蓄洪湖泊施工進行中）

Bird's-eye view of Shenzhen River Regulation Project Stage IV (construction of retention lake in progress)

跑馬地地下蓄洪計劃

為紓緩跑馬地和灣仔一帶地區之水浸風險，我們於2012年開展跑馬地地下蓄洪計劃，興建總容量達60,000立方米的地下蓄洪池、長約650米的箱形暗渠，以及一個抽水量達每秒1.5立方米的雨水泵房。這項工程亦是本港首個結合「可調式溢流堰」和「資料採集與監控系統」的防洪工程。

目前進度 Current progress

- 跑馬地地下蓄洪計劃第一期工程已於2015年3月投入運作，而座落於地下蓄洪池上的3個足球場亦已完成復修工程並開放予公眾使用。工程團隊會致力在2017年雨季前完成興建第二期地下蓄洪池。屆時，整個計劃將投入運作，該區的排洪能力將會提高至可抵禦50年一遇的暴雨。整項工程的預算費用約為10億元。
- Phase 1 of HVUSSS was commissioned in March 2015. The three football pitches above the tank were reinstated and are now open to the public. The project team aims to complete the underground storage tank in Phase 2 before the 2017 wet season. Once the project is commissioned, the flood protection level of the region will be able to withstand rainstorms of a 50-year return period. The estimated cost for the entire project is about \$1 billion.

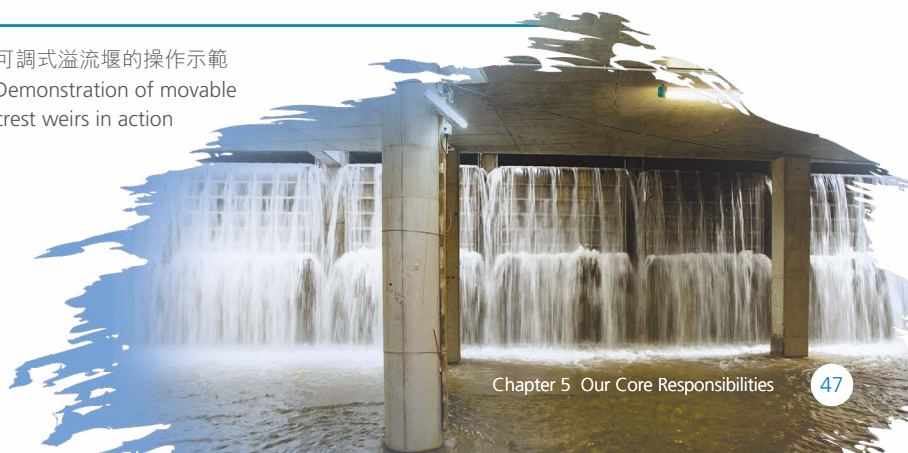
Happy Valley Underground Stormwater Storage Scheme

To alleviate the flood risks in Happy Valley and Wan Chai districts, we initiated the Happy Valley Underground Stormwater Storage Scheme (HVUSSS) in 2012, constructing an underground storage tank with a total capacity of 60,000 cubic metres, a box culvert of about 650 metres, and a stormwater pumping room rated at a peak flow of 1.5 cubic metres per second. It is the first flood prevention project in Hong Kong with a movable crest weir system and a Supervisory Control and Data Acquisition (SCADA) system.



跑馬地地下蓄洪池（第一期）的內部
Internal view of HVUSSS tank (Phase 1)

可調式溢流堰的操作示範
Demonstration of movable crest weirs in action





環境管理



Environmental Management



渠務署致力在各工作範疇中，實踐環境管理概念。我們透過考察活動及定期與環保團體會面，獲得環境管理的最新資訊。此外，本署亦積極引進嶄新的工程技術和管理措施，注入可持續發展的元素，減低轄下渠務設施在施工和營運階段對環境的影響。

DSD is committed to realising environmental management principles in every aspect of its operations. We gather the latest information in this field through duty visits and regular meetings with green groups. DSD also actively introduces innovative engineering techniques and management practices, incorporating sustainability elements such that our drainage facilities pose minimal impact to the environment during the course of construction and operation.







藍綠建設

Blue-Green Infrastructure

渠務署積極實踐活化水體概念，在進行明渠及河道工程時，除確保排水暢順外，亦以促進綠化、生物多樣性及美化環境為目標。透過藍綠建設，我們希望為市民建設兼備草木繁茂和水景優美的河道，並讓市民有更多機會親近水體。我們亦根據香港《環境影響評估條例》，評估及減低主要渠務工程對環境可能造成的影響。

渠務署積極研究有關藍綠建設，以發掘嶄新技術，將之用於設計排水設施。近年完成或現正進行的研究項目包括復修水生生物生境、生態水力學、多孔透水路面等。未來，我們將善用各項研究成果，在河道工程中廣泛應用有關技術，改善環境。

DSD actively implements the concept of revitalising water bodies. In construction works for nullahs and rivers, we give priority to greening, biodiversity and aesthetic improvements in addition to ensuring effective drainage. Through Blue-Green Infrastructure, we hope to provide citizens with rivers suffused with lush greens and pristine blues, so as to offer more opportunities for the citizens to get closer to water bodies. We also conduct assessments in accordance with the “Environmental Impact Assessment Ordinance” in Hong Kong for our major drainage projects in order to evaluate and mitigate the potential environment impact.

DSD actively undertakes research in Blue-Green Infrastructure in order to explore and apply novel techniques in the drainage facilities. Studies recently completed or currently being undertaken by DSD include habitat rehabilitation for aquatic organisms, eco-hydraulics and porous permeable paving. We will make good use of these research results in the future and apply them to our river works extensively to improve our living environment.

藍綠建設 Blue-Green Infrastructure

- 藍指河道水體，綠指綠化景觀。
Blue refers to rivers and water bodies, whereas green refers to greening landscapes.
- 建設集自然環境、社區特色和現代化功能於一身的都市排水布局。
Build a drainage layout in urban areas that interweaves the natural environment with community characteristics and contemporary functions.

啟德河改善工程

Kai Tak River Improvement Works

我們正進行啟德河改善工程，除了提升該河的排洪能力外，亦把握是次機遇，加入美化、綠化、園境及生態元素，將之活化為翠綠怡人的市區綠化河道走廊。我們亦借鑒西貢蠔涌河改善工程的成功經驗，在河床加設魚洞穴、導流板和石塊，改善微生物生境及促進生物多樣性。此外，我們會在河壁設置人工石，並在河道兩旁栽種不同植物，加強綠化效果。為配合啟德河改善工程，我們將會在毗鄰的黃大仙摩士公園（1號公園）進行美化及改善工程，配合啟德河主題。

啟德河的水質近年已得到改善，現時，河中可見各種雀鳥及魚類。改善工程完成後，啟德河將成為生機勃勃的綠化河道走廊，供市民休憩活動。

We are currently proceeding with Kai Tak River Improvement Works. In addition to upgrading drainage capacities, we are also taking this opportunity to inject aesthetic, greening, landscaping and ecological elements, thus revitalising the nullah into an urban green river along a serene emerald corridor. Riding on the success of Ho Chung River Improvement Works in Sai Kung, we will install fish shelters, current deflectors and boulders in the riverbed to improve microhabitats and biodiversity. We will also line the river embankment with faux rocks and grow different types of plants on both banks to accentuate the greening effect. In association with Kai Tak River Improvement Works, we will carry out beautification and improvement works for the adjacent Morse Park (No. 1) in Wong Tai Sin to in line with the theme of the river.

The water quality of Kai Tak River has been improved in recent years, and various species of birds and fish can now be found within it. Once the works are complete, Kai Tai River will be brimming with life as a green river corridor for public enjoyment and recreation.



改善後的啟德河構想圖
Kai Tai River post-rehabilitation,
artist's impression



小白鷺（攝於施工中的啟德河）
Little egret (*Egretta garzetta*) (photographed
at Kai Tak River construction site)



啟德河中的游魚（攝於施工中的啟德河）
Fish at Kai Tak River (photographed at
Kai Tak River construction site)



毗鄰啟德河的黃大仙摩士公園（1號公園）
Morse Park (No. 1), Wong Tai Sin, adjacent to
Kai Tak River



美化及改善後的摩士公園（1號公園）構想圖
Morse Park (No. 1), post-beautification and
improvement, artist's impression



大白鷺（攝於施工中的啟德河）
Great egret (*Ardea alba*) (photographed
at Kai Tak River construction site)

林村河上游雨水排放系統改善工程 River Improvement Works in Upper Lam Tsuen

渠務署於2012年完成林村河上游河道改善工程，紓緩區內的水浸風險。由於林村河上游極具生態保育價值，我們在工程設計、建造及管理等方面，盡力把工程對環境及生態的影響減至最少。我們亦與環保團體緊密合作，聽取他們的意見及建議，以便更有效地保育棲息於河道中的物種。

DSD completed River Improvement Works in Upper Lam Tsuen in 2012, alleviating flood risk in the region. Given the extraordinary conservation value of upstream Lam Tsuen River, we made every effort to minimise environmental and ecological impacts of our works, in aspects ranging from engineering design to construction and management. We also worked closely with green groups and collected their opinions and suggestions so as to better protect the species inhabiting in the rivers.

保育措施例子 Examples of conservation measures

- 擴闊河道時，盡量縮小工程範圍，以保留原有河道
Minimising construction land uptake during river widening in order to preserve its original course
- 工程完竣後重鋪原有河床物料，營造天然溪澗環境，減少使用混凝土
Minimising construction land uptake during river widening in order to preserve its original course
- 在適當地方建造魚梯，保持河道連貫，令河道生物能往返不同流域
Building fish ladders at suitable spots, maintaining flow continuity and retaining access for river organisms across sections of the stream
- 採用石籠護土牆，以助植物生長及營造自然生態環境
Using gabion retaining walls to promote plant growth and cultivate a natural ecology

我們在此工程各個階段，均監察物種種類及數量，以了解工程對生態的影響。我們發現在工程完成後，石籠河岸及天然河床的植物蓬勃茂盛，如同自然生境，而且水質有所改善，顯示保育措施具有成效，而部分稀有物種如香港瘰螈的數量，更勝從前。此外，河道的生物多樣性亦有所提高，鳥類、魚類及蜻蜓的品種數量均有所增加。

At every stage of the construction works, we monitored the biota by species and population to get a better picture of the construction impact on the ecology. We observed extensive plant growth on gabion banks and the natural riverbed after the project was completed, with a flourishing natural habitat and improved water quality. These outcomes indicate that the conservation measures were effective: several rare species, such as the Hong Kong warty newt, were more abundant afterwards. Biodiversity was also improved along the river, with an increase in the number of bird, fish and dragonfly species.



林村河
Lam Tsuen River



香港瘰螈
Hong Kong Newt (*Paramesotriton hongkongensis*)

起動九龍東－活化翠屏河

Energising Kowloon East Initiative: Revitalisation of Tsui Ping River

我們正在九龍東進行活化工程，把現有沿敬業街、敬業里和翠屏道一段長約一公里的明渠活化成翠屏河。為配合主題，此項目同時美化毗鄰行人道，以及改善行人通道之間的連繫，例如增建河邊走道及園景平台。

We are undertaking revitalisation works in Kowloon East in order to convert a nullah approximately 1 kilometre long running along King Yip Street, King Yip Lane and Tsui Ping Road into "Tsui Ping River". To echo with the theme, the adjacent pedestrian paths will also be beautified as part of the project, improving connectivity between pavements through e.g. building riverside walkways and landscape decking.

有關工程包括下列各項：

- 美化現有明渠；
- 加建河道兩旁及連接河道兩岸的行人通道，以改善行人通道間的連繫；
- 在翠屏河上增建園景平台；
- 翻新觀塘道現有行人天橋；及
- 美化現有明渠附近街道。

Associated project items include:

- Beautifying the existing nullah;
- Adding walkways on both river banks and across the two to improve pedestrian connectivity;
- Adding landscape decking atop Tsui Ping River;
- Rehabilitating the existing footbridge on Kwun Tong Road; and
- Beautifying streets near the existing nullah.

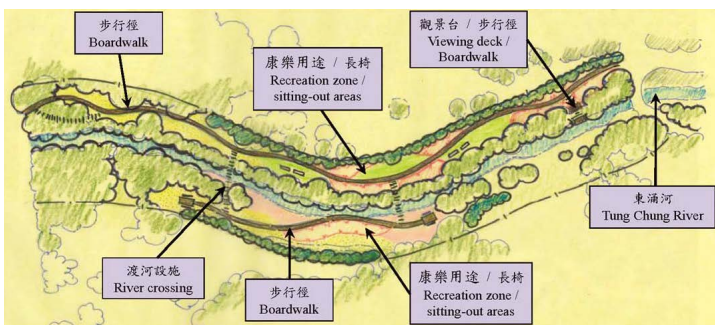


起動九龍東
-活化翠屏河構想圖
Energising Kowloon East: Revitalising
Tsui Ping River, artist's impression

東涌河河畔公園 Tung Chung River Park

藉著東涌新市鎮擴展的機遇，政府計劃活化一段現有東涌河，提升其排洪能力之餘，更將其打造為全港首個河畔公園。改善工程完成後，將可大大改善現有環境、促進河道的生物多樣性。河畔公園會以綠化和親水為主題，落成後將是個讓市民進行親水活動，享受自然環境的好地方。

With the Tung Chung New Town extension under way, the Government has seized the opportunity with plans to revitalise a section of the existing Tung Chung River, upgrading its drainage capacity and transforming it into the first river park in Hong Kong. Upon completion, the improvement works will significantly enhance the neighbourhood and promote biodiversity in the river. The river park is poised to be green and water-friendly for residents who enjoy water sports and natural sceneries.



東涌河河畔公園的初步設計
Preliminary design for Tung Chung River Park

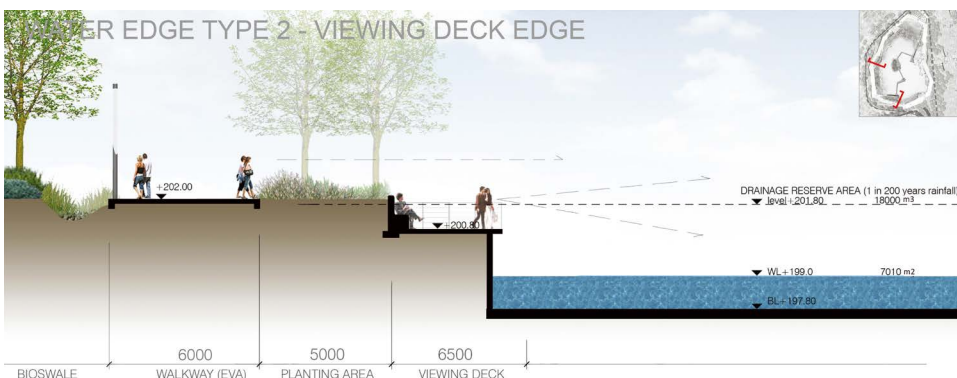


東涌河河畔公園初步範圍
Preliminary site boundary for Tung Chung River Park

安達臣道石礦場用地發展規劃 Anderson Road Quarry Development Plans

年內，我們與土木工程拓展署和康樂及文化事務署合作，擬於安達臣道石礦場發展計劃中，建造防洪人工湖。此項工程不但有助減低九龍東地區水浸風險，還為市民提供優美的水景環境。發展區亦會引進環保排水設計，包括透水行人道、雨水集蓄設施及滲水花槽等。

During the year, DSD worked with the Civil Engineering and Development Department and the Leisure and Cultural Services Department to build a flood retention lake in the plan of the Anderson Road Quarry Development. This project will serve to reduce flood risk in East Kowloon and provide scenic waterscape environment to residents. The Development area will also feature environmentally friendly drainage designs, including permeable pavements, rainwater harvesting facilities, and infiltration planter.



安達臣道石礦場發展計劃擬建的防洪人工湖
Proposed flood retention lake at Anderson Road Quarry

《河道設計的環境和生態考慮指引》實務備考

Practice Note “Guidelines on Environmental and Ecological Considerations for River Channel Design”

為進一步向業界推廣綠化河道設計，渠務署在2015年發佈實務備考編號1/2015《河道設計的環境和生態考慮指引》（實務備考），取代2005年版本。

新訂實務備考提倡藍綠建設概念，並概述其好處及重要性。實務備考亦在多方面提供技術指引，包括選擇河道設計方案的考慮因素、生態設計、平衡排水和生態功能及景觀設計等。實務備考更載述案例，說明河道設計的實際應用情況。

To further promote green river channel design within the industry, DSD released Practice Note No. 1/2015 “Guidelines on Environmental and Ecological Considerations for River Channel Design” in 2015 (The Practice Note), replacing the preceding version published in 2005.

The new Practice Note advocate the concept of Blue-Green Infrastructure concepts by outlining its benefits and importance. The document provides technical guidance in various areas, including consideration factors in the selection of river channel designs, ecological design, balancing drainage and ecological functions, and landscape design. Case studies are also included in the Practice Note to illustrate the practical application of river channel design.



《河道設計的環境和生態考慮指引》中列舉的例子：蠔涌河（左）及白銀鄉河（右）的魚梯
Illustrative cases in the Practice Note: fish ladders in Ho Chung River (left) and Pak Ngan Heung River (right)

綠化天台

Roof Greening

綠化天台不但能改善空氣質素、降低室溫及減少建築物耗能，還可以美化建築物外觀及改善周邊環境的生物多樣性。在選擇合適地點建造綠化天台時，我們會於施工前聘請合資格人士評估選址及設計。2015-16年度我們在轄下6所廠房完成天台綠化工程。

Roof greening not only improves air quality, lower indoor temperature and reduce building energy consumption, but also enhances the building appearance, and improves the biodiversity of the surrounding environment. When identifying suitable sites for green roofs, we will engage qualified assessors to ascertain viable locations and design prior to construction. In 2015-16, we completed roof greening projects for six of our facilities.

昂船洲污水處理廠
Stonecutters Island Sewage Treatment Works



2015-16年度完成天台綠化工程的廠房

Facilities with roof greening projects completed in 2015-16

- 深水埗一期及二期污水隔篩廠
Sham Shui Po Nos. 1 and 2 Sewage Screening Plants
- 昂船洲污水處理廠
Stonecutters Island Sewage Treatment Works
- 九龍灣污水截流站及泵房
Kowloon Bay Sewage Interception Pumping Station
- 望后石污水處理廠
Pillar Point Sewage Treatment Works
- 啟德4號旱流污水截流泵房
Kai Tak No. 4 Dry Weather Flow Interceptor
- 將軍澳基本污水處理廠
Tseung Kwan O Preliminary Treatment Works



深水埗一期及二期污水隔篩廠
Sham Shui Po Nos.1 and 2 Sewage Screening Plants



九龍城一號及二號污水泵房於2015年年底正式獲頒「綠建環評新建建築」的最高評級——鉑金級，是首個獲得此殊榮的政府基礎設施。綠建環評新建建築是香港綠色建築議會認可的建築物全面環境評估系統。

泵房以「心靈綠洲」為設計主題，有別於傳統渠務設施，在用地、室外環境、能源使用、用水、選材、室內環境質素和創新方面，均表現超卓。

Kowloon City No. 1 and No. 2 Sewage Pumping Stations were bestowed the highest Platinum rating under BEAM Plus Assessment for New Buildings in late 2015, a first-time award for government infrastructure facilities. BEAM Plus New Buildings is a comprehensive environmental assessment system for buildings recognised by the Hong Kong Green Building Council.

Themed “Oasis for the Soul”, the stations stand apart from conventional drainage facilities with their exemplary performance in siting, exterior, energy use, water utilisation, choice of materials, indoor environmental quality and innovation.



九龍城一號污水泵房
Kowloon City No. 1 Sewage Pumping Station



環保團體意見

Comment from Green Group

渠務署一直致力把科學應用於香港的渠道生態管理。自2012年起，我們一直與渠務署合作，為改善渠道生物多樣性，以及復修水生生物生境研究提供顧問服務。渠務署十分支持我們引進日本的生態管理經驗，以螢火蟲及各種水棲昆蟲作生物多樣性指標，評估不同渠務工程對生態的影響。時至今日，我們與渠務署的合作範疇已擴展至渠道設計及工程監察。我們身為環境管理顧問，衷心欣賞渠務署的科學精神，以及對應用生物科學的支持。我們期待未來能與渠務署有更多更深入的合作，為香港的可持續發展作出貢獻。

DSD makes a consistent effort towards the application of science to the drainage ecology management in Hong Kong. We have been working with DSD since 2012, as a consultancy services provider, on drainage channels' biodiversity improvement and habitat rehabilitation research for aquatic organisms. DSD has been very supportive of ecological management practices we introduced from Japan, utilising fireflies and various aquatic insects as a biodiversity indicator to assess the effects of various drainage projects on the ecology. Over time, our collaboration with DSD has expanded to drainage channel design and project monitoring. As an environmental management consultant, we genuinely appreciate DSD's scientific spirit and its support for applied biological sciences. We look forward to further and closer collaboration with DSD as we contribute to sustainable development in Hong Kong.



Mark Mak 麥肇峰

螢火蟲保育基金會會長
Founder of Firefly Conservation Foundation

我們的回覆

Our Response

非常感謝各環保團體對本署工作的支持，他們的寶貴意見及建議對本署保育河道生態環境至為重要，讓我們進行河道工程時能更有效地保育棲息於河道中的物種。

期待日後能與不同環保團體繼續合作，致力為香港建構更美好的生活環境。

We would like to thank various green groups that have supported our work. Their valuable feedback and suggestions have been an important factor which enabled us to conserve the river ecology in Hong Kong, so as to better protect the species inhabiting in the rivers.

We look forward to further collaboration with various green groups in future, striving to provide a better living environment in Hong Kong.



應對氣候變化

Combating Climate Change

2015年12月，各國領袖在巴黎召開的聯合國氣候變化大會中，承諾進一步加強減緩及適應氣候變化的措施。就此，香港政府加快步伐，回應有關議題。

事實上，早於2007年，香港特區政府已成立由環境局領導的氣候變化跨部門工作小組，渠務署是16個參與部門之一，並在協助香港適應與減緩氣候變化方面，擔當重要角色。為提升城市的抗洪能力，我們在檢討雨水排放整體計劃時，會考慮氣候變化的影響，並按需要展開排水改善工程。另一方面，渠務署亦致力於轄下設施推行節能減排措施，包括引進高效污水處理技術、使用可再生能源及善用生物氣發電等，減緩氣候變化。

氣候變化威脅全球，與其他城市和地區保持緊密聯繫，能促進資訊和經驗交流。渠務署是國際組織C40城市氣候領袖組織旗下「連結三角洲城市」的成員，代表香港政府與其他三角洲城市在防洪工作方面作技術交流。本署亦是粵港應對氣候變化聯絡協調小組成員，定期與廣東省政府交流排水系統規劃的經驗。

渠務署會繼續和各部門及地區合作，為香港以至全球應對氣候變化的工作出力。本章節列出渠務署在節能減排工作。欲知藍綠建設及防洪詳情，請參閱第5章 渠務署主要職責及第6章 環境管理 — 藍綠建設。

In the 2015 United Nations Climate Change Conference held in Paris in December 2015 national leaders pledged to step up mitigation and adaptation efforts to combat climate change, prompting the Hong Kong Government to pick up the pace and respond to the issue.

