渠務署
Drainage Services Department

海綿城市：適應氣候變化
Sponge City: Adapting to Climate Change

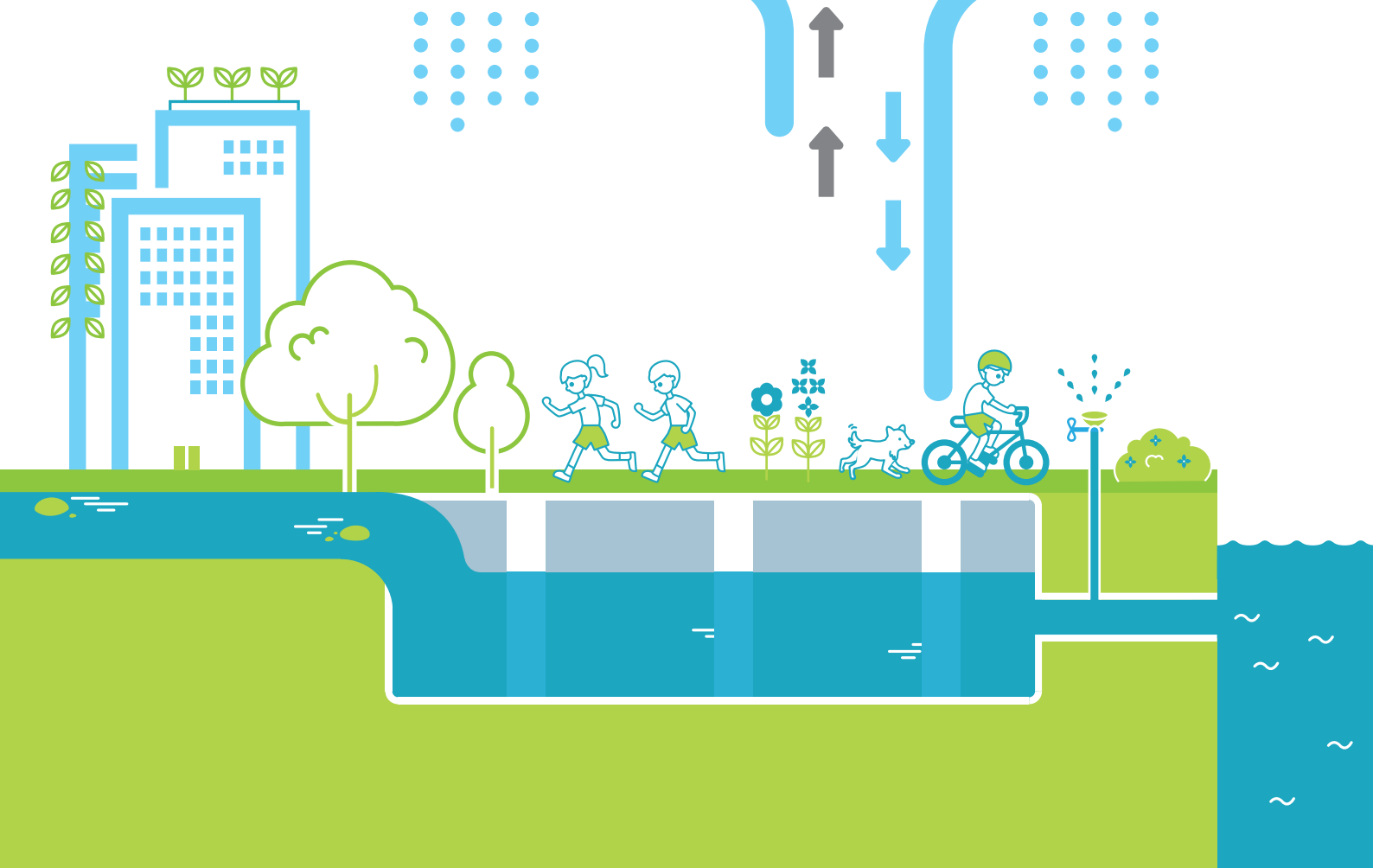
2016-17
可持續發展報告
Sustainability Report

60,000 立方米 m^3
跑馬地地下蓄洪計劃
Happy Valley Underground Stormwater Storage Scheme

1,000 百萬立方米 M m^3
年度污水總處理量
Annual Volume of Sewage Treated

1.1 百萬度電 M kWh
全港最大太陽能發電場
Hong Kong's Largest Solar Farm

20
獎項及殊榮
Awards & Honours



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署長序言
Director's Statement

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Director's Statement

二十多年來，渠務署的防洪及污水處理設施默默支撐著市民的生活及香港的發展。我非常榮幸與大家分享，2016-17年度，渠務署多項工程都有良好的進展，其中兩項別具意義的工程項目－跑馬地地下蓄洪計劃，以及小蠔灣污水處理廠內的全港最大太陽能發電場－亦於年內啟用；這兩個項目，引證了我們在加強本港防洪能力，以及發展可再生能源的決心。然而，回顧2016年極端天氣的情況，我和大家同樣都真切感受到氣候變化為香港帶來的嚴峻挑戰。因此，我們不能自滿，更要時刻提高警覺，加倍努力做好適應(推展防洪工程)及減緩(發展可再生能源)氣候變化的工作。

雨季防洪

根據世界氣象組織的評估，2016年可能是全球有紀錄以來最溫暖的一年，而香港全年降雨量高達3,027毫米，較氣候正常值高出約26%。極端天氣頻繁出現，使我們更需要全面完善防洪設施。我們在過去廿多年消除了超過120個水浸黑點，今年初亦再剔除一個，使現時全港只餘下7個水浸黑點。另外，我們現正規劃、設計及建造約126億元的防洪工程，包括施工中的啟德河改善工程及深圳河治理第四期工程。

海綿城市

渠務署近年積極將「藍綠建設」的概念融入各工程項目中。在提高防洪能力的同時，保育周邊的生態環境，以及把握機會促進生物多樣性及親水文化。我們亦於多個工程項目引入「海綿城市」的理念—順應自然、彈性適應，通過滲透、蓄洪、滯洪等自然方式疏導雨水，從而避免進行大規模的渠道工程。其中，容量達60,000立方米、剛於今年初全面啟用的跑馬地地下蓄洪計劃，可以說得上是在香港落實「海綿城市」理念的顯例；計劃中有多項創新元素，包括「智能水閘」、「水資源採集及回用系統」，以及地盡其用的設計等。

新工程合約

跑馬地地下蓄洪計劃，同時亦是「新工程合約」的成功典範，為未來的工務工程提供了堅實的基礎和寶貴的經驗。「新工程合約」講求互助互信的伙伴關係，著重團隊精神和盈虧與共；計劃在工程團隊的共同努力下，不但比原定時間提前一年完工，更節省了約9,000萬的工程費用。工程團隊勇於承擔、

For more than two decades, the flood prevention and sewage treatment facilities of the Drainage Services Department (DSD) have been silently supporting the livelihood of citizens and the development of Hong Kong. It is my pleasure to share the good progress achieved in various projects of DSD in the year 2016-17. Among these, two of particular significance, namely the Happy Valley Underground Stormwater Storage Scheme (HVUSSS) and the Hong Kong's largest Solar Farm at the Siu Ho Wan Sewage Treatment Works (SHWSTW), were commissioned during the year. These two projects demonstrate our determination to strengthen the flood prevention capacity of Hong Kong and to develop renewable energy. However, revisiting the extreme weather situation in 2016, I, like you, can truly appreciate the severe challenges that climate change had inflicted upon Hong Kong. Therefore, we cannot be complacent, but need to heighten our vigilance at all times and put more efforts in our work of adaptation to (by taking forward flood prevention projects) and mitigation of (by developing renewable energy) climate change.

Flood Prevention in Rainy Season

According to the assessment by the World Meteorological Organization, 2016 was likely the warmest year on record in the world. The annual rainfall in Hong Kong was up to 3,027mm, about 26% higher than the Climate Normal. Due to the frequent occurrence of extreme weather, there is a pressing need to optimise our flood prevention facilities across the board. Over the past two decades or so, we have eliminated more than 120 flooding blackspots. In early 2017, we eliminated one more, further reducing the number of flooding blackspots in the territory to seven. Besides, flood prevention works costing about $12.6 billion are currently under planning, design and construction. Among them are the Kai Tak River Improvement Works and Shenzhen River Regulation Project Stage IV, both of which are in progress.

Sponge City

In recent years, DSD has actively incorporated the concept of "Blue-Green Infrastructure" into various projects. While enhancing the flood prevention capacity, we place emphasis on protecting the ecological value of the surrounding environment and seize the opportunities to promote biodiversity as well as water-friendly culture. Meanwhile, we have introduced the "Sponge City" concept of "following the nature with resilience" to a number of projects in order to divert stormwater through natural means, such as infiltration, flood storage and retention, to avoid undertaking large-scale drainage works. Among these, the HVUSSS, which has a total storage capacity of 60,000 cubic metres and was fully commissioned just earlier this year, sets an obvious example of implementing the "Sponge City" concept in Hong Kong. Various innovative elements, including "smart" (i.e. movable) weirs, water harvesting system, and land co-use design, were incorporated in the HVUSSS.

New Engineering Contract

The HVUSSS is also a successful example in adopting the "New Engineering Contract" (NEC), which has provided a solid foundation and valuable experience for future public works projects. NEC stresses a partnering relationship with mutual trust and co-operation, team spirit as well as pain-gain share mechanism. With the concerted effort of the project team, the works were completed a year in advance, resulting in a saving of construction cost by approximately $90 million. The HVUSSS project

敢於創新，同時與各持份者緊密連繫、衷誠合作，令跑馬地地下蓄洪計劃在部門內外都獲得高度的讚揚。

污水處理

隨著本港各區持續發展及人口不斷增長，渠務署亦須適時提升轄下設施，應付未來的需求。報告期內，我們開展了新圍污水處理廠的第一期改善工程，增加其處理量至每日200,000立方米，同時將污水處理級別提升至化學強化一級處理。另外，為了使污水收集系統更為可靠，我們亦已開展工程，於東涌至小蠔灣鋪設一條長達6.5公里、直徑1.2米的加壓污水管。我們亦會繼續積極探討搬遷污水處理廠往岩洞的計劃，並爭取盡快開展搬遷沙田污水處理廠往岩洞的前期工程。

可再生能源

由於污水處理設施需要24小時運作，渠務署的用電量因而佔政府總用電量約10%；就此，我們無時無刻都在尋找節能減排、轉廢為能的機會。以沙田污水處理廠為例，我們利用污泥消化過程中產生的生物氣發電、發熱，過去三年為廠房提供接近四成的能源需求，平均每年節省相當於約1,800萬度電的能源！另外，於上年底啟用的小蠔灣污水處理廠太陽能發電場，更是現時全港最大的太陽能發電設施，每年發電量高達110萬度。

展望未來－創新、協作、互動

渠務署會繼續以大膽創新的精神，把握設計新設施和改善現有設施的機會，更廣泛應用可再生能源，期望在十年內將其提供部門總能源需求的比率，由10%逐步增加至15%。我們亦會與持份者緊密協作，在開展各項渠務工程的同時，推展活化水體的計劃，以及積極應對氣候變化所帶來的挑戰。

我能夠在這份報告和大家分享渠務工作的成果，全賴部門所有同事一直謹守崗位，竭誠服務市民；作為署長，我對同事的專業態度時刻感到驕傲。我亦在此感謝市民大眾一直以來對渠務署的信任和支持。我們會透過開放日、傳媒專訪等活動，讓市民更加了解渠務署的工作；與此同時，我們亦會與學生及年輕人，保持多方面的互動，包括走進學校舉辦講座、邀請學校參觀渠務設施，以及協辦青少年工作影子計劃等，加強與學生及年輕人的交流溝通，攜手締造更宜居的香港！

渠務署署長
唐嘉鴻
2017年12月

is highly commended within and outside the Department, which was attributed to the project team's strong commitment and innovative spirit, coupled with its close liaison and sincere cooperation with stakeholders.

Sewage Treatment

In view of the continuous development and population growth in various districts in Hong Kong, DSD needs to upgrade the drainage facilities in good time to cope with future needs. During the reporting period, we commenced the upgrading of San Wai Sewage Treatment Works Phase 1 to increase the capacity of the plant to 200,000 cubic metres per day while upgrading its treatment level to chemically enhanced primary treatment. Besides, to make the sewerage system more reliable, we have commenced the construction of a sewage rising main of 6.5km long with a diameter of 1.2m from Tung Chung to Siu Ho Wan. Furthermore, we will continue the active study on the relocation of sewage treatment works to caverns and strive for the early commencement of the advance works for the relocation of Sha Tin Sewage Treatment Works to caverns.

Renewable Energy

As sewage treatment facilities need to operate round the clock, the electricity consumption of DSD constitutes about 10% of the overall electricity consumption of government departments. Hence, we constantly look for opportunities to save energy and reduce emission, as well as convert waste to energy. Take the Sha Tin Sewage Treatment Works as an example, biogas from the sludge digestion process is used to generate electricity and heat required, providing nearly 40% of the energy consumption of the plant in the past three years. As such, about 18 million kWh of electricity can be saved a year on average. Besides, the SHWSTW Solar Farm, which was commissioned in late 2016, is the largest of its kind in Hong Kong at present. It can generate as much as 1.1 million kWh of electricity annually.

Way Forward – Being Innovative, Collaborative and Interactive

DSD will continue to be bold and innovative in order to seize the opportunities in the design of new facilities - and improvement of existing facilities to make wider use of renewable energy. We hope to progressively increase our usage of renewable energy, from constituting 10% of the overall energy consumption of the Department to 15% in 10 years. We will also collaborate closely with stakeholders. While unfolding various drainage projects, we will take forward schemes to revitalise water bodies and proactively address the challenges arising from climate change.

I would like to express my sincere appreciation for my colleagues' continuous commitment to work and dedication to serving the public, without which I would not have been able to share with you the success of our work. As the Director, I am proud of their professionalism. I would also like to take this opportunity to thank the public for their constant trust and support towards DSD. We will arrange open days, media interviews and other activities so that the public can learn more about our work. At the same time, we will maintain interaction with students and teenagers through holding seminars in schools, inviting schools to visit our facilities, as well as co-organising job shadowing programme for teenagers, etc., with a view to strengthening communication and joining hands with them to make Hong Kong a more livable city.

Edwin TONG Ka-hung
Director of Drainage Services Department
December 2017

關於本報告
About this Report

香港特別行政區政府轄下的渠務署可持續發展報告2016-17，載述了過去一年的工作成果，讓持份者及公眾更了解我們對可持續發展的願景及承諾。

The Sustainability Report 2016-17 of Drainage Services Department (DSD) of the Hong Kong Special Administrative Region (HKSAR) summarises our achievements in the past year and enables our stakeholders to have a better understanding of our vision and commitment to sustainable development.

1. 小蠔灣污水處理廠苗圃
   Siu Ho Wan Sewage Treatment Works Nursery

2. 跑馬地地下蓄洪計劃
   Happy Valley Underground Stormwater Storage Scheme

3. 梧桐河
   Ng Tung River

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

報告簡介
Report Profile

渠務署[1]發表題為**「海綿城市：適應氣候變化」**的第5份可持續發展報告(本報告)，闡述2016-17財政年度期間(即2016年4月1日至2017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。

本報告是依照全球報告倡議組織出版的《可持續發展報告標準》(GRI標準)的核心符合選項編寫而成。為確保本報告的準確性、可靠性和公信性，以及報告內容符合有關標準的規定，我們聘用獨立核證機構，核實報告內容。此報告亦通過了GRI標準的「實質性披露服務」，確認本報告按要求標示了一般披露102-40至102-49的位置。

本報告分別以網上版本、PDF版本及純文字版本發布，備有3款文字編制(英文、繁體中文及簡體中文)。本報告的摘要亦備有印刷版本。

我們非常重視你對本報告內容、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。

DSD[1] publishes its 5th Sustainability Report, titled **"Sponge City: Adapting to Climate Change"** (the Report), in which we elaborate our economic, environmental and social performance during the fiscal year 2016-17 (i.e. 1 April 2016 to 31 March 2017). The Report serves as a significant means of communication to report our sustainability performance to our stakeholders.

The Report was prepared in accordance with "Core Option" of the Global Reporting Initiative (GRI) Standards. To assure the accuracy, reliability and credibility of the Report, and its compliance with the requirements in the corresponding Standards, we have appointed an independent accreditation agency to verify the contents of the Report. The Report has successfully completed the GRI Materiality Disclosures Service and GRI confirmed the correctness of the locations of the General Disclosures 102-40 to 102-49.

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

Your opinions on the report content, report approach and our sustainability performance are highly valued. We treasure your feedback and suggestions that spur our operation and performance. Please complete the feedback form appended to the Report and return to us.

報告範圍及邊界
Reporting Scope and Boundary

GRI標準著重議題的「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，我們自2013-14年起每年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]。本署在2017年4月至6月期間，分別透過焦點小組會議及問卷調查，邀請不同持份者參與並收集他們的意見，並將所得結果加以整合及分析[3,4]。

The GRI Standards emphasises the importance of "materiality" of each topic under review, and encourages organisations to report on topics which pose greater impact on themselves and their stakeholders. To better distinguish these particular topics, we have been holding stakeholder engagement exercises each year since 2013-14 through inviting different groups of stakeholders in stages to explore their concerns about our work[2]. From April to June in 2017, we collected and analysed their views by means of focus group meetings and questionnaires[3,4].

1 102-45 2 102-42 3 102-40 4 102-43

「實質性」議題評估過程
"Materiality" Assessment Process

下表列出本報告涵蓋的實質性議題範圍及邊界[6]：
The Material Topics of the Report and their corresponding boundaries have been tabulated below[6]:

類別 Categories	主要範圍[7] Material Topics[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 Environmental	生態保育 Ecological Conservation	✓	✓
	能源管理 Energy Management	✓	✓
	污水及廢物處理 Effluents and Waste Treatment	✓	✓
	氣味管理 Odour Management	✓	✓
	物料使用 Use of Materials	✓	
	水資源管理 Water Resources Management	✓	
經濟 Economic	財務表現 Financial Performance	✓	
	間接經濟影響 Indirect Economic Impacts	✓	
	部門的採購政策 Procurement Practices	✓	
社會 Social	遵守法規 Compliance	✓	
	內部溝通渠道 Internal Communication Channel	✓	
	客戶的滿意度調查結果 Results of Surveys Measuring Customer Satisfaction	✓	

本報告涵蓋的實質性範圍，包括渠務署的辦事處及轄下設施，以及本署主要工程顧問和承建商的日常運作[8]。渠務署竭盡所能提供準確的數據和資訊，惟部分數據和信息需由相關機構提供，非由我們直接控制。

The Report covers the Material Topics resulting from DSD's offices and facilities, and the operations of our major consultants and contractors that we have engaged[8]. DSD spares no effort in providing accurate data and information to the best of our knowledge, however, part of them had to be obtained from relevant parties that are beyond our direct remit.