In fact, the HKSAR Government first established the Inter-departmental Working Group on Climate Change in 2007, which was led by the Environment Bureau and comprising representatives from 16 departments including DSD. DSD plays a vital role in helping Hong Kong adapt to and mitigate climate change. As we review Drainage Master Plans (DMPs) and improve the city's flood defences, we take into account the impact of climate change and undertake drainage improvement works deemed necessary. The Department is also dedicated to doing its part in reducing climate change through its many energy conservation and emission reduction measures at its facilities, such as introducing efficient sewage treatment technologies, using renewable energy and utilising biogas for electricity generation.

Climate change is a global challenge, and close liaison with other cities and regions facilitates the exchange of information and experience. DSD is a member of Connecting Delta Cities, a subsidiary of the international organisation C40 Cities Climate Leadership Group, and in this capacity the Department represents the Hong Kong Government to exchange flood prevention experiences with other delta cities. DSD is also a member of the Hong Kong/Guangdong Joint Liaison Group on Combating Climate Change, regularly exchanging lessons learnt in drainage system planning with the provincial government of Guangdong.

DSD will continue to work with various departments and regions on climate change, an issue affecting Hong Kong and the world alike. This chapter sets out the Department's work on energy conservation and emissions reduction. For more details on Blue-Green Infrastructure and flood prevention work, please refer to Chapter 5: Our Core Responsibilities, and Chapter 6: Managing the Environment - Blue-Green Infrastructure.



碳審計

Carbon Auditing

為確定溫室氣體排放量及其源頭，我們為轄下廠房進行碳審計，並落實相應措施，降低耗能、提高效率，減少溫室氣體排放。本年度，我們共進行了兩次新的碳審計和6次監察碳審計。未來，渠務署還會為更多污水處理廠及建造工程項目進行碳審計，以及採取更多減碳措施，冀能減少碳排放，緩減氣候變化。

We conduct carbon audits at our plants to identify sources and quantities of greenhouse gas emissions, thereby implementing corresponding measures to lower energy consumption, enhance efficiency and reduce overall emissions. This year, we conducted two new carbon audits and six surveillance carbon audits. In future, DSD will extend these audits to other STWs and construction projects, with further carbon reduction measures undertaken to reduce our carbon emissions and mitigating climate change.

2014年的碳排放量（公噸二氧化碳當量）¹

Carbon Emission in 2014 (tonnes of CO₂ equivalent)¹

* 進行了新的碳審計的污水處理廠
STWs that conducted new carbon audits

總碳排放量 Total carbon emissions²

昂船洲污水處理廠 Stonecutters Island STW	<div><div></div></div> 42,022 範圍一 Scope 1 : 14 範圍二 Scope 2 : 42,008
沙田污水處理廠 Sha Tin STW	<div><div></div></div> 22,247 範圍一 Scope 1 : 1,923 範圍二 Scope 2 : 20,324
大埔污水處理廠 Tai Po STW	<div><div></div></div> 11,481 範圍一 Scope 1 : 411 範圍二 Scope 2 : 9,353
石湖墟污水處理廠 Shek Wu Hui STW	<div><div></div></div> 9,194 範圍一 Scope 1 : 406 範圍二 Scope 2 : 8,788
赤柱污水處理廠 Stanley STW	<div><div></div></div> 2,285 範圍一 Scope 1 : 36 範圍二 Scope 2 : 2,249
元朗污水處理廠* Yuen Long STW*	<div><div></div></div> 2,315 範圍一 Scope 1 : 46 範圍二 Scope 2 : 2,269
西北九龍基本污水處理廠 Northwest Kowloon PTW	<div><div></div></div> 1,110 範圍一 Scope 1 : 0 範圍二 Scope 2 : 1,110
馬灣污水處理廠* Ma Wan STW*	<div><div></div></div> 886 範圍一 Scope 1 : 25 範圍二 Scope 2 : 861

範圍一 Scope 1 除氮過程中釋放的氧化氮 N₂O emissions through nitrogen removal +
直接使用燃料所產生的排放 Emissions generated from direct combustion of fuels

範圍二 Scope 2 使用電力所產生的間接排放 Indirect emissions generated from the use of electricity + 其他 Others³

1 渠務署8所主要污水處理廠的碳排放數據。報告期內，該8所污水處理廠處理的污水佔總污水處理量達50%以上。渠務署暫時未有為總部辦公室進行碳審計。

The above table shows carbon emission data from eight major STWs of DSD. During the reporting period, these eight STWs treated over 50% of sewage processed by DSD. DSD does not conduct carbon audit for its head office for the time being.

2 由於四捨五入關係，各項目數字相加未必等於總和。

Totals may not add up due to rounding.

3 包括因種植樹木、製冷、消化污泥、使用食水及棄置廢紙，所產生之溫室氣體排放量的淨值總和。

Including net greenhouse gas emissions associated with tree planting, refrigeration, sludge digestion, fresh water consumption, and paper waste disposal.

使用電動車

Using Electric Vehicles

電動車由電池驅動，無須燃燒汽油，不會直接排放廢氣，有助改善香港路面空氣質素。截至2016年3月，本署車隊共有20部電動車；2015-16年度，總行車里數約為254,000公里。我們計劃於轄下設施物色合適位置，增設電動車中速充電器，進一步推廣使用電動車。

沙田污水處理廠的充電插座
Charging socket at Sha Tin STW



Electric vehicles (EVs) run on batteries and thus no petrol is combusted, resulting in zero direct emissions which helps improve roadside air quality in Hong Kong. As of March 2016, we currently have 20 EVs in our fleet with a combined mileage of about 254,000 kilometres during 2015-16. We plan to further encourage the use of EV by identifying suitable locations within our facilities for the installation of medium EV chargers.

實施多項節能措施

Implementing Various Energy Conservation Measures

本署於2007年成立能源及排放管理小組，透過多個途徑管理本署的能源和污染排放，包括訂立基準以評估表現、實施改善措施及匯報節能成效。近年，我們在營運上的節能和減碳一直表現理想。於2015-16年度，我們透過優化及更換污水處理廠的操作設施、安裝太陽能光伏板及更換發光二極管等，成功節省了約169萬度電⁴（相當於減碳約1,176噸）⁵。

We established an Energy and Emission Management Team in 2007 to improve DSD's performance in energy and emissions in different ways, including benchmarking performance, implementing improvement measures, and reporting energy-saving results. We have seen excellent results in the reduction of energy usage and carbon emissions at our operations in recent years. By optimising and replacing operational facilities in STWs, installing photovoltaic (PV) panels, switching to light-emitting diodes (LEDs) etc., we managed to save about 1.69 million kilowatt-hours of electrical energy in 2015-16 (equivalent to reducing 1,176 tonnes of CO₂).⁵

裝設太陽能光伏板

Installing Photovoltaic Panels

本署轄下各類設施，包括位於元朗、石湖墟、昂船洲、小濠灣及沙灣的污水處理廠，均採用大規模的獨立或接駁電網太陽能光伏系統，為廠內設備提供電力。隨著小濠灣污水處理廠的太陽能光伏系統於2016年年底安裝完成，本署在廠內太陽能光伏板的總發電容量將約為1,250千瓦。

Large-scale PV systems, either off-grid or on-grid, have been deployed at DSD facilities to power on-site equipment. They include sewage treatment works at Yuen Long, Shek Wu Hui, Stonecutters Island, and Siu Ho Wan, and Sandy Bay. With the completion of the PV system installation in Siu Ho Wan STW in end 2016, the combined generation capacity of all PV systems in our sites will be about 1,250 kilowatts.

小濠灣處理廠內的太陽能板
The PV system at Siu Ho Wan STW

4 以2006-07年為基線

2006-07 as baseline year

5 使用全港性的預設值0.7千克二氧化碳

當量/千瓦時計算

Using Hong Kong-wide default values
of 0.7kg CO₂ equivalent per kWh.

生物氣轉化為能

Energy Conversion from Biogas

污水處理過程中產生的污泥，在厭氧消化過程中形成的生物氣，屬可再生能源。為善用生物氣，渠務署已於沙田、大埔和石湖墟的污水處理廠共安裝5台電熱聯供發電機（總發電容量為3,600千瓦），為污水處理廠提供部分所需電力。年內，我們利用生物氣體所產生約3,200萬度電，較2010-11年度上升約28%。

由於部分污水處理廠的污泥及生物氣產量較低，傳統的大型電熱聯供發電機並不適用。為善用這些生物氣，我們積極研究採用微型渦輪發動機，並於元朗污水處理廠完成試驗研究項目，安裝了這種發動機（發電量為30千瓦）。研究結果顯示，有關系統穩定可靠，電力輸出與設計目標一致。我們將會繼續監察系統表現，如有需要，會以模組形式擴充。是次試驗所得的操作數據和經驗，有助我們為其他污水處理廠設計同類設備。

Biogas is a source of renewable energy emitted during the anaerobic digestion of sludge generated from the sewage treatment processes. DSD installed five combined heat and power (CHP) generators with a combined electrical generation capacity of 3,600 kilowatts at Sha Tin, Tai Po and Shek Wu Hui STWs, using biogas to generate electricity to partially offset the electrical demand of the plants. During the year, we generated over 32 million kilowatt-hours of electricity using biogas, which is about 28% increase as compared with 2010-11.

Some STWs produce less sludge and biogas than others which makes them unsuitable for conventional large scale CHP generators. To better utilise the biogas, we have been proactively exploring the adoption of micro-turbine system in these plants, and we completed a pilot programme at Yuen Long STW with the installation of a micro-turbine engine (capacity at 30 kW). The result showed that the system was stable and reliable with electrical output in line with design specifications. We will continue to monitor the performance of this system and make modular expansions if needed. The operational data collected and lessons learnt from this trial will help us design similar facilities for other STWs.



元朗污水處理廠的微型渦輪發動機
Micro-turbine engine at Yuen Long STW

廚餘、污泥共厭氧消化研究項目

Food Waste/Sewage Sludge Anaerobic Co-Digestion Pilot Trial

根據《香港廚餘及園林廢物計劃2014-2022》，政府期望在2022年，把棄置於堆填區的廚餘量減少約四成（以2011年為基礎）。為此，渠務署將與環境保護署合作，在大埔污水處理廠進行為期6年的「廚餘、污泥共厭氧消化」試驗計劃。

計劃推展先，我們將於現有船灣滲濾液預處理廠設立廚餘預先處理設施，並於大埔污水處理廠設置污泥厭氧消化系統。經處理的廚餘，將於大埔污水處理廠與污泥進行共厭氧消化，產生生物氣體。計劃除有助提升本港的廚餘處理能力外，亦能轉廢為能，減低碳足跡。

廚餘預先處理設施的勘察研究、設計及建造顧問合約已於2015年10月開展。預計設施於2018年啟用後，每日最多可處理約50公噸廚餘。

According to A Food Waste & Yard Waste Plan for Hong Kong 2014-2022, the Government anticipates reducing food waste disposal to landfills by 40% in 2022 (using 2011 as the base year). In view of this, DSD and the Environmental Protection Department are implementing the six-year Food Waste/ Sewage Sludge Anaerobic Co-Digestion Pilot Trial at Tai Po STW.

We will begin by establishing pre-treatment facilities for food waste at the present Shuen Wan Leachate Pre-treatment Works, and constructing anaerobic digestion facilities at Tai Po STW. The pre-treated food waste will undergo anaerobic co-digestion with sludge at Tai Po STW, during which biogas will be generated. The scheme will raise city-wide food waste processing capacity and reduce carbon footprint by recovering energy from waste.

The contract for the investigation, design and construction of food waste pre-treatment facilities commenced in October 2015. After commissioning in 2018, it is anticipated that the relevant facilities would treat a maximum of approximately 50 tonnes food waste per day.



水資源管理

Water Resources Management

本署在新建設施引進可持續發展水資源管理概念，提升各項設施的水資源利用效率，當中有關主要設計元素包括雨水收集系統、地下蓄洪系統、雨水花園及多孔透水路面等。舉例而言，雨水花園是把水資源管理概念融入園境設計，利用花園植物和沙土過濾雨水，以改善徑流水質和減少排入地下水道的水量。雨水花園更可美化環境、提供生物棲息地和加強生物多樣性。

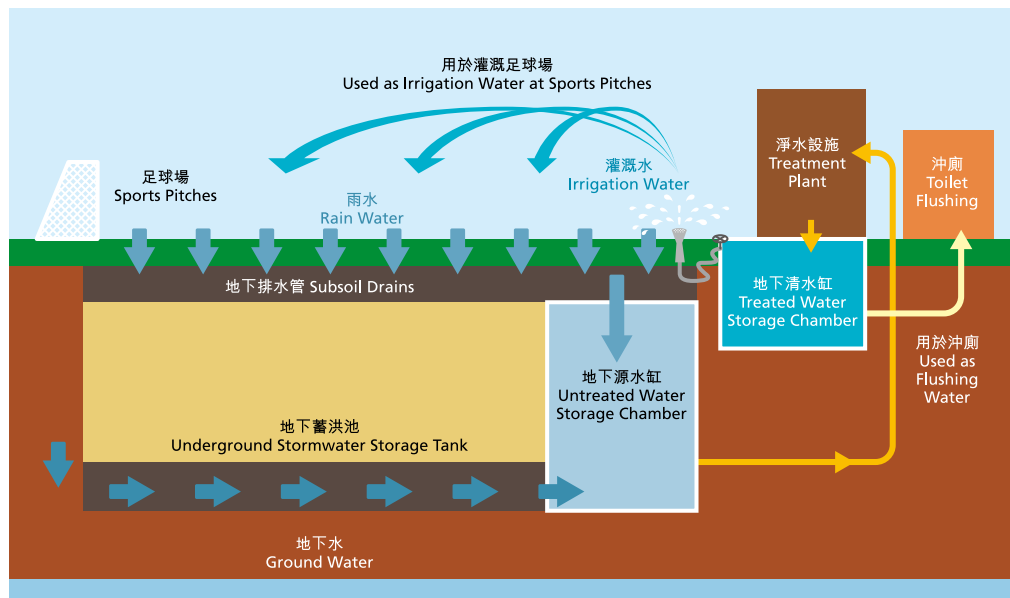
2012至2016年完成的工程項目包括九龍城一號及二號污水泵房、荔枝角雨水排放隧道，以及跑馬地地下蓄洪計劃。我們期望日後在更多大型項目加入相關設計。

DSD has incorporated concepts of sustainable water resources management into its newly constructed facilities, raising their water resources utilisation rates. Major design elements include rainwater harvesting systems (RHS), underground stormwater storage systems, rain gardens and porous permeable pavements. Rain gardens, for instance, amalgamate water resources management and garden landscaping by filtering rainwater through garden plants and soil to improve runoff water quality and reduce the flow entering underground drains. In addition to aesthetic value, rain gardens provide ecological habitats and improve biodiversity.

Associated projects completed between 2012 and 2016 include Kowloon City Sewage Pumping Stations Nos. 1 and 2, Lai Chi Kok Drainage Tunnel, and Happy Valley Underground Stormwater Storage Scheme. We hope to incorporate related design in more major works in future.

跑馬地地下蓄洪計劃的水資源採集及回用系統

RHS at Happy Valley Underground Stormwater Storage Scheme



九龍城一號污水泵房由雨水回用系統供水的梯台瀑布

Water cascade irrigated by RHS at Kowloon City Sewage Pumping Station No. 1



雨水回用

Rainwater Reuse

雨水是珍貴的天然資源，善加利用可節省食水。荔枝角雨水排放隧道因應水力設計，備有靜水池。我們盡量利用截流所得雨水，經適當處理後作沖廁、灌溉和洗滌用途，以及供食物環境衛生署用作清洗街道，節省珍貴水資源。

We can reduce use of potable water by tapping into rainwater, a precious natural resource. Lai Chi Kok Drainage Tunnel is equipped with a stilling basin as part of its hydraulic design. We use the intercepted rainwater for toilet flushing, irrigation and cleaning after suitable treatment as far as possible. Some of the water is used by the Food and Environmental Hygiene Department for street cleaning purposes, conserving precious water resource.



荔枝角雨水排放隧道靜水池上蓋的蝴蝶谷道寵物公園

Butterfly Valley Road Pet Garden, built above the stilling basin at Lai Chi Kok Drainage Tunnel

生產再造水

Production of Reclaimed Water

我們全力支持政府根據全面水資源管理策略使用再造水的建議，繼續在其設施內生產及使用再造水，並提高再造水設備在運作方面的可靠性。2015-16年度，渠務署平均每日生產約1,460立方米再造水作非飲用用途。

DSD fully supports the Government's proposals regarding the use of reclaimed water under its Total Water Management Strategy. DSD continues to produce and consume reclaimed water within its facilities while improving operational reliability of its water reclamation facilities. In 2015-16, DSD reclaimed water at an average rate of approximately 1,460 cubic metres per day for non-potable purposes.

大埔污水處理廠的再造水設施
Water reclamation facilities at Tai Po STW





為改善渠務署的環境表現，我們除了在轄下工程及污水處理設施注入環保元素外，亦致力在總部實踐綠色辦公室概念。透過推行相關政策及措施，有助培養員工的環保意識，推動渠務署的綠色文化。



於會議室擺放盆栽
Potted plants at the meeting room

Apart from incorporating green elements into our projects and sewage treatment facilities, we strive to improve the Department's environmental performance by realising green office concepts at our Headquarters. The implementation of relevant policies and measures helps raise environmental awareness amongst our staff and promote a green culture across DSD.



廢紙回收箱
Waste Paper Collection Point

環保採購

Green Procurement

渠務署一直積極支持政府的環保採購政策。於2015-16年度，我們採購了多項符合環保規格的产品，包括電器例如電腦、碎紙機、打印機、電風扇和雪櫃及辦公室用品如再造紙、充電電池、衛生紙和垃圾袋。

DSD has always given its full support to the Government's green procurement policy. In 2015-16, we procured a variety of products complying with green specifications, including electrical appliances e.g. computers, paper shredders, printers, electric fans and refrigerators and office consumables e.g. recycled paper, rechargeable batteries, toilet paper and refuse bags.

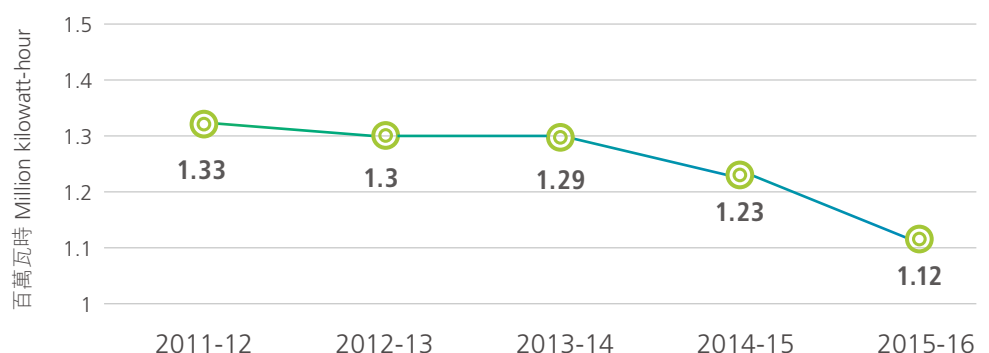
節約能源

Energy Saving

政府於2009年為政府建築物訂定目標，以2007-08年度為基礎，在2009-10至2013-14年度的5年間，減少用電5%。多年來，為降低辦公室的耗電，我們實施了多項辦公室節能措施，如把室溫設定在攝氏25.5度、減少非必要照明，以及使用時間掣於辦公時間後關掉公用辦公室設備等。多年來，渠務署辦公室用電量持續下降，2015-16年度的耗電量較2010-11年度減少約16%，足證同事節約能源的決心。

In 2009, the Government set a target for government buildings to reduce electricity consumption by 5% during the five-year period from 2009-10 to 2013-14, with 2007-08 as the base year. Over the years, we have implemented multiple energy-saving measures to reduce energy consumption in our offices, such as setting the room temperature at 25.5°C, reducing non-essential lightings, and using timers to switch off shared office equipment after office hours. We have recorded a progressive drop in electricity consumption over time: In 2015-16, we recorded an approximately 16% reduction in energy consumption compared to that in 2010-11, demonstrating our colleagues' dedication towards saving energy.

渠務署辦公室用電量 Electricity consumption by DSD offices



廢物管理

Waste Management

為使辦公室的運作更環保，我們積極減廢及節省資源。除發出有關節約用紙指引外，我們亦鼓勵同事重用信封，並設立打印機碳粉盒、充電電池、廢紙、塑膠和金屬容器等回收站。我們亦經常發放綠色資訊及巡查辦公室，提高員工的環保意識。

辦公室運作一般製造較多廢紙。為此，我們特別設節約用紙指引，鼓勵同事雙面打印及重用信封等並積極亦推動「無紙會議」，於日常會議中使用平板電腦和手提電腦等電子產品，進行簡報及討論，節約用紙。

We strive to run a greener office by reducing waste and conserving resources. In addition to releasing guidelines on reducing paper usage, we encourage colleagues to reuse envelopes and set up recycling stations for printer toner cartridges, rechargeable batteries, paper, plastic, metal containers and so on. We also disseminate green information and conduct office inspection regularly to raise our employees' environmental awareness.

In general, office operations tend to generate quite a lot of paper waste. In view of this, we have established paper saving guidelines encouraging colleagues to print on both sides, reuse envelopes and cut down on waste. We have also actively promoted "paperless meetings" to reduce paper consumption by using electronic devices such as tablets and laptop computers for briefings and discussions in day-to-day meetings.

於2015-16年度，渠務署

In 2015-16, we



共舉行了約**265**次無紙會議，並以電子方式傳閱逾**2,113**份相關文件
held about 265 paperless meetings and circulated over 2,113 relevant documents electronically



用紙量約為**9,608**令，較2009-10年度減少約**31%**
used about 9,608 reams of paper, a decrease of approximately 31% compared to 2009-10

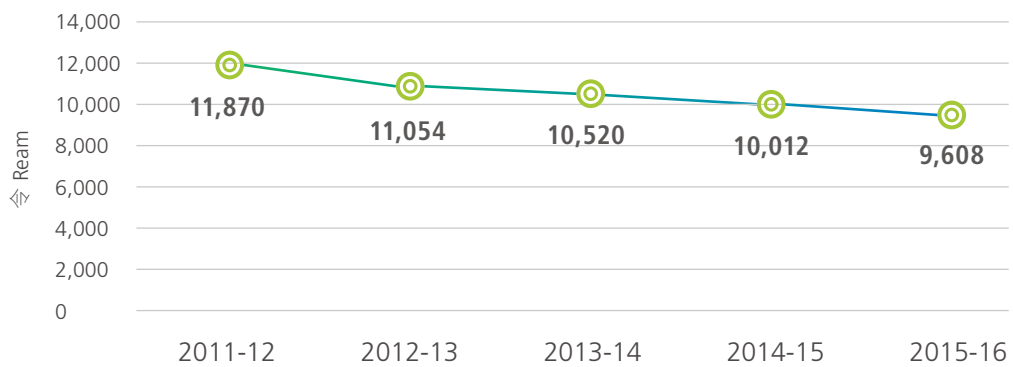


推行「無紙會議」減少用紙

Promoting "paperless meetings" to reduce paper usage

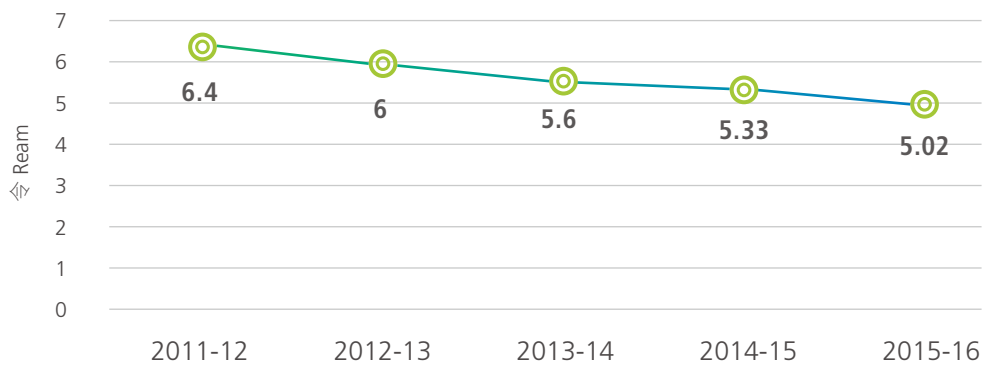
用紙量 (令)

Total paper consumption (ream)



每名員工用紙量 (令)

Paper consumption per member of staff (ream)





持份者 參與活動

Stakeholder Engagement Activities



為確保渠務服務和建設工程能順利推行，我們一直非常重視與持份者保持緊密聯繫。年內，渠務署繼續舉行多種形式的持份者參與活動，向市民介紹渠務工作與近期的重點工程，以及聽取他們的意見。與此同時，我們與業界、學界進行各類技術交流，並積極投身義務及慈善活動，貢獻社會。

In order to ensure the successful implementation of drainage services and construction projects, we have always placed great efforts to keeping close contact with stakeholders. During the year, DSD continued to carry out stakeholder engagement activities in a variety of formats, listening to the public's views as we briefed them on drainage operations and updated them on key projects. At the same time, we held technical sharing sessions with academics and the industry, and actively volunteered and participated in charity events, in order to contribute to the community.







渠務工程的公眾參與活動

Public Engagement Activities for DSD Projects

在實施渠務工程項目的過程中，我們會盡量與市民分享相關資訊，並尤其重視項目團隊與鄰近社區的相互溝通。相關的工程包括在2015-16年度進行中的淨化海港計劃第二期甲工程、啟德河改善工程、搬遷沙田污水處理廠往岩洞計劃，以及跑馬地地下蓄洪計劃。

In the course of implementing drainage projects, we share relevant information with the public as far as possible, and focus on the communication between project teams and neighbouring communities. Relevant projects in 2015-16 include the Harbour Area Treatment Scheme (HATS) Stage 2A, the Kai Tak River Improvement Works, the Relocation of Sha Tin Sewage Treatment Works to Caverns, and the Happy Valley Underground Stormwater Storage Scheme (HVUSSS).

淨化海港計劃第二期甲

HATS Stage 2A

為向市民推廣淨化海港計劃第二期甲工程及加深公眾對工程的了解，我們舉辦多項公眾參與活動。

We held various public engagement activities to promote HATS Stage 2A and enhance the public's awareness of this scheme.

淨化海港計劃第二期甲啟動典禮

Grand Ceremony for HATS Stage 2A

於2015年12月19日，香港特別行政區行政長官、環境局、發展局、渠務署、環境諮詢委員會、工程界立法會議員、工程顧問及一眾承建商等，出席淨化海港計劃第二期甲啟用典禮。隨後，大會亦安排簡報會，向傳媒介紹項目詳情。

On 19 December 2015, the Grand Ceremony for HATS 2A was attended by the Chief Executive of the HKSAR, the Secretary for the Environment, the Permanent Secretary for Development (Works), the Director of Drainage Services, Advisory Council on the Environment (ACE), a member of the Legislative Council (LegCo), engineering consultants and various contractors. A Media Briefing was held afterwards, to explain details of the project to the press.



香港特別行政區行政長官、環境局局長、立法會議員、發展局常任秘書長（工務）、渠務署署長及工程顧問公司代表主禮啟用典禮

The Grand Ceremony was officiated by the Chief Executive of the HKSAR, the Secretary for the Environment, the Permanent Secretary for Development (Works), the Director of Drainage Services, and representatives of engineering consultants

宣傳簡介活動 Promotion Activities

我們透過派發簡訊及參與展覽，加深公眾對淨化海港計劃的了解。第二期甲工程進行期間，我們亦多次接待不同傳媒，包括無線電視、香港電台及彭博，進行採訪及拍攝，向公眾介紹隧道建造工程。

We are educating the public on HATS by distributing newsletters and participating in exhibitions. During the construction period of Stage 2A, we also met members of the press, including TVB, RTHK and Bloomberg, with whom we publicized our tunnel construction works in a series of interviews and filming.



2015年10月28日至31日
28-31 October 2015

參與位於亞洲博覽館舉辦的國際環保展覽2015
Participating in the Eco Expo Asia 2015 at the AsiaWorld-Expo

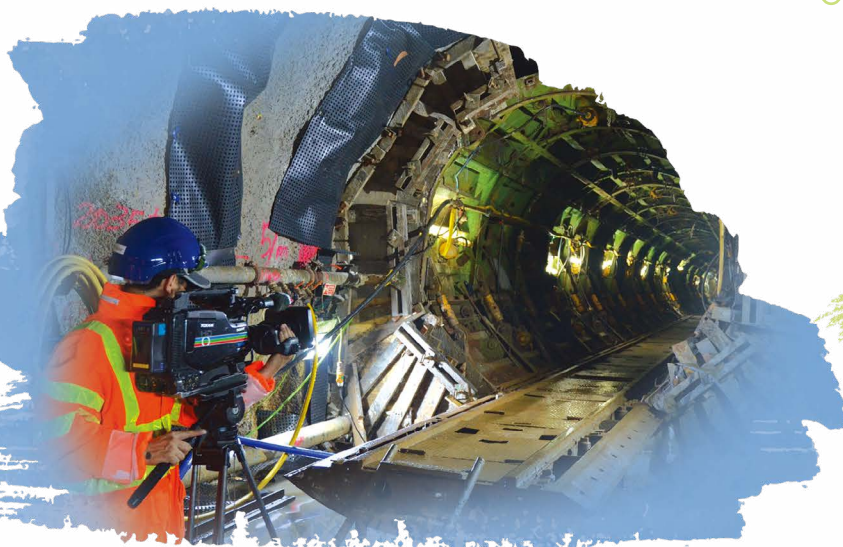


2015年9月24日
24 September 2015

邀請各大傳媒蒞臨淨化海港計劃第二期甲啟動截污轉流措施的傳媒簡報會

Inviting the press to the Media Briefing on Commencement of Flow Turning of HATS Stage 2A at Stonecutters Island Sewage Treatment Works (SCISTW)

接待無線電視攝製隊，參與拍攝「建造香港好明天」節目，介紹工程及建造隧道混凝土內壁的伸縮式範本（節目於2015年3月28日播出）
Receiving the TVB crew shooting for the variety show Build a Better Hong Kong, introducing the HATS project and telescopic formworks for tunnel concrete lining construction (show broadcast on 28 March 2015)



香港電台在昂船洲隧道工地進行拍攝，用以製作「地下秩序」特輯，介紹工程重要性及施工時遇到的挑戰（節目於2015年7月30日播出）
RTHK filming at Stonecutters Island tunnel site for the series Subsurface Rules featuring the vital project and challenges during the course of construction (show broadcast on 30 July 2015)



技術考察 Technical Site Visits

我們歡迎團體參觀，了解工程的最新進展。年內參觀的團體包括：武漢市水務局、四川省住房和城鄉建設廳和前海管理處、深圳水規院及西北院立法、立法會議員陳家洛先生及公民黨成員、香港高等教育科技學院、英國土木工程師學會、香港公開大學、英國機械工程師學會、香港工程師學會及賽馬會「鼓掌·創你程」計劃等。

We welcome group visits to understand our latest construction updates. Groups hosted during the year include the Wuhan Water Authority; the Department of Housing and Urban-Rural Development of Sichuan province and the Authority of Qianhai; Shenzhen Water Planning and Design Institute; China Northwest Architecture Design and Research Institute; LegCo member Mr. Kenneth CHAN Ka-lok and members of the Civic Party; the Technological and Higher Education Institute (THEi) of Hong Kong; the Institution of Civil Engineers (ICE) (UK); the Open University of Hong Kong (OpenU); the Institution of Mechanical Engineers (IMechE) (UK); the Hong Kong Institution of Engineers (HKIE); and the "CLAP for Youth" programme organised by the Hong Kong Jockey Club.



2015年5月4日
4 May 2015

立法會議員陳家洛先生及公民黨成員參觀污水輸送系統

LegCo member Mr. Kenneth CHAN and members of the Civic Party visited the HATS Stage 2A Sewage Conveyance System



2015年11月21日
21 November 2015

香港高等教育科技學院考察團於蒞臨昂船洲污水處理廠，了解工程建造技術

The THEi delegation visited SCISTW for an in-depth review of the construction techniques involved



2016年3月5日
5 March 2016

香港公開大學帶領考察團蒞臨昂船洲污水處理廠，了解工程建造技術

OpenU led a delegation to the SCISTW to study its engineering methods



2016年3月24日
24 March 2016

國家海洋局局長及其他代表到訪昂船洲污水處理廠

The State Oceanic Administration (PRC) and other representatives visited the SCISTW



2016年3月29日及3月31日
29 and 31 March 2016

賽馬會「鼓掌·創你程」計劃成員蒞臨昂船洲污水處理廠

Jockey Club "CLAP for Youth" visited SCISTW



2016年1月16日
16 January 2016

英國土木工程師學會參觀昂船洲污水處理廠
Institution of Civil Engineers visited SCISTW



2016年3月19日
19 March 2016

英國機械工程師學會參觀昂船洲污水處理廠
Institution of Mechanical Engineers visited SCISTW

貢獻社區活動 Community Contributions

年內，淨化海港計劃第二期甲昂船洲污水處理廠工程的義工積極參與關懷社區的活動，例如探訪長者中心及安排捐血日活動等。

During the year under review, volunteers from the HATS Stage 2A works signed up for several community care campaigns, such as visits to district elderly community centres and blood donation.



2015年6月13日
13 June 2015

工程顧問到訪耆康會東區長者地區中心，與長者一起進行包粽活動

Engineering consultants visiting the SAGE Eastern Multi-service Centre for the Elderly to make rice dumplings with seniors



2015年9月1日
1 September 2016

工程顧問舉辦了捐血日，宣揚關愛社會的訊息

Engineering consultants holding a "Blood Donation Day"

啟德河改善工程

Kai Tai River Improvement Works

啟德河改善工程旨在改善前稱「啟德明渠」的河道，一方面加強河道的排洪能力，另一方面藉著加入園景和生態等元素，建造綠色河道走廊，為周邊社區提供更多休憩空間。

早於工程開展前，渠務署已聯同土木工程拓展署及規劃署進行兩階段的「共建啟德河」公眾參與活動。自2011年工程落實開展後，我們一直與各持份者緊密溝通，務求充分了解他們所關注的議題，並盡力減低施工對居民造成的影響。

The Kai Tai River Improvement Works aim at improving the waterway formerly known as Kai Tai Nullah, boosting its drainage capacity on one hand and providing more open space to neighbouring communities on the other, through the establishment of a green river corridor and the introduction of landscaping and ecological elements.

Prior to project commencement, DSD joined hands with the Civil Engineering and Development Department (CEDD) and Planning Department (PlanD) in a two-stage public engagement programme known as "Building our Kai Tak River". Ever since the project commenced in 2011, we have been in close contact with various stakeholders, seeking to fully grasp their concerns and minimise impact of the construction project on residents as far as possible.

2015年7月，我們與啟德河改善工程的顧問公司及承建商合辦的「共建啟德河」徵文比賽2015圓滿結束。是次比賽共收到85份來自黃大仙區4間小學和4間中學的參賽作品。我們希望藉著今次比賽，鼓勵同學透過文字，抒發對啟德河在環境、外觀及生態方面發生轉變的感想，並加深他們對啟德河的認識。頒獎典禮於2015年7月2日假九龍城寨社區會堂舉行。

In July 2015, the “Building our Kai Tak River” Writing Competition, jointly organised by DSD, consultants and contractors of the Kai Tai River Improvement Works, is concluded successfully. The competition received a total of 85 submissions from four primary schools and four secondary schools in Wong Tai Sin district. We hope that this competition will encourage students to spell out their thoughts on the river’s environmental, aesthetic and ecological transformation, while getting to learn more about the river. The prize presentation ceremony was held at the Kowloon Walled City Community Hall on 2 July 2015.



「共建啟德河」徵文比賽2015頒獎嘉賓與獲獎同學合照
Group photo of officiating guests and winners of
“Building our Kai Tak River” Writing Competition 2015

此外，我們亦多次安排中學生、香港知專設計學院和香港工程師學會會員等團體，到啟德河改善工程的工地參觀，向他們介紹啟德河改善工程的目的、挑戰和主要技術應用等。

We have also arranged for students from secondary schools and the Hong Kong Design Institute, and members of the HKIE to visit Kai Tai River Improvement Works sites, briefing them on the goals, challenges and major techniques applied to the project.

2016年3月香港工程師學會（土木分部）會員參觀啟德河改善工程的工地
HKIE (Civil Engineering Division) members conducted site visits at the Kai Tak River Improvement Works in March 2016



搬遷沙田污水處理廠往岩洞計劃 Relocation of Sha Tin STW to Caverns

隨著搬遷沙田污水處理廠往岩洞計劃的開展，我們於2015年12月至2016年5月期間舉辦了第三階段的公眾參與計劃，當中包括一系列活動，向公眾介紹項目進度、環境影響評估結果和項目初期的建設安排等。在活動中，我們亦主動收集參與人士的意見和建議，以提升項目成效。

As the Relocation of Sha Tin STW to Caverns proceeds, DSD organised the third stage of its public engagement programme between December 2015 and March 2016, with a series of activities briefing the public on the project progress, the results of the Environmental Impact Assessment (EIA), and preliminary construction arrangements etc. We also took the initiative to collect views and suggestions from participants during the programme in order to improve overall project performance.



社區小組會議
Community group meeting

在沙田區內商場、公共運輸交匯處、社區中心等28個地點舉辦巡迴展覽
Roving exhibitions in 28 locations, including shopping centres, public transport interchanges and community centres in Sha Tin district



與專業團體和環保組織進行兩場小組討論會
Two focus group meetings with professional institutions and green groups



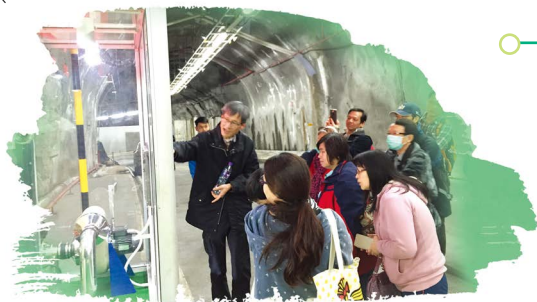
地區諮詢會
Local consultation meeting

此外，我們透過定期出版通訊刊物，與附近居民和各界持份者介紹搬遷沙田污水處理廠往岩洞計劃的最新進度。我們亦特別製作了一輯有關工程的錄影，在不同活動場合播放，以更生動的形式傳遞項目的重要資訊。

我們理解公眾關心工程可能引起的氣味影響。因此，我們特意在一些公眾參與活動中，加設了全功能的迷你除臭器，向參觀人士展示將來會採取的有效氣味控制措施。

We also updated nearby residents and various stakeholders on the progress of the relocation with regular newsletters. We produced a video for broadcasting at various activities regarding the associated project works, in order to lively present key information about the project.

DSD understands public concern about potential odour impact due to the project. To this end, we presented a mini multi-purpose deodouriser in several public engagement activities, demonstrating the efficacy of odour control measures which will be deployed in future.



向訪客展示工程中的氣味控制措施
Demonstrating to visitors the odour control measures which will be deployed during construction

跑馬地地下蓄洪計劃

Happy Valley Underground Stormwater Storage Scheme

跑馬地地下蓄洪計劃旨在透過建造地下蓄洪池，減低跑馬地及灣仔區的水浸風險。自工程開展以來，我們一直致力與鄰近地區的團體和學校等持份者，保持緊密聯繫和溝通。

Happy Valley Underground Stormwater Storage Scheme (HVUSSS) aims to reduce flooding risks in Happy Valley and Wan Chai districts through the construction of an underground stormwater storage tank. We have endeavoured to keep close contact with the neighbouring groups, schools and other stakeholders since the works began.

技術考察 Technical Site Visits

過去一年，多個本地及海外機構到訪蓄洪計劃工地進行技術考察，包括香港大學、香港科技大學、英國土木工程師學會、香港工程師學會、亞洲科技前沿大學聯盟、中國水利部、廣東省政府、台灣大學校友總會等代表團。

In the past year, various local and overseas organisations have dispatched delegations on technical site visits to the HVUSSS. They include the University of Hong Kong, the Hong Kong University of Science and Technology, Institution of Civil Engineers (ICE), HKIE, the Asian Science and Technology Pioneering Institutes of Research and Education (ASPIRE) League, the PRC Minister of Water Resources, the Governor of Guangdong province, the National Taiwan University Alumni Association, and so on.



中國水利部部長及廣東省省長到訪跑馬地地下蓄洪計劃工地
PRC Minister of Water Resources and the Governor of Guangdong province visiting HVUSSS site



亞洲科技前沿大學聯盟參觀團
ASPIRE League delegation

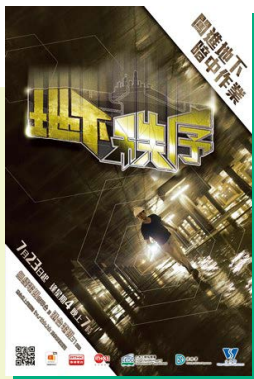
媒體宣傳 Media Promotion

2015年6月1日，香港電台的電視資訊節目「地下秩序」於跑馬地地下蓄洪計劃工地進行拍攝。第一集「下水之道」介紹了本署的「防洪三招」－截流、蓄洪及疏浚。該節目帶出了地下基建之重要性，並剖析我們在興建地下基建時，如何克服在規劃及實施上的各種重大挑戰。

於2015年4月，休閒雜誌《野外動向》就蓄洪計劃訪問本署高級工程師鄭雅思女士。訪問涵蓋了工程的設計特點，包括蓄洪池的運作、水資源採集和回收再用系統、樹木保育以及與持份者溝通等多個範疇。該專題文章「雨城 香港－(II) 跑馬地的秘密：兩水暫駐地」已於2015年5月在《野外動向》中刊載。

On 1 June 2015, RTHK began shooting its television news programme Subsurface Rules at the HVUSSH site. Episode one "Submarine rules" featured DSD's "three-pronged flood prevention" strategies in flood protection: interception, flood storage and drainage improvement. The programme highlighted the importance of less-noticeable underground infrastructures and explained how the substantial planning and implementation challenges were overcome during construction.

In April 2015, leisure magazine Hong Kong Discovery interviewed our Senior Engineer, Ms. CHENG Nga-see, covering various features of the project from stormwater storage tank operations and the water harvesting system to tree conservation and stakeholder communication. The feature article, "Hong Kong Rain Profile (II). Secret under Happy Valley: Rainwater Exodus", was published in Hong Kong Discovery in May 2015.



香港電台電視節目「地下秩序」介紹渠務署的防洪三招
RTHK's Subsurface Rules presents DSD's "three-pronged flood prevention" strategies



《野外動向》刊載專題文章「雨城・香港－(II)跑馬地的秘密：兩水暫駐地」
"Hong Kong Rain Profile (II). Secret under Happy Valley: Rainwater Exodus", feature article in Hong Kong Discovery magazine

持份者參與工作坊 Stakeholder Engagement Workshops

於2015年12月15日，跑馬地地下蓄洪計劃舉行第4次持份者參與工作坊。我們向多位主要的持份者，包括灣仔區區議員、香港賽馬會和康樂及文化事務署代表等，匯報工程的最新進度。

The fourth HVUSSH Stakeholder Engagement Workshop was held on 15 December 2015. We reported the project progress to various key stakeholders, including Wan Chai DC members, representatives of the Hong Kong Jockey Club and the Leisure and Cultural Services Department.



工程團隊與持份者大合照
Group photo of construction team and stakeholders



其他公眾參與活動^[1]

Other Public Engagement Activities ^[1]

除了就特定的工程項目與持份者溝通外，渠務署多年來亦非常重視與公眾以不同形式互動，例如專題展覽、工作影子計劃、外展教育，及接待團體參觀等。

「科學為民」服務巡禮

Science in the Public Service

本署一向積極參與由多個政府政策局和部門合辦的年度「科學為民」服務巡禮。2015年的主題為「科學與環境」。高級工程師梁華明先生於2015年8月1日在香港科學館主講題為「香港防洪策略 - 剛柔並用」的公開講座，闡述氣候變化對排水系統的影響和應對策略，以及優化排水系統的新概念。



土地排水部高級工程師梁華明先生（右一）在「科學為民」服務巡禮演說
Mr. Leung Wah-ming, Senior Engineer of Land Drainage Division (right), presenting in the SIPS

In addition to communicating with stakeholders on specific construction projects, DSD has also emphasised over the years on interacting with the general public, through a range of channels from topical exhibitions, job shadowing schemes, educational outreach to hosting group visits.

DSD is a long-time supporter of the Science in the Public Service (SIPS), an annual campaign jointly organised by government bureaux and departments. Under the theme of “Science and Environment” in SIPS 2015, Senior Engineer Mr. LEUNG Wah-ming, gave a public talk titled “Hong Kong's Flood Protection Strategies – Resistance and Resilience” at the Hong Kong Science Museum on 1 August 2015, illustrating the impact of climate change on drainage systems and our strategic responses, as well as new approaches for optimising drainage systems.

工作影子計劃

Job Shadowing

本署與香港基督教服務處—觀塘樂Teen會合作，在2015年12月30日舉辦「工作影子日」，讓青年人了解及體會實際工作環境，為投身社會作好準備。活動當天，35位來自觀塘區的中學生被派往不同分部，在24位工作導師指導下「工作」，如參與駐地盤工程師會議和協助化驗師工作等。學生們在活動期間踴躍發問，並十分積極參與工作導師所給予的「職務」。

In association with the Kwun Tong Happy Teens Club of the Hong Kong Christian Service, we organised a one-day “DSD Job Shadowing” on 30 December 2015, giving youths a glimpse of real-life working environments as they prepare themselves for future careers. 35 Secondary students from Kwun Tong district were “on secondment” to various DSD divisions under the guidance of 24 workplace mentors, such as sitting in meetings with resident engineers and assisting in laboratory work. The students were eager to ask questions throughout the affair and attended to the “duties” assigned by their mentors with enthusiasm.

「工作影子日」參加者與渠務署同事大合照

Group photo of DSD Job Shadowing participants and departmental colleagues



渠務署副署長麥嘉為先生致送紀念品予香港基督教服務處—觀塘樂Teen會代表

Mr. MAK Ka Wai, Deputy Director of Drainage Services, presenting souvenirs to representatives of the Hong Kong Christian Service - Kwun Tong Happy Teens Club

外展教育活動

Educational Outreach

我們定期推行外展教育計劃，到學校向師生講解渠務署的工作和工程項目。年內，我們到訪8所學校，向師生簡介渠務署的防洪和污水處理工作。

We conduct educational outreach programmes regularly, visiting schools and introducing the Department's work and projects to students and teachers. During the year, we visited eight schools and gave them an overview on DSD's work in flood prevention and sewage treatment.