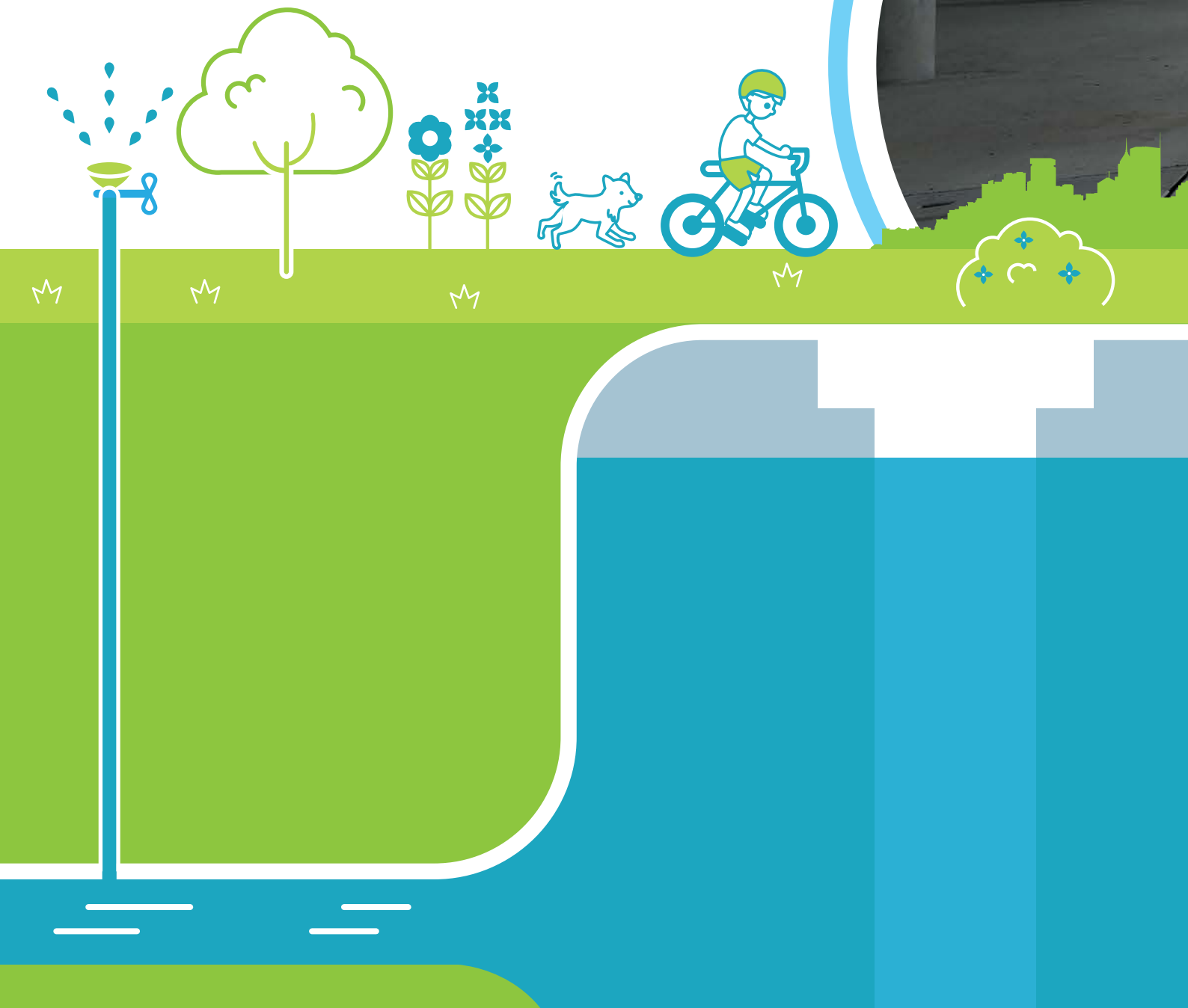
5 102-46 6 102-44 7 102-47 8 103-1

經過一連串的持份者參與活動後，我們根據實質性分析結果，評選出共12項持份者最關注的議題，並將之提交至渠務署高級管理層及可持續發展報告工作小組，作最終審閱及確認[5]。

As a result of a series of stakeholder engagement activities, we identified and prioritised 12 Material Topics based on our result evaluation of the Materiality Assessment, which were then reviewed and validated by our senior management and sustainability reporting team[5].

1. 深圳河
Shenzhen River

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



跑馬地地下蓄洪計劃
Happy Valley Underground
Stormwater Storage Scheme

海綿城市：適應氣候變化

Sponge City : Adapting to Climate Change

「海綿城市」是現代雨水管理模式，有助解決排水問題、充分利用土地資源並促進可持續發展。為應對氣候變化，渠務署鼓勵新發展項目採用「海綿城市」的理念，以滲、滯、蓄、淨、用、排為原則，更有效疏導和回用雨水，加強城市應對洪水的能力。為落實理念，渠務署會活化水體、建設蓄洪湖，以及在城市建設中加入綠化天台、多孔路面和其他可持續排水設施等。

"Sponge City" is a modern stormwater management approach to help solve drainage problems, fully utilise land resources and promote sustainable development. To combat climate change, DSD encourages the "Sponge City" concept to be adopted in new developments for more effective drainage and rainwater reuse to enhance urban flood resilience by the principle of infiltration, retention, storage, purification, reuse and discharge. To implement the concept, DSD will revitalise water bodies, construct flood retention lakes, and apply sustainable drainage elements such as green roof, porous pavement in urban development.

海綿城市：適應氣候變化

Sponge City: Adapting to Climate Change

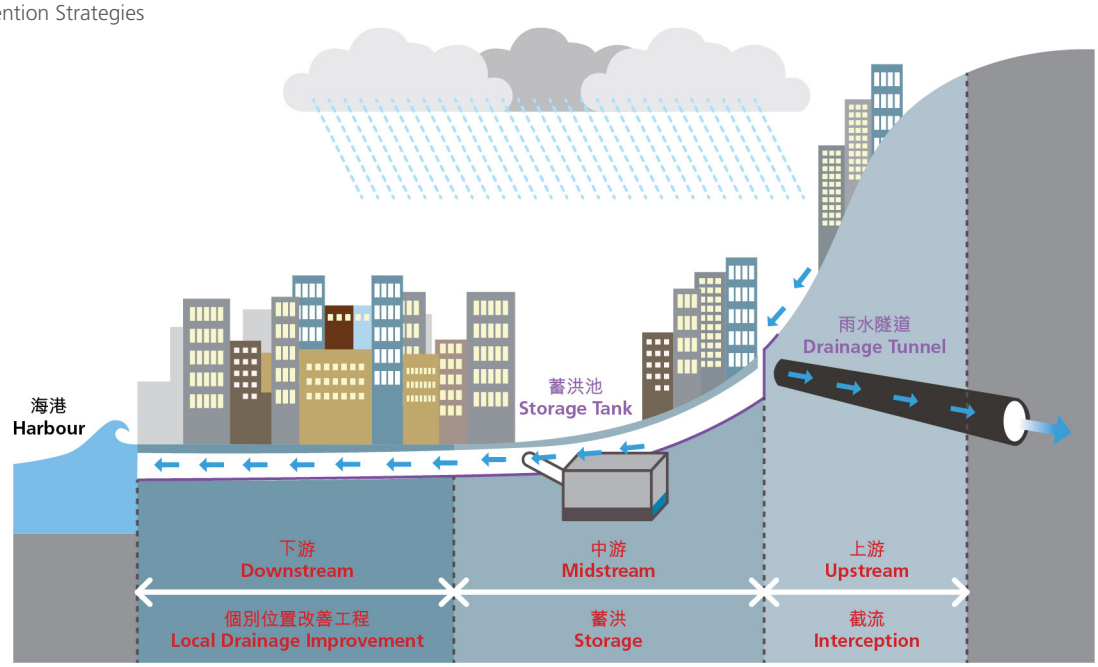
香港地處熱帶風暴的常規路徑，是亞太區內降雨量最高的城市之一，每年平均降雨量達到2,400毫米。基於這個氣候環境，香港過往經常發生大規模的水浸。渠務署自1989年成立以來，一直致力防治洪患，利用「防洪三招」，即截流、蓄洪、疏浚的方法，有效減低暴雨及洪水對本港的影響，令水浸黑點由1995年的90個減少至2017年的7個。

但隨着全球氣候變化加劇，引致海平面加速上升、極端暴雨及風暴潮增加，香港需要作出更多新嘗試，以便有效應對未來的防洪挑戰。配合香港的可持續發展及應對氣候變化，渠務署除參與政府跨部門小組，聯手應對氣候變化的影響，及檢討各區的雨水排放整體計劃外，近年亦開始參照「海綿城市」理念，以順應自然、彈性適應的方法，在渠務設施加入綠化天台、多孔透水路面，以促進滲透，減少地面徑流；規劃河畔公園及蓄洪湖等具蓄洪功能的休閒設施，以減低流量，達到蓄洪和滯洪的效果；採用雨水收集及回用系統，以增強城市的水循環效應，提高城市的耐洪能力。

Hong Kong is on the common track of tropical cyclones. It is one of the cities with the highest rainfall in the Asia Pacific region with an average annual rainfall of about 2,400 millimetres. Under this climatic setting, Hong Kong always experienced substantial flooding in the past. Since the establishment of DSD in 1989, it has been striving to prevent flooding by adopting a three-pronged approach: stormwater interception, flood storage, and drainage improvement, which are proven effective in mitigating the impact of rainstorm and flooding hazards, resulting in reducing the number of flooding blackspots in the city from 90 in 1995 to 7 in 2017.

As global climate change worsens, sea level rise will be accelerated, extreme torrential rains and storm surges will become more frequent. Hong Kong has to make more new attempts to tackle these challenges for flood prevention in the future. To support the sustainable development of Hong Kong and combat the climate change, in addition to jointly tackle the impact of climate change with other government departments by participating in the Inter-departmental Working Group on Climate Change, and reviewing the Drainage Master Plans (DMPs) of various districts, we adopt the "Sponge City" concept of "following the nature with resilience" when planning and constructing new facilities. For instance, green roofs and porous pavements are included in DSD facilities to facilitate infiltration and reduce surface runoff. Leisure facilities with stormwater storage capacity, such as riverside parks and flood retention lakes, are also planned to reduce water flow and achieve the effect of flood storage and detention, while stormwater harvesting systems are in place to reuse rainwater to optimise water recycling across the city and enhance the flood resilience level of the city.

防洪三招
Three-pronged Flood Prevention Strategies



「海綿城市」理念示意圖
Schematic Drawing of the "Sponge City" concept

什麼是海綿城市?
What is Sponge City?

海綿城市是指城市像海綿一樣，於適應環境變化、應對自然災害等方面具有良好「彈性」。雨天時能夠吸水、蓄水、滲水、淨水，需要時將蓄存的水「釋放」並加以利用，提升城市生態系統功能和減少城市洪患的發生。

海綿城市是現代雨水管理模式，讓城市在下雨時收集雨水，並在有需要的時候把蓄存的雨水釋放並加以利用。此概念主張減少城市開發，通過自然排走雨水，而避免進行大規模的人工渠道改善工程。

Sponge City means that a city could function like a sponge that has great "resilience" to environmental changes and natural disaster. The stormwater could be absorbed, stored, infiltrated and cleaned during rainy days, and could be "released" and utilised as needed to enhance the ecological function of the city and reduce the flooding in the city.

Sponge City is a modern stormwater management approach which allows the city to collect rainwater and use the stored rainwater when needed. This concept advocates reducing urban development through natural drainage of rain to avoid large-scale artificial channel improvement works.

下列項目體現「海綿城市」概念融入設計的成果：
The following projects vividly illustrate the result of the "Sponge City" concept in practice:

地下蓄洪計劃

蓄洪計劃的原理是暫時將暴雨期間的雨水儲存於地下蓄洪池，從而紓緩下游雨水排放系統的壓力。當下游雨水排放系統的雨水退去後，蓄洪池內的雨水便會被抽走，騰出空間以準備下次暴雨。現時香港有3個地下蓄洪池，分別位於大坑東、上環及跑馬地。

Underground Stormwater Storage Scheme

The principle of stormwater storage scheme is to temporarily store stormwater during heavy rainstorm in an underground tank, thus relieving the burden of downstream drainage system. When the stormwater in the downstream drainage system recedes, the stormwater stored in the tank will be pumped out to relieve storage space for the next rainstorm. Currently there are 3 underground stormwater storage tanks located at Tai Hang Tung, Sheung Wan and Happy Valley respectively.

今年落成啓用的跑馬地地下蓄洪池便是實現「海綿城市」概念的例子。蓄洪池總容量達60,000立方米，建造在跑馬地遊樂場的下方，蓄存大雨洪峰期間的雨水。這工程概念不但實現減少城市開發、土地共用的概念，同時也避免了進行大規模的下游渠務改善工程。此計劃更是本港首個結合智能水閘和數據採集與監控系統的防洪工程。

The Happy Valley Underground Stormwater Storage Tank, commissioned this year, is the example of realising the "Sponge City" concept. Built under the Happy Valley Recreation Ground, the storage tank has a total capacity of 60,000 cubic metres for runoff storage during heavy rainstorms. This concept of engineering not only achieves low-impact urban development and land co-use concept, but also avoids the large-scale downstream drainage improvement project. This is also the first flood prevention project in Hong Kong to combine the use of Movable Weir and Supervisory Control and Data Acquisition (SCADA) System.

跑馬地地下蓄洪池
Happy Valley Underground Stormwater Storage Tank

綠化天台及垂直綠化

我們於轄下的渠務設施（包括污水處理廠及污水和雨水泵房）共建造了30,000平方米綠化天台及垂直綠化，並每年繼續增建4,000平方米綠化天台及垂直綠化。

Green Roof and Vertical Greening

We have built a total of 30,000 square metres of green roofs and vertical greening within our drainage facilities including sewage treatment works as well as sewage and stormwater pumping stations, and continued to build 4,000 square metres of green roofs and vertical greening each year.

九龍城二號污水泵房綠化天台
Green roof at Kowloon City No.2 Sewage Pumping Station

沙田污水處理廠綠化天台
Green roof at Shatin Sewage Treatment Works

活化河道

部份河道治理工程，如已完成的蠔涌河和林村河，以及進行中的深圳河和啟德河，除了提升河道的排洪能力外，我們在設計河道改善工程時，同時為項目注入綠化、生態保育及水景元素，如盡量保留河道的自然生境、在河床加設魚洞穴、導流板和石塊，

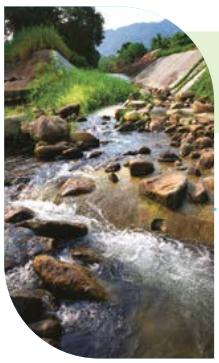
River Revitalisation

For some river training works such as the completed Ho Chung River and Lam Tsuen River, and the on-going projects like Shenzhen River and Kai Tak River, in addition to upgrading drainage capacities, when designing the river improvement works, greening, ecological conservation and water landscape elements have been incorporated into the projects, such as preserving the rivers' natural habitat, installing fish shelters, deflectors and boulders in the riverbed to improve microhabitats and biodiversity. For the Shenzhen River

改善微生境及生物多樣性。在深圳河治理工程中，我們將在深圳河上興建一個蓄洪湖，它不僅為野生動物提供一個自然的生境，大大提高河流的生態價值，在暴雨期間，還可暫存洪水，從而控制下游河道水位。

Regulation Project, a flood retention lake will be constructed on Shenzhen River not only to provide a habitat for wildlife that greatly enhances the river's ecological value but also to help store floodwater, thus keeping the downstream water level under control.

深圳河治理工程
Shenzhen River Regulation Project



林村河的魚梯
Fish ladder at Lam Tsuen River

元朗排水繞道工程的目的，是透過截取元朗集水區四成雨水，不經元朗市而直接引到錦田河下游，從而紓緩元朗市及其周邊地區的水浸風險。工程進行時影響了一些魚塘和農地，為了補償生態上的損失，我們將3個荒廢漁塘改造成人工濕地。人工濕地面積達70,000平方米(相等於10個標準足球場)，為依賴濕地生存的野生鳥類、兩棲動物（蛙）和蜻蜓提供濕地生境外，更有淨化及暫存雨水的作用。

The aim of the Yuen Long Bypass Floodway is to mitigate flooding in Yuen Long Town and its peripheral village areas by intercepting 40% of the runoff in the Yuen Long catchment, and the intercepted flow is diverted to the downstream of Kam Tin River. As some fishponds and agricultural land were affected during the construction of Yuen Long Bypass Floodway, in order to compensate for the ecological losses, we converted 3 abandoned fishing ponds into engineered wetland. The engineered wetland covers an area of 70,000 square metres (equivalent to 10 standard soccer fields), providing a freshwater habitat for wild birds, amphibians (frogs) and dragonflies that depend on the wetland as well as serving as a purification and temporary storage area for stormwater.

元朗排水繞道人工濕地
Yuen Long Bypass Floodway Engineered Wetland

雨水收集及回用系統

本署轄下的荔枝角雨水排放隧道及跑馬地地下蓄洪計劃均設有雨水收集及回用系統，收集到的雨水經適當處理後可用作灌溉、沖廁及洗滌用途，節省珍貴水資源。

Rainwater Harvesting Systems

We have also implemented Rainwater Harvesting Systems at Lai Chi Kok Drainage Tunnel and Happy Valley Underground Stormwater Storage Scheme. The harvested rainwater can be used for irrigation, toilet flushing and cleaning after suitable treatment as far as possible to save precious water resources.

跑馬地地下蓄洪計劃
Happy Valley Underground Stormwater Storage Scheme

九龍城一號污水泵房

位於啟德的九龍城一號污水泵房，泵房設計融入多項綠色建築理念，包括綠化天台、多孔路面、雨水花園及雨水回用設施等，是首項獲頒綠建環評新建建築的最高評級－鉑金級認證的政府基建設施。

Kowloon City No.1 Sewage Pumping Station

Located at Kai Tak, Kowloon City No.1 Sewage Pumping Station is designed to incorporate a number of green building concepts, including green roofs, porous pavement, rain gardens and water harvesting facilities. It is the first government infrastructure to be bestowed the highest Final Platinum Rating under BEAM Plus Assessment for New Buildings.

九龍城一號污水泵房鳥瞰圖
Aerial view of Kowloon City No.1 Sewage Pumping Station

展望將來

除了在現有的渠務設施中體現「海綿城市」的概念，展望將來，渠務署亦積極於新發展項目中加入具有「海綿」效應的設計元素。

Looking Forward

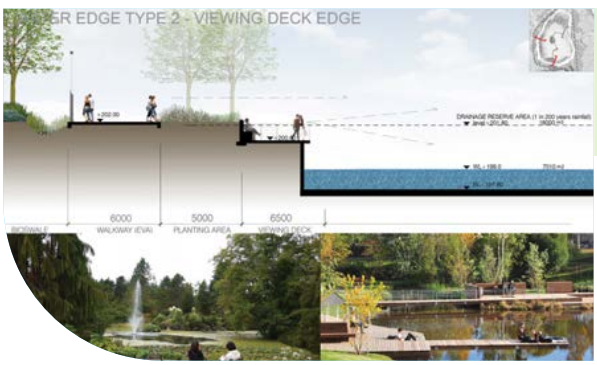
Apart from embodying the concept of "Sponge City" in existing drainage facilities, in the future, DSD will also actively introduce design elements with "sponge" effect to the new projects.

香港首個蓄洪湖

在安達臣道石礦場用地發展規劃中，我們將興建香港首個蓄洪湖。蓄洪湖集防洪、休憩和雨水收集重用於一身，在大雨時將部分雨水儲存，減低下游水浸的風險，部分湖水經適當處理後，會供區內作灌溉及其他非飲用用途。此項工程還為市民提供優美的水景環境，供公眾作為休憩用途。

The First Flood Retention Lake in Hong Kong

In the plan of the Development of Anderson Road Quarry Site, we will construct the first flood retention lake in Hong Kong. The flood retention lake serving flood control, leisure and rainwater harvesting functions. It will store stormwater during heavy rains to reduce the flood risk downstream, and some of the lake water will be used as irrigation and other non-potable purposes after suitable treatment. This project also provide scenic waterscape environment to residents for public enjoyment.



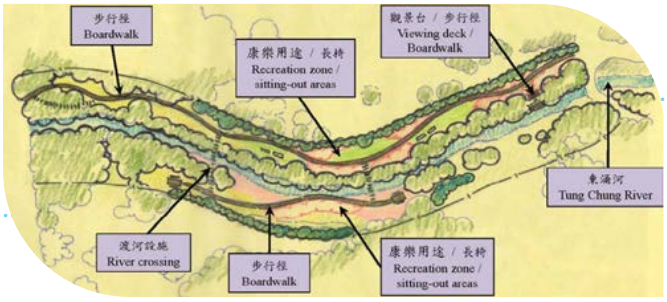
安達臣道石礦場發展計劃擬建的防洪人工湖
The planned artificial lake of the Anderson Road Quarry

全港首個河畔公園

藉著東涌新市鎮擴展的機遇，政府計劃活化一段現有的東涌河，提升其排洪能力之餘，更將其打造為全港首個河畔公園。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。

The First River Park in Hong Kong

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. The river park is poised to be green and water-friendly for residents who enjoy water sports and natural sceneries.



東涌河畔公園的初步設計
Preliminary Design of Tung Chung River Park

水塘間轉運隧道計劃

我們亦正計劃興建一條全長約2.8公里的輸水隧道連接九龍副水塘與下城門水塘，轉運九龍水塘群的溢流至下城門水塘。計劃除有效提升西九龍地區排洪能力，減低水浸風險外，估計平均每年額外提供約250萬立方米原水，以達致防洪及保護水資源的雙重目標。

Inter-Reservoirs Transfer Scheme (IRTS)

We are also planning to construct a water tunnel with a total length of about 2.8 kilometres connecting Kowloon Byewash Reservoir and Lower Shing Mun Reservoir, which will transfer overflow of Kowloon Group of Reservoirs to Lower Shing Mun Reservoir. Apart from improving the drainage capacity of West Kowloon effectively and reducing flood risk, the scheme will supply an estimated 2.5 million cubic metres of extra raw water yearly on average to achieve the goals of both flood prevention and water conservation.

水塘間轉運隧道計劃
Inter-Reservoirs Transfer Scheme (IRTS)

為應對氣候變化，渠務署會繼續提升本港的防洪能力及善用循環水，並會配合周邊地區的自然及文物環境，在收集雨水、保育自然的同時，還會致力改善市民的生活環境。

To combat climate change, DSD will continue to enhance Hong Kong's flood prevention capacity and the reuse of water resources. While harvesting stormwater and conserving the nature, we endeavour to improve the citizens' living environment in tune with the surrounding natural and heritage setting.

年度大事
重點輕描
Highlights of the Year

渠務署多項重點工程已於本年內相繼竣工並投入運作，當中包括跑馬地地下蓄洪計劃和小蠔灣污水處理廠太陽能發電場。我們致力在提高城市抗洪排污能力的同時，引入創新元素，務求在城市發展和環境保護上取得平衡，以促進香港的可持續發展及提升市民生活質素。渠務署全體同事上下一心、眾志成城，積極面對未來的挑戰。我們藉此章節，與各位分享本署於2016-17年內的年度大事。

DSD has completed several significant projects which are now in full operations during the year, including the Happy Valley Underground Stormwater Storage Scheme and Solar Farm at Siu Ho Wan Sewage Treatment Works. We are committed to improving our drainage and sewage capacity and at the same time introducing innovative elements to our services, with the aim to seek a balance between urban development and environmental protection, so as to promote the sustainability development in Hong Kong and enhance the quality of life of the public. DSD staff has always been a tight-knit team that strategises and strives together, and that has enabled us to overcome every challenge. In this chapter, we are honoured to share our highlights in 2016-17.

跑馬地地下蓄洪計劃
Happy Valley Underground Stormwater Storage Scheme

1. 小蠔灣污水處理廠太陽能發電場啟用典禮
Commissioning Ceremony for Solar Farm at Siu Ho Wan Sewage Treatment Works

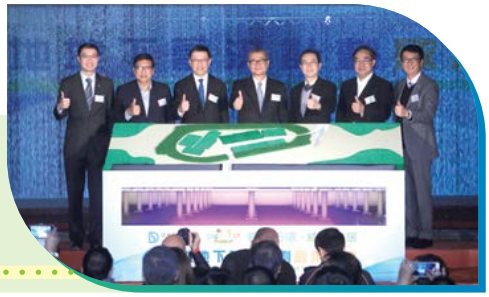
2. 渠務署2016研究及發展論壇
DSD Research and Development Forum 2016

3.「2016年度環保建築大獎」頒獎典禮
Green Building Award 2016 Presentation Ceremony

跑馬地地下蓄洪計劃啟用典禮
Commissioning Ceremony of Happy Valley Underground Stormwater Storage Scheme (HVUSSS)

2017年3月16日，本署舉行跑馬地地下蓄洪計劃啟用典禮，宣布容量達60,000立方米（容量相等於24個標準游泳池）的跑馬地地下蓄洪池正式投入使用。「蓄洪拓源 綠建宜居」為是次啟用典禮的主題。「蓄洪拓源」是指蓄洪計劃中的創新設計，包括令蓄洪池更有效地暫存和排放雨水的智能水閘，及全港最大型的地下水及雨水回收重用系統；而「綠建宜居」則指蓄洪計劃中的綠色建築設計及提供的新建休閒空間。在同一片土地下，地下蓄洪池為市民帶來防洪保護的作用，而在地面的綠化空間及蓄洪池的附屬設施亦會對外開放，為公眾提供一個舒適恬靜的休憩空間。

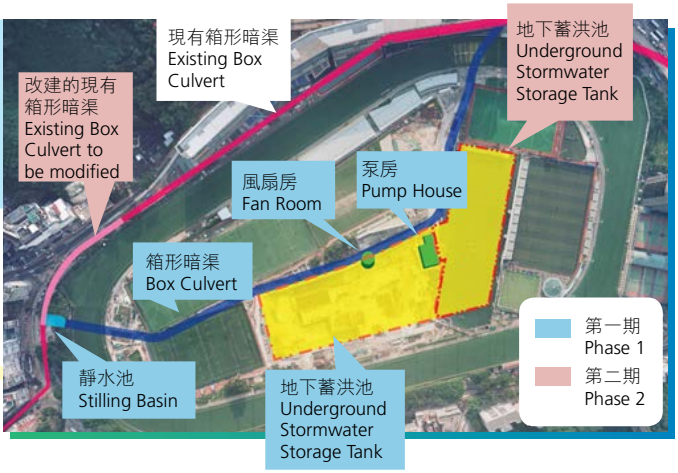
On 16 March 2017, DSD held the Commissioning Ceremony of HVUSSS and announced the full commissioning of the 60,000 cubic metres (which is equivalent to the total volume of about 24 standard swimming pools) Happy Valley Underground Stormwater Storage Tank. "Smart Drainage • Green Living" is the theme of the Commissioning Ceremony. "Smart Drainage" refers to the innovative design, featuring both of the Movable Weir for more effective stormwater storage and drainage and the largest groundwater and rainwater harvesting system in Hong Kong; "Green Living" refers to the green building designs and the provision of new leisure areas in HVUSSS. On one hand, the underground stormwater storage tank alleviates the flood risk and offers protection to the citizens; and on the other hand, the ancillary facilities above the tank offer a comfortable and relaxing zone for the public.



財政司司長陳茂波先生(中)、時任發展局局長馬紹祥先生(右三)和本署署長唐嘉鴻先生(左三)一同主持啟用典禮
Mr. Paul CHAN Mo-po (middle), Financial Secretary, Mr. Eric MA Siu-cheung (third right), then Secretary for Development and Mr. Edwin TONG Ka-hung (third left), Director of Drainage Services, officiated at the Commissioning Ceremony

跑馬地地下蓄洪計劃於2012年展開，工程包括於跑馬地遊樂場地底興建一個地下蓄洪池、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。暴雨時，箱形暗渠內的雨水溢流會被引進蓄洪池作暫時儲存，從而減輕下游的水浸風險。計劃分兩期進行，整個計劃投入運作後，跑馬地及鄰近灣仔地區的排洪能力提高至可抵禦50年一遇的暴雨，保障該區市民的生命及其財產。此項工程亦是本港首個結合智能水閘和數據採集與監控系統的防洪工程。整項工程的核準工程預算總值約10億7千萬元。

The construction works for the Scheme commenced in 2012 comprising the construction of a stormwater storage tank underneath the Happy Valley Recreation Ground, a box culvert of about 650 metres long and a stormwater pump house with a peak flow rate of 1.5 cubic metres per second. It will serve as a storage tank to collect and temporarily store the runoff during heavy rainstorms to relieve the discharge load of the downstream drainage system and thereby alleviate flooding risks. The Scheme is divided into two phases. After the commissioning of the project, the flood protection level in Happy Valley and Wan Chai districts will be increased to withstand heavy rainstorms of a 1 in 50-year return period, safeguarding the lives and properties of citizens in the districts. This is also the first flood prevention project in Hong Kong to combine the use of Movable Weir and the Supervisory Control and Data Acquisition (SCADA) System. The Approved Project Estimates for the entire project is about $1.07 billion.



跑馬地地下蓄洪計劃鳥瞰圖
Aerial photo of HVUSSS

融入可持續性元素創新設計實現海綿城市概念
Integrating Sustainability Elements Innovative Design Achieving Concept of Sponge City

本署在渠務建設上，不斷探索更多對環境及社會可持續發展有促進作用的解決方案，實現海綿城市的概念，跑馬地地下蓄洪計劃便是其中的佼佼者。

We have continued to explore more sustainable solutions in developing the drainage system to foster environmental and social sustainability and achieve the concept of Sponge City. Amongst all, HVUSSS is a good exemplar of such.

智能水閘（即可調式溢流堰）

作為本港首個結合智能水閘和數據採集與監控系統的防洪工程，跑馬地地下蓄洪計劃實時監察潮水和蓄洪池內及其上下游箱形暗渠裡的水位，並自動控制水閘開關，確保蓄洪池發揮最大功能。智能水閘可因應實時監察的數據，令暗渠內的雨水溢流能在最適當的時間進入蓄洪池，從而減少蓄洪池所需的設計容量。

在2016年10月19日的一場黑雨中，智能水閘充份發揮其功用，讓蓄洪池適時收集了共27,000立方米的雨水，確保跑馬地及鄰近地區並無發生水浸，於跑馬地馬場及遊樂場舉行的活動亦能如期舉行。

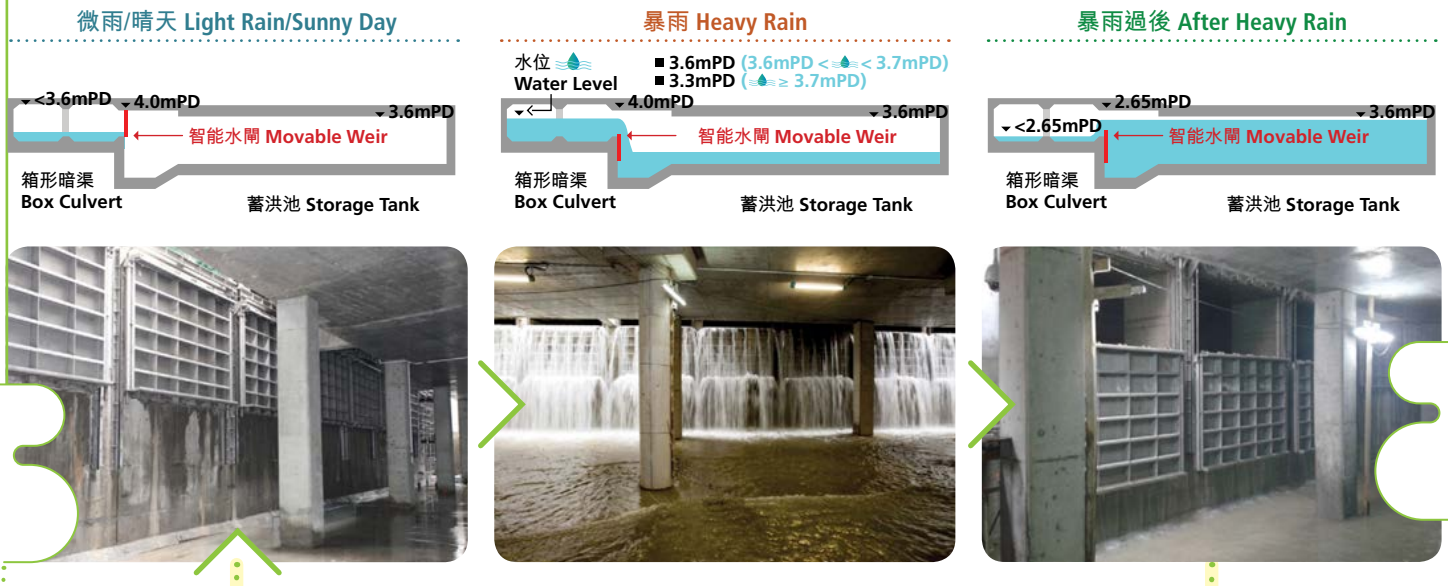
這個創新設計有效降低建築成本和時間，節省操作耗能，做到防洪與環保並重，因而勇奪2012年國際水協東亞區項目創新獎及香港工程師學會「工程創意大獎2012/13」優異獎。

Movable Weir

Being the first flood prevention project in Hong Kong to combine the use of Movable Weir and SCADA System, HVUSSS real-time monitors the tidal level and the water level inside the storage tank and the box culvert immediate upstream and downstream of the tank. The positioning of the Movable Weir is based on the real-time monitoring data such that the overflowing of rainwater from the box culvert to the tank can be triggered at the most optimal time, thereby reducing the required design capacity.

When the Black Rainstorm Signal was hoisted on 19 October 2016, the Movable Weir optimized the overflow of rainwater and a total of 27,000 cubic metres of rainwater was collected such that there was no flooding in Happy Valley and its surrounding areas, and the activities at the Happy Valley Racecourse and Recreation Ground could be held as scheduled.

The innovative design can effectively reduce the construction costs and time, thus saving energy consumption to achieve both flood prevention and environmental protection. The design was awarded International Water Association (IWA) Project Innovation Awards (East Asia Regional Awards) and the Hong Kong Institution of Engineers "The Innovation Award for Engineering Industry 2012/13" - Merit Award.



智能水閘的運作原理
Operating Principle of the Movable Weir

水資源採集及回用系統

蓄洪計劃中包括一個嶄新的水資源採集及回用系統，利用興建在蓄洪池及球場底部的底土排水系統採集地下水、球場灌溉水和雨水。這些水資源經處理及消毒後會用作灌溉、沖廁及洗滌之用，循環不息，實現海綿城市中回用雨水的概念。該系統為現時全港規模最大的同類型水資源採集及回用系統，能有效地節省珍貴食水。

Water Harvesting System

The Stormwater Storage Scheme includes a new water harvesting system that allows groundwater, irrigation water at sport pitches and rainwater to be harvested from subsoil drainage systems that were built underneath the storage tank and sport pitches. These water resources can be used for irrigation, flushing and cleansing after treatment and disinfection to realise the rainwater reuse concept in Sponge City. The system is the largest water harvesting system of the same type in Hong Kong and can conserve precious potable water supply.

採集及回用的水資源用於灌溉球場草地
Use of harvested water for irrigation at the sport pitches

綠色休憩空間

本署除了在蓄洪計劃中使用環保滲水地磚及太陽能板等綠色建築元素外，亦優化了跑馬地遊樂場內的公眾休憩空間。當中，建於泵房屋頂的綠色小山坡，既可為泵房隔熱亦成為市民的觀景台。此外，我們改變風扇房傳統的方形結構，將其優化為有篷的設計，讓市民在任何天氣亦能舒適地在風扇房外休憩。風扇房和泵房更獲香港綠色建築議會綠建環評新建建築暫定鉑金級認證。

Green Leisure Space

In addition to introducing green building features such as environmentally friendly permeable paving blocks and solar panels in the Stormwater Storage Scheme, we have improved the public leisure area in the Happy Valley Recreation Ground. For instance, a green lawn has been built on the pump house rooftop to serve the purpose of heat insulation and providing a scenic lookout for the public. Also, we changed the traditional box-shaped structural form of the fan room and optimised it by including a canopy design so that the public can rest comfortably outside the fan room in all weather conditions. The fan room and pump house have obtained Platinum Rating of Provisional Assessment under the BEAM plus (New Buildings) from the Hong Kong Green Building Council.

設有天篷的風扇房
The fan room with canopy

採用新工程合約 提升工程成本效益

跑馬地地下蓄洪計劃是本署現時最大規模的新工程合約項目。新工程合約講求僱主與承建商以互助互信的合作模式管理工程，設有一個共同管理風險的機制以提早解決工程風險。自跑馬地地下蓄洪計劃工程開展以來，本署及承建商一直以「一個團隊・一個目標」的精神推動工程。工程團隊摒棄零和思維，共同管理風險，並努力尋求雙贏方案。工程由2012年9月展開，原定2018年年底完工，但在各方的努力及配合下，跑馬地地下蓄洪計劃比預期提早一年完工，工程節省了約9,000萬工程費用。

Enhance Cost Effectiveness with the Adoption of New Engineering Contract (NEC)

HVUSSS is the current largest NEC project of DSD. NEC emphasises the mutual trust and cooperation between the employer and contractor in project management, and there is a collaborative risk management mechanism to resolve construction risks at early stage. Since the commencement of the HVUSSS, we have adopted the "One Team · One Goal" spirit to implement the project. The project was commenced in September 2012 and scheduled for completion by the end of 2018. With the collaboration and efforts made by various parties, the project was completed one year ahead of the schedule with about $90 million saving in project cost.

工程團隊在泵房頂草坡大合照
Group photo of the project team at the green lawn on the pump house rooftop

公眾參與活動

為向市民推廣跑馬地地下蓄洪計劃及加深公眾對工程的了解，我們舉辦多項公眾參與活動，包括嘉年華會、團體參觀、媒體訪問及社區宣傳。

Public Engagement

We have organised a number of public engagement activities, including carnivals, group visits, media interviews and community outreach programme to promote the HVUSSS and to enhance the public understanding of the project.