於本地學校推行外展教育計劃

Organising educational outreach programmes for local schools



團體參觀

Group Visits

渠務署每年均接待不同社區團體和學校參觀轄下設施，向公眾推廣部門工作。年內，我們共接待逾6,000名來自中小學、內地及海外等不同機構的訪客。

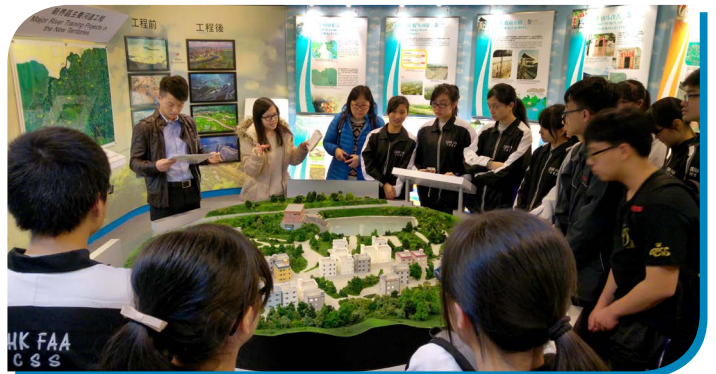
Every year, DSD promotes our departmental work by hosting visits for multiple community groups and schools at its facilities. During the year, we received over 6,000 visitors from primary and secondary schools and Mainland and overseas organizations.



學生參觀沙田污水處理廠的設施
Students visiting Sha Tin STW

中學師生參觀新田雨水泵房

Secondary school students and teachers visiting San Tin Stormwater Pumping Station



[1] G4-26



其他持份者參與活動

Other Stakeholder Engagement Activities

為配合渠務署發布最新動態，我們不時安排傳媒簡報會和專訪，並應邀參與資訊節目，以加強與各界交流，提升本署的公眾形象。為促進與社區的聯繫，我們亦定期派員出席區議會會議。我們亦會舉辦技術論壇及與環保團體進行專題小組討論，以促進與業界的交流。

From time to time, DSD has held media briefings, given interviews, and participated in informational programmes to announce its latest developments, in order to enhance knowledge sharing with different parties and promote our public image. To strengthen our ties with the community, we have also sent representatives to attend DC meetings on a regular basis. To promote industry exchanges, we have organised technical forums and engaged green groups in focus group discussion.

傳媒與專訪

Media Exchanges and Interviews

參與資訊節目《Think Big天地》

Participation in Information Programme Think Big

2015年5月22日，電視廣播有限公司節目《Think Big天地》，介紹沙田污水處理廠，讓公眾加深對本港污水處理過程的認識。

On 22 May 2015, Sha Tin STW was featured in the TVB programme *Think Big*, giving the public a better picture of sewage treatment processes in Hong Kong.



本署化驗師羅國華先生（左三）接受訪問
Mr. LAW Kwok-wah, DSD chemist (third left), attending the interview

「全城清潔2015@家是香港」專訪

Interview for "Keep Clean 2015@Hong Kong" Campaign

2015年8月18日，本署工程師黃志良先生、李銘強先生和通渠工長陸冠強先生接受多份報章專訪，簡介渠務署於清理管道方面的工作。本署的直屬員工隊更於深水埗區內示範清理管道的工作。

On 18 August 2015, Mr. WONG Chi-leung and Mr. LEE Ming-keung, our Engineers, and Mr. LUK Koon-keung, Drain Chieftain, were interviewed by several newspapers, during which they introduced DSD's work in clearing drains and sewers. Our Direct Labour Force also gave a demonstration of clearance works for drains and sewers in Sham Shui Po district.



直屬員工隊以高壓噴水法清理渠管
Direct Labour Force clearing drains with water jetting



渠務署工程師黃志良先生（左）及李銘強先生（右）向記者簡介渠務署於清理管道方面的工作
Mr. WONG Chi-leung (left) and Mr. LEE Ming-keung (right), our Engineers, giving the media an account of DSD drain clearing operations

有關活化水體及氣候變化的專訪

Interview on Revitalising Water Bodies and Climate Change

2015年10月30日及11月23日，本署土地排水部高級工程師梁華明先生分別就「活化水體」及「氣候變化」接受報章專訪。在「活化水體」專訪中，梁先生詳述本署在排水工程中所加入的「活化水體」意念，以及多個已完成、進行中及規劃中的活化河道工程。而在「氣候變化」專訪中，梁先生則介紹了本署應對氣候變化的防洪策略，當中包括截流、蓄洪、疏浚，以及採用可持續排水系統等範疇。

On 30 October and 23 November 2015, Mr. LEUNG Wah-ming, Richard, our Senior Engineer, received newspaper interviews on the topics of revitalising water bodies and climate change respectively. In the former, he elaborated on the concept as incorporated in DSD's drainage projects, as well as several river revitalisation projects which were completed, on-going or under planning. As for the interview on climate change, Mr. Leung gave an overview of DSD's flood protection strategies, including interception, flood storage, drainage improvement, and sustainable drainage system.



土地排水部高級工程師梁華明先生介紹「活化水體」的意念
Mr. LEUNG Wah-ming, Senior Engineer, presenting the concept of revitalising water bodies

「渠務署化驗室服務」專訪

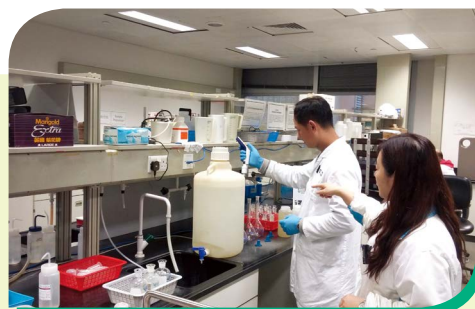
Interview on DSD Laboratory Services

2016年2月1日，渠務署高級化驗師鄧天祐博士接受多份報章專訪，分享渠務署化驗室服務的點滴及未來發展方向。鄧博士並示範了本署獨有的「生物相觀察」，透過觀察污水中的微生物，了解污水的狀況，以改進污水處理程序。

On 1 February 2016, Dr. TANG Tin-wu, our Senior Chemist, was interviewed by several newspapers, during which he shared the history and the scope of works of DSD's laboratory services and its future plans. Dr. Tang also demonstrated the unique Microscopic Examination technique of DSD, which could facilitate enhancement of the sewage treatment process through examination of the behaviour of bacteria in sewage and understand the sewage conditions.



本署高級化驗師鄧天祐博士講解「生物相觀察」測試
Dr. TANG Tin-wu, Senior Chemist, explaining the Microscopic Examination techniques



本署工程化驗室技術員示範生化需氧量的測試
DSD Engineering Laboratory Technicians demonstrating Biological Oxygen Demand testing

年度傳媒簡報會 Annual Media Briefing 2016

本署於2016年3月22日舉行年度簡報會，向傳媒簡介防洪及污水處理工作的最新情況，並帶領傳媒參觀九龍城一號污水泵房。該污水泵房於2015年年底正式獲頒「綠建環評新建建築」的最高評級——白金級，是首個政府基建設施獲此殊榮。

On 22 March 2016, we held the annual DSD Media Briefing to update the press on our latest flood prevention and sewage treatment work, followed by a site visit to the Kowloon City No. 1 Sewage Pumping Station. The facility was given the Platinum Rating (the highest rating) of Final Assessment under the BEAM Plus for New Buildings in late 2015, the first government facility to be recognised as such under the scheme.



本署署長唐嘉鴻先生接受傳媒訪問
Mr. TONG Ka-hung, Director of Drainage Services, being interviewed by the media

與區議員聯繫

Liaison with District Council Members

我們與社區聯繫的其中一個途徑是與區議員保持溝通，因此會定期派員出席區議會會議。年內，署長及部門代表出席油尖旺、黃大仙、荃灣、九龍城及東區區議會會議，向區議員講解相關地區的主要工程項目，並聽取意見。

One of the channels through which DSD connects with the community is our close correspondence with District Council (DC) members. To this end, DSD representatives will attend DC meetings regularly. During the year, the Director of Drainage Services and departmental representatives attended meetings by the Yau Tsim Mong, Wong Tai Sin, Tsuen Wan, Kowloon City and Eastern DCs, during which we explained our major projects for respective districts to DC members and listened to their views.

2015年8月27日九龍城區議會會議
Kowloon City DC meeting on
27 August 2015



2015 研究及發展論壇

Research and Development Forum 2015

渠務署「2015研究及發展論壇」於2015年11月11及18日假香港科學館舉行。論壇分兩節進行，主題分別為「污水管理」及「活化水體」，共吸引約300名本地學者、專業人士和業界代表參與。我們邀得業界翹楚和專家發表專題演說，有效促進業界在污水管理方面的合作和技術創新，亦就河道美化、生態保育及親水文化的研究和發展，分享他們的寶貴經驗。



環境局常任秘書長王倩儀作專題演講
Keynote speech by Ms. Anissa WONG Sean-ye,
Permanent Secretary for the Environment

The DSD Research and Development Forum 2015 was held on 11 and 18 November at the Hong Kong Science Museum. The Forum consisted of sessions themed "Wastewater Management" and "Revitalising Water Bodies" respectively and were attended by some 300 local academics, professionals, and industry representatives. With pioneers and experts in the field giving keynote speeches, the Forum facilitated industry-wide cooperation and technological innovation in wastewater management, while participants shared invaluable first-hand experiences in the research and development of river beautification, ecological conservation and water-friendly cultures.



本署署長唐嘉鴻先生（左六）和發展局副局長馬紹祥先生（中）與其他講者和嘉賓合照
Mr. TONG Ka-hung, Director of Drainage Services (sixth left) and Mr. MA Siu-cheung,
Under Secretary for Development (centre), pictured with other speakers and guests

與環保團體保持溝通

Ongoing Communications with Green Groups

年內，我們與關注河道生態的環保團體，包括綠色力量、世界自然（香港）基金會、長春社、嘉道理農場暨植物園、香港觀鳥會及創建香港進行了3次會面。雙方就河道生態的不同議題交換了意見，包括在排水改善工程中引進的環保設計和活化水體、在自然河道進行工程時所實施的生態保護措施和河道生態的研究等。

Over three meetings in 2015-16, DSD exchanged views on river ecologies with green groups, including Green Power, WWF-Hong Kong, The Conservancy Association, Kadoorie Farm and Botanic Garden, Hong Kong Bird Watching Society, and Designing Hong Kong. Tabled topics include ecological features adopted in drainage improvement projects, revitalisation of water bodies, ecological protection measures deployed in construction works on natural streams, and studies of river ecosystems.



與環保團體會面
Meeting with green groups



義工服務及慈善活動

Volunteering and Charitable Events

本署同事利用公餘時間積極參與各類義工服務及慈善活動，盡一己之力服務社會。年內，渠務署義工隊共參與27項義務工作，總服務時數逾1,000小時。

Our colleagues have been keen to volunteer and participate in charitable activities for the benefit of our community. During the year, DSD Volunteer Team took part in 27 volunteer activities, with over 1,000 service hours in total.

「愛•與孩同行」- 孩子成長之旅 “Lovely Trip with the Kids”: Journey of Growth

今年，渠務署義工隊與樂天倫飯堂合辦「愛•與孩同行」活動，冀透過為基層兒童安排不同的探訪及參觀活動，與他們遊歷、互動和成長。在2015年7月，我們特意安排了小朋友參觀荔枝角雨水排放隧道，除了讓他們與義工們互動，更可以認識本署工作。

This year, our Volunteer Team joined hands with Joyful Family Canteen to launch a series of visits and outings for children from low-income families, we travelled, interacted and grew together with the participants. In July 2015, we arranged a special trip for children to our Lai Chi Kok Drainage Tunnel, giving them a chance to interact with our volunteers and know more about our work.



渠務署義工與小朋友同樂
DSD volunteers and kids enjoying themselves



渠務署義工在11月時與小朋友進行“大棠定向”及參觀濕地公園，親親大自然
DSD volunteers organised “Tai Tong Orientation” and a visit to the Wetland Park for the children to explore nature in November



「愛•關懷」- 長者探訪活動 “Love and Tender Care”: Visiting the Elderly

每年7至12月，渠務署義工隊會探訪麗瑤白普理護老院的長者。透過每月一次的手工小聚，義工與長者打成一片，閒聊生活點滴，互相關懷，漸而成為「老友記」。

Every year from July to December, our Volunteer Team makes monthly visits to the Helping Hand Lai Yiu Bradbury Care Home, running handicraft workshops and mingling with the residents. Over the years and countless intimate talk, we have grown close and fond relationship with the elderly.

渠務署義工與長者邊做小手工邊談天，歡度充滿笑聲的週末早上
DSD volunteer chatted with the elderly as they were making handicraft, enjoying a joyful Saturday morning



在2015年9月的中秋節，我們探訪了土瓜灣安老院的長者，與長者猜燈謎和唱粵曲等，共度佳節。

同年12月，本署義工隊參與探訪獨居長者活動，藉此表達對獨居長者的一點關懷。2016年1月，我們與工作夥伴展開「掃舊抹新」大行動，探訪長沙灣區獨居長者家庭，並進行家居清潔。我們特意送上義工們為響應社會福利署舉辦的「香港人•香港心」活動而製作的手工藝品，表達祝福。



At the mid-autumn Festival in September 2015, we visited the elderly at To Kwa Wan elderly home, and enjoyed this joyful festival together with lantern riddle and Cantonese Opera singing.

In December 2015, our Volunteer Team visited elderly who live alone to spread some holiday cheer and warmth in the wintry season. We then teamed up with our working partners in January 2016 to provide spring cleaning services for lone elderly residents in Cheung Sha Wan district. During each visit, we presented them with handicrafts made by our volunteers in support of the "Hong Kong Citizen, Hong Kong Heart" Campaign organised by the Social Welfare Department as blessing.

渠務署義工隊參與派米活動

DSD volunteer participating in rice distribution activity

慈善籌款活動

Fundraising Activities

年內，我們還參與多項社會慈善籌款活動，包括：

- 公益行善「折」食日、公益愛牙日及公益金便服日等活動，為公益金會員社會福利機構籌募經費，提供有關服務；以及
- 不同慈善團體舉辦的籌款活動，例如世界宣明會的「饑饉一餐」及樂施會的「樂施米義賣大行動」等，扶助弱勢社群。

We also joined many community fundraisers throughout the year, including:

- "Skip Lunch Day", "Love Teeth Day", "Dress Casual Day" to raise fund for the services delivered by various social welfare agencies of the Community Chest; and
- Fundraisers held by charity groups, including World Vision's "Skip-A-Meal" and "Oxfam Rice Event" by Oxfam Hong Kong to help the disadvantaged

清潔海岸活動

Shoreline Clean-up

2015年5月、9月、10月及11月，本署義工隊及環保先鋒參與多個機構舉辦的海岸清潔活動，為保育我們珍貴的大自然盡一分力。

In May, September, October and November 2015, our Volunteer Team and Green Champions worked together at various coastal clean-ups, to help conserve our invaluable natural habitats.





與工作夥伴 攜手合作

Joining Hands with Working Partners



渠務署與工作夥伴緊密合作，借助他們的技術及經驗，推行各項工程。為確保項目質素，我們設有系統和指引，以便管理顧問公司及承建商以嶄新方式與工作夥伴合作。年內，我們繼續積極舉行工地考察、經驗分享會和獎勵計劃，加強夥伴合作。

DSD works closely with its partners, leveraging their expertise and experience to assist us in implementing various projects. To ensure project quality, we have established systems and guidelines on managing consultants and contractors, and adopted innovative approaches to collaborate with our working partners. During the year, we continued to nurture a culture of cooperative partnership by holding various site visits, experience sharing sessions, and incentive programmes.







推廣職業安全與健康

Promoting Occupational Safety and Health

渠務署設有「安全督導委員會」，監察部門的工地安全表現。委員會其中一項工作是鼓勵承建商和員工積極提升職業安全與健康表現。一如以往，我們訂立了多項安全改善措施及舉辦不同的活動，包括工地參觀、經驗分享會及工地整潔獎勵計劃，致力提升轄下工地的整體安全標準。

工地考察及經驗分享會

Site Visits and Experience-sharing Sessions

藉著參觀工地，我們為工作夥伴提供互相交流及觀摩的機會。在2015年第二季，我們安排了本署同事、駐工地督導人員和承建商代表，視察屯門鄉村污水收集系統及望后石主幹污水渠工程，讓他們了解有關工地採用的工地安全及環保措施。



The Steering Group on Safety was formed to monitor DSD's safety performance. A major task under its purview is to encourage contractors' participation in the improvement of Occupational Safety and Health (OSH) performance at our project sites. As in previous years, we rolled out multiple safety measures and activities, including site visits, experience sharing sessions, and the Construction Sites Housekeeping Award Scheme, in an effort to raise the overall safety levels across our sites.

Through organising site visits, we offer our working partners an opportunity to exchange knowledge from others'. In the second quarter of 2015, we arranged a site visit to the Tuen Mun Village Sewerage and Trunk Sewers at Pillar Point. DSD colleagues, site supervisory staff and representatives of contractors, were guided to learn about the safety and environmental practices adopted at the site.



本署同事、駐工地督導人員和承建商代表，參觀屯門鄉村污水收集系統及望后石主幹污水渠工程的工地

DSD's colleagues, site supervisory staff and representatives of contractors visiting Tuen Mun Village Sewerage and the site of Trunk Sewers at Pillar Point

此外，我們亦分別於2015年第二季及第三季安排人員參觀位於上水的金城安全訓練中心和位於葵涌的禮頓教育及培訓中心。主辦機構就工地安全設備和管理措施，分享其寶貴經驗。

We also arranged experience sharing sessions in Kum Shing Training Centre in Sheung Shui and Leighton Knowledge and Skills Training Centre in Kwai Chung, in the second quarter and the third quarter of 2015 respectively. The organiser shared with the participants about its valuable experience on site safety facilities and management practices.



本署同事、駐工地督導人員和承建商代表參觀金城安全訓練中心（左）和禮頓教育及培訓中心（右）

DSD's colleagues, site supervisory staff and representatives of contractors visiting Kum Shing Training Centre (left) and Leighton Knowledge and Skills Training Centre (right)

此外，我們亦舉辦了多場經驗分享會，探討不同的建造安全課題。當中，我們邀請了機電工程署及中華電力有限公司的人員，分享採用更妥善的工地安全工序和作業方式的經驗。分享會探討事故的起因、提醒與會者採取適當安全措施，並重溫現行相關法例、合約要求、安全指引和工作守則，避免日後發生同類事故。

DSD also held a number of experience sharing sessions for different topics on construction safety. Speakers from the Electrical and Mechanical Services Department and CLP Power Hong Kong Limited were invited to share their hands-on experience and tips on advanced site safety procedures and practices. The sessions aim to prevent occurrence of accidents in future through studying the potential causes of accidents, reminding participants to take appropriate safety measures, and reviewing relevant current legislative and contractual requirements, safety guidelines and codes of practices.

工地整潔獎勵計劃 2015

Construction Sites Housekeeping Award Scheme 2015

除了提升本署同事、工程顧問及承建商的安全意識外，改善工地整潔情況也是我們的職業安全與健康管理目標之一。自2004年起，我們每年均舉辦「工地整潔獎勵計劃」，鼓勵本署同事、工程顧問及承建商通力合作，加強工地整潔。評核工地整潔表現的準則包括工地整潔程度和外觀、衛生情況和蚊蟲防治以及對環境滋擾的控制等。

參與2015年度「工地整潔獎勵計劃」的47支隊伍，均取得「良好」級別或以上的表現，有此佳績有賴各方群策群力，同心同德。渠務署管理層在頒獎典禮上，鼓勵各參賽團隊應積極採取所需的措施回應市民的關注，達致雙贏的局面。



In addition to raising safety awareness amongst DSD colleagues, project consultants and contractors, our OSH management targets include housekeeping improvements at construction sites. We have organised the Construction Sites Housekeeping Award Scheme annually since 2004, encouraging DSD colleagues, project consultants and contractors to work together to improve site tidiness and cleanliness. Assessment criteria for site performance include cleanliness, tidiness and site appearance; hygienic condition and mosquito control; and environmental nuisance control.

This year, all 47 participating teams scored a rating of "Good" performance or above, and this remarkable result thanked to the efforts by all contractors, project consultants and DSD colleagues. During the award presentation ceremony, DSD's senior management encouraged all teams to take the necessary measures in response to public expectations and work towards a win-win scenario.

「總冠軍大獎」工程團隊合照
The Grand Award winning team





採用「新工程合約」

Adopting New Engineering Contract

本署積極採用「新工程合約」，以嶄新合作模式與工作夥伴推展渠務工程。相比傳統的工程合約，「新工程合約」提倡各方緊密合作、共同管理及分擔風險。此模式讓工程管理部门和承建商建立良好的夥伴關係，從而避免爭拗、減少工程延誤的風險及提升施工效率。在過去7年，渠務署共批出18份「新工程合約」，涵蓋土木工程、機電工程、維修保養和工程顧問服務等範疇，並積極向建造業界推廣此合約模式。於2016年1月，本署首次以「新工程合約」模式批出污水處理機電設備保養合約，為轄下各污水處理廠及泵房的機電設備進行檢驗、維修及測試。

渠務署作為「新工程合約」的主要用戶，將繼續舉辦專題研討會、工作坊和訓練課程，與業界不同持份者分享實踐經驗，讓他們了解「新工程合約」模式如何有助提升工程成本效益和降低風險。

Through our proactive application of New Engineering Contract (NEC), DSD is implementing drainage works with its working partners through innovative collaborative approaches. Comparing with conventional contract, NEC advocates close cooperation, joint management and shared risks by all working parties. This approach establishes rapport between the project management division and contractors, preventing disputes, reducing risks arising from project delay, and improving construction efficiency. In the past seven years, DSD has issued 18 NECs covering civil engineering projects, electrical and mechanical engineering projects, maintenance works and consultancy services, as well as actively promoting the NEC to the construction industry. In January 2016, DSD issued the first electrical and mechanical maintenance contract for sewage treatment facilities under NEC, through which inspections, repairs and testing will be carried out for the electrical equipments in sewage treatment works and pumping rooms under the Department's remit.

As a major NEC user, DSD will continue to organise symposiums, workshops and training courses to share our first-hand experience with different stakeholders in the construction industry, showing them how NEC helps optimising cost-effectiveness and reducing project risks.