跑馬地地下蓄洪計劃草上嘉年華會

為與市民進行直接和互動的溝通，以及向大眾介紹工程在跑馬地遊樂場內新建的各種康樂休憩設施，本署在2016年11月5日聯同灣仔區議會、康樂及文化事務署及灣仔民政事務處，在跑馬地遊樂場內合辦草上嘉年華會。嘉年華會除了展示蓄洪計劃的工程模型及資訊外，工程團隊亦準備了各式遊戲攤位及表演節目，讓市民參與其中。在短短的3個半小時內，嘉年華會接待超過2,100名市民。而各持份者，包括鄰近學校、香港賽馬會及香港足球會等的踴躍參與，亦令整個嘉年華會生色不少。

Green Carnival of HVUSSS

To promote an interactive and direct communication with the public and to introduce the community the new leisure facilities in the Happy Valley Recreation Ground, we jointly organised a Green Carnival with the Wan Chai District Council, Leisure and Cultural Services Department and Wan Chai District Office on 5 November 2016. In addition to displaying the engineering model, there was a variety of game booths and performance in the Carnival. In a short span of 3.5 hours of the Carnival we already received more than 2,100 citizens. The active participation of nearby schools, Hong Kong Jockey Club and Hong Kong Football Club, contributed to a more enjoyable Carnival.

跑馬地地下蓄洪計劃草上嘉年華會
Green Carnival of HVUSSS

本署職員透過遊戲向市民介紹蓄洪概念
DSD staff introducing the concept of flood prevention to public through gamification

技術考察

過去一年，多個海外及本地機構到訪蓄洪計劃工地進行技術考察，包括印尼政府、新加坡建設局、深圳市水務局、商界環保協會、英國土木工程師學會、香港工程師學會、香港測量師學會與及其他學術及社區團體等。

Technical Visits

Over the past year, a number of overseas and local organisations have visited the HVUSSS site, including the Indonesian Government, the Building and Construction Authority of Singapore Government, Bureau of Water Resources of Shenzhen Municipality, the Business Environment Council, the Institution of Civil Engineers, the Hong Kong Institution of Engineers, the Hong Kong Institute of Surveyors and other academic and community groups.

2016年8月6日，香港工程師學會到訪
Visit by the Hong Kong Institution of Engineers on 6 August 2016

2016年11月3日，深圳市水務局官員參觀團到訪
Visit by Bureau of Water Resources of Shenzhen Municipality on 3 November 2016

2017年3月22日，新加坡政府官員參觀團到訪
Visit by the Singapore Government Officials on 22 March 2017

媒體及社區宣傳

工程團隊在過去一年亦接受了不同媒體採訪，當中包括鳳凰衛視、新華社、中國中央電視台及U周刊等。採訪內容涵蓋了本署的「防洪三招」－截流、蓄洪及疏浚策略，以及跑馬地地下蓄洪計劃內各種創新元素及特色，包括智能水閘、水資源採集及回用系統，以及綠色設計。詳情可參考**第七章 媒體參與活動**。

此外，透過派發簡訊及參與不同種類的社區活動，亦可加深持份者及公眾對蓄洪計劃的了解。

Media and Community Promotion

The project team has received different media interviews in the past year, including Phoenix Television, Xinhua News Agency, China Central Television and U Magazine, etc. The interviews introduced the "Three-pronged flood prevention" strategies, i.e. stormwater interception, flood storage, and drainage improvement, as well as the innovative elements and features of the HVUSSS, including the Movable Weir, water harvesting system and green design features. For more details, please refer to **Chapter 7 Media Engagement Activities**.

We have also enhanced public and stakeholders' understanding of the project through the dissemination of newsletters and participation in different kinds of community activities.

本署總工程師簡漢成先生接受中央電視台英語新聞頻道訪問
Our Chief Engineer, Mr. KAN Hon-shing, was interviewed by CCTV News

時任高級工程師鄭雅思女士接受新華社訪問
Then Senior Engineer, Ms. Ellen CHENG Nga-see, was interviewed by Xinhua News Agency

2016年5月10日及24日，工程團隊向學校進行工程簡介
Project team introduced HVUSSS to school on 10 and 24 May 2016

2017年3月5日，工程團隊參與了由香港童軍總會舉辦的嘉年華會
Project team participated in the carnival organised by the Scout Association on 5 March 2017

全港最大太陽能發電場正式投入運作
Full Commissioning of the Largest Solar Farm in Hong Kong

本署於小蠔灣污水處理廠設置全港最大的太陽能發電場，並已於2016年12月9日正式投入運作。發電場由超過4,200塊多晶硅太陽能光伏板組成，佔地超過11,000平方米，預計每年發電量可達110萬千瓦時，相當於230個家庭每年的用電量。太陽能發電場產生的可再生能源，透過污水處理廠的配電網絡輸送到廠內不同的機電設施，包括隔篩和污泥處理設施，以及紫外光消毒系統等，預計每年能減少770噸二氧化碳排放量。

為了提高公眾對氣候變化的意識，本署於2016年12月9日舉行了太陽能發電場的啟用典禮，並邀請300多名嘉賓一同見證發電場正式投入運作。本署於啟用典禮後安排導賞團，向嘉賓進一步介紹發電場的資訊。

Being the largest of its kind in Hong Kong, the Solar Farm at Siu Ho Wan Sewage Treatment Works came into operation on 9 December 2016. The Solar Farm comprises over 4,200 polycrystalline photovoltaic panels occupied 11,000 square metres. It is anticipated that the Solar Farm can generate as much as 1.1 million kilowatt-hours of electricity annually, equivalent to the annual electricity consumption of 230 households. The renewable energy generated is fed to various facilities and systems inside the plant, including screening and sludge treatment facilities and a ultra-violet disinfection system etc., which is expected to reduce 770 tonnes of carbon dioxide emissions annually.

To raise the public awareness of climate change, we held a commissioning ceremony on 9 December 2016 and invited more than 300 guests to witness the successful commencement of the Solar Farm. A tour was arranged for guests after the commissioning ceremony to further introduce the information of the Solar Farm.

小蠔灣污水處理廠鳥瞰圖
Aerial Photo of Siu Ho Wan Sewage Treatment Works

環境局局長黃錦星先生(中)和本署署長唐嘉鴻先生(左二)一同主持啟用典禮
Mr. WONG Kam-sing (middle), Secretary for the Environment, and Mr. Edwin TONG Ka-hung (second left), Director of Drainage Services, officiated at the commissioning ceremony

環境局局長黃錦星先生(左四)和本署署長唐嘉鴻先生(右四)與學生進行交流
Interaction between Mr. WONG Kam-sing (forth left), Secretary for the Environment, Mr. Edwin TONG Ka-hung (forth right), Director of Drainage Services, and the students

渠務署2016研究及發展論壇 「氣候變化 香港行動」
DSD Research & Development Forum 2016: Climate Ready@HK

本署2016研究與發展論壇「氣候變化 香港行動」於2016年11月8日假香港科學館舉行，吸引逾500名本地學者、專業人士和業界代

On 8 November 2016, we organised the Research & Development Forum 2016: Climate Ready@HK at the Hong Kong Science Museum, attracting more than 500 local academics, professionals and industry representatives.

表參與。我們更邀請業界翹楚、教授和專家就「致力創新可持續雨水排放系統」及「污水處理走向可持續能源使用」兩節主題發表演說，分享他們在氣候變化、活化水體、可持續排水系統和污水處理節能的經驗，促進業界的合作和技術創新。

The Forum invited industry leaders, professors, and professionals to deliver two thematic speeches on "Striving for Innovation in Sustainable Stormwater Drainage" and "Towards Sustainable Energy Utilisation in Sewage Treatment". They shared their experiences in climate change, revitalising water bodies, sustainable drainage systems, and energy reduction initiatives in sewage treatment to foster collaboration and technological innovation in the industry.

本署署長唐嘉鴻先生致歡迎辭
Mr. Edwin TONG Ka-hung, Director of Drainage Services, delivering a welcome speech

發展局常任秘書長(工務)韓志強先生(右六)、本署署長唐嘉鴻先生(左六)和本署副署長麥嘉為先生(右五)與上午論壇的講者合照
Group photo of Mr. HON Chi-keung (sixth right), Permanent Secretary for Development (Works), Mr. Edwin TONG Ka-hung (sixth left), Director of Drainage Services, Mr. MAK Ka-wai (fifth right), Deputy Director of Drainage Services, and speakers of the morning session

時任環境局副局長陸恭蕙女士(右五)、本署署長唐嘉鴻先生(右六)、本署副署長麥嘉為先生(右四)與下午論壇的講者合照
Group photo of Ms. Christine LOH Kung-wai (fifth right), then Under Secretary for the Environment, Mr. Edwin TONG Ka-hung (sixth right), Director of Drainage Services, Mr. MAK Ka-wai (fourth right), Deputy Director of Drainage Services, and speakers of the afternoon session

研究與發展重點
Highlight of R&D Studies

多孔透水路面

可持續排水系統或藍綠建設可促進雨水蒸發、滲透及減少地面徑流，例如多孔透水路面。這種路面採用滲透性物料，例如環保滲水地磚、砂礫路基，作用是蓄存地面雨水。多孔透水路面除可暫時蓄存徑流，還可藉著滲透和生物降解清除淤泥及污染物。

Porous Pavement

Sustainable drainage system or Blue-Green Infrastructure features helps facilitating stormwater evaporation, infiltration and reduce surface runoff, such as porous pavement. It usually consists of a permeable material, such as porous paving block, and gravel subgrade which provides storage capacity for surface runoff. Apart from attenuating the stormwater runoff, porous pavement can help removing silt and pollutants through filtration and biodegradation.

綠化河道的生態水力學研究

本署近年的防洪工程引入不少綠化河道措施，為評估各種綠化河道設計的環境優化效益和不同生態環境改善措施的水力特性，本署進行了綠化河道的生態水力學研究。

Eco-hydraulics Study on Green Channels

DSD has implemented green channel practices in flood prevention projects in recent years. To assess the extent of environmental enhancement brought by different green channel designs and the hydraulic characteristics of various ecological enhancement elements, DSD conducted a research and development study on the eco-hydraulics of the green channels.

熱島效應研究

我們的水體活化顧問研究發現，河溪和水體有助降低周邊地區的氣溫，活化水體工程若加入藍綠建設元素，更有助紓緩熱島效應。這些優點能增強人體熱舒適感，也可營造更宜人的水體環境供公眾享用。有見目前並無任何針對本港排水和氣候實況的熱島效應研究資料，本署遂展開研究，探討引入藍綠建設元素能否紓減河道附近的熱島效應和改善人體熱舒適感。

Study on Heat Island Effects

Under the consultancy study on revitalisation of water bodies, it was identified that streams and water bodies could help cooling down the temperature of the area in the vicinity with incorporation of blue-green elements, and revitalising water bodies could help reducing the heat island effects. Such benefits could enhance the human thermal comfort and provide pleasant water bodies for public enjoyment. Since we are lack of existing research on heat island effects with local drainage setting and climate condition, DSD conducted a research study on investigating the effects of blue-green elements on alleviating heat island effects and improving human thermal comfort in the vicinity of local river channels.

密集處理污水技術

本署過去數年一直致力研究密集處理污水技術，包括測試機械過濾網及試驗膜式生物反應器等。兩項試驗計劃取得的資料有助我們評估在香港應用密集處理污水技術的表現，以及這類技術的運作和維修要求。

Compact Sewage Treatment Technologies

DSD has been exploring compact sewage treatment technologies in the past few years, including R&D studies on the pilot trial on mechanical filter mesh and membrane bioreactors. The two trials have provided us with more data for evaluation of its performance for sewage treatment in Hong Kong and the operation and maintenance requirements of the technologies.

獎項及殊榮
Awards and Honours | 2016

4月 Apr

2016年4月19日
19 April 2016

淨化海港計劃第二期甲聯同環保署的污泥處理設施「源・區」榮獲2016年全球水獎年度污水處理專案類別的卓越級殊榮

Harbour Area Treatment Scheme (HATS) Stage 2A and EPD's sludge treatment facility T. PARK jointly won the distinction award in the category of Wastewater Project of the Year at the Global Water Awards 2016

2016年4月28日
28 April 2016

榮獲英國新工程合約用戶組織頒發的工程委託機構冠軍大獎

Won the New Engineering Contract (NEC) Client of the Year award from the United Kingdom's (UK) NEC Users' Group

8月 Aug

2016年8月26日
26 August 2016

本署機電工程師潘慕孺女士(右一)榮獲香港工程師學會2016年年輕工程師 / 研究員傑出論文獎

Ms. Stephanie POON Mo-yu (first right), Electrical and Mechanical Engineer, received The Hong Kong Institution of Engineers Outstanding Paper Award for Young Engineers / Researchers 2016

8月 Aug

渠務署可持續發展報告2014-15榮獲多項殊榮，其中包括：
DSD Sustainability Report 2014-15 received a number of awards, including:

獎項 Awards	主辦機構 Organisers
2015 Vision Awards 可持續發展報告組別 - 金獎 Gold Award in the category of Sustainability Report 2015年度最優秀中文可持續發展報告前50名 Top 50 Chinese Sustainability Reports of 2015 亞太區最優秀可持續發展報告前80名 Top 80 Sustainability Reports in the Asia-Pacific Region	美國傳媒專業聯盟 League of American Communications Professionals LLC
2015 Inspire Awards 銀獎 Silver Award 2015年最優秀企業出版刊物前25名 Top 25 Corporate Publishing Materials of 2015	美國傳媒專業聯盟 League of American Communications Professionals LLC
2016 International ARC Awards 銅獎(專業年報：綜合年報和可持續發展報告) Bronze Award (Specialized Annual Report: Combined Annual and Sustainability Report)	MerComm, Inc.
2016 APEX Awards for Publication Excellence 卓越獎(電子媒體 - 綠色) Awards of Excellence (Electronic Media - Green)	Communications Concepts, Inc.
香港管理專業協會的2016年度最佳年報獎 **2016 HKMA Best Annual Reports Awards** 可持續發展報告獎 Sustainability Reporting Award	香港管理專業協會 The Hong Kong Management Association

9月 Sep

2016年9月28日
28 September 2016

「石湖墟污水處理廠－進一步擴建工程計劃第1A及1B期」及「機電資產管理BIM應用先導計劃－馬鞍山第108區污水泵房」兩個工程項目均獲頒「Autodesk香港建築信息模擬設計大獎2016」，在五個獲獎工程項目中佔了兩個席位

"Shek Wu Hui Sewage Treatment Works (SWHSTW) – Further Expansion Phases 1A and 1B" and "Adoption of Knowledge-based BIM for E&M Asset Management Supplemented with Mobile Technology – A Case Study in Public Sewage Pumping Facilities", were selected as two out of the five award winners of "Autodesk Hong Kong BIM Awards 2016"

10月 Oct

2016年10月27日
27 October 2016

時任高級工程師李康年先生(右一)及工程師余偉昌先生(左一)榮獲2016年申訴專員嘉許獎(公職人員獎)

Mr. Robin LEE Hong-nin (first right), then Senior Engineer, and Mr. Henry YU Wai-cheong (first left), Engineer, received awards in The Ombudsman's Awards 2016

11月 Nov

2016年11月22日
22 November 2016

本署「綠化河道的生態水力學研究」和「研究、策劃及推廣在建築環境設置應對氣候變化及提升城市耐洪的可持續排水系統」項目分別榮獲2016年度園境設計大獎銀獎和2016年度環保建築大獎優異獎

"Eco-hydraulics Study on Green Channels" and the "Research, Planning and Promotion of Sustainable Drainage System for Climate Change and Flood Resilience in Built Environment", were granted the Silver Award of the Hong Kong Institute of Landscape Architects (HKILA) Landscape Awards 2016 and the Merit Award of the Green Building Award 2016

12月
Dec

2016年12月13日
13 December 2016

「佐敦谷箱形雨水渠污水截流設施的泵房」及「石涌凹污水泵房」分別榮獲綠建環評新建建築最終鉑金級和暫定鉑金級的評級

"Provision of Interception Facilities at Jordan Valley Box Culvert – Pumping Station" and the "Shek Chung Au Sewage Pumping Station" were awarded the Final Platinum rating and Provisional Platinum rating under BEAM Plus respectively

獎項及殊榮 Awards and Honours | 2017

3月
Mar

2017年3月17日
17 March 2017

本署機電工程師梁志滔先生(右一)榮獲香港工程師學會傑出青年工程師榮譽證書

Mr. Vincent LEUNG Chi-to (first right), Electrical and Mechanical Engineer, received The Hong Kong Institution of Engineers' Young Engineer of the Year Award 2017 Certificate of Merit

2017年3月10-19日
10-19 March 2017

以「愛-賞花@濕地」為題參與2017年香港花卉展覽，獲得最佳設計(園林景點)大獎

DSD's exhibit "Blossoms of Love - Wetland" was awarded the Grand Award for Design Excellence (Landscape Display) in the Hong Kong Flower Show 2017

管治方針
Governance Approach

自1989年成立至今，渠務署的工作一直以公眾利益為依歸。建基於良好的機構管治，我們恪守管治守則，並設有多個事務委員會及管理系統，適時優化管治及發展策略。同時，我們亦廣立溝通渠道，務求聽取市民意見，有助本署推行和提供更優質的服務。

Since its establishment in 1989, DSD has always conducted its work with due consideration of public interest. Guided by the sound corporate governance, we abide by stringent governance principles and establish various committees and management systems to ensure timely optimisation of governance and development strategies. Meanwhile, we also establish a variety of communication channels to collect the opinions from the public to help us excel in service excellence.

小蠔灣污水處理廠太陽能發電場
Solar Farm at Siu Ho Wan Sewage Treatment Works

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。有鑑於香港社會對可持續發展日益關注，我們於2007年更新了部門的「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。

To provide timely response to address the needs of our society, DSD improves its governance approach and services to keep abreast of the times. In view of growing awareness for sustainable development within the Hong Kong community, we renewed our departmental "Vision, Mission and Values" in 2007 to fully demonstrate our aspirations and commitments in this regard.

- 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, who are responsible for making important policy decisions and overseeing the Department's daily operations. The senior management team also develops and reviews DSD's strategies and targets for sustainable development.

渠務署的高級管理層
DSD's Senior Management

1

渠務署署長
Director of Drainage Services

唐嘉鴻先生
Mr. Edwin TONG Ka-hung

2

渠務署副署長
Deputy Director of Drainage Services

麥嘉為先生
Mr. MAK Ka-wai

3

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

簡炎輝先生
Mr. Fedrick KAN Yim-fai

4

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

方學誠先生
Mr. Michael FONG Hok-shing

5

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

崔偉誠先生
Mr. CHUI Wai-sing

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

7

主任秘書
Departmental Secretary

黃球年先生
Mr. Tony WONG Kau-nin

渠務署的組織架構圖
DSD's Organisation Chart

渠務署總部 DSD Headquarters

渠務署署長
Director of Drainage Services

渠務署副署長
Deputy Director of Drainage Services

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

設計拓展科
Projects and Development Branch

- 顧問工程管理部
  Consultants Management Division
- 工程管理部
  Project Management Division
- 污水工程部
  Sewerage Projects Division
- 排水工程部
  Drainage Projects Division

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

操作維修科
Operations and Maintenance Branch

- 香港及離島渠務部
  Hong Kong & Islands Division
- 九龍及新界南渠務部
  Mainland South Division
- 新界北渠務部
  Mainland North Division
- 土地排水部
  Land Drainage Division

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

機電工程科
Electrical and Mechanical Branch

- 機電工程部
  Electrical and Mechanical Projects Division
- 污水處理部一
  Sewage Treatment Division 1
- 污水處理部二
  Sewage Treatment Division 2

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

污水處理服務科
Sewage Services Branch

- 淨化海港計劃部
  Harbour Area Treatment Scheme Division
- 客戶服務及資產管理部
  Customer Services and Asset Management Section
- 行動部
  Operation Section
- 污水服務收入部
  Sewage Revenue Section

部門行政部
Departmental Administration Division

- 機密檔案室
  Confidential Registry
- 翻譯組
  Translation
- 招聘及編制事務室
  Appointment & Establishment Registry
- 總務室
  General Registry
- 總務部-員工關係及福利組
  General Registry-Staff Relations & Welfare
- 人事事務室
  Personnel Registry

財務及物料供應部
Finance and Supplies Section

- 部門會計組
  Departmental Accounts Unit
- 物料供應組
  Supplies Unit

技術支援部
Technical Support Group

- 合約顧問組
  Contract Advisory Unit
- 環境保護組
  Environmental Unit
- 總部組
  Headquarters Unit
- 資訊科技管理組
  Information Technology Management Unit
- 園境師
  Landscape Architect
- 品質管理
  Quality Assurance
- 安全顧問組
  Safety Advisory Unit
- 技術秘書1
  Technical Secretary 1
- 公共關係組
  Public Relations Unit
- 訓練組
  Training Unit

本署設有4個分科，編制有1,937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 1,937. Each branch is led by an Assistant Director and is responsible for providing technical and professional support services in its specific field. The duties of 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、執行土地排水條例，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 Ordinance and the management and maintenance of engineered drainage channels.

機電工程科
Electrical and Mechanical Branch

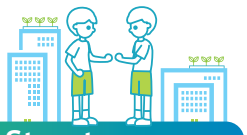
負責污水處理及防洪設施的運作及維修，以及為部門轄下各污水處理及防洪項目提供機電設計及裝置。

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2次會議，深入討論節能、綠化、減排、減廢等議題及檢視環保工作目標的進度。

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 saving, greening, emission reduction and waste reduction, and to review the progress of meeting targets on environmental initiatives.

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2次會議，討論節能措施及目標、再生能源應用等議題。

Energy conservation and emission reduction are among the key environmental issues addressed by DSD. Chaired by the Assistant Director / Electrical and Mechanical, the 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, including energy conservation measures and 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 gives comments and makes decisions related to the preparation of the sustainability report. These include determining the choice of international guidelines to be adopted for reporting, defining stakeholder engagement plans, and identifying material topics.

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 the 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8次會議，並統籌渠務署「2016研究及發展論壇」。年內，本署共完成9個研究項目，課題涵蓋藍綠建設、氣味控制、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 Committee is responsible for conducting research in support of DSD's development plans. The Committee consists of two teams which coordinate research in civil engineering and electrical and mechanical engineering respectively.

During the reporting period, the Committee held eight meetings and organised DSD Research & Development Forum 2016. In the year under review, DSD completed nine research projects on topics covering Blue-Green Infrastructure, odour control, 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。

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

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。

DSD has begun building and implementing management systems in line with international standards since 2002. At present, we have in place an integrated management system composed of multiple systems that cover quality, environment, and occupational health and safety aspects. We adhere to the "Plan-Do-Check-Act" approach of the management systems and strive for continuous improvement.

為提升能源效益及紓緩氣候變化，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。自2014年5月至2017年5月，本署轄下共有124所污水泵房、污水處理廠和雨水泵房已先後通過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。我們的目標是在2019年6月前，分階段為轄下其餘約220多所的渠務設施進行同類資產管理系統的認證審核。

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, making the first time that DSD received ISO 50001 Energy Management System certification.

Climate change has accelerated in recent years and extreme weather phenomena are occurring more frequently. In this regard, we are facing greater challenges in the design and management of our drainage facilities. Since 2013, DSD has commenced a staged implementation of an Asset Management System (AMS) to better manage our facilities. From May 2014 to May 2017, a total of 124 DSD-operated sewage pumping stations, sewage treatment works and stormwater pumping stations passed the certification audit for ISO 55001 AMS standard, making us one of the first government departments to obtain this accreditation. It is our target to extend similar AMSs to the remaining 220-plus DSD-operated drainage facilities in phases by June 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職業安全衛生管理系統認證
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 Sewage Treatment Works

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 9 DSD facilities

2016
轄下16所設施取得ISO 55001資產管理標準認證
Obtained ISO 55001 AMS standard certification for 16 DSD facilities

2017
轄下124所設施取得ISO 55001資產管理標準認證
Obtained ISO 55001 AMS standard certification for 124 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。詳情請參閱**第八章 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 have established multiple channels to maintain two-way communication with stakeholders on matters such as construction works, daily operations and our development approaches. Our stakeholder groups include DSD staff, professional institutions, academia, green groups, the media, work consultants and contractors. For details, please refer to **Chapter 8 Stakeholder Engagement Activities**.

持份者[1] Stakeholder[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]
• 渠務署員工 DSD Staff	• 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	• 員工福利 Employee benefits • 員工培訓機會 Employee training opportunities
• 公眾 General Public	• 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	• 渠務工程對居民的影響 Impact of drainage works on residents • 營運效率 Operational efficiency

1102-40 2 102-43 3 102-44

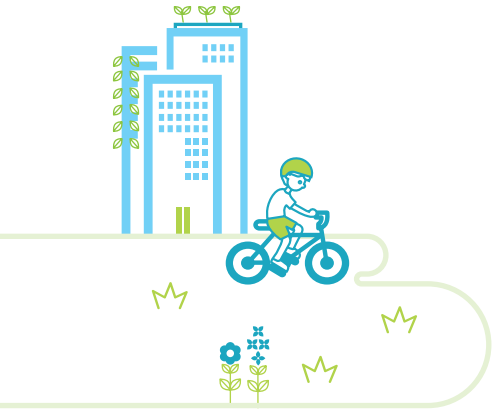
持份者[1] Stakeholder[1]	持份者溝通渠道 / 互動方式[2] Stakeholder Communication Channels / Means of Interaction[2]	關注事項[3] Issues of Concern[3]
工程顧問及承建商 Consultants and Contractors	工地考察 Site visits 經驗分享會 Experience sharing sessions 工地整潔獎勵計劃 Construction Sites Housekeeping Award Scheme	職業安全與健康 Occupational safety and health 工程的建設要求及趨勢 Construction requirements and trends for projects 工程的環境效益 Environmental performance of projects
學術團體 Academia	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 研究與發展論壇 Research and Development Forum	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	環保團體會議 Meeting with environmental groups 河道考察 Site visits to river channels 研究與發展論壇 Research and Development Forum	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

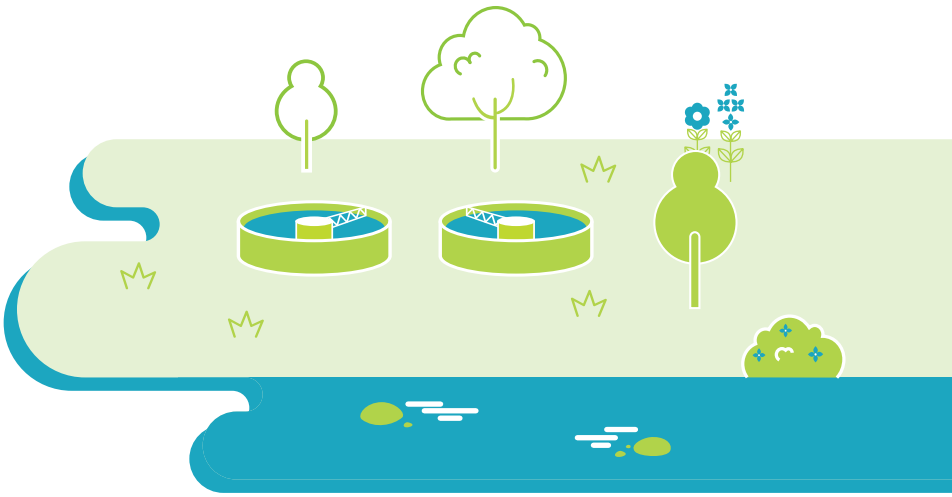
1 102-40 2 102-43 3 102-44

持份者[1] Stakeholder[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	渠務署國際會議 DSD International Conference 研究與發展座談會 Research and Development Forum	工程技術 Engineering technology 資產管理 Asset management
傳媒 Media	傳媒簡報會 Media briefings	工程進度 Progress of engineering works

除了持續的雙向溝通外，我們亦希望可持續發展報告能適切地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，為加強與員工、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**關於本報告**。

In addition to maintaining ongoing two-way communication, we also hope that our sustainability reports can better address concerns of our stakeholders. To this end, we began in 2012-13 to launch an additional stakeholder engagement programme prior to compiling each report. This arrangement helps giving us clearer understanding of 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 staff, consultants and the public by collecting their views through focus group meetings and questionnaire surveys. For details, please refer to **About this Report**.





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渠務署主要職責
Our Core Responsibilities

「夏天為大地帶來雨水，疏導雨水，需要暢通的渠道……」不論是處理污水或疏導雨水，都與市民日常生活息息相關。本署致力提供世界級的污水和雨水處理排放服務，面對日益頻繁的極端天氣，本署會不斷加強應對能力，為市民締造更宜居的生活環境。

"Summer always brings rain. To carry away rainwater, we must keep our drains clear…" Both sewage treatment and rainwater drainage are closely tied to the daily lives of citizens. While endeavouring to provide world-class sewage and rainwater drainage services, we boost our resilience to increasing extreme weather. It is our goal to create a more livable environment for the public.


1


2


3


4

1. 沙田污水處理廠
Shatin Sewage Treatment Works

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

3. 林村河
Lam Tsuen River

4. 跑馬地地下蓄洪計劃
Happy Valley Underground Stormwater Storage Scheme

石湖墟污水處理廠改善工程
Shek Wu Hui Sewage Treatment Works Improvement Project

2016-17年度防洪概要
Overview of Flood Prevention in 2016-17

2016年，香港受極端天氣影響，頻繁暴雨為防洪工作帶來不少挑戰。當年全年總降雨量達3,027毫米，較1981至2010年的年平均值約2,400毫米高約26%。年內，天文台共發出1次黑色、5次紅色及21次黃色暴雨警告；於10月19日發出的黑色暴雨警告更是暴雨警告系統自1992年設立以來，首個於10月發出的黑色暴雨警告。當日下午廣泛地區錄得逾100毫米雨量，下午3至4時更錄得78.7毫米雨量，是1884年有記錄以來10月份錄得最高的時雨量。

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，並定期進行巡查及妥善維修。2016-17年度，本署進行多項防洪工程，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，擬定相關策略以配合香港未來發展。

Affected by extreme weather, Hong Kong faced frequent severe rainstorms that posed challenges to flood prevention in 2016. The annual total rainfall of that year was 3,027 millimetres, about 26% higher than the mean annual total rainfall of approximately 2,400 millimetres between 1981 and 2010. During the year, the Hong Kong Observatory issued one Black, five Red and 21 Amber Rainstorm Warnings. The Black Rainstorm Warning on 19 October 2016 was the first Black Rainstorm Warning ever issued in October since the inception of the Rainstorm Warning System in 1992. Over 100 millimetres of rainfall were recorded in most areas in Hong Kong that afternoon. The rainfall of 78.7 millimetres recorded between 3 and 4 p.m. on that day was also the highest hourly rainfall in October since records began in 1884.

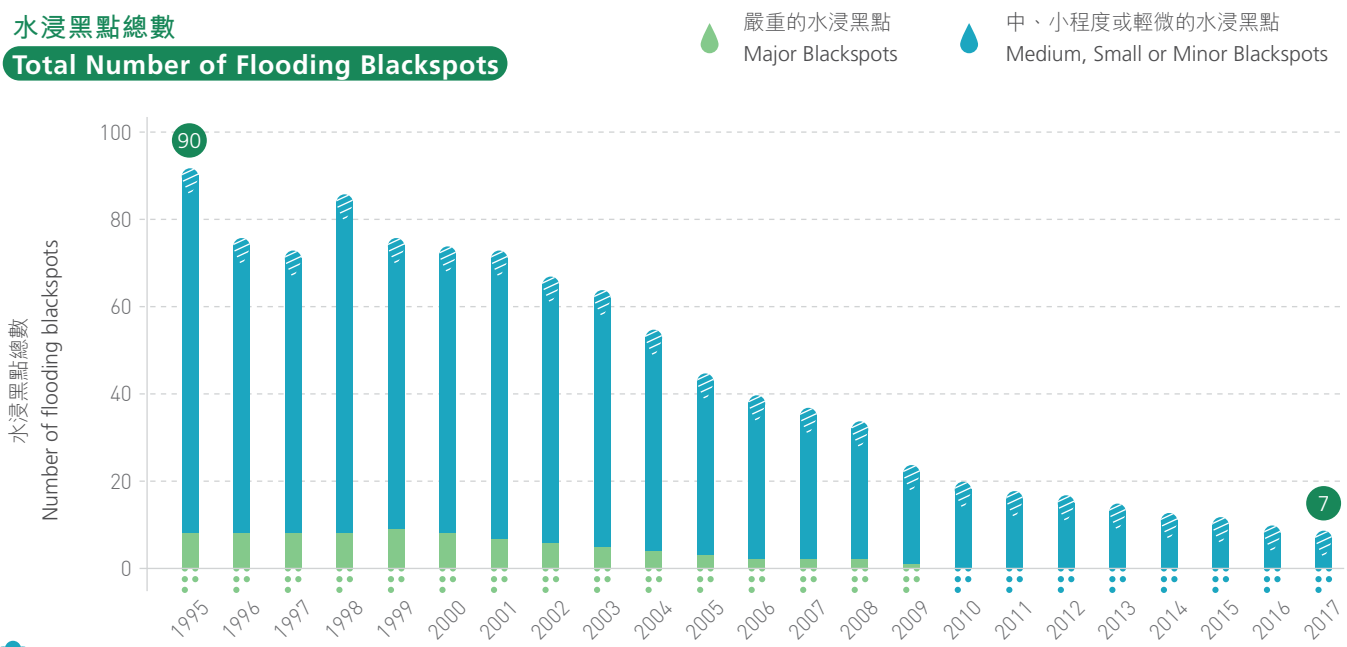
To prevent flooding and safeguard the public, we have designed and constructed stormwater drainage systems with reference to international standards, and carried out regular inspections and maintenance works. In 2016-17, DSD implemented various flood prevention projects to upgrade the flood protection level and reduce the flood risks in relevant hazard areas. While ensuring that our facilities are operated properly, we are reviewing the Drainage Master Plans (DMPs) of various districts in stages, so as to formulate corresponding strategies for Hong Kong's future development.

水浸黑點再減一個
Another Flooding Blackspot Off the List

2017年年初，我們評估各項已完成的排水系統改善工程的成效後，進一步剔除黃竹坑道與南朗山道交界的水浸黑點，令全港水浸黑點由8個減至7個。

In early 2017, after evaluating the effectiveness of each completed drainage improvement works, we removed the flooding blackspot at the junction of Wong Chuk Hang Road and Nam Long Shan Road, thus reducing the total number of flooding blackspots in the territory from eight to seven.

水浸黑點總數
Total Number of Flooding Blackspots



在這7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，並正規劃和設計其餘4個黑點的相關工程。我們會在雨季期間密切監察這些地區的排水情況，致力盡早剔除所有水浸黑點。

Among the seven remaining flooding blackspots, drainage improvement works for three have been commissioned. We are monitoring the effectiveness of these works as well as planning and designing improvement works for the remaining four. We will closely monitor their respective drainage conditions during the rainy season and endeavour to eliminate all flooding blackspots as soon as possible.

現有排水設施的運作及維修保養
Operation and Maintenance of Existing Drainage Facilities

本署負責管理總長約2,400公里的地下雨水渠、長約360公里的人工河道、長約21公里的雨水排放隧道，以及36所雨水泵房。2016-17年度，我們繼續定期巡查雨水排放設施及進行預防性維修保養工作，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清理淤塞渠道。過去一年，我們巡查逾2,200公里的雨水渠及河道。

DSD manages about 2,400 kilometres of underground stormwater drains, 360 kilometres of engineered channels, 21 kilometres of drainage tunnels, and 36 stormwater pumping stations. In 2016-17, we continued with our regular inspections and preventive maintenance works of all stormwater drainage facilities to ensure smooth operation of the drainage systems. We also conduct functional and structural checks regularly and clear blockages before the wet season and after heavy rainstorms. Over 2,200 kilometres of drains and rivers were inspected over the past year.

緊急事故及應變措施
Emergency Response

- 緊急事故及暴風雨應變組織24小時運作，以處理緊急和水浸事故
- 在惡劣天氣下，緊急事故控制中心會投入運作，統籌緊急事故的信息發放和資源調配事宜，以應付緊急情況，並與政府其他緊急應變單位協調
- Emergency and Storm Damage Organisation (ESDO) operates round the clock to handle emergencies and floods.
- In adverse weather conditions, the Emergency Control Centre is activated to coordinate disseminating information relating to emergencies and allocation of resources to deal with extreme situations and to liaise with other government emergency units

蓄洪
Flood Storage

- 暴雨期間，市區部分雨水會引流至蓄洪池暫存，以紓緩下游地區排水系統的壓力
- 大坑東、上環及跑馬地的蓄洪計劃已投入運作
- 鄉郊已推行27個鄉村防洪計劃，保護35條低窪鄉村免受水浸威脅
- 低窪村落四周設防洪基堤，在暴雨期間村內徑流會暫存於蓄洪池，及後經泵房抽走
- During heavy rainstorms, stormwater in some urban areas is diverted to storage tanks for temporary storage to relieve the burden of downstream drainage systems
- Stormwater storage schemes at Tai Hang Tung, Sheung Wan and Happy Valley are in operation
- In rural areas, 27 village flood protection schemes are currently in operation, protecting 35 low-lying villages against flood hazards
- Low-lying villages are enclosed by flood protection embankments. Runoffs within villages are stored temporarily in flood storage ponds during heavy rainstorms and subsequently discharged by pumping stations

截流
Interception

- 在上游截取雨水，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(包括啟德雨水轉運計劃、港島西雨水排放隧道、荔枝角雨水排放隧道、荃灣雨水排放隧道)總長度約21公里，已經運作多年
- Stormwater is intercepted at upstream and diverted for direct discharge into the sea or rivers, thereby substantially mitigating the flood risk in downstream areas
- Four drainage tunnels, including the Kai Tak Transfer Scheme, and Hong Kong West, Lai Chi Kok and Tsuen Wan Drainage Tunnels, totaling about 21 kilometres in length, have been in operation for years

疏浚
Drainage Improvement

- 進行排水系統改善工程，拉直、擴闊和挖深河道，以及建造或擴大地下排水渠
- 至今已改善逾100公里河道，另提升約93公里排水渠
- Drainage improvement works are carried out to straighten, widen and deepen rivers and to construct or enlarge underground drains
- Over 100 kilometres of rivers have been improved and about 93 kilometres of drains upgraded to date

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，範圍涵蓋全港所有易受水浸影響的地區。為配合香港未來發展及應對氣候變化，我們會適時檢討和更新整體雨水排放計劃，以評估排水改善工程的成效，並按需要建議進一步改善措施。

Drainage Master Plan (DMP) Reviews

DSD has completed eight DMP studies and three drainage studies covering all flood-prone areas in Hong Kong. To tie in with Hong Kong's future development and adapt to climate change, we review and update DMPs in a timely manner to assess the effectiveness of completed drainage improvement works. Where necessary, further improvement measures will be recommended.