本署同事與承辦商代表參與定期進度會議

DSD colleagues hold regular progress meetings with contractors

本署同事為有意投標的承辦商講解NEC
DSD colleague explaining NEC to tenderers who have expressed interest





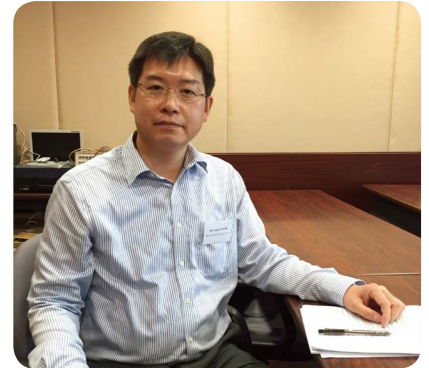
持份者訪問 Stakeholder Interview

顧問公司意見

Comment from Consultant

我們是渠務署的主要工程顧問，主要為其轄下污水及雨水排放設施提供可行性研究、設計、施工及監察的專業意見。最近，我們參與深圳和香港攜手合作的治理深圳河第4期工程，包括建造蓄洪湖泊及落實綠化河道設計。相比傳統方法，建造蓄洪湖泊旨在雨季滯洪，旱季蓄水，減低工程對生態環境的影響。為確保工程完竣後，生物可於人工河道自由游動，工程團隊特別改善河道兩旁的擋土牆設計，加入石塊模仿天然河道。渠務署人員一直積極參與有關設計方案的討論，並對創新元素持開放態度，不斷提升工程質素之餘，還滿足功能和環保要求。此外，渠務署近年的工程項目已逐步採用新工程合約，要求各方透過共同管理模式進行工程，有助建立更緊密的夥伴合作關係。

最後，氣候變化是大眾十分關注的議題，渠務署應繼續未雨綢繆，加強防洪工作，協助香港適應日益頻繁的極端天氣。



Ir Andy Kwok 郝炎工程師

項目董事
博威工程顧問有限公司
Director of Projects
Black & Veatch Hong Kong Limited

As one of DSD's major engineering consulting firms, we mainly offer professional services in feasibility studies, design, construction and monitoring for drainage facilities which provide sewage and rainwater discharge services under the Department's remit. We recently participated in Regulation of Shenzhen River Stage 4, a joint enterprise between Shenzhen and Hong Kong. The project involved the construction of a flood retention lake and the implementation of eco-river designs. Compared to conventional approaches, the construction of flood retention lake serves to contain stormwater surges during the wet season and store water for wetlands during the dry season, effectively mitigating construction impact on the ecological environment. To ensure that organisms can move about freely within the artificial waterways after construction works are complete, the project team improved the specific design of toewall and added rocks to simulate natural streams environments. DSD personnel were consistently engaged in discussions for design schemes and considered innovative elements with an open mind, thus ceaselessly improving construction quality with an eye on the dual demands on functionality and environmental protection. In addition, DSD is gradually adopting NEC on its construction projects, requiring all parties to carry out works through a managerial partnership, which is helpful on building stronger cooperative relations.

On a final note, I believe that climate change is a typical concern amongst the general public, and DSD should keep ramping up its preparations on this front and aid Hong Kong in adapting to increasingly frequent change of extreme weather.

我們的回覆 Our Response

渠務署致力培育員工的創新思維，透過與公眾、業界和各地相關機構的合作，群策群力，務求以具經濟效益和合乎環保的方式，實踐抱負。

氣候變化對香港的影響日益嚴重。我們期待能與業界攜手合作，發展創新工程技術，以應對未來的挑戰。

DSD strives to nurture an innovative spirit of our staff and collaborate with the public, trades and relevant organisations across different regions, with an ultimate aim to fulfill our responsibilities with a cost-effective and environmentally friendly manner.

Climate change manifests an increasing impact to Hong Kong. We look forward to collaborating with the industries to develop innovative technologies to cope with future challenges.



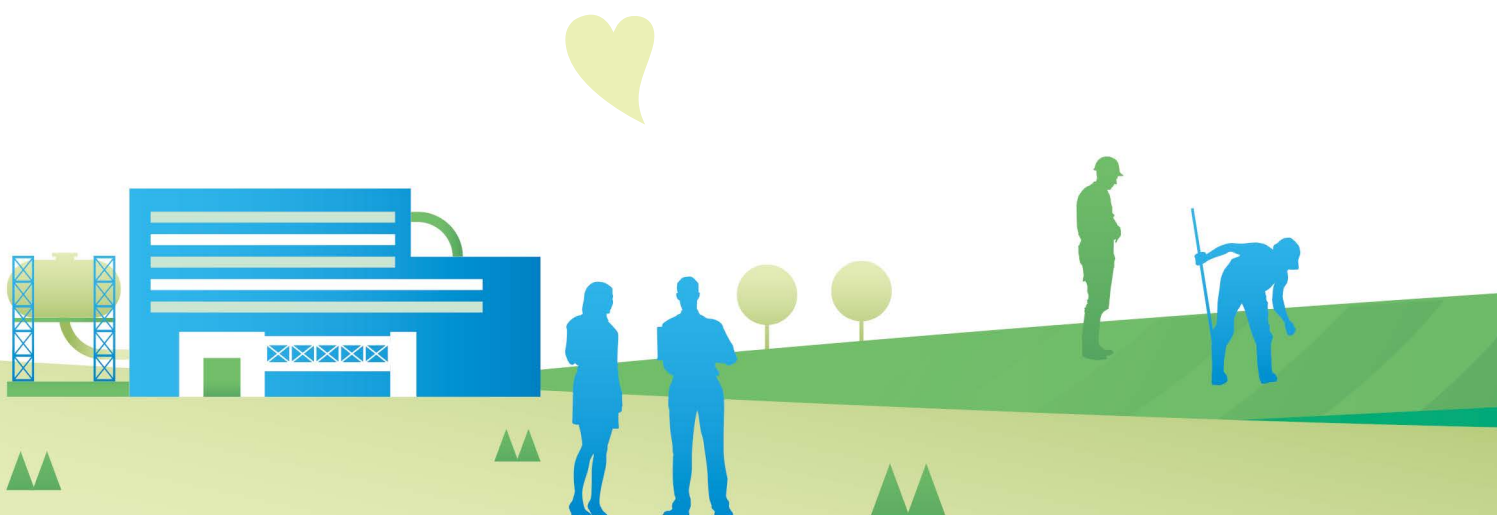
關愛員工

Care for Our Staff



渠務署致力為員工提供多元化的培訓，讓他們提升能力和增長知識，並促進他們的事業及個人發展。同時，我們亦著重為員工提供安全和愉快的工作環境，並舉辦各類康樂活動，增進員工之間的認識及對本署的歸屬感。

DSD is committed to providing a variety of training for its staff, enhancing their capabilities and knowledge while fostering their career and personal development. At the same time, we also place great emphasis on providing a safe and joyful working environment, alongside a variety of recreational activities to allow our colleagues to get to know each other, and cultivate a sense of belonging across DSD.







員工培訓與發展 Staff Training and Development

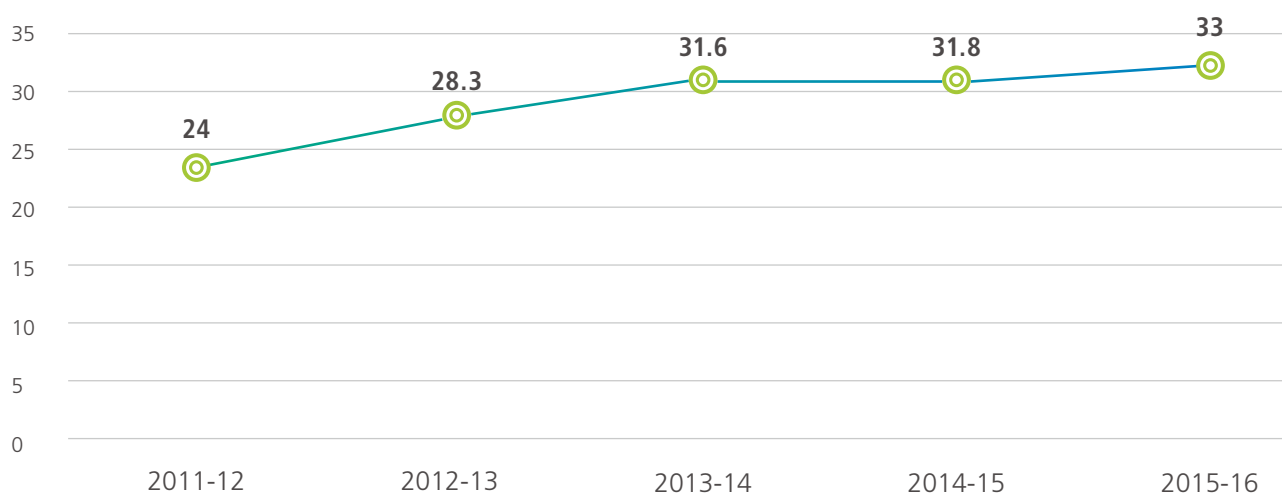
渠務署員工所具備的專業技能和知識，對部門的運作及發展十分重要。為此，我們於2015-16年度為員工舉辦共654項培訓活動，包括入職培訓、內部培訓、職務考察及海外會議等，以提升其能力。

本署員工年內的平均培訓時數為33小時，遠超過香港人力資源管理學會公布的全港僱員平均培訓時¹。

Professional expertise and knowledge held by our staff are vital to our departmental operations and development. We held a total of 654 training activities in 2015-16, improving staff competence through induction courses, internal training, duty visits, overseas conferences, etc.

During the year, the average number of training hours of our staff was 33 hours, significantly higher than the city-wide average according to the Hong Kong Institute of Human Resource Management ¹.

員工平均培訓時數 Average number of training hours per member of staff



培訓 Training

員工入職訓練

我們會為新同事安排入職課程，加深他們對部門工作的認識，從而切實履行部門的服務承諾。年內，我們共舉辦了4次入職課程，共有163名新同事參與。

Induction Courses

We arrange induction courses for new recruits so that they have a thorough understanding of our works and work with us to fulfil the Department's service pledges. In 2015-16, we held four induction courses for a total of 163 newcomers.

職業安全與健康培訓

2015-16年度，我們舉辦不同的簡報會，當中包括OHSAS 18001職業健康及安全管理系統的議題，合共有63名員工參加。我們亦為逾270名員工舉辦多達10類職安健培訓活動。

Occupational Safety and Health Training

In 2015-16, we offered orientation briefings for 63 participants, with several sessions on topics covering the OHSAS 18001 Occupational Health and Safety Management System. We also held 10 types of Occupational Safety and Health (OSH) training for over 270 colleagues.

1 「2015年僱員培訓及發展需求調查」公布的時數為18.5小時
18.5 hours, as published in the "2015 Training and Development Needs Survey"

職業安全與健康培訓 OSH Training Courses



其他安全培訓課程 Other Safety Training Courses



海外職務考察

Overseas Duty Visits

我們除安排培訓課程外，亦為員工提供海外考察機會，透過與外地專家交流，借鑒成功經驗，引進先進科技，提升部門服務質素。

In addition to local training courses, we offer opportunities to make overseas duty visits to our staff for exchanging their expertise with foreign counterparts, learning from success stories, introducing state-of-the-art technology back in Hong Kong, and enhancing DSD's service quality.

新加坡水資源管理工作

2015年5月，渠務署同事前赴新加坡，與該國公用事業局的工程專家就應對氣候變化及水資源的收集、生產、分配和處理污水等議題，進行研討及經驗交流。考察團參觀了當地著名的工程項目，包括「濱海灣堤壩」、「碧山宏茂橋公園」段的「加冷河」及「樟宜污水處理廠」。

Water Resource Management Practices in Singapore

In May 2015, DSD colleagues visited Singapore to discuss and share their experiences on a range of topics with engineering experts from the nation's Public Utilities Board (PUB), including climate change, water resources collection, production, distribution, and wastewater treatment. The delegation toured renowned engineering works across the city, including Marina Barrage, the Kallang River section within Bishan-Ang Mo Kio Park, and Changi Water Reclamation Plant.



渠務署代表與公用事業局代表進行交流
Sharing session between DSD and PUB representatives



「碧山宏茂橋公園」段的「加冷河」
Kallang River section within Bishan-Ang Mo Kio Park

第六屆「可持續環境水利與水資源運用」會議

2015年9月，渠務署同事前赴北京，出席國際水協會 — 亞太地區分組舉辦的第六屆「可持續環境水利與水資源運用」會議。渠務署同事與來自各國的代表進行交流，並聽取防洪管理和污水處理技術方面的最新研究成果。

6th IWA-ASPIRE Conference and Exhibition

In September 2015, DSD colleagues attended the 6th IWA-ASPIRE Conference and Exhibition in Beijing, under the theme of "Sustainable Water Environment and Water Use". They exchanged views with representatives from various countries and learnt the latest research results on flood prevention management as well as sewage treatment technologies.



會議盛況
Conference in progress

深圳生態河道工程

2015年9月，渠務署應深圳市治理深圳河辦公室邀請，到訪3條剛完成綜合整治工程之河道（福田河、丁山河及龍崗河）進行實地考察，了解深圳的防洪策略、活化河道和生態保育經驗。



深方設計顧問公司代表朱聞博先生講解治理丁山河工程的背景
Mr ZHU Wenbo, design consultant representative (Shenzhen), giving a background briefing on the regulation of Dingshan River

Shenzhen "Eco-River" Works

In September 2015, DSD accepted an invitation from Shenzhen River Regulation Office to make site visits at Futian, Dingshan and Longgang rivers which have just completed comprehensive regulation works. The delegation learnt about Shenzhen's flood prevention strategies as well as its experiences with river channel revitalisation and ecological conservation.



渠務署考察團視察龍崗河河道補水的運作
DSD delegation inspecting streamflow restoration at Longgang River

世界工程資產管理研討會議

2015年9月，渠務署同事遠赴芬蘭出席由坦佩雷理工大學和VTT技術研究中心舉辦的第10屆「世界工程資產管理研討會議」。會議上發佈了由學者、從業者和科學家貢獻的超過90篇論文。本署同事跟與會者互相交流建立ISO 55001資產管理系統過程中的難題，並與同業分享渠務署的策略及成果。當中所獲得的經驗有助將來繼續推動ISO 55001資產管理系統的進程。



渠務署同事在第10屆「世界工程資產管理研討會議」發表論文
DSD colleagues publishing their paper in the 10th World Congress on Engineering Asset Management

World Congress on Engineering Asset Management

In September 2015, our staff went to Finland to attend the 10th World Congress on Engineering Asset Management, organised and hosted by Tampere University of Technology in co-operation with VTT Technical Research Centre of the International Society of Engineering Asset Management. Over 90 papers were published by academics, practitioners, and scientists during the Congress. DSD's colleagues shared their experiences with other attendees on the challenges of establishing ISO 55001 Asset Management systems as well as our strategies and results. The exchange of views was conducive to the continued implementation of ISO 55001 Asset Management system in DSD.

倫敦污泥處理設施

2015年12月，渠務署同事前赴倫敦參觀了當地的污水處理廠，了解使用熱水解污泥處理和液壓過濾設施的技術和經驗，所得的資訊有助香港評估引進有關技術的可行性。

Sludge Treatment Facility in London

DSD colleagues visited a sewage treatment works in London in December 2015, exploring techniques and experiences in the application of thermal hydrolysis as well as the use of filter press systems. The information will assist in the feasibility evaluation for introducing these technologies in Hong Kong.



熱水解系統
Thermal hydrolysis system



液壓過濾設施
Filter press system



職業安全與健康

Occupational Safety and Health

本署以員工的職業安全及健康為首，故此我們投放充足資源提升安全表現，並安排員工接受有關培訓，讓他們能安全及有效率地完成日常工作。

內部職安健事務

為監察和統籌本署的職業安全及健康事務，本署特設由副署長擔任主席的「安全督導委員會」。委員會與各分部主管定期舉行會議，檢討本署內部的安全政策與程序，並發布最新的內部安全指令。此外，我們亦設有機電工程科安全管理委員會、污水處理廠安全及健康管理委員會，以及直屬員工隊安全管理委員會。各個委員會均由署內不同職系和職級的人員組成，佔部門整體人員編制約3%。成員會定期舉行會議，檢視現有的健康與安全管理系統，並尋求改善及優化空間。

OSH for our staff is a top priority at DSD. To this end, we allocate sufficient resources to raise safety performance and arrange associated staff training to ensure that their day-to-day tasks are accomplished safely and efficiently.

In-house Occupational Safety and Health

Chaired by the Deputy Director of Drainage Services, DSD Safety Steering Group was established to monitor and coordinate the safety and health matters of the Department. The Group holds regular meetings with Division Heads to review in-house safety policies and procedures, as well as announce the latest safety directives within the Department. We have also established Electrical and Mechanical Branch Safety Management Committee, Sewage Treatment Works Safety and Health Management Committee, and Direct Labour Force Safety Management Committee. The Committees are all composed of DSD staff from different disciplines and grades and comprising 3% of the entire staff establishment. Meetings are held regularly to review the present OSH systems and seek room for improvement and optimisation.



本署於2012年通過OHSAS 18001職業健康及安全管理系統認證

DSD was awarded the OHSAS 18001 Occupational Health and Safety Management System certification in 2012.

職安健推廣活動

為提升員工的安全意識及培育安全文化，年內，我們舉辦和參與多項職安健推廣活動、運動及獎項計劃。

Occupational Safety and Health Promotion

To raise safety awareness and nurture a culture of safety amongst our staff, we organised and participated in a variety of OSH promotion drives, campaigns, and incentive programmes.



轄下**26**項工程項目參與發展局主辦的2015年「公德地盤嘉許計劃」

26 DSD projects participated in the Development Bureau's Considerate Contractors Site Award Scheme 2015



舉辦2015年「工地整潔獎勵計劃」，共**47**項工程項目參與

47 projects participated in the DSD's Construction Sites Housekeeping Award Scheme 2015



為本署員工、顧問公司駐工地人員及承建商人員舉辦一個安全講座和**3**次參觀工地活動

One safety talk and three site visits were organised for DSD colleagues, resident site staff and contractors' staff



員工康樂活動

Staff Recreational Activities

我們的員工自發成立了渠務署職員康樂會，義務為同事舉辦各式各樣的康樂活動。這些活動一方面讓同事舒展身心，也可增進不同部門同事之間的認識。

Founded by DSD staff, the Staff Club organised a range of recreational activities on a voluntary basis, giving colleagues a chance to relax and get to know one another across divisions.

香港馬拉松2016 Hong Kong Marathon 2016

一如以往，本署踴躍參與香港馬拉松賽事，今年除了約60名員工和其親屬參賽外，還有顧問公司及承建商人員等合作夥伴一同參與，總人數多達320人。賽事中參賽者互勵互勉，士氣高昂，充分發揮團隊精神。

As usual, about 60 DSD staff members and their relatives signed up for the Hong Kong Marathon 2016, joined by consultants, contractors, and other working partners to form a 320-strong team. The high-spirited runners supported one another throughout the trek in a show of real teamwork.



馬拉松盛況
Photo taken in the Marathon

渠務署龍舟隊在「國慶小龍公開賽2015」獲得優異獎

DSD's dragon boat team won the excellence award in the "2015 National Dragons Open "



龍舟競渡 Dragon Boat Race

每年，本署的龍舟隊均積極參與賽事。為了爭取好成績，各隊員很早便開始備戰，進行連串刻苦練習。參與龍舟競渡既可增強團隊的合作精神，亦是鍛鍊體魄、強身健體的好機會。

Our dragon boat team enters tournaments every year, training hard well in advance to gain every possible advantage. Rowing boosts team spirit within the Department and is an excellent opportunity to train up oneself, both physically and mentally.

渠務署龍舟隊在「2015沙田龍舟競賽」的男子中龍賽事中獲得殿軍

DSD's dragon boat team won the third runner-up in the "2015 Shatin Dragon Boat Race" men's medium boat event



渠務署龍舟隊在「第十二屆中華電力友誼盃龍舟賽 2015」的合照
Group photo of DSD's dragon boat team in "The 12th CLP Dragon Boat Friendship Cup 2015"

體育競賽 Sports Competitions

除組隊參加香港馬拉松及多場龍舟競賽外，職員康樂會亦舉辦多項熱門體育比賽，讓員工一展身手，當中包括足球、籃球、乒乓球、壁球、桌球、高爾夫球、網球、羽毛球、保齡球和飛鏢競賽等。

In addition to the Hong Kong Marathon and dragon boat races, our Staff Club also organised a wide range of popular sports competitions, catering to different tastes with tournaments for football, basketball, table-tennis, squash, snooker, golf, tennis, badminton, bowling, and darts.

足球比賽
Football tournament



單車活動
Cycling session



戶外活動及興趣班 Outdoor Activities and Interest Classes

我們亦安排各式各樣的戶外活動和興趣班，包括遠足、太極班、綠色種植講座、單車生態遊及氣槍射擊體驗日等，讓員工陶冶性情，增進彼此友誼。

We have also arranged various outings and interest classes, including hiking, tai chi lessons, gardening seminars, cycling eco-trip, and airgun taster days, so that our staff can make new friends and try out new hobbies.



遠足活動
Hiking session

周年晚宴 Annual Dinner

本年度的渠務署職員康樂會周年晚宴於2015年5月舉行，出席的嘉賓及同事約300人。除頒發各項體育比賽獎項及進行幸運抽獎外，大會還安排問答環節和緊張刺激的集體遊戲，台上台下全情投入，開懷盡歡。

DSD Staff Club Annual Dinner was held in May 2015, with nearly 300 colleagues and guests in attendance. On top of prize presentations for sports competitions and lucky draws, the Dinner also hosted quizzes and exciting group games to our collective and unbridled excitement.



周年晚宴
Annual dinner



發展局局長陳茂波到訪
Visit by Mr Paul CHAN Mo-po,
Secretary for Development

部門聖誕聯歡會 Christmas Party

今年，逾450位同事及嘉賓在2015年的部門聖誕聯歡會聚首一堂，共慶佳節。當日節目包括詩歌唱詠、短片播放及有獎問答遊戲，考驗同事對部門歷史及各項工程的認識。

Over 450 colleagues and guests joined DSD's Christmas Party 2015, with hymns sung and video broadcast, followed by a chance to win prizes in a quiz on DSD's history and our various projects.



祝酒儀式
Making a toast



親善探訪 Goodwill Visits

渠務署自2013年6月起開展「親善探訪計劃」，目的為加強管理層與前線員工的溝通，深化彼此間之連繫。在該計劃推動下，本署的署長、副署長和其他首長級人員到前線員工的工作地點進行親善探訪，與員工暢談彼此關心的議題。在2015-16年度，管理層共進行了12次親善探訪，與16處辦公地點的員工溝通。

Since June 2013, DSD has launched a Goodwill Visit Programme to strengthen communication and ties between senior management and frontline staff. Under this Programme, the Director, Deputy Director of Drainage Services, and other directorate officers visited frontline staff at their workplaces, with frank conversations on topics of mutual concern. In 2015-16, senior management made a total of 12 goodwill visits to communicate with frontline staff at 16 workplaces.



親善探訪情況
On a goodwill visit



完成目標

Meeting the Targets



為有系統地檢討及改善渠務署的可持續發展表現，我們為環境保護、社會工作表現及服務質素等範疇訂立了多項目標，並積極落實相關工作。本章節列出了我們於報告期內的表現，以及為2016-17年度訂定的新目標。

In order to systematically review and improve our sustainability performance, we have established various targets on environmental performance, social performance and service quality, and taken corresponding actions. Details of our achievements in the reporting year and targets set for 2016-17 are summarised in this chapter.







環保事務

On Environmental Issues

2015-16年度環保事務目標 Environmental Target 2015-16

成果 Achievement

採用先進的低污染技術及預防污染措施

Adopting state-of-the-art clean technologies and pollution prevention measures

由2013-14年度開始，在未來3年採用3項新穎的低污染技術或預防污染措施

Adopt three new clean technologies or pollution prevention measures within a three-year period starting from 2013-14

開展3項關於低污染技術的研發項目

Conduct three research and development (R&D) items for clean technologies

- 進度良好。我們已採用3項新穎的環保技術，分別用於雨水回用、沼氣脫硫和電動車。
The progress was satisfactory. We have adopted three new green technologies, namely rainwater harvesting, biogas desulfurisation and use of electric vehicle.

- 我們已就生產沼氣、人工濕地淨水作用、再生能源應用、薄膜太陽能發電和廚餘與污泥共厭氧消化5個範疇開展研發項目。
We have commissioned R&D projects in five areas, namely biogas production, constructed wetland polishing, renewable energy for corrosion prevention, thin film solar panels and co-digestion of food waste with sewage sludge.