目前進度 Current progress

元朗、新界北區及跑馬地的雨水排放整體計劃檢討研究已於2011年完成，而研究所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，並正在籌備餘下的檢討研究。

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

深圳河治理第4期工程

工程旨在改善平原河河口至白虎山一段長約4.5公里的深圳河，以及建造容量達80,000立方米的蓄洪湖泊，從而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。我們冀在蓄洪湖中加入濕地元素，營造更佳的生態環境。

Shenzhen River Regulation Project Stage IV

This project aims to improve the flood protection level for the river section between the Ping Yuen River estuary and Liantang/Heung Yuen Wai Boundary Control Point by improving a 4.5-kilometre section of the Shenzhen River (between Ping Yuen River and Pak Fu Shan), and constructing a flood retention lake of 80,000 cubic metres. We hope to create wetland habitats in the lake to enhance the ecological environment.

目前進度 Current progress

整項深圳河治理第4期工程預計2017年7月完成，工程預算費用約為10億元。

The Shenzhen River Regulation Project Stage IV is scheduled for completion in July 2017 at an estimated construction cost of approximately $1 billion.

深圳河治理第4期工程蓄洪湖鳥瞰圖(蓄洪湖施工進行中)
Aerial view of Shenzhen River Regulation Project Stage IV flood retention lake (Construction of retention lake in progress)

啟德河改善工程

為提升東九龍的防洪能力，工程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，並在河道上游旁邊建造一條長約400米的箱形暗渠，藉此提升啟德河排洪能力，同時將之活化成為一條市區綠化河道走廊，供市民享用。

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 drainage capacity and revitalise into an urban 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，工程預計於2018年完成。整項工程預算費用約為28億元。

Upstream and midstream improvement works of the Kai Tak River commenced in October 2011 and December 2013 respectively and are scheduled for completion in 2018. The estimated project cost is about $2.8 billion.

啟德河改善工程的施工情況
Kai Tak River improvement works in progress

活化翠屏河

我們正在九龍東進行活化工程，透過改善環境、生態和景觀，把現有沿敬業街、敬業里和翠屏道一段長約1公里的明渠活化成翠屏河。此項目同時美化毗鄰行人道，以及加強連接行人道，如增建河邊走道及園景平台。

Revitalisation of Tsui Ping River

We are conducting revitalisation works in Kowloon East, transforming a 1-kilometre nullah along King Yip Street, King Yip Lane and Tsui Ping Road into Tsui Ping River through environmental, ecological and scenic enhancement. The project also beautifies adjoining pavements as well as improves connectivity and walkability by providing riverside walkways and landscaped decks.

目前進度 Current progress

勘測研究於2015年7月展開，預計2017年完成。第一階段的公眾參與活動已於2017年3月完成。

Investigation study began in July 2015 and is scheduled for completion in 2017. The phase one public engagement exercise was completed in March 2017.

翠屏河設計構想圖
Photomontage of Tsui Ping River

2016-17年度污水處理概要
Overview of Sewage Treatment and Sewerage System 2016-17

收集、處理及排放污水是本署核心服務之一。我們透過採用不同的污水處理程序及先進技術，去除污水中大部分污染物、有毒物質和細菌會被除去以符合各項相關排放標準及法規要求。

Sewage collection, treatment and discharge is one of DSD's core services. Through application of different of sewage treatment processes and advanced technologies, most of the pollutants, toxins and bacteria are removed from sewage to meet the respective discharge standards and legal requirements.

現時，本署轄下共有304所污水處理設施，每日平均處理約280萬立方米污水。

At present, we operate **304** sewage treatment facilities and treat about **2.8 million** cubic metres of sewage on average every day.

2016-17年度污水處理廠位置圖 Location map of Sewage Treatment Works (STW) in 2016-17

2016-17污水處理設施及污水收集系統網絡概要
Summary of Sewage Treatment Facilities and Sewerage Network 2016-17

1,015

年度污水總處理量(百萬立方米)

Annual sewage treatment volume (million m^3)

93.5%

公共污水收集網絡覆蓋(佔人口百分率)

Coverage of public sewerage (Population percentage)

以有繳付排污費的住宅水務帳戶計算

Based on the no. of domestic water bill accounts with sewage charges levied

1,755

污水收集網絡總長度(公里)

Total length of sewerage network (km)

304

污水處理設施總數

Total no. of sewage treatment facilities

於2016-17年度，我們共處理約10.15億立方米污水，當中4.4%進行基本處理，76.7%進行化學強化一級處理，18.4%進行二級處理，餘下0.5%進行一級和三級處理。

污水處理過程會產生污泥。2016-17年度，我們共收集及處理約410,526公噸污泥。

In 2016-17, we treated a total of about 1,015 million cubic metres of sewage, of which 4.4% received preliminary treatment, 76.7% chemically enhanced primary treatment (CEPT), 18.4% secondary treatment, and the remaining 0.5% primary & tertiary treatment.

Sludge is produced during the sewage treatment process. 410,526 tonnes of sludge were collected and treated in 2016-17.

我們時刻進行適當維修保養工作，確保污水收集、處理和排放設施有效運作。我們亦會繼續擴大污水收集系統的覆蓋範圍，並持續改善污水處理設施，促進香港的可持續發展。

Proper maintenance is always carried out to ensure that the sewage collection, treatment and disposal facilities operate effectively. In support of Hong Kong's sustainable development, we will continue to expand the coverage of the sewage collection network and improve the treatment facilities continuously.

專業的化驗室服務

本署下設多個化驗室，提供專業化驗服務，確保經處理的污水符合法例要求。早於1999年，沙田中央化驗室及昂船洲化驗室已獲創新科技署香港認可處頒發「香港實驗所認可計劃」(HOKLAS)證書，確認測試環境樣本(水及廢水)的認可資格。2007年，昂船洲化驗室亦獲得測試化學樣本的認可資格，負責測試購置用於污水處理的化學品的主要成分，確保其符合合約要求。沙田中央化驗室於2016年12月購置一台新的電感耦合等離子體發射光譜儀，並於2017年年初採用該儀器，進一步提高測試污水及污泥樣品中重金屬的能力。年內，化驗室的認可測試項目達31項。

Professional Laboratory Services

DSD operates a number of laboratories to provide professional laboratory services to ensure that treated sewage meets the statutory requirements. Since 1999, our Shatin Central Laboratory and Stonecutters Island Laboratory have been accredited for testing of environmental samples (water & wastewater) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) operated by the Hong Kong Accreditation Service of the Innovation and Technology Commission. The Stonecutters Island Laboratory has also gained accreditation since 2007 for testing of chemical samples to assure that the procured chemicals for sewage treatment conform with the contract specifications. A new inductively coupled plasma-optical emission spectrometer was purchased in December 2016 and commissioned in early 2017 at the Shatin Central Laboratory, which can further enhance the performance on detecting heavy metals in sewage and sludge samples. During the year, 31 of our laboratory tests were accredited.

電感耦合等離子體發射光譜儀
Inductively coupled plasma-optical emission spectrometer

分析服務

我們定期收集樣本及分析污水，以提升儀器的準確度及監察污水處理過程的水質和效率，確保經處理的污水符合排放標準，而提供的水質數據亦準確無誤。

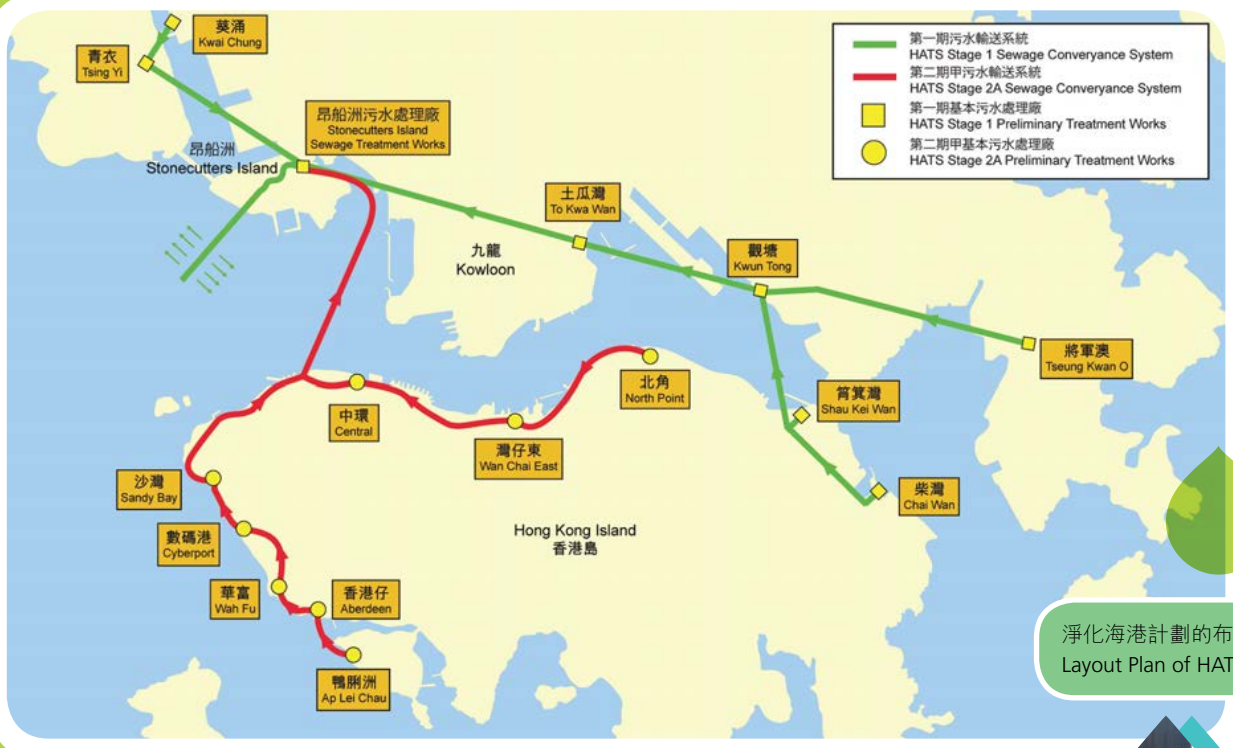
沙田、大埔、西貢、石湖墟及元朗的化驗室負責不同的污水樣本測試，測試種類逾14項。2016-17年度，化驗室完成超過266,600項分析。有關主要污水處理廠的排放水水質分析結果，可瀏覽本署網頁。

Analytical Services

To improve precision of instruments and monitor water quality and efficiency of the sewage treatment process, we carry out sewage sampling and analysis regularly. These measures can ensure that treated sewage meets specified discharge requirements and accurate water quality data are provided.

Extensive laboratory testing covering more than 14 types of analysis of sewage samples is carried out in our laboratories in Shatin, Tai Po, Sai Kung, Shek Wu Hui and Yuen Long. In 2016-17, these laboratories conducted over 266,600 analyses in total. The analytical results of effluent quality of major sewage treatment works can be found on our website.

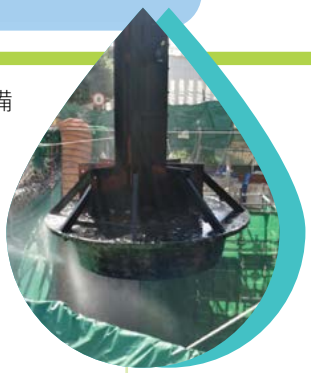
淨化海港計劃 Harbour Area Treatment Scheme (HATS)



淨化海港計劃的布局圖
Layout Plan of HATS

淨化海港計劃第二期甲於2015年12月全面啟用後，今年又完成另一里程碑。工程團隊經過多月籌備及規劃，終於2017年1月在第一期海平面以下24米深的上升豎井內，移除兩個直徑3米的混凝土塞，貫通昂船洲污水處理廠連接兩座大型主泵房的隧道。連接隧道的測試及試行亦於2017年3月24日完成。自此，在非雨季時淨化海港計劃的污水便可以由兩座主泵房其中一座單獨處理，大大提升該污水處理廠運作的靈活性及穩定性。

Following its full commissioning in December 2015, the HATS Stage 2A project completed another milestone this year. After months of preparation and planning, two 3-metre-diameter concrete plugs located at -24mPD in the HATS Stage 1 riser shaft were successfully removed in January 2017, connecting the two main pumping stations in the Stonecutters Island Sewage Treatment Works (SCISTW) by the interconnection tunnel. Testing and commissioning of the interconnectional tunnel were completed on 24 March 2017. This allows sewage to be handled by either of the two main pumping stations in the dry season, which greatly enhances the operation flexibility and reliability of the SCISTW.



為檢查口加蓋
Covering the inspection openings

目前進度 Current progress

淨化海港計劃第二期甲的餘下工程，包括污泥塊筒倉南翼及維修大樓，現正進行得如火如荼。綠化天台，園林種植及建築外觀特色等美化工程亦正在施工。所有工程在短期內完成後，將會為市民提供更優質的污水處理服務。

Construction of the remaining facilities of HATS Stage 2A, including the southern sludge cake silo and the workshop buildings, is now in full swing. Beautification works such as green roofs, landscaping and architectural features, are also in progress. Completion of these works in the near future will serve to enhance our sewage treatment services to the public.

昂船洲污水處理廠鳥瞰圖
Aerial photo of Stonecutters Island Sewage Treatment Works

持份者訪問
Stakeholder Interview

林嘉朗先生
Mr. Kevin K. L. LAM

助理營運經理
Assistant Operations Manager

昇達安樂聯營
SITA ATAL Joint Venture

承建商的話 Contractor's Note

在淨化海港計劃第二期甲工程項目中，我們負責為渠務署轄下的昂船洲污水處理廠設計、建造及營運污泥餅運送設施。在完成設計及建造兩艘運泥船－「淨港一號」和「淨港二號」後，現時我們的日常工作主要是把已脱水的污泥餅以特製的貨櫃集裝箱盛載，從海路以「淨港號」由昂船洲污水處理廠運送至屯門稔灣的T • PARK(源 · 區)，作再進一步的處理。「淨港號」是全港首批「柴油—電力推進」的貨櫃船，在航行時使用超低硫柴油發電，以電力推動船隻；而船隻在泊岸後更會從岸邊取電，不會燃燒柴油，使靠岸時達致零排放。

渠務署投入大量資源，不斷改善污泥脱水的處理程序，致力推動香港的可持續發展。除了定期檢驗設備、進行維修及更新外，渠務署亦嚴格監測污泥處理過程的整體質素。若發現污泥品質有改變時，渠務署會立即跟進，如發現情況特殊便會即時採取相應行動。

我們在日常的工作中與渠務署可謂合作無間、風雨不改。由於污泥脱水程序可能受設備的維修保養及天氣變化而影響，故此，我們與污水處理廠時刻保持密切聯繫，以便適時安排足夠人手及車輛，應付突發需要，為市民提供穩定可靠的服務。作為渠務署的合作夥伴，我們會繼續全力配合渠務署的工作。

We are commissioned by DSD to design, construct and operate the sludge cake handling facilities for the Stonecutters Island Sewage Treatment Works under HATS Stage 2A. After designing and building two container vessels for sludge transportation — "Clean Harbour 1" and "Clean Harbour 2", we carry out routine duties to transfer dewatered sludge cakes using purpose-built containers and the Clean Harbour vessels from Stonecutters Island Sewage Treatment Works to T-Park in Nim Wan, Tuen Mun, for further treatment. the Clean Harbour vessels are the first diesel-electric propulsion container vessels in Hong Kong, using ultra-low sulphur diesel to generate electricity for propulsion; and they are connected to on-shore power supplies when berthed, without using diesel and thereby achieving zero emission.

DSD has allocated considerable resources to continuously improve the sludge dewatering process in support of Hong Kong's sustainable development. In addition to inspecting, maintaining and renewing equipment on a regular basis, DSD keeps a close eye on the overall quality of the sludge treatment process. DSD will follow up and take immediate action if there is change in sludge quality to address unusual circumstances.

We work closely with DSD in our daily operation. Given that the sludge dewatering process may be affected by equipment maintenance and change in weather, we keep close contact with the sewage treatment plant to ensure that adequate manpower and vehicles can be deployed in case of emergency situations to ensure the provision of stable and reliable services for the public. As a working partner of DSD, we will continue to support the department's initiatives.

渠務署的話 DSD's Note

渠務署感謝持份者對本署可持續發展工作的認同及支持，業界寶貴而又切實可行的意見加強我們繼續應用嶄新科技的決心，同時強化與業界的關係。我們會繼續保持與業界緊密合作，積極提升本署的工作效率及服務質素，共同努力推動香港的長遠可持續發展。

DSD is grateful to stakeholders' for their recognition and support of our sustainability efforts. Bolstered by valuable and pragmatic feedback from the industry, we are dedicated to applying more new technologies to our operation. Such communication can also enable us to develop a close rapport with the industry. We will continue to work closely with the industry to optimise DSD's operation efficiency and service quality and foster the long-term sustainable development of Hong Kong.

規劃、設計及建造新的污水處理設施
Planning, Design and Construction of New Sewerage Facilities

在東涌及小蠔灣之間增建一條加壓污水管及修復現有加壓污水管工程

為提升東涌市和機場污水收集系統的整體運作能力和可靠性，以及應對未來擴展東涌新市鎮所增加的污水流量，我們將在東涌污水泵房及小蠔灣污水處理廠之間增建一條長約6.5公里、直徑1,200毫米的加壓污水管，以及修復現有的加壓污水管。

Construction of additional sewage rising main and rehabilitation of the existing sewage rising main between Tung Chung and Siu Ho Wan

To enhance the overall operation and reliability of the sewerage system for Tung Chung Town and Airport Island, and to cope with the increased sewage flow from the development of the Tung Chung New Town Extension, we will construct an additional sewage rising main of about 6.5 kilometres with diameter of 1,200 millimetres from the Tung Chung Sewage Pumping Station to the Siu Ho Wan STW. The existing sewage rising main will also be rehabilitated.

目前進度 Current progress

建造新加壓污水管的工程於2016年8月展開，預計2022年7月完工。新加壓污水管工程竣工及啟用後，現有加壓污水管可暫停運作，以進行修復工程。修復工程預計2025年年底完成。

Construction of the new sewage rising main commenced in August 2016 and is scheduled for completion in July 2022. Upon completion and operation of the new sewage rising main, the existing main can be temporarily decommissioned for rehabilitation. The rehabilitation works are expected to be completed in late 2025.

加壓污水管工程現址
Current view of the sewage rising main

新圍污水處理廠改善工程(第一期)

現有的新圍污水處理廠的級別為基本處理，每天污水處理量為164,100立方米。新圍污水處理廠改善工程(第一期)完成後，污水處理量可增至每天200,000立方米，而污水處理水平會提升至化學強化一級處理，並加設紫外線消毒。工程將提升西北水域的水質，並配合地區人口增長。

Upgrading of San Wai STW – Phase 1

The existing San Wai STW is a preliminary sewage treatment works with treatment capacity of 164,100 cubic metres per day. The Upgrading of San Wai Sewage Treatment Works - Phase 1 project will increase the capacity to 200,000 cubic metres per day and raise the treatment level to chemically enhanced primary treatment with ultraviolet disinfection. The upgrading works will help raise the water quality of to the north-western waters and cope with growing population in the area.

目前進度 Current progress

工程合約採用設計、建造及營運模式，並於2016年5月展開，預計2020年完成。建造工程完成後，承建商會負責新圍污水處理廠的營運及維修工作，為期最長達15年。

This project was procured through a Design-Build-Operate (DBO) contract, which commenced in May 2016 and is scheduled for completion in 2020. Upon completion of construction works, the contractor will undertake the operation and maintenance of the new San Wai STW for a period of up to 15-years.

新圍污水處理廠改善工程(第一期)完工構想圖
Photomontage of the upgraded San Wai STW - Phase 1

石湖墟污水處理廠擴建工程

為配合北區迅速發展，我們將分階段增加石湖墟污水處理廠的處理量，並提升其污水處理級別至三級水平，以保護后海灣的生態環境。我們亦會藉機改善廠房外觀及環境表現，提升其水資源保育教學功能，使該廠成為具代表性的多元化社區設施。

Expansion of Shek Wu Hui STW

In line with the rapid development of 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 ecological environment of Deep Bay. We will also take this opportunity to revamp its exterior and environmental performance, and promote its educational purpose on water conservation so as to transform Shek Wu Hui STW into an iconic, multi-purpose community facility.

目前進度 Current progress

項目分階段進行。前期工程於2015年7月展開，預計2019年完成。主體工程的詳細設計採用嶄新的建築信息模型。我們會盡快完成前期工作，然後展開餘下的擴建工程。

This project is executed in stages. Advance works commenced in July 2015 and are expected to complete in 2019. Detailed design of the main works employs the innovative building information model (BIM). We will strive for the earliest completion of the advance works and commence the extension works for subsequent stages.

石湖墟污水處理廠
Shek Wu Hui STW

石湖墟污水處理廠完工構想圖
Photomontage of the upgraded Shek Wu Hui STW

搬遷沙田污水處理廠往岩洞工程

搬遷沙田污水處理廠往岩洞，可騰出現址約28公頃土地作有利民生用途，同時改善區內生活環境。

Relocation of Sha Tin STW to Caverns

In addition to releasing some 28 hectares of land for other beneficial uses, the relocation of the Sha Tin STW to caverns can improve the living environment of the district.

目前進度 Current progress

我們正進行地質勘測和優化污水處理的詳細設計。此外，環境影響評估已獲環境保護署署長批准；而2015年12月展開的第三階段公眾參與活動於翌年5月結束。我們會繼續與社區及持份者保持緊密聯繫，共同優化搬遷計劃。

Site investigations and enhancement of the detailed design on sewage treatment are well under way. The environmental impact assessment (EIA) has been approved by the Director of Environmental Protection whereas the third stage of our public engagement exercise commenced in December 2015 were concluded in May 2016. We will continue to maintain close communication with the local community and stakeholders and strive to optimise the project.

此外，本署亦正研究搬遷西貢污水處理廠及深井污水處理廠往岩洞的可行性。

More other, we are also studying the possibility of relocating Sai Kung STW and Sham Tseng STW.

深井污水處理廠
Sham Tseng STW

西貢污水處理廠
Sai Kung STW

吐露港地區污水收集系統建造工程

我們在沙田及大埔進行污水系統工程，以改善吐露港水質及11個未有敷設污水設施地區的衞生情況。工程包括在沙田九肚建造污水泵房，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 Shatin and Tai Po to improve both the water quality in Tolo Harbour and sanitation conditions for 11 unsewered communities. The project involves building a sewage pumping station at Kau To, Shatin and laying about 12 kilometres of sewers for nine and two unsewered areas in Shatin and Tai Po respectively.

目前進度 Current progress

工程於2013年動工，預計2018年11月完成。

Construction works commenced in 2013 and are scheduled for completion in November 2018.

梅窩污水處理廠改善工程

為配合未來發展，我們正在梅窩污水處理廠進行改善工程，把污水處理量從每日1,190立方米增至3,700立方米。工程亦包括提升污泥處理及除味設施，以及園林綠化工作。

Upgrading of Mui Wo STW

In view of future development, we are undertaking improvement works at the 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 alongside associated greening works.

目前進度 Current progress

工程於2012年動工，預計2018年完成。

Construction began in 2012 and is scheduled for completion in 2018.

梅窩污水處理廠
Mui Wo STW

擴建鄉村公共污水收集系統

本署多年來致力擴建鄉村公共污水收集系統，以改善鄉郊地區的衞生環境及附近水體水質。進行中的鄉村污水工程，分別位於北區、大埔、沙田、元朗、屯門、西貢及離島。

Expansion of Village Sewerage

DSD has made ongoing efforts to expand the public sewerage systems in villages over the years, in a bid to improve the hygienic conditions in rural areas as well as the water quality of nearby water bodies. Construction works for village sewerage projects are currently underway in North District, Tai Po, Shatin, Yuen Long, Tuen Mun, Sai Kung and outlying islands.

目前進度 Current progress

截至2017年3月，我們已為220多條鄉村鋪設公共污水渠，亦正為另外40多條鄉村籌備相關工程。目前，仍有230多條鄉村的工程在規劃和設計中。

As at March 2017, we have laid public sewerage for over 220 villages. Works for other 40-plus villages are in progress and the schemes for more than 230 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自1995年4月1日起，根據污染者自付原則實施。凡接駁至公共污水渠的建築物，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，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. The charge is composed of Sewage Charge (SC) and Trade Effluent Surcharge (TES). There are currently 27 trades under the TES.

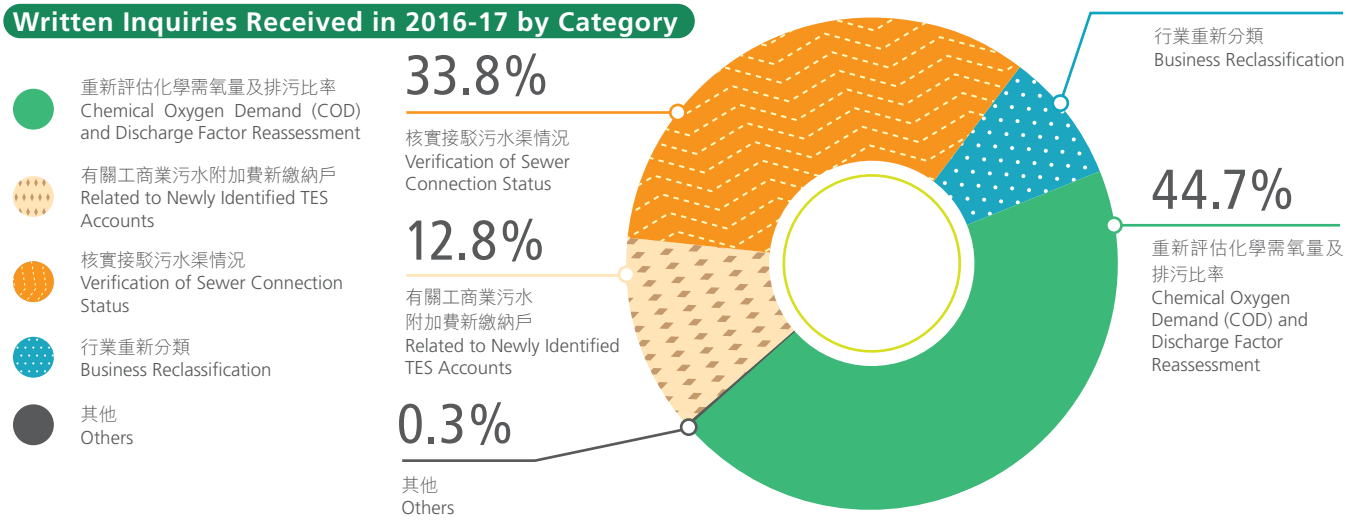
客戶查詢

不論是污水處理或雨水排放，本署的服務均與香港市民日常生活息息相關。為了提供更優質服務，我們除了不斷提升轄下設施的表現，亦提供多項常規服務，以滿足市民的需要。2016-17年度，我們共接獲6,209宗有關污水處理服務的電話及書面查詢，當中99%的書面查詢，均在收到後一個月內正式回覆。

Customer Inquiry

DSD's services, whether in relation to sewage treatment or stormwater drainage, are closely related to the daily life of the public. In order to provide better services, we consistently enhance the performance of our facilities and offer a range of routine services to cater for the public's needs. In 2016-17, we received 6,209 written and telephone inquiries about our sewage services and 99% of the written inquiries were replied within a month.

2016-17年度收到的各類書面查詢
Written Inquiries Received in 2016-17 by Category



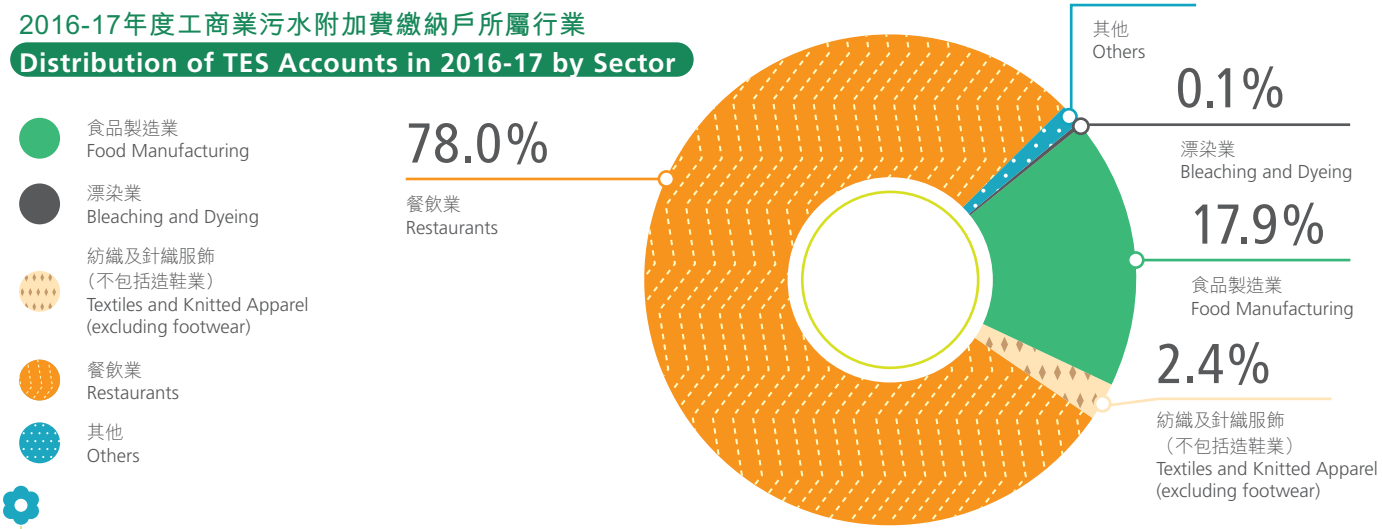
帳單及用水量統計數字

全港約有296萬個自來水用戶，其中約274萬用戶須繳付排污費。非住宅用戶中，約有27,000用戶屬須繳付工商業污水附加費的27類行業之一。工商業污水附加費繳納戶所屬行業分布見下圖。

Billing and Water Consumption Statistics

Among some 2.96 million water utility users in Hong Kong, about 2.74 million are required to pay the SC. Among the non-domestic users, about 27,000 are operating in one of the 27 trades required to pay the TES, the distribution of which is as follows:

2016-17年度工商業污水附加費繳納戶所屬行業
Distribution of TES Accounts in 2016-17 by Sector



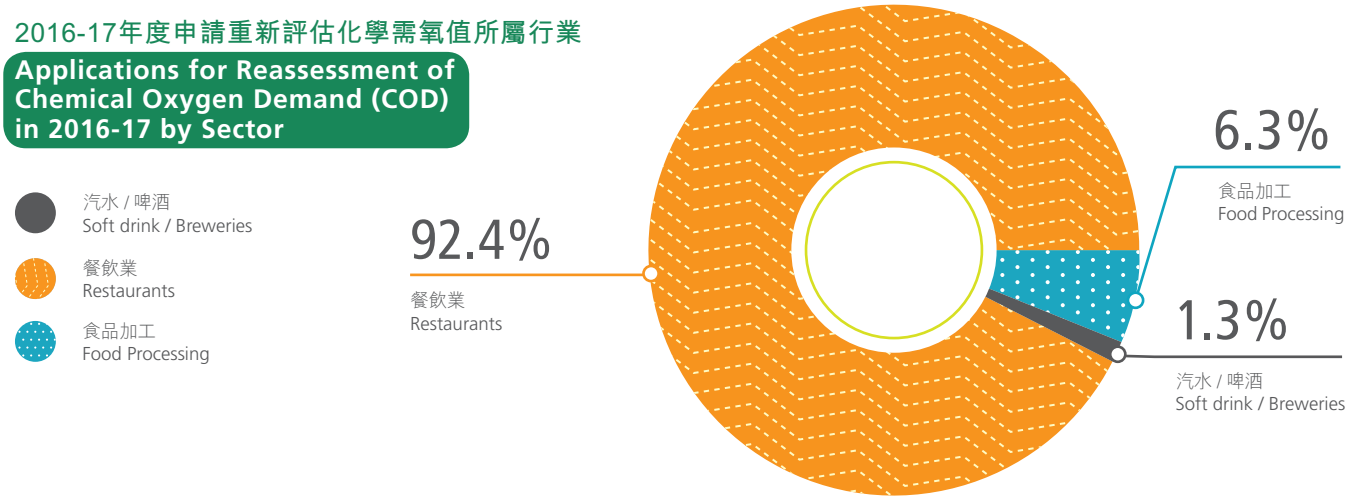
重新評估工商業污水附加費收費率及排污比率

非住宅用戶如認為其排放的污水濃度或排污比率低於法例所列明的數值，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 factor if they consider that their effluent strength or discharge factor is lower than the corresponding values specified by law. The reassessed TES rate is valid for three years.

2016-17年度申請重新評估化學需氧值所屬行業
Applications for Reassessment of Chemical Oxygen Demand (COD) in 2016-17 by Sector



管理地下排水及污水收集網絡
Managing Underground Drainage and Sewerage Networks

本署現時管理逾4,100公里地下雨水渠及污水渠，這些渠管平均使用年期為29年，當中已使用30年或以上的渠管長逾1,800公里，不少出現老化及損耗情況。我們設有定期檢查計劃，以監察管道狀況，並按需要進行復修工程。2016-17年度，我們復修了總長約22公里的雨水渠及污水渠，費用約1億3千8百萬元。

一些嚴重耗損的渠管或會塌陷引致土壤流失而路陷，這不但會影響渠管正常運作，亦對交通、環境及公眾安全帶來影響。有見及此，我們正致力推行風險為本的全港性修復老化雨水渠及污水渠工程計劃，分階段勘查及修復被評為高風險的渠管。與此同時，我們會研究及採用先進技術，務求更有效地保養管道網絡，以及提高工程的成本效益。

DSD currently manages more than 4,100 kilometres of underground drains and sewers . These underground pipes have been put in service for 29 years on average and over 1,800 kilometres of these pipes have been used for 30 years or more, many of them show signs of wear and tear. We schedule regular inspection plans to monitor the conditions of these underground pipes and conduct rehabilitation works as and when necessary. In 2016-17, we rehabilitated about 22 kilometres of drains and sewers at a cost of about $138 million.

Structural failure of seriously deteriorated pipes may result in road subsidence. Apart from the impact on the operation of the pipelines, it may bring about adverse impacts on traffic, environment and public safety. In view of this, we are striving to implement a territory-wide rehabilitation programme for aged stormwater drains and sewers using risk-based approach. Condition survey and rehabilitation of high risk underground pipes are being implemented in phases. At the same time, we will study and apply various cutting-edge R&R techniques to efficiently maintain our underground pipe networks and achieve greater cost-effectiveness of our works.

環境管理
Environmental Management

渠務署一直在轄下廠房設施加入可持續發展元素，透過推行「藍綠建設」，致力提倡綠化景觀、節能減排。我們推行每項工程時均十分重視環境管理，務求保護環境和節約用水。

DSD has been incorporating sustainability elements into our facilities at all plants. With the implementation of "Blue-Green Infrastructure", we actively promote green landscaping, energy conservation and emission reduction. We put environmental management a very high priority in each of our work projects in order to protect the environment and conserve water, etc.

1. 小蠔灣污水處理廠苗圃
   Siu Ho Wan Sewage Treatment Works Nursery
2. 沙田污水處理廠垂直綠化
   Vertical Greening at Shatin Sewage Treatment Works
3. 小蠔灣污水處理廠太陽能發電場
   Solar Farm at Siu Ho Wan Sewage Treatment Works
4. 林村河
   Lam Tsuen River

沙田污水處理廠
Shatin Sewage Treatment Works

藍綠建設
Blue-Green Infrastructure

渠務署多項渠道及河道工程中，積極引進綠化和生態保育元素的活化水體意念（包括在河道兩旁或河道種植、營造天然溪澗環境、保育河道生態、促進各種類生物繁衍，以及引入園景設計等），不但能美化環境，更可促進河溪生態多樣化。

DSD has been striving to implement the concept of revitalising water bodies by incorporating green and eco-conservation elements into channel and river training works. These include planting in river channels and along river banks, engineering natural stream settings, preserving river ecosystems, enhancing wildlife growth and introducing landscape designs, which not only beautify the environment, but also promote rivers and streams biodiversity.

藍綠建設 Blue-Green Infrastructure

- **藍指河道水體，綠則指綠化景觀。**
  Blue refers to rivers and water bodies; green refers to landscape greening.
- **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。**
  Building an urban drainage system that interweaves the natural environment with community characteristics and modern functions.

活化河道及明渠
Revitalising Rivers and Nullahs

活化翠屏河

翠屏河原是貫穿翠屏道及敬業街旁的明渠，毗鄰民居及繁盛工商業區，地理位置優越，加上河道水景特質，具有極佳條件成為市區珍貴的河畔公共空間。透過活化翠屏河工程，我們會活化現有明渠，並美化毗鄰行人道和增建河邊走道及園景平台以加強行人通道間連繫，使翠屏河成為九龍東未來的新景點。

Revitalisation of Tsui Ping River

Tsui Ping River was originally a nullah running through Tsui Ping Road and King Yip Street. It has the geographical advantage of being adjacent to residential developments and bustling commercial and industrial areas. Coupled with inherent riverine characteristics, it lends itself very well to being transformed into a precious riverside leisure space for public enjoyment. The Revitalisation of Tsui Ping River involves revitalisation of the existing nullah, beautification of adjoining walkways, as well as enhancement of connectivity and walkability through, for example, providing riverside walkways and landscape decks, turning the River into a new scenic attraction of Kowloon East in the future.