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

Achieve 100% compliance with the statutory environmental impact assessment (EIA) process.

每年最少與社區組織/環保團體/學者會面6次，研討可持續發展事務

Meet with community groups/green groups/academics at least six times each year to consider sustainability matters.

再造水/回用雨水的使用量在2015-16年度完結前達到每日1,500立方米

Use 1,500 cubic metres of reclaimed water or harvested water per day by the end of 2015-16

進行兩次新的碳審計和5次監察碳審計

Conduct two new carbon audits and five surveillance carbon audits

- 達致100%符合法定環境影響評估程序。
100% compliance with statutory EIA process achieved.
- 年內，我們與社區組織/環保團體/學者會面6次。
We met with community groups/green groups/academics six times during the year.
- 再造水使用量平均為每日1,512立方米。
On average, we used 1,512 cubic metres of reclaimed water per day.
- 共進行了兩次新的碳審計和6次監察碳審計。
We have conducted two new carbon audits and six surveillance 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4,000平方米綠化天台和150平方米垂直綠化
Build 4,000 square metres green roof and 150 square metres vertical greening

種植2,300棵樹及60,000叢灌木

Plant 2,300 trees and 60,000 shrubs

- 共建造了4,000平方米綠化天台和150平方米垂直綠化。
4,000 square metres green roof and 150 square metres vertical greening were built
- 種植了2,300棵樹及70,000叢灌木。
Planted 2,300 trees and 70,000 shrubs

2015-16年度環保事務目標 Environmental Target 2015-16

成果 Achievement

符合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 DSD

達致100%遵守環保法例

Achieve 100% compliance under environmental legislation

- 未能達標。年內有2宗承辦商違反《噪音管制條例》的定罪和15宗從污水處理廠排出不符合排放標準的污水，而違反環保法例的事件。
Target not met. There were two convictions of contractors under the Noise Control Ordinance and 15 non-compliance on Water Pollution Control Ordinance discharge licence standard.

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

較2014-15年度減少2%的用紙量

Reduce paper consumption by 2% compared to 2014-15

- 達標，用紙量較2014-15年度減少了4%。
Target met. Reduced paper consumption by 4% compared to 2014-15.

節約130萬度電，即2006-07年度基準能源消耗量的0.52%

Save energy of 1.30 million kilowatt-hours which is equivalent to 0.52% energy consumption of the base level in 2006-07

- 2015-16年度共節約了169萬度電。
Saved energy of 1.69 million kilowatt-hours in 2015-16.

增加10%的電動車總行車里數

Increase the total mileage of electric vehicles by 10%

- 共增加了31%電動車總行車里數。
The increase in total mileage of electric vehicles was 31%.



2016-17年度環保事務目標 Environmental Target 2016-17

採用先進的低污染技術及預防污染措施

Adopting state-of-the-art clean technologies and pollution prevention measures

- 由2016-17年度開始，在未來3年採用3項新穎的低污染技術或預防污染措施
Adopt three new clean technologies or pollution prevention measures within a three-year period starting from 2016-17
- 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
Achieve 100% compliance with the statutory EIA process
- 每年最少與環保團體/學者會面6次，研討可持續發展事務
Meet with green groups/academics at least six times each year to consider sustainability matters
- 再造水/回用雨水的使用量在2016-17年度完結前達到每日1,500立方米
Use 1,500 cubic metres of reclaimed water or harvested water per day by the end of 2016-17
- 進行2次新的碳審計和5次監察碳審計
Conduct two new carbon audits and five surveillance carbon audits

盡量減低及舒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4,000平方米綠化天台和150平方米垂直綠化
Build 4,000 square metres green roof and 150 square metres vertical greening
- 種植2,000棵樹及60,000叢灌木
Plant 2,000 trees and 60,000 shrubs

符合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 DSD

- 達致100%遵守環保法例
Achieve 100% 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1%的用紙量
Reduce paper consumption by another 1%
- 節約140萬度電，即2006-07年度基準能源消耗量的0.56%
Save energy of 1.4 million kilowatt-hours which is equivalent to 0.56% energy consumption of the base level in 2006-07
- 由2016-17年度起，在3年內將電動車佔所有車輛的行車里數由現時的6%增加一倍至12%
Double the mileage percentage of electric vehicles to all vehicles from the current 6% to 12% in 3 years starting from 2016-17



社會事務 On Social Issues

2015-16年度社會事務目標 Environmental Target 2015-16

成果 Achievement

盡量減低渠務署員工的工傷意外率 Minimising accident rate for DSD staff

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

- 報告期內每年每1,000名員工有7.2宗工傷意外。
7.2 occupational injuries per 1,000 staff per year achieved in the reporting period ¹.

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

渠務署工程合約的工傷意外率應低於每100,000工時0.6宗
Accident rate in DSD's contracts should be less than 0.6 reportable accident per 100,000 man-hours worked

- 報告期內每100,000工時有0.16宗職業工傷意外。
0.16 reportable accident per 100,000 man-hours worked achieved in the reporting period.

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 occupational 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

- 共舉辦了兩次署內職安健工作坊。
Two in-house workshops on safety and health were organised.

提高承建商的職安健意識 Promoting the awareness on occupational safety and health amongst contractors

達致最少80%的渠務署合資格新工程合約及30%的合資格維修定期工程合約，參加發展局的「公德地盤嘉許計劃」
At least 80% of DSD eligible new works contracts and 30% of eligible maintenance term contracts should participate in Development Bureau's Considerate Contractors Site Award Scheme (CCSAS)

- 26項渠務署合資格新工程中，21項 (81%) 參加了發展局的「公德地盤嘉許計劃」；而11項合資格維修定期工程中，則有5項 (45%) 參加了該計劃。
Out of the 26 eligible new works contracts, 21 (81%) participated in CCSAS while out of the 11 eligible maintenance team contracts, five (45%) participated in the Scheme.

¹ 包括非公務員合約僱員遭遇的意外

Included accidents encountered by Non-civil Service Contract staff (NCSC)



2016-17年度社會事務目標 Social Target 2016-17	指標 Indicators
盡量減低渠務署員工的工傷意外率 Minimising accident rate for DSD staff	<ul style="list-style-type: none">● 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 ten 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	<ul style="list-style-type: none">● 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	<ul style="list-style-type: none">● 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	<ul style="list-style-type: none">● 達致最少80%的渠務署合資格新工程合約及30%的合資格維修定期工程合約，參加發展局的「公德地盤嘉許計劃」 At least 80% of DSD eligible new works contracts and 30% of eligible maintenance term contracts should participate in Development Bureau's Considerate Contractors Site Award Scheme (CCSAS)



常規服務 On Routine Services

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.

服務 Service	承諾 Pledge	2015-16年工作目標 Performance Achievement Target 2015-16	成果 Achievement
清理堵塞污水管/排水渠 Clearance of blocked sewers/ drains	<ul style="list-style-type: none"> 於即日回應在下午一時前接獲的投訴 Respond within the same day for complaints received before 1 pm 於翌日正午前回應在下午一時後接獲的投訴 Respond before noon of next day for complaints received after 1 pm 市民對清理工作的滿意程度¹ Customers satisfy with the clearing work¹ 	99% 99% 95%	99.76% 99.31% 98.83%
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	<ul style="list-style-type: none"> 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 HBP1 application 	99%	100%
回應關於污水處理服務賬項的書面查詢 Response to written enquiries on sewage services accounts	<ul style="list-style-type: none"> 於兩個工作天內作出初步回應 Initial respond within two working days 於一個月內詳細回覆 Full reply within a month 	100% 98%	100% 100%
回應投訴 Response to complaints	<ul style="list-style-type: none"> 於10天內回應 Respond within ten calendar days 	98%	98.41%
提供渠務系統紀錄圖則 Provision of drainage record plans	<ul style="list-style-type: none"> 於即日安排查閱 Allow inspection of drainage record plans within the same day 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% 95%	100% 100%
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	<ul style="list-style-type: none"> 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%	99.91%

於2016-17年度，我們將會繼續維持以上目標，以監察及確保常規服務質素。

The above targets will be maintained for 2016-17 to monitor and upkeep our routine service quality.

核實聲明



範圍及目的

香港品質保證局已對渠務署二零一五／一六年可持續發展報告（以下簡稱「報告」）內容進行獨立驗證。報告陳述了渠務署在2015年4月1日至2016年3月31日於社會及環境方面的承諾和表現。

此核實聲明的目的是對報告內容的完整性及準確性提供合理保證。渠務署可持續發展報告依循全球報告倡議組織（GRI）的第4代可持續發展報告指南（下稱G4）的核心選項進行報告。

核實方法

核實的程序包括審閱相關之文件、與負責編製報告內容的代表面談及選取報告內具有代表性的數據和資料進行查核。對所選樣本的數據及證據已進行徹底審查。

獨立性

香港品質保證局不涉及收集和計算此報告內容的數據或參與編撰此報告。香港品質保證局的核實過程是獨立於渠務署。

結論

是次的核實結果肯定了渠務署用作管理和報告其可持續發展表現資料的系統和流程為有效。我們確定報告內所陳述的資料可靠和準確。可持續發展報告G4框架中載述的要求、元素和關鍵績效指標得到適切地涵蓋。報告的內容結構完整合理，能平衡及一致地反映有關渠務署重要可持續發展範疇於2015/16年的實踐表現。

渠務署一直積極地主動與持份者保持良好溝通。持份者的意見極受重視並且成為渠務署建立可持續發展策略和編制報告內容的基礎。同時，渠務署亦能及時回應持份者的關注及期望，報告也記載了有關例子。總括而言，報告清楚載述了有關渠務署在重要可持續發展範疇的承諾，實踐及表現。

香港品質保證局

譚玉秀

企業業務總監

2016年12月

VERIFICATION STATEMENT



Scope and Objective

Hong Kong Quality Assurance Agency ("HKQAA") conducted an independent verification of the Drainage Services Department Sustainability Report 2015-16 (hereinafter referred to as "the Report") of Drainage Services Department (hereinafter referred to as "DSD"). The Report states DSD's commitments and progress on sustainability for the period from 1st April 2015 to 31st March 2016.

The aim of this verification was to provide reasonable assurance on the completeness and accuracy of the information stated in the Report which was prepared in accordance with the Core Option of the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines.

Methodology

The verification process included reviewing of relevant documentation, interviewing responsible personnel with accountability for preparing the reporting contents and verifying the selected representative sample of data and information. Raw data and supporting evidence of the selected samples were thoroughly examined.

Independence

HKQAA was not involved in collecting and calculating the reporting data, or in the development of the Report. HKQAA's activities are independent from DSD.

Conclusion

The results of our verification provided confidence in the systems and processes used by DSD for managing and reporting sustainability performance information. It is confirmed that the contents stated in of the Report are accurate and reliable. The requirements, aspects and key performance indicators specified in the G4 Sustainability Reporting Guidelines have been adequately addressed. The information presented in the reporting contents articulate a balanced account of DSD's sustainability performance during the reporting period.

DSD has established effective mechanism to proactively engage with its stakeholders. Feedbacks from stakeholders were taken into account very seriously for incorporating into the company's sustainability strategies and for preparing the reporting contents. Also, DSD has been responsive to stakeholder concerns and expectations with a number of examples shown in the Report. Overall, the material sustainability issues of DSD's commitments, progress and achievement were included in the Report.

Signed on behalf of Hong Kong Quality Assurance Agency

Jorine Tam

Director, Corporate Business

December 2016



附錄一 — 主要統計數據

Appendix 1 — Key Statistics and Data

環境工作表現 Environmental Performance

能源使用量 Energy Consumption

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
渠務署 By DSD (G4-EN3)						
電力 Electricity	千兆焦耳 (百萬千瓦時) GJ (Million kWh)	860,400 (239)	864,000 (240)	890,244 (247)	947,646 (263)	988,740 (275)
汽油 Gasoline						
徵用車隊 Pool cars	千兆焦耳 (公升) GJ (Litre)	沒有相關數據 Figures not available	1046.19 (31,862)	877.48 (26,724)	893.14 (27,048)	824.63 (24,974)
部門車隊 AM cars	千兆焦耳 (公升) GJ (Litre)	4423.79 (133,967)	4315.08 (130,675)	4103.83 (124,278)	3,799.29 (115,060)	3,496.86 (105,901)
沼氣 ¹ Biogas ¹	百萬立方米 Million m ³	10	10	9	10	10
處理每單位體積污水的平均用電量 Average electricity consumption per unit volume of sewage treated (G4-EN5)	千瓦時 kWh	0.2426	0.2388	0.2409	0.2591	0.2716

渠務署的承建商 By DSD's contractors (G4-EN4)

電力 Electricity	千兆焦耳 (百萬度電) GJ (Million kWh)	沒有相關數據 Figures not available	137,952 (38.32)	23,328 (6.48)	97,798 (27.17)
汽油 Gasoline	千兆焦耳 (公升) GJ (Litre)	沒有相關數據 Figures not available	13,153 (398,325)	10,438 (316,101)	6,834 (187,239)
柴油 Diesel	千兆焦耳 (公升) GJ (Litre)	沒有相關數據 Figures not available	94,698 (2,594,463)	27,451 (752,080)	42,601 (1,167,162)

溫室氣體排放量² Greenhouse Gas (GHG) Emissions²

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
渠務署 By DSD						
購買電力 Electricity purchased (Scope 2) (G4-EN16)	二氧化碳當量，以公噸計算 Tonnes CO2e	167,300	168,000	173,103	184,265	187,611
燃燒汽油 Gasoline combustion (Scope 1) (G4-EN15)						
徵用車隊 Pool cars	二氧化碳，以公噸計算 Tonnes CO2	沒有相關數據 Figures not available	75.19	63.07	63.83	65.90
部門車隊 AM cars	二氧化碳，以公噸計算 Tonnes CO2	316.16	308.39	336.53	271.54	249.93
渠務署的承建商 By DSD's contractors (G4-EN17)						
購買電力 Electricity purchased (Scope 3)	二氧化碳當量，以公噸計算 Tonnes CO2e	沒有相關數據 Figures not available		26,824	4,536	19,016
燃燒燃料 ³ Fuel consumption (Scope 3) ³	二氧化碳，以公噸計算 Tonnes CO2	沒有相關數據 Figures not available		7,865	2,824	3,561

¹ 由污水處理廠產生
Generated from sewage treatment works

² 溫室氣體排放量的計算是參考香港環境保護署及機電工程署在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審計和報告指引》。GHG emission were calculated 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 and Electrical and Mechanical Services Department, HKSAR in February 2010.

耗水量 Water Consumption

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
用於防洪及污水處理設施的淡水耗用量 Freshwater consumption at flood prevention and sewage treatment facilities (G4-EN8)	立方米 m ³	2,092,627	2,078,729	1,709,925	2,085,560	2,050,936
污水處理廠的再造水每日生產量 Daily reclaimed water produced at STWs	立方米 m ³	1,349	1,194	1,151	1,565	1,512
再造水佔用水量百分比 Percentage of water reclaimed (G4-EN10)	%	0.06	0.06	0.07	0.08	0.07

污水處理 Sewage Treatment

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
經處理的污水量 Volume of sewage treated (G4-EN22)	百萬立方米 Million m ³	981	1,001	1,021	1,011	1,007
從污水移除的生化需氧量(BOD) Biochemical oxygen demand (BOD) removed from sewage	公噸 Tonnes	107,057	100,677	109,579	115,681	124,569
從污水移除的懸浮固體(SS)量 Suspended solids (SS) removed from sewage		163,986	146,208	169,792	207,738	242,933
從污水移除的氮量 Nitrogen removed from sewage		5,541	5,310	6,067	6,820	6,551
經處理的污水移除脫水污泥量 Dewatered sludge removed from treated sewage		301,583	300,965	298,093	355,220	392,396
經處理的污水移除隔濾物量 Screenings removed from treated sewage		12,157	13,334	13,663	15,817	15,172
經處理的污水移除砂礫量 Grits removed from treated sewage		4,388	4,741	4,903	5,429	6,631

廢料管理 Waste Management (G4-EN23)

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
建築及拆卸廢料 Construction & demolition materials						
運往堆填區的建築及拆卸廢物 ⁴ C&D waste disposed of to landfills ⁴	10 ³ 公斤 10 ³ kg	7,863	8,525	6,093	6,420	6,998
運往公眾堆填區的建築及拆卸廢物 ³ C&D waste disposed of to public fill areas ³	10 ³ 公斤 10 ³ kg	854,293	765,105	584,018	238,662	235,735
可循環再造廢料收集量 Recyclable waste collected						
廢紙 ⁵ Waste paper ⁵	公斤 kg	18,679	11,983	13,284	28,918	19,360
鋁罐 ⁶ Aluminium cans ⁶	公斤 kg	12.94	14.15	14.76	30.70	19.73
膠樽 ⁵ Plastic bottles ⁵	公斤 kg	28.53	29.92	27.78	43.70	20.71

³ 由固定燃燒柴油及流動燃燒汽油產生（即車輛用油）

Generated from stationary combustion of diesel and mobile combustion of petrol i.e. vehicle consumption

⁴ 建築及拆卸廢物包括金屬、紙張/紙皮包裝物料、化學廢料以及其他廢料，包括一般廢物。

Construction and Demolition (C&D) waste includes metals, paper / cardboard packaging waste, chemical waste and other wastes such as general refuse.

⁵ 數字並不包括並不包括於工地所收集的廢紙量。

The amount of waste paper collected did not include those collected from project sites.

⁶ 由於未能獲得相關數據，數字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。

The amount of aluminium cans and plastic bottles collected did not include those collected from the Kowloon Government Offices and Western Magistracy as the data were not available.

物料使用 Material Consumption (G4-EN1)

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
渠務署 By DSD						
紙張總用量 Total paper consumption	令 Reams	11,870	11,054	10,520	10,012	9,608
A4紙張用量 A4 paper	令 Reams	11,400	10,696	10,080	9,452	9,357
A3紙張用量 A3 paper	令 Reams	470	358	440	470	251
購買含再造成份(舊纖維)的 A4/A3紙張 Purchased paper with recycled content	令 (佔購入紙張的百分率) Reams (% of total paper purchased)	11,850 (99.8%)	11,054 (100%)	10,520 (100%)	10,012 (100%)	9,608 (100%)
每名員工紙張用量(以職員編制計算) Paper consumed per staff (By establishment)	令 Reams	6.4	6.0	5.6	5.3	5.0

渠務署的承建商 By DSD's contractors

鋼筋 Rebar	噸 Tonnes	沒有相關數據 Figures not available				7,165
水泥 Steel	噸 Tonnes					3,171
磚塊 Bricks	立方米 m ³					30
水泥 Cement	噸 Tonnes					2,406
沙漿 Cement Mortar	立方米 m ³					263
混凝土 Concrete	立方米 m ³					50,616
沙 Sand	噸 Tonnes					12,586
石料 Stones	噸 Tonnes					9,617
辦公室用紙 Office paper	噸 Tonnes					27

綠化 Greening

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
總種植樹木數量 Trees planted	數目 No.	2,500	1,996	2,169	570	2,300
增設的綠化天台面積 Area of green roof added	平方米 m ²	2,900	3,200	4,902	6,051	4,015
生物氣體所產生的電力 Electricity generated from biogas	百萬度電 Million kWh	27	30	27	28	32

社會工作表現 Social Performance

員工 Staff

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
職員編制 Staff establishment	人數 No.	1,845	1,856	1,862	1,883	1914
首長級人員 Directorate	人數 No.	18	18	18	18	18
專業人員 Professional	人數 No.	283	292	292	306	310
技術人員及工地督導人員 Technical & site supervisory	人數 No.	815	820	827	838	865
一般職系人員 General & common grades	人數 No.	525	525	526	524	526
第一標準薪級人員 Model scale I	人數 No.	204	201	199	197	195

培訓 Training

培訓課程 ⁷ Training courses ⁷	數量 No.	256	278	584 ⁸	624	654
受訓員工 Trainees	人數 No.	6,978	9,848	6,574	7,159	8,019
員工培訓時數 Training hours received	小時 Hours	44,369	52,597	54,517	57,600	58,520
員工平均培訓時數 Average training hours per staff	小時 Hours	24.0	28.3	31.6	31.8	33
培訓總開支 ⁶ Total expenditure on training ⁶	港元 HK\$	4,306,329	4,756,800	3,856,237	4,201,000	3,585,011

受傷 Injury

渠務署員工受傷個案 ⁹ Staff injury cases ⁹	數量 No.	14	12	10	11	13
員工因工傷放取病假 No. of sick leave for officers injured on duty	日數 Days	920.5	1,237	603	914.5	870.5¹⁰

6 由於未能獲得相關數據，數字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。

The amount of aluminium cans and plastic bottles collected did not include those collected from the Kowloon Government Offices and Western Magistracy as the data were not available.

7 包括內部和外界座談會/工作坊/培訓課程/參觀。

It includes internal and external seminars/ workshops/ training courses/ visits.

8 數字包括由公務員培訓處舉辦的培訓班和員工發起的外部課程。

It includes training courses held by CSTDI and staff-initiated external courses.

9 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。

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.

10 數字包括在2014/15年度批出，但在2015/16年度實現的病假日數。

The number includes sick leave days granted in 2014/15 but enjoyed in 2015/16.

2015-16年度職員編制 Staff Breakdown in 2015-16

	單位 Unit	以實際人數計算 By Strength
員工人數 No. of staff (G4-10)	人數. No.	1,761
以職位分類 By Post		
首長級人員 Directorate	%	1.2
專業人員 Professional	%	17.4
技術人員及工地督導人員 Technical & site supervisory	%	48.0
一般職系人員 General & common grades	%	23.5
第一標準薪級人員 Model scale I	%	10.1
以僱用類型分類 By Employment Type (G4-10)		
全職 Full-time	%	100
兼職 Part-time	%	0
以僱用合約分類 By Employment Contract (G4-10)		
永久合約 (男性) Permanent (male)	%	83.8
永久合約 (女性) Permanent (female)	%	16.2

	單位 Unit	以實際人數計算 By Strength
以年齡分類 By Age		
20-29歲 Age 20-29	%	7.7
30-39歲 Age 30-39	%	21.0
40-49歲 Age 40-49	%	24.1
50-59歲 Age 50-59	%	46.1
60歲或以上 Age 60 or above	%	1.2
以國籍分類 By Ethnicity		
中國 Local	%	100
外國 Non-local	%	0
以性別分類 By Gender (G4-10)		
男性 Male	%	83.8
女性 Female	%	16.2

2015-16年度高級管理人員編制 Senior Management Breakdown in 2015-16

	單位 Unit	以實際人數計算 By Strength
員工人數 No. of staff	人數. No.	7
以年齡分類 By Age		
20-29歲 Age 20-29	%	0
30-39歲 Age 30-39	%	0
40-49歲 Age 40-49	%	14.3
50-59歲 Age 50-59	%	85.7
60歲或以上 Age 60 or above	%	0

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

2015-16年度員工培訓時數¹¹ Training Hours Breakdown in 2015-16¹¹

職位 Type of Staff	員工總人數 No. of Staff	接受培訓時數 (小時) Training Hours Received (Hours)	每名員工培訓時數 (小時) Training Hours Per Staff (Hours)
首長級人員 Directorate	20	1,267	63.3
專業人員 Professional	306	23,541	76.9
技術人員、工地督導人員、一般職系人員及第一標準薪級人員 Technical, site supervisory, general grade and model scale I	1,445	33,712	23.3

2015-16年度員工流失量¹² Staff Turnover in 2015-16¹²

	單位 Unit	男性 Male	女性 Female
20-29歲 Age 20-29	人數 No.	0	0
30-39歲 Age 30-39	人數 No.	1	0
40-49歲 Age 40-49	人數 No.	0	0
50-59歲 Age 50-59	人數 No.	4	4
60歲或以上 Age 60 or above	人數 No.	52	5

2015-16年度新入職員工¹³ New Employee Hires in 2015-16¹³

	單位 Unit	男性 Male	女性 Female
新入職員工 No. of new employee hires	人數 No.	88	12
以年齡分類 By Age			
20-29歲 Age 20-29	人數 No.	39	7
30-39歲 Age 30-39	人數 No.	35	5
40-49歲 Age 40-49	人數 No.	9	0
50-59歲 Age 50-59	人數 No.	5	0
60歲或以上 Age 60 or above	人數 No.	0	0

11 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。

As there is no distinct requirement regarding receiving training in terms of gender, therefore we do not report the data broken down by gender.

12 員工流失率數字不包括在部門間轉職的一般職系人員。

The staff turnover figures exclude those General/Common Grades' staff on inter-department transfer.

13 以上數字包括於2014年4月1日至2015年3月31日期間入職的員工。

The above figures involve staff with their 1st appointment date falling within the period from 1 April 2014 to 31 March 2015.

意外率 Accident Rate (G4-LA6)

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
死亡數目 Number of fatalities						
總死亡數目 No. of fatalities	數量 No.	1	0	2	0	1
由渠務署員工負責的建築及維修工程 Construction and maintenance works carried out directly by DSD's staff	數量 No.	0	0	0	0	0
由承辦商負責的建築及維修工程 Construction and maintenance works undertaken by DSD's contractors	數量 No.	1(男性) 1 (Male)	0	2(男性) 2 (Male)	0	1(男性) 1 (Male)
每10萬工時發生的致命意外率 Fatal accident rate per 100,000 man-hours						
由渠務署員工負責的建築及維修工程 ¹⁴ Construction and maintenance works carried out directly by DSD's staff ¹⁴	-	0	0	0	0	0
由承辦商負責的建築及維修工程 ¹³ Construction and maintenance works undertaken by DSD's contractors ¹³	-	0.005	0	0.012	0	0.011
非致命意外數目 Number of non-fatal accidents						
由渠務署員工負責的建築及維修工程 ¹³ Construction and maintenance works carried out directly by DSD's staff ¹³	數量 No.	14	12	10	11	13
由承辦商負責的建築及維修工程 ¹³ Construction and maintenance works undertaken by DSD's contractors ¹³	數量 No.	64	36	33	18	14
每10萬工時發生的非致命意外率 Non-fatal accident rate per 100,000 man-hours						
由渠務署員工負責的建築及維修工程 ¹³ Construction and maintenance works carried out directly by DSD's staff ¹³	-	0.21	0.18	0.15	0.17	0.20
由承辦商負責的建築及維修工程 ¹³ Construction and maintenance works undertaken by DSD's contractors ¹³	-	0.34	0.19	0.21	0.13	0.16

社區工作及慈善捐款 Community Work and Charitable Contributions (G4-EC8)

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
員工參與義工活動的總時數 Total number of voluntary work hours carried out by our staff	小時 Hours	469	589	800	1,000	1,200
已完成的義工服務數目 Number of voluntary projects completed	人數 No.	14	18	21	25	27
員工募捐 Employee fundraising	千港元 HK\$ thousands	133	56	67	73	65

13 以上數字包括於2014年4月1日至2015年3月31日期間入職的員工。

The above figures involve staff with their 1st appointment date falling within the period from 1 April 2014 to 31 March 2015.

14 我們目前不按性別細分相關數據。

We currently do not collect these figures by gender.

經濟工作表現

本署的開支主要分為營運開支及公共工程項目開支兩類。我們的日常營運經費來自政府的一般收入帳目，而公共工程項目的開支，則由立法會財務委員會按個別項目批核。為確保公帑用得其所，我們採用創新技術及管理模式，致力提高營運效率。

Economic Performance

The two major types of expenses in DSD are operational expenses and public works project expenses. Our day-to-day departmental operation is financed by the General Revenue Account of the Government, while funding for public works projects are approved on a project-by-project basis by the Finance Committee of the Legislative Council. To ensure public funds are used effectively, we strive to enhance operation efficiency by adopting new technologies and management practices.

營運開支 Operating Expenditure (G4-EC1)

		單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
經常開支 Recurrent expenditure	個人薪酬 Personal emoluments	百萬元 \$M	727.4	769.3	793.5	839.8	882.3
	部門開支 ¹⁵ Departmental expenses ¹⁵	百萬元 \$M	1,111.2	1,141.4	1,178.9	1,286.4	1,487.8
非經常開支 Non-recurrent expenditure		百萬元 \$M	0.0	0.0	0.0	0.0	0.0
總額 Total		百萬元 \$M	1,838.6	1,910.7	1,972.4	2,126.2	2,370.1

基本工程的項目開支 Capital Works Project Expenditure

		單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
正在規劃、設計和施工的雨水排放工程項目總值 Value of drainage projects under planning, design and construction		百萬元 \$M	14,323	11,288	12,311	12,975	13,983
正在規劃、設計和施工的污水處理工程項目總值 Value of sewerage projects under planning, design and construction		百萬元 \$M	41,200	49,872	78,749	80,483	72,402
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.	22	20	20	17	18
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.	70	77	87	81	73

¹⁵ 包括強積金及公務員公積金

It included expenses on Mandatory Provident Fund & Civil Service Provident Fund.

污水處理服務經營帳目 Sewage Services Operating Accounts

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16 ¹⁶
排污費收入 Sewage Charge revenue	百萬元 \$M	703	776	875	955	1,048
工商業污水附加費收入 Trade Effluent Surcharge revenue	百萬元 \$M	204	207	221	226	232
其他收入 Other revenue	百萬元 \$M	40	40	44	45	47
總收入 Overall revenue	百萬元 \$M	947	1,023	1,141	1,227	1,327
開支 (不包括折舊) Expenditure (excluding depreciation)	百萬元 \$M	(1,484)	(1,538)	(1,594)	(1,759)	(1,927)
折舊 Depreciation	百萬元 \$M	(782)	(808)	(850)	(840)	(1,045)
總開支 Overall expenditure	百萬元 \$M	(2,266)	(2,346)	(2,444)	(2,599)	(2,972)
(虧損) (Deficit)	百萬元 \$M	(1,319)	(1,323)	(1,303)	(1,372)	(1,645)

註： 2014-15年度數字只屬暫時性，有待污水處理服務帳目委員會確認。

Note : The 2014-15 figures are provisional and subject to endorsement by the Sewage Services Accounts Committee.

污水處理服務成本回收率 Sewage Services Operating Cost Recovery Rate

	單位 Unit	2014/15	2015/16
排污費及工商業污水附加費收入 Revenue of Sewage Charge and Trade Effluent Surcharge	百萬元 \$M	1,182	1,280
排污費及工商業污水附加費開支 (不包括折舊) Expenditure (excluding depreciation) of Sewage Charge and Trade Effluent Surcharge	百萬元 \$M	1,715	1,881
收回經營成本比率 Operating cost recovery rate	%	68.9	68.0

註： 2015-16年度數字只屬暫時性，有待污水處理服務帳目委員會確認。

Note : The 2015-16 figures are provisional and subject to endorsement by the Sewage Services Accounts Committee.

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

	2011/12	2012/13	2013/14	2014/15	2015/16
自來水用戶數目 (以千計) Number of water accounts (in thousand)	2,800	2,820	2,860	2,881	2,907
需繳付排污費的用戶數目 (以千計) Number of water accounts liable to pay Sewage Charge (in thousand)	2,590	2,610	2,640	2,663	2,689
工商業污水附加費 (TES) 繳納戶數目 (以千計) Number of accounts - Trade Effluent Surcharge (TES) (in thousand)	21.4	22	23	24	25

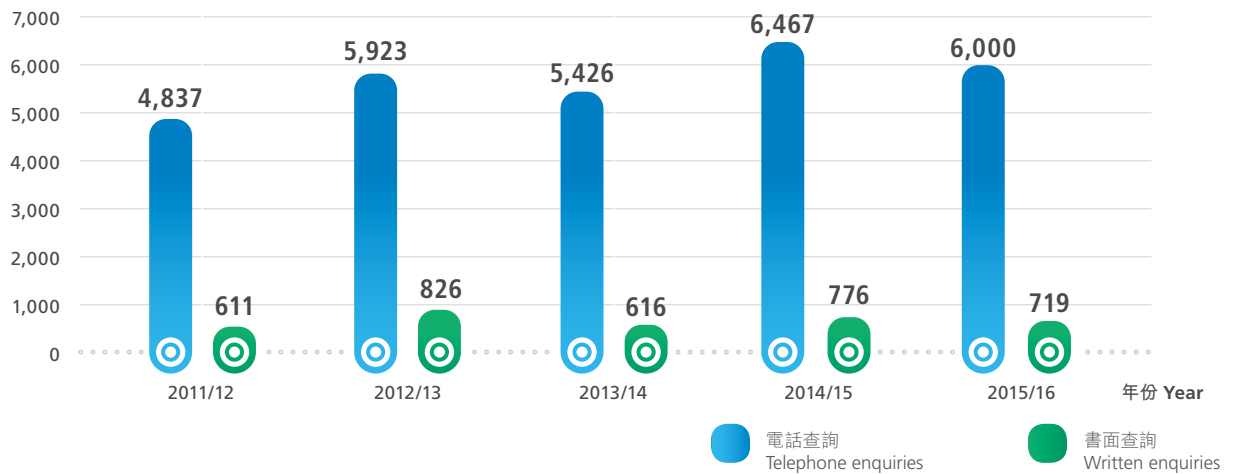
16 2015-16年度數字只屬暫時性，有待污水處理服務帳目委員會確認。

The 2015-16 figures are provisional and subject to endorsement by the Sewage Services Accounts Committee.

常規服務 Routine Services

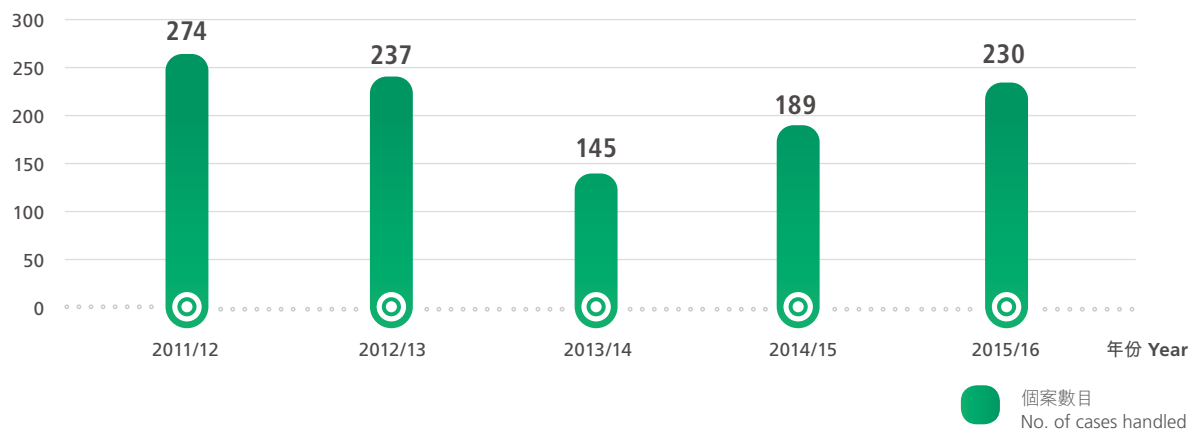
過去5年接到的顧客查詢數目

Number of Enquiries Received for the Past Five Years



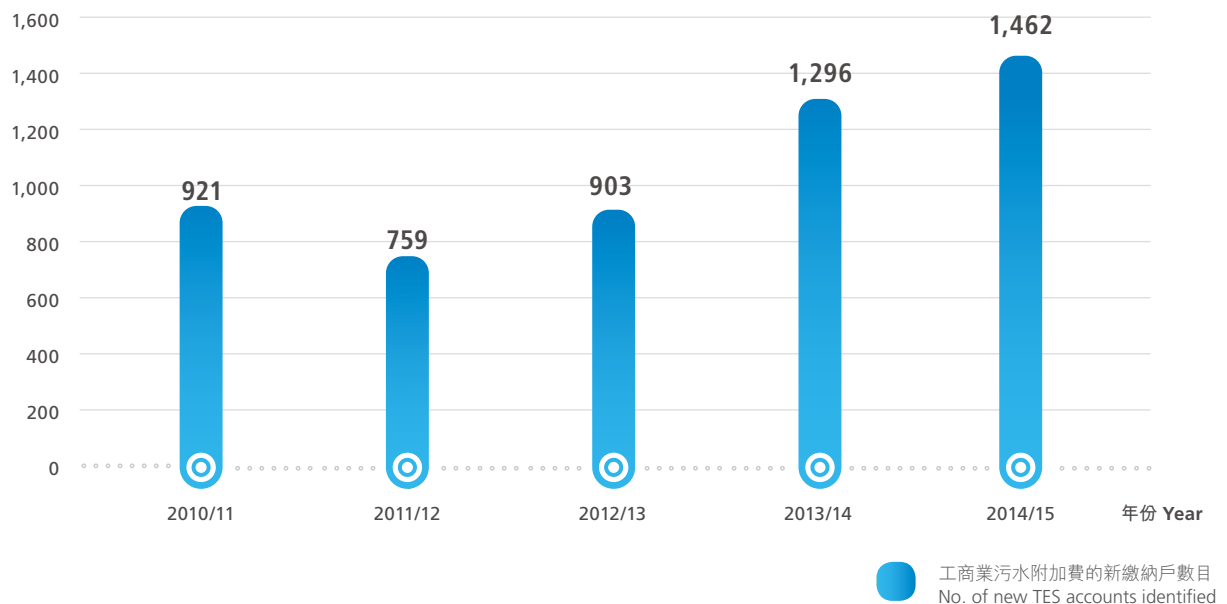
過去5年所處理有關行業重新分類的申請

Business Reclassification Applications Handled for the Past Five Years



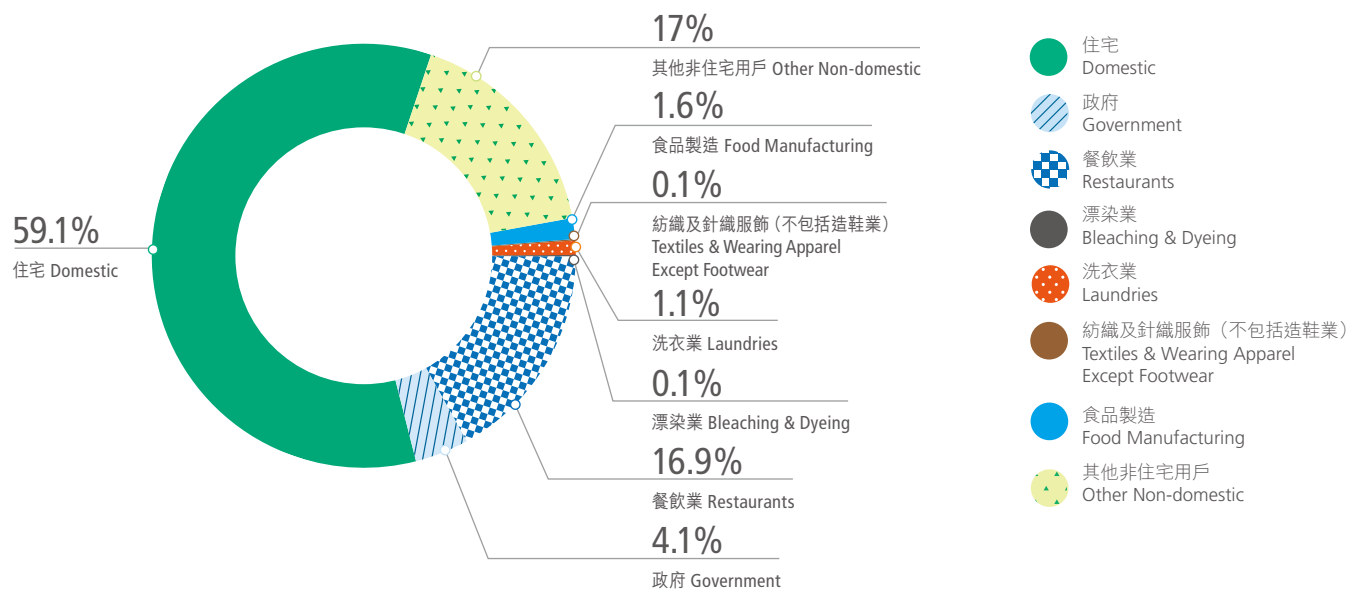
過去5年所發現工商業污水附加費的新繳納戶數目

Number of New TES Accounts Identified for the Past Five Years



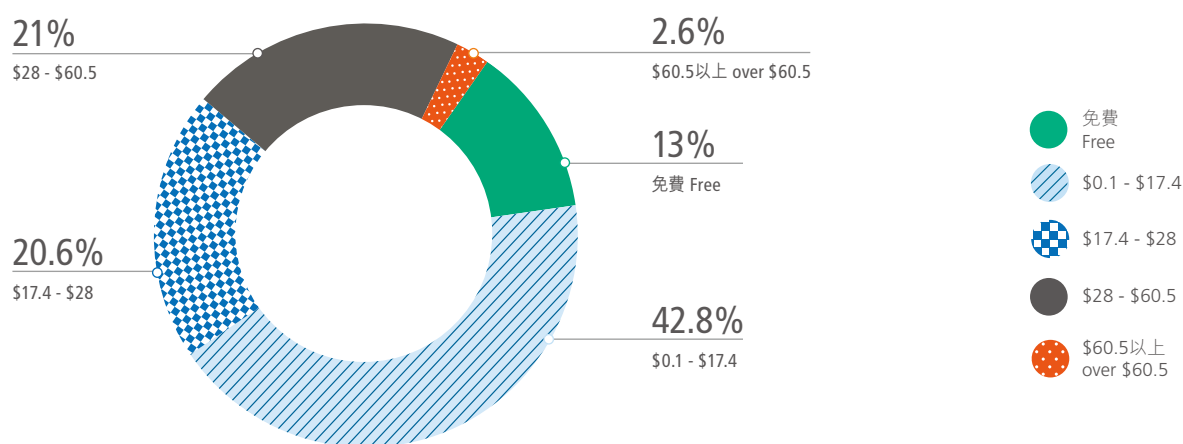
2015-16年度污水排放用戶用水量 (524百萬立方米) — 用戶情況

Water Consumption of Sewered Accounts (\$524 million m³) - Customers Pattern in 2015-16



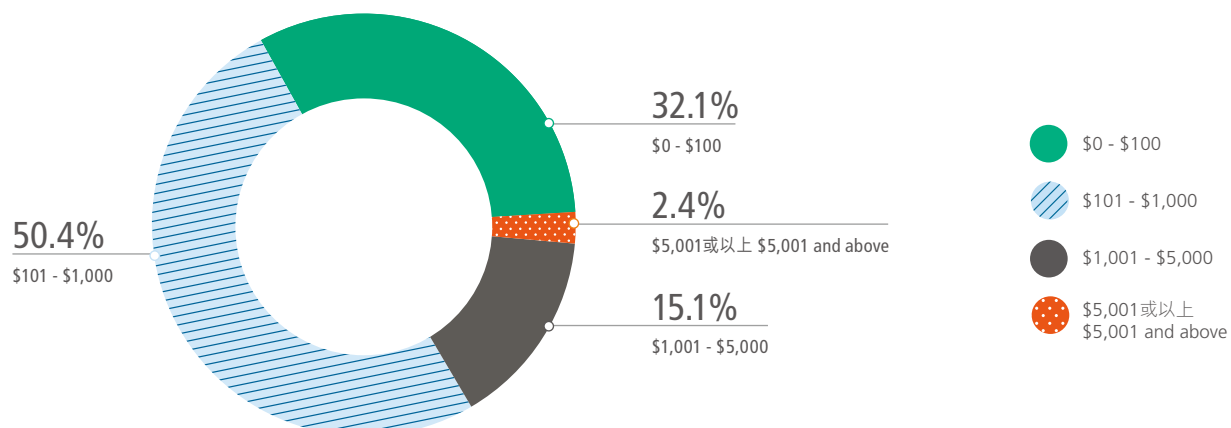
住宅用戶 — 2015-16年度排污費收費情況 (港元/月)

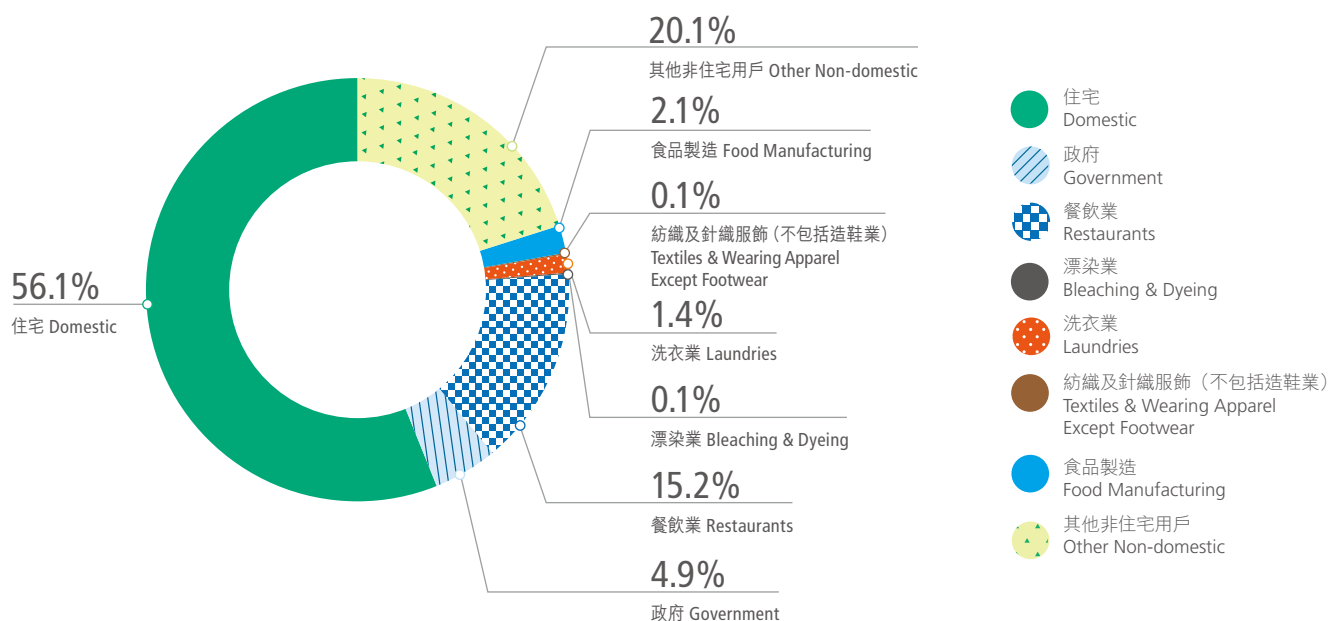
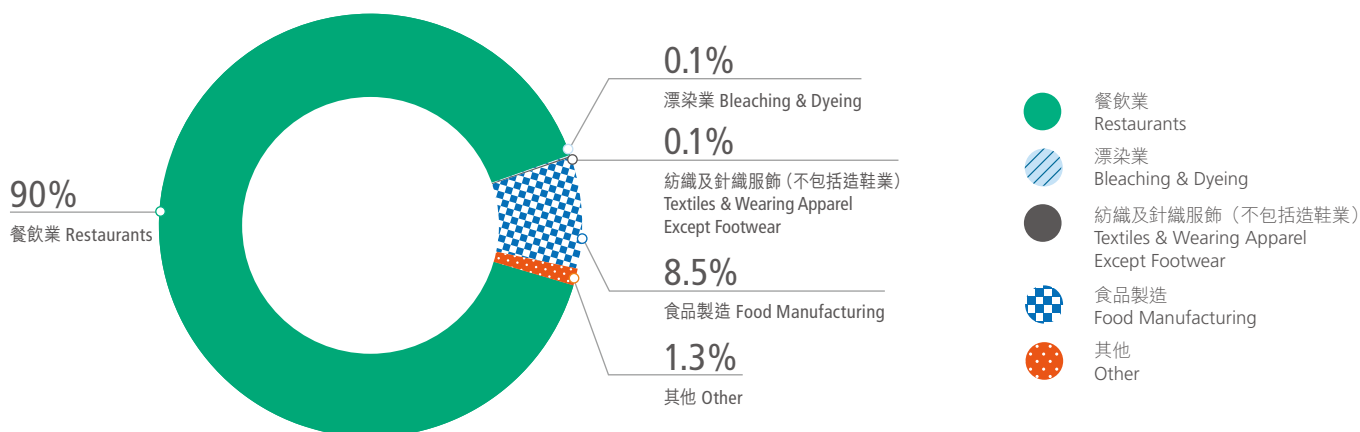
Domestic Accounts - Sewage Charge Payment Pattern in 2015-16 (HK\$/month)



工商業污水附加費用戶 — 2015-16年度工商業污水附加費收費情況 (港元/月)

TES Accounts - TES Payment Pattern in 2015-16 (HK\$/month)



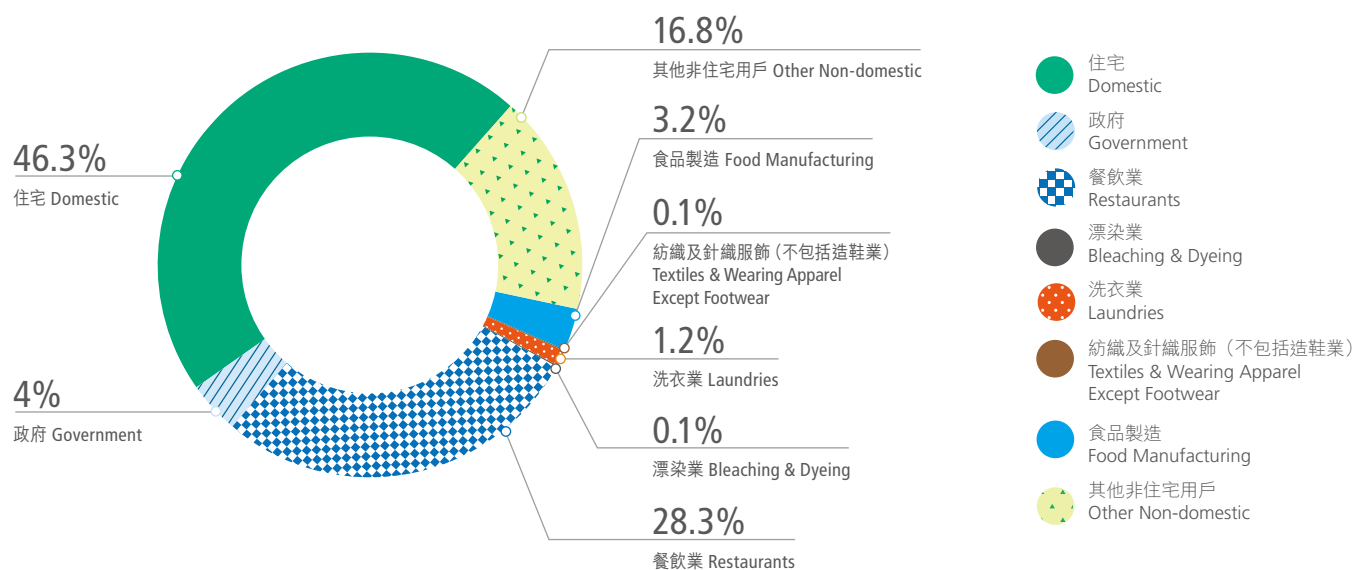
排污費 (1,048百萬港元) — 2015-16年度用戶種類收費情況¹⁷Sewage Charge (HK\$1,048 M) - Revenue Pattern by Type in 2015-16¹⁷工商業污水附加費 (232百萬港元) — 2015-16年度用戶種類收費情況¹⁷Trade Effluent Surcharge (HK\$232 M) - Revenue Pattern by Type in 2015-16¹⁷

¹⁷ 以上數據屬暫定性，有待污水處理服務帳目委員會確認。

The figures are provisional only and are subject to endorsement by the Sewage Services Accounts Committee.

排污費及工商業污水附加費 (1,280百萬港元) — 2015-16年度用戶種類收費情況¹⁷

Sewage Charge and Trade Effluent Surcharge (HK\$1,280 M) - Revenue Pattern by Type in 2015-16 ¹⁷



污水處理服務經營帳目 Sewage Services Operating Accounts

	單位 Unit	2011/12	2012/13	2013/14	2014/15	2015/16
防洪 Flooding Prevention						
水浸黑點總數 Total number of flooding blackspots	數目 No.	15	13	11	10	8
污水處理 Sewage Treatment						
公共污水收集網絡覆蓋 (佔人口百分率) ¹⁸ Coverage of public sewerage (population percentage) ¹⁸	-	93%	93%	93%	93%	93%
污水收集網絡總長度 Total length of sewerage network	公里 km	1,647	1,683	1,695	1,700	1,700
污水處理設施總數 Total no. of sewage treatment facilities	數目 No.	287	292	293	297	300
污水總處理量 Volume of sewage treated	百萬立方米 Million m ³	981	1,001	1,021	1,011	1,007
基本處理 By Preliminary Treatment		286	306	303	228	138
一級處理 By Primary Treatment		4	5	5	5	5
化學強化一級處理 By Chemically Enhanced Primary Treatment (CEPT)		525	525	541	606	690
二級處理 By Secondary Treatment		166	165	172	172	174
三級處理 By Tertiary Treatment		0.13	0.2	0.15	0.14	0.14

¹⁸ 以用水用戶計算
Based on the number of water accounts



附錄二 — 全球報告倡議組織內容索引

Appendix 2 — GRI Content Index



一般標準披露 General Standard Disclosures	互相參照/註釋/省略資料的原因 Cross-reference/Comments/ Reasons for Omissions	外部認證 External Assurance
策略與分析 Strategy and Analysis		
G4-1 機構最高決策者的聲明 Statement from the most senior decision-maker of the organisation	署長序言 (P.4-5) Director's Statement	✓ (P. 108-109)
機構簡介 Organisational Profile		
G4-3 機構名稱 Name of the organisation	關於本報告 (P.8) About this Report	✓ (P. 108-109)
G4-4 主要品牌、產品及(或)服務 Primary brands, products and/or services	渠務署主要職責 (P.28-47) Our Core Responsibilities	✓ (P. 108-109)
G4-5 機構總部的地址 Location of organisation's headquarters	香港灣仔稅務大樓43樓 Hong Kong, 43/F Revenue Tower, Wanchai.	✓ (P. 108-109)
G4-6 機構在多少個國家營運 Number of countries where the organisation operates	只限香港 Hong Kong only	✓ (P. 108-109)
G4-7 機構擁有權的性質及法律形式 Nature of ownership and legal form of the organisation	屬於香港特區政府的一部分 Part of the Hong Kong SAR Government	✓ (P. 108-109)
G4-8 機構所服務的市場 Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	渠務署為香港提供污水和雨水處理排放服務 DSD provides wastewater and stormwater drainage services to Hong Kong	✓ (P. 108-109)
G4-9 機構的規模 Scale of the reporting organisation	附錄一 - 主要統計數據 (P.114,117-118) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
G4-10 僱員人數 Employees statistics	附錄一 - 主要統計數據 (P.114) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
G4-11 受集體協商協議保障的僱員百分比 Percentage of employees covered by collective bargaining agreements	沒有 Nil	✓ (P. 108-109)
G4-12 機構的供應鏈 Description of the organisation's supply chain	與工作夥伴攜手合作 (P.84) Joining Hands with Working Partners	✓ (P. 108-109)
G4-13 匯報期內機構規模、架構、擁有權或供應鏈方面的重大改變 Significant changes during the reporting period regarding the organisation's size, structure, ownership or its supply chain	沒有顯著改變 No significant changes	✓ (P. 108-109)
參與外界事務 Commitments to External Initiatives		
G4-14 解釋機構有否及如何按謹慎方針或原則行事 Explanation of whether and how the precautionary approach or principle is addressed by the organisation	管治方針 (P.22-24) Governance Approach	✓ (P. 108-109)
G4-15 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 Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses	年度大事 重點輕描 (P.12-15) Highlights of the Year 持份者參與活動 (P.82-83) Stakeholder Engagement Activities	✓ (P. 108-109)



一般標準披露 General Standard Disclosures	互相參照/註釋/省略資料的原因 Cross-reference/Comments/ Reasons for Omissions	外部認證 External Assurance
G4-16 機構加入的聯會及(或)本地/國際倡議組織 Memberships in associations and/or national/international advocacy organisations	渠務署屬於以下協會的成員：國際水利與環境工程學會 香港分會；香港綠色建築議會；香港水務及環境管理學會；及新工程合約用戶組織。 DSD holds membership in the following associations: The International Association for Hydro-Environment Engineering and Research (IAHR) - Hong Kong Chapter; The Hong Kong Green Building Council; The Chartered Institution of Water and Environmental Management (CIWEM); and The NEC Users' Group.	✓ (P. 108-109)
實質性議題及邊界 Identified Material Aspects and Boundaries		
G4-17 機構綜合財務報表或同等文件內的單位 Entities included in the organisation's consolidated financial statements or equivalent documents	關於本報告 (P.8) About this Report	✓ (P. 108-109)
G4-18 界定報告內容及邊界的過程 Process for defining report content and aspect boundaries	關於本報告 (P.9) About this Report	✓ (P. 108-109)
G4-19 決定報告內容過程中界定的實質性議題 Material Aspects identified in the process for defining report content	關於本報告 (P.9) About this Report	✓ (P. 108-109)
G4-20 機構內各個實質性議題的邊界 Aspect boundary within the organisation for each material aspect	關於本報告 (P.9) About this Report	✓ (P. 108-109)
G4-21 機構外各個實質性議題的邊界 Aspect boundary outside the organisation for each material aspect	關於本報告 (P.9) About this Report	✓ (P. 108-109)
G4-22 解釋重整舊報告所載信息的影響及原因 Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statements	本報告沒有重整舊報告所提供的信息。 There is no such re-statement in this Report.	✓ (P. 108-109)
G4-23 報告的範圍及邊界與以往報告的重大分別 Significant changes from previous reporting periods in the scope and boundary	關於本報告 (P.9) About this Report	✓ (P. 108-109)
持份者參與 Stakeholder Engagement		
G4-24 機構的持份者組別清單 List of stakeholder groups engaged by the organisation	關於本報告 (P.8) About this Report 管治方針 (P.25-27) Governance Approach	✓ (P. 108-109)
G4-25 界定及挑選需引入的持份者之根據 Basis for identification and selection of stakeholders with whom to engage	關於本報告 (P.8) About this Report	✓ (P. 108-109)
G4-26 引入持份者的方針，包括按不同形式及組別引入持份者的頻密程度 Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	關於本報告 (P.8) About this Report 管治方針 (P.25-27) Governance Approach	✓ (P. 108-109)
G4-27 引入持份者參與的過程中提出的主要項目及關注點，以及機構如何回應，包括以報告回應 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	關於本報告 (P.9) About this Report 管治方針 (P.25-27) Governance Approach	✓ (P. 108-109)

一般標準披露

General Standard Disclosures

互相參照/註釋/省略資料的原因
Cross-reference/Comments/
Reasons for Omissions外部認證
External
Assurance

報告概況 Report Profile

G4-28 匯報期 Reporting period	關於本報告 (P.8) About this Report	✓ (P. 108-109)
G4-29 上一份報告的日期 Date of most recent previous report	2015年12月 December 2015	✓ (P. 108-109)
G4-30 匯報周期 Reporting cycle	自2012-13年度起每年發表可持續發展報告。 Our Sustainability Report has been published annually since 2012-13.	✓ (P. 108-109)
G4-31 查詢報告或報告內容的聯絡點 Contact point for questions regarding the report or its contents	回應表格 (P.129-132) Feedback Form	✓ (P. 108-109)
G4-32 機構所選的「符合」選項及外部認證參考 The 'in accordance' option the organisation has chosen and the reference to the External Assurance Report	關於本報告 (P.8) About this Report	✓ (P. 108-109)
G4-33 為報告尋求外部認證的政策及現行措施 Policy and current practice with regard to seeking external assurance for the report	渠務署會繼續為其可持續發展報告尋求獨立核實證明 DSD will continue to seek external assurance of its Sustainability Report.	✓ (P. 108-109)

管治 Governance

G4-34 機構的管治架構 Governance structure of the organisation	管治方針 (P.18-21) Governance Approach	✓ (P. 108-109)
G4-36 負責經濟、環境及社會事宜的行政人員職位，及他們是否直接向最高管治團隊匯報 Report whether the organisation has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	管治方針 (P.22) Governance Approach	✓ (P. 108-109)
G4-48 負責審閱機構可持續發展報告及確保報告已涵蓋所有實質性議題的最高委員會 The highest committee that formally reviews and approves the organisation's sustainability report and ensures that all material Aspects are covered	關於本報告 (P.9) About this Report	✓ (P. 108-109)

道德及誠信 Ethics and Integrity

G4-56 機構的信念、原則、標準及行為規範 Organisation's values, principles, standards and norms of behavior	管治方針 (P.18) Governance Approach 我們要求員工恪守最高的道德標準。如發現任何涉嫌貪腐的個案，會立即向廉政公署舉報，以作進一步調查。 We request our staff to adhere to the highest ethical standard. If any suspected corruption cases are reported, they will be submitted to the Independent Commission Against Corruption for further investigation.	✓ (P. 108-109)
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特定標準披露
Specific Standard Disclosures

互相參照/註釋/省略資料的原因
Cross-reference/Comments/
Reasons for Omissions

外部認證
External
Assurance

經濟 Economic

經濟績效 Economic Performance

G4-DMA —		附錄一 - 主要統計數據 (P.117) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EC1	機構產生和分配的直接經濟價值 Direct economic value generated and distributed	附錄一 - 主要統計數據 (P.117) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EC2	氣候變化對機構活動所產生的財務影響及其他風險與機會 Financial implications and other risks and opportunities for the organisation's activities due to climate change	管治方針 (P.24) Governance Approach 環境管理 (P.57) Environmental Management	✓ (P. 108-109)

間接經濟影響 Indirect Economic Impacts

G4-DMA —		與工作夥伴攜手合作 (P.84) Joining Hands with Working Partners	✓ (P. 108-109)
EC8	重大間接經濟影響，包括影響的程度 Significant indirect economic impacts, including the extent of impacts	我們致力提升承建商的能力，並尤其著重推廣與職業安全與健康相關的知識。有關詳情請參閱第八章 - 與工作夥伴攜手合作。 We strive to enhance the capability of contractors, in particular through the promotion of knowledge and experience in relation to Occupational Health and Safety. For more details, please refer to Chapter 8 - Joining Hands with Partners. 附錄一 - 主要統計數據 (P.116) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)

採購措施 Procurement Practices

G4-DMA —		渠務署採取香港特別行政區政府的採購政策。有關詳情請參閱 http://www.fstb.gov.hk/tb/tc/guide-to-procurement.htm DSD adopts the procurement policy of the Government of the Hong Kong Special Administrative Region. For details, please refer to http://www.fstb.gov.hk/tb/tc/guide-to-procurement.htm .	✓ (P. 108-109)
EC9	在主要營運地點向當地供應商採購的支出比例 Proportion of spending on local suppliers at significant locations of operation	99.2%	✓ (P. 108-109)

環境 Environmental

物料 Material

G4-DMA —		環境管理 (P.63-64) Environmental Management	✓ (P. 108-109)
EN1	所用物料的重量或體積 Materials used by weight or volume	環境管理 (P.64-65) Environmental Management 附錄一 - 主要統計數據 (P.112) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)

能源 Energy

G4-DMA —		管治方針 (P.22,24) Governance Approach 環境管理 (P.57-60,63) Environmental Management	✓ (P. 108-109)
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特定標準披露 Specific Standard Disclosures		互相參照/註釋/省略資料的原因 Cross-reference/Comments/ Reasons for Omissions	外部認證 External Assurance
EN3	機構內的能源消耗量 Energy consumption within the organisation	附錄一 - 主要統計數據 (P.110) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN4	機構外的能源消耗量 Energy consumption outside of the organisation	附錄一 - 主要統計數據 (P.110) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN5	能源強度 Energy intensity	附錄一 - 主要統計數據 (P.110) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN6	減少能源消耗 Reduction of energy consumption	環境管理 (P.59,63) Environmental Management 完成目標 (P.103) Meeting the Targets	✓ (P. 108-109)

水 Water

G4-DMA	—	管治方針 (P.22-24) Governance Approach 環境管理 (P.61) Environmental Management	✓ (P. 108-109)
EN8	依來源劃分的總取水量 Total water withdrawal by source	附錄一 - 主要統計數據 (P.111) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN10	水資源回收及再利用率百分比及總量 Percentage and total volume of water recycled and reused	附錄一 - 主要統計數據 (P.111) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)

生物多樣性 Biodiversity

G4-DMA	—	環境管理 (P.50) Environmental Management	✓ (P. 108-109)
EN11	在環境保護區或在生物多樣性方面具有重大價值的地區（或其毗鄰地區），所擁有、租賃或管理的營運地點 Operational sites owned, leased, managed in (or adjacent to) protected areas and areas of high biodiversity value outside protected areas	環境管理 (P.50-52) Environmental Management 渠務署致力保護環境，並盡量減少工程對自然環境的影響。例如大埔林村河的改善工程，受工程影響的範圍達10萬平方米，我們在進行工程前，就與環保團體合作，保育河道生物。DSD is committed to environmental protection, and strives to reduce the impact of our projects on the natural environment. A good example is the improvement works at Lam Tsuen River at Tai Po. With an affected area up to 100,000 square metres, we collaborated with green groups to protect aquatic species.	✓ (P. 108-109)

排放物 Emissions

G4-DMA	—	管治方針 (P.22,24) Governance Approach 環境管理 (P.57,58) Environmental Management	✓ (P. 108-109)
EN15	直接溫室氣體排放量（範疇一） Direct greenhouse gas (GHG) emissions (Scope 1)	環境管理 (P.58) Environmental Management 附錄一 - 主要統計數據 (P.110) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN16	使用能源間接引致的溫室氣體排放量（範疇二） Energy indirect greenhouse gas (GHG) emissions (Scope 2)	環境管理 (P.58) Environmental Management 附錄一 - 主要統計數據 (P.110) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN17	其他間接溫室氣體排放量（範疇三） Other indirect greenhouse gas (GHG) emissions (Scope 3)	環境管理 (P.58) Environmental Management 附錄一 - 主要統計數據 (P.110) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN19	溫室氣體的減排量 Reduction of greenhouse gas (GHG) emissions	環境管理 (P.59) Environmental Management	✓ (P. 108-109)

特定標準披露
Specific Standard Disclosures

互相參照/註釋/省略資料的原因
Cross-reference/Comments/
Reasons for Omissions

外部認證
External
Assurance

環境 Environmental

污水及廢棄物 Effluents and Waste

G4-DMA —		渠務署主要職責 (P.30) Our Core Responsibilities	✓ (P. 108-109)
EN22	依水質及排放目的地所劃分的總排放水量 Total water discharge by quality and destination	附錄一 - 主要統計數據 (P.111) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN23	按類別及處置方法劃分的廢棄物總重量 Total weight of waste by type and disposal method	附錄一 - 主要統計數據 (P.111) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)
EN24	嚴重溢漏的總次數及漏量 Total number and volume of significant spills	年內，渠務署發生了3宗污水溢漏個案，總漏量為710立方米。(P.111) During the year, a total of three significant sewage spills were reported and the total volume of sewage spill was 710 cubic metres.	✓ (P. 108-109)

運輸 Transport

G4-DMA —		我們致力減少渠務署在運輸方面產生的環境影響，包括使用轄下車隊及運送污泥時所產生的空氣污染及間接碳排放。 We strive to reduce DSD's environmental impacts caused by transportation, including the air pollution and indirect carbon emissions caused by our car fleet and transportation of sludge.	✓ (P. 108-109)
EN30	為機構營運而運輸產品、其他商品、原料以及員工交通所產生的顯著環境影響 Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	渠務署主要職責 (P.37) Our Core Responsibilities 附錄一 - 主要統計數據 (P.110) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)

社會 Social

職業安全及健康 Occupational Safety and Health

G4-DMA —		與工作夥伴攜手合作 (P.86) Joining Hands with Working Partners 關愛員工 (P.96) Care for Our Staff	✓ (P. 108-109)
LA6	按地區和性別劃分的工傷、職業病、損失工作日及缺勤的種類比率，以及和工作有關的死亡人數 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	附錄一 - 主要統計數據 (P.116) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)

員工申訴機制 Grievance Mechanisms for Staff

G4-DMA ---		關愛員工 (P.99) Care for Our Staff	✓ (P. 108-109)
LA16	經由正式申訴機制提交、處理和解決的勞工問題申訴的個案宗數 Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	附錄一 - 主要統計數據 (P.113) Appendix 1 - Key Statistics and Data	✓ (P. 108-109)

產品及服務標籤 Product and Service Labelling

G4-DMA —		渠務署主要職責 (P.42) Our Core Responsibilities	✓ (P. 108-109)
PR5	客戶滿意度調查結果 Results of surveys measuring customer satisfaction	完成目標 (P.107) Meeting the Targets	✓ (P. 108-109)

渠務署可持續發展報告2015-16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。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
這份報告的內容平衡及充份。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
這份報告的資料很有用。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
這份報告的結構清晰。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
這份報告的圖像與文字的比例合適。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
這份報告的設計美觀。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
這份報告易於閱讀及瀏覽。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
這份報告有助您增加對渠務署的認識。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. 請評價我們的可持續發展報告2015-16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？	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
您會如何評價我們的可持續發展表現？	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 2015-16

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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The content of the report is balanced and adequate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The information of the report is useful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The structure of the report is clear.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The proportion of graphics and text is appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The design of the report is decent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The report is easy to read and navigate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The report enables you to understand more about DSD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Please rate our Sustainability Report 2015-16 and sustainability performance:

	Excellent	Good	Fair	Poor
How would you rate our Sustainability Report?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How would you rate our sustainability performance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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_Reports/index.html (繁體中文版)

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

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

服務查詢 Service Enquiries

渠務熱線 Drainage Hotline: 2300 1110

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

一般查詢 General Enquiries: 2877 0660

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

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