翠屏河完工構想圖
Illustration of the completed Tsui Ping River

啟德河改善工程

啟德河改善工程除了提升該河的排洪能力外，亦加入了美化、綠化、園境及生態元素活化河道，供市民享用。我們會在河岸兩旁種植合適的植物及美化河壁，並在河道放置仿石和魚洞穴，使它成為一條市區綠化河道走廊。

Kai Tak River Improvement Works

In additional to upgrading the drainage capacity of Kai Tak River, the improvement works will also revitalise the river by including aesthetic, greening, landscaping of ecological elements for public enjoyment. Suitable greenery will be planted on both sides of the River and the river embankment will also be beautified. Artificial rocks and fish shelters will be installed along the River to transform it into an urban green river corridor.

啟德河改善工程完工構想圖
Illustration of the revitalised Kai Tak River

林村河上游河道改善工程

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，我們在工程的設計、建造及管理方面，均盡力減低工程對環境和生態的影響。工程所採用的保育措施例子包括：

- 擴闊河道時，盡量縮小工程範圍，以保留原有河道
- 在適當地方建造魚梯，保持河道連貫，讓河道生物往返不同流域
- 採用石籠護土牆，以助植物生長及營造自然生態環境
- 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

我們發現工程完成後，石籠河岸及天然河床的植物蓬勃茂盛，而且水質有所改善，而部分稀有物種(如香港瘰螈)數量更勝從前。此外，河道的生物多樣性亦有所提升，鳥類、魚類及蜻蜓的品種數量均有所增加。我們亦與環保團體緊密合作，聽取其意見及建議，以便更有效地保育河道物種。

River Improvement Works in Upper Lam Tsuen

DSD completed River Improvement Works in Upper Lam Tsuen in 2012, alleviating the flood risk in the region. Given the extraordinary conservation value of upstream Lam Tsuen River, we did our utmost to minimise environmental and ecological impacts of our works throughout the design, construction and management stages. Conservation measures adopted in this project included:

- Minimising construction land uptake during river widening in order to preserve its original course
- Building fish ladders at suitable spots, maintaining river flow continuity to allow river organisms to cross sections of the stream
- Using gabion walls to promote plant growth and cultivate a natural ecology
- Restoring the riverbed with original materials upon completion of works to create a natural stream setting and minimise the use of concrete

We observed extensive plant growth on the gabion banks and natural riverbed after the project was completed. In addition to improved water quality, populations of some rare wildlife species, such as the Hong Kong Newt, have increased. The river biodiversity was also enhanced, with an increased number of bird, fish and dragonfly species. To better protect wildlife species in this river habitat, we worked closely with green groups and sought their views and advice.

經改善的林村河
Lam Tsuen River after the Improvement Works

綠化天台
Roof Greening

綠化天台不但能美化建築物外觀、促進周邊環境的生物多樣性，亦可改善空氣質素、降低室內溫度及減少建築物的能源消耗。我們選擇地點建造綠化天台時，聘請合資格人士評估選址，待完成設計後，方會展開建造工程。2016-17年度我們為轄下16個項目及設施完成天台綠化工程，詳情如下：

Roof greening not only beautifies the building appearance and enhances the biodiversity of the surrounding environment, but also improves the air quality, lowers the indoor temperature and reduces the building energy consumption. When identifying sites for green roofs, we will engage qualified persons to conduct assessments in ascertaining viable locations and design prior to construction. In 2016-17, we completed roof greening for the following 16 DSD projects and facilities:

觀塘中途污水泵房
Kwun Tong Intermediate Sewage Pumping Station

筲箕灣基本污水處理廠
Shau Kei Wan Preliminary Treatment Works

落禾沙污水泵房
Lok Wo Sha Sewage Pumping Station

香港中文大學污水泵房
Chinese University Sewage Pumping Station

沙田主污水泵房
Shatin Main Sewage Pumping Station

流浮山污水泵房
Lau Fau Shan Sewage Pumping Station

屯門西部主幹污水泵房
Tuen Mun Western Trunk Sewer Sewage Pumping Station

昂船洲污水處理廠(主泵房)
Stonecutters Island Sewage Treatment Works (Main Pumping Station)

跑馬地地下蓄洪計劃
Happy Valley Underground Stormwater Storage Scheme

林村谷污水收集系統第一期：
(林村谷污水泵房、塘面村污水泵房、田寮下污水泵房)
Lam Tsuen Valley Sewerage Stage 1 (Lam Tsuen Valley Sewage Pumping Station, Tong Min Tsuen Sewage Pumping Station, Tin Liu Ha Sewage Pumping Station)

丙崗、虎地排及大窩污水收集系統
(丙崗污水泵房、大窩村污水泵房)
Sewerage in Ping Kong, Fu Tei Pai and Tai Wo (Ping Kong Sewage Pumping Station, Tai Wo Village Sewage Pumping Station)

紅磡灣污水泵房
Hung Hom Bay Sewage Pumping Station

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

跑馬地地下蓄洪計劃
Happy Valley Underground Stormwater Storage Scheme

紅磡灣污水泵房
Hung Hom Bay Sewage Pumping Station

建造新廠房時，我們亦會優先考慮環保設計。2016年，九龍灣污水截流泵房獲頒綠建環評新建建築[1]最高評級－最終鉑金級，是渠務署第二個獲此殊榮的基建設施。此外，石涌凹污水泵房亦成為渠務署第四個獲頒綠建環評新建建築暫定鉑金級評級的基建設施。

Green design is also our priority consideration when constructing new plants. In 2016, the Kowloon Bay Sewage Interception Pumping Station was bestowed the highest Final Platinum Rating under BEAM Plus Assessment for New Buildings[1], being DSD's second infrastructure facility to obtain this award. Furthermore, the Shek Chung Au Sewage Pumping Station became DSD's fourth infrastructure facility awarded with the Provisional Platinum Rating under BEAM Plus Assessment for New Buildings.

九龍灣污水截流泵房
Kowloon Bay Sewage Interception Pumping Station

石涌凹污水泵房
Shek Chung Au Sewage Pumping Station

能源管理及排放控制
Energy Management and Emission Control

處理污水消耗大量能源，為節能減碳，本署於2007年成立能源及排放管理小組，以便制定及推行各類節能措施和應用可再生能源。

Sewage treatment is an energy intensive process. To save energy and reduce carbon emission arising from sewage treatment, DSD formed the Energy and Emission Management Team in 2007 to formulate and implement various energy saving measures and steer the application of renewable energy.

碳審計
Carbon Audit

本署進行碳審計，以確定轄下廠房的主要排放源，並透過降低機器耗能、提升運作效率及利用可再生能源等方法減少溫室氣體排放量。

Carbon audit enables DSD to identify our plants' major sources of emission and mitigate greenhouse gas emissions by reducing energy consumption, enhancing operation efficiency and using renewable energy, etc.

本年度，我們分別為西貢污水處理廠、九龍城一號污水泵房、西北九龍基本污水處理廠、昂船洲污水處理廠、大埔污水處理廠、沙田污水處理廠、石湖墟污水處理廠及赤柱污水處理廠進行碳審計。

During the year, we conducted carbon audits for the Sai Kung Sewage Treatment Works (STW), Kowloon City No. 1 Sewage Pumping Station (SPS), North West Kowloon Preliminary Treatment Works (PTW), Stonecutters Island STW, Tai Po STW, Shatin STW, Shek Wu Hui STW and Stanley STW.

展望將來，本署會為更多污水處理廠及建造工程項目進行碳審計，並採取合適的減碳措施，藉此減少碳排放，目的是利用最環保的方法為市民提供優質的雨水排放及污水處理服務。

Looking forward, we will conduct carbon audit and adopt appropriate carbon reduction measures in more of our STWs and construction projects to reduce carbon footprint with a view to providing quality drainage and sewage treatment services for the public in the most environmentally friendly manner.

1 *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。*
BEAM Plus New Buildings is a comprehensive environmental assessment system for buildings recognised by the Hong Kong Green Building Council.

2015年的碳排放量(以公噸二氧化碳當量計算)
Carbon Footprint in 2015 (in tonnes of CO_2 equivalent)

總碳排放量 Total Emissions[2]

範圍一 Scope One

除氮過程中釋放的氧化氮(以公噸二氧化碳當量計算) N_2O emissions (in tonnes of CO_2 equivalent) through nitrogen removal + 經直接使用燃料而產生的碳排放 Emissions generated from direct combustion of fuels

範圍二 Scope Two

經使用電力而產生的間接排放 Indirect emissions generated from the use of electricity + 其他 Others [3]

節能措施
Energy Saving Measures

2016-17年度，本署繼續優化污水處理廠及污水泵房的運作，並以更高能源效益的機電設備取替老化設備，以節省能源，當中推行的節能措施包括：

- 優化污水處理廠的操作流程及更換能源效益較高的設備；
- 安裝太陽能光伏板；
- 以發光二極管燈取代傳統熒光燈；以及
- 安裝生物氣發電機(渦輪發動機)。

年內，透過我們各項節能措施，節省約154萬度電(相當於減碳約1,078噸[4])。

In 2016-17, we continued to optimise the operation of the sewage treatment works and sewage pumping stations, while replacing ageing equipment with more energy efficient types in order to save energy. Implemented energy saving measures included:

- Optimising operation procedures and replacing old equipment with more energy efficient types at the sewage treatment works;
- Installation of photovoltaic solar panel;
- Replacement of conventional fluorescent lamps with light emitting diode (LED) lamps; and
- Installation of biogas electricity generator (gas turbine).

During the year, through various energy saving measures, we saved about 1.54 million kilowatt-hours (kWh) of electricity (equivalent to carbon reduction of about 1,078 tonnes[4]).

電動車
Electric Vehicle

電動車由電池推動，無須燃燒汽油，不會排放廢氣，有助改善香港路面的空氣質素。截至2017年3月，本署車隊共有35部電動車。2016-17年度，本署在各區污水處理廠及污水泵房增設10多台中速充電器，方便司機隨時充電。

Powered by batteries, the operation of electric vehicles (EV) does not involve gasoline combustion or produce emission, which helps improve roadside air quality in Hong Kong. As at March 2017, there are 35 EVs in our fleet. In 2016-17, an additional of more than 10 medium EV chargers were installed in our sewage treatment works and sewer pumping stations in various district across Hong Kong making charging more convenient and readily available.

可再生能源
Renewable Energy

污水處理設施裝設太陽能光伏板

本署轄下主要設施，包括沙田污水處理廠、深井污水處理廠、元朗污水處理廠、西貢污水處理廠、石湖墟污水處理廠、沙灣基本污水處理廠、昂船洲污水處理廠、小蠔灣污水處理廠等，均採用大型太陽能光伏系統供電，預計總發電量可達1,320千瓦。

Installation of Photovoltaic Solar Panels in Sewage Treatment Facilities

We have deployed large-scale photovoltaic (PV) systems to supply electricity to our major facilities, including the Shatin STW, Sham Tseng STW, Yuen Long STW, Sai Kung STW, Shek Wu Hui STW, Sandy Bay PTW, Stonecutters Island STW and Siu Ho Wan STW. Estimated total generation capacity is 1,320 kilowatts (kW).

小蠔灣污水處理廠太陽能光伏板系統
PV System at Siu Ho Wan STW

2016-17年度，全港最大型太陽能光伏系統已於小蠔灣污水處理廠完成安裝並投入運作，預計每年發電量可達110萬度。

The largest PV system in Hong Kong was installed and commissioned at Siu Ho Wan STW during 2016-17. It is anticipated that the Solar Farm can generate as much as 1.1 million kilowatt - hours of electricity annually.

2 *由於四捨五入關係，各項目數字相加未必等於總和。*
Figures are rounded up and may not add up exactly to the total.

3 *包括因植樹、製冷、消化污泥、使用食水及棄置廢紙所產生的溫室氣體排放量的淨值總和。*
This includes total greenhouse gas emissions arising from tree planting, refrigeration, sludge digestion, fresh water consumption and waste paper disposal.

4 *使用全港性預設值0.7千克/千瓦時計算減碳量。*
Using Hong Kong-wide default values of 0.7kg CO_2 equivalent per kWh.

生物氣轉化為能

污水處理過程中產生的污泥，能在厭氧消化中形成可再生能源－生物氣。我們一直有效地利用這些生物氣以提高污水處理廠整體能源效益，當中包括在廠房安裝電熱聯供發電機，以及利用渦輪系統以產生電熱能。利用電熱聯供發電機及渦輪系統燃燒生物氣均屬碳排放量較低的潔淨發電技術，於2016-17年度，本署在沙田污水處理廠增添一台渦輪發動機，以善用生物氣。此外，沙田污水處理廠內於2017年亦增設了一台吸收式製冷機，把廢熱轉為空調應用。

我們在沙田、大埔和石湖墟污水處理廠共安裝5台電熱聯供發電機(總發電量為3.6兆瓦)。另外，我們亦在沙田及元朗污水處理廠安裝了渦輪發動機(總發電量為280千瓦)。2016-2017年度，各污水處理廠由生物氣所產生的當量電力約為2,100萬度電。

Turning Biogas to Energy

Sludge generated during the sewage treatment process would be anaerobic digested and produce biogas which is a form of renewable energy. We have improved the overall energy efficiency of our sewage treatment works through effectively use of biogas, including installation of combined heat and power (CHP) generators and use of gas-turbines to generate thermal and electric energy. The biogas CHP generator and gas-turbine system are clean technology with lower carbon emission. In 2016-17, a gas-turbine was installed in the Shatin STW to effectively use biogas. Furthermore, an absorption chiller was also brought into operation in 2017 to convert waste heat into air conditioning application.

We installed a total of five CHP generators (with a combined capacity of 3.6 MW) at the Shatin STW, Tai Po STW and Shek Wu Hui STW. Gas-turbines (with a total capacity of 280kW) were also installed at Shatin STW and Yuen Long STW. The total equivalent electricity generated by biogas in our STWs achieved about 21 million kWh in 2016-17.

沙田污水處理廠的吸收式製冷機
Absorption chiller at Shatin STW

沙田污水處理廠的渦輪發動機
Gas turbine at Shatin STW

減緩與適應氣候變化
Climate Change Mitigation and Adaptation

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，本署是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。

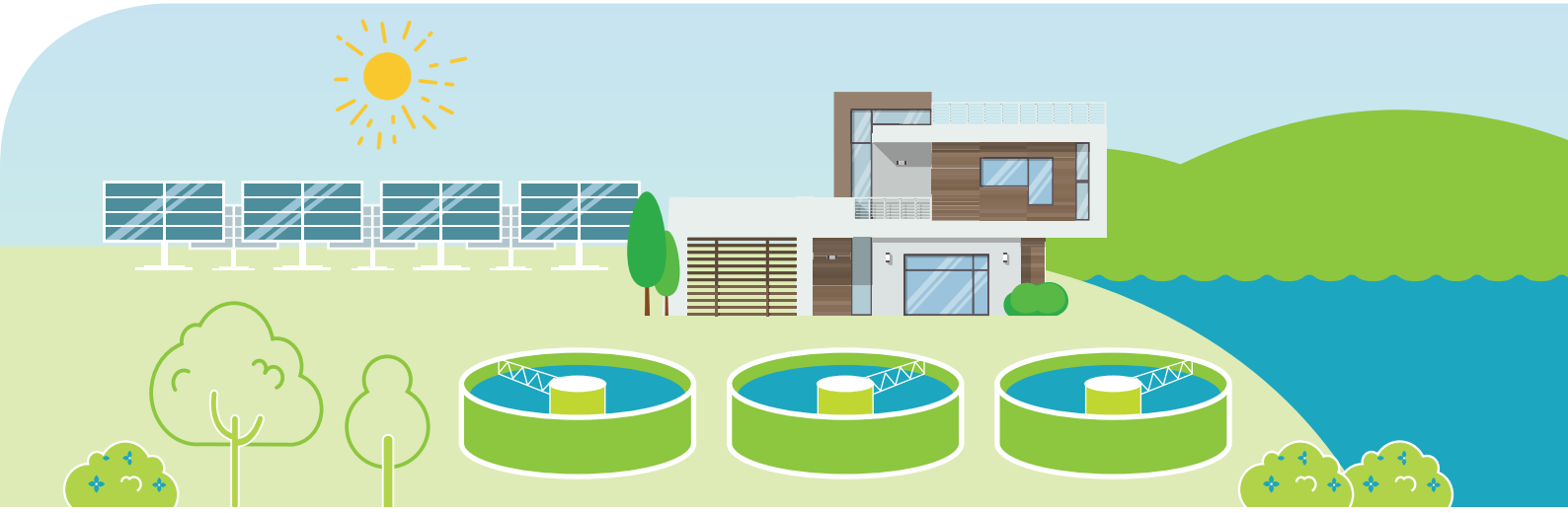
政府於2017年發表的《香港氣候行動藍圖2030+》，鼓勵公營機構率先廣泛應用可再生能源。為此，本署計劃在沙田污水處理廠安裝第二台電熱聯供發電機，充分利用污泥處理過程中產生的生物氣能源，並將於大埔污水處理廠推行「廚餘與污泥共厭氧消化試驗計劃」，以產生更多生物氣，從而獲得更多可再生能源。

此外，我們在沙田污水處理廠安裝了三聯供系統，利用電熱聯供發電機產生的廢熱來製冷，並在轄下23所污水處理廠和污水泵房安裝太陽能光伏板，盡量利用廠房空間吸取太陽能。本署會繼續探索在其他設施利用更多可再生能源的機會。

As early as 2007, the HKSAR Government established the Inter-departmental Working Group on Climate Change, which is led by the Environment Bureau and comprises representatives from 16 departments including DSD which plays a vital role in helping Hong Kong adapt to and mitigate climate change.

In support of the "Hong Kong's Climate Action Plan 2030+", a roadmap issued by the Government in 2017 that encourages the public sector to spearhead the extensive use of renewable energy, DSD has planned to install the second CHP generator in the Shatin STW to fully utilise biogas from the sludge treatment process. In addition, DSD will implement the Food Waste and Sewage Sludge Anaerobic Co-digestion Pilot Trialot at Tai Po STW to generate more biogas and hence renewable energy.

We have also put in place a trigeneration system in the Shatin STW to utilise the waste heat produced by CHP generators for cooling. PV panels have also been installed in 23 STWs and SPSs, in a bid to utilise the open space in our plants to harness solar energy as far as practicable. DSD will continue to explore more opportunities for utilising renewable energy in our facilities.



為應對氣候變化帶來的全球威脅，我們積極與其他城市和地區保持緊密聯繫。渠務署是國際組織C40城市氣候領導聯盟旗下連結三角洲城市的成員，代表香港特區政府與其他三角洲城市在防洪工作方面進行技術交流；亦是粵港應對氣候變化聯絡協調小組成員，於2016年接待廣東省政府代表到訪，交流排水系統規劃的經驗。

To address global challenges arising from climate change, we maintain close connection with other cities and regions. DSD is a member of Connecting Delta Cities, a subsidiary of the international organisation C40 Cities Climate Leadership Group, and represents the HKSAR Government to exchange views and experience on flood prevention with other delta cities. DSD is also a member of the Hong Kong/Guangdong Joint Liaison Group on Combating Climate Change. Representatives of the Guangdong Provincial Government visited DSD in 2016 to exchange proven experience in drainage system planning.

水資源管理
Water Resources Management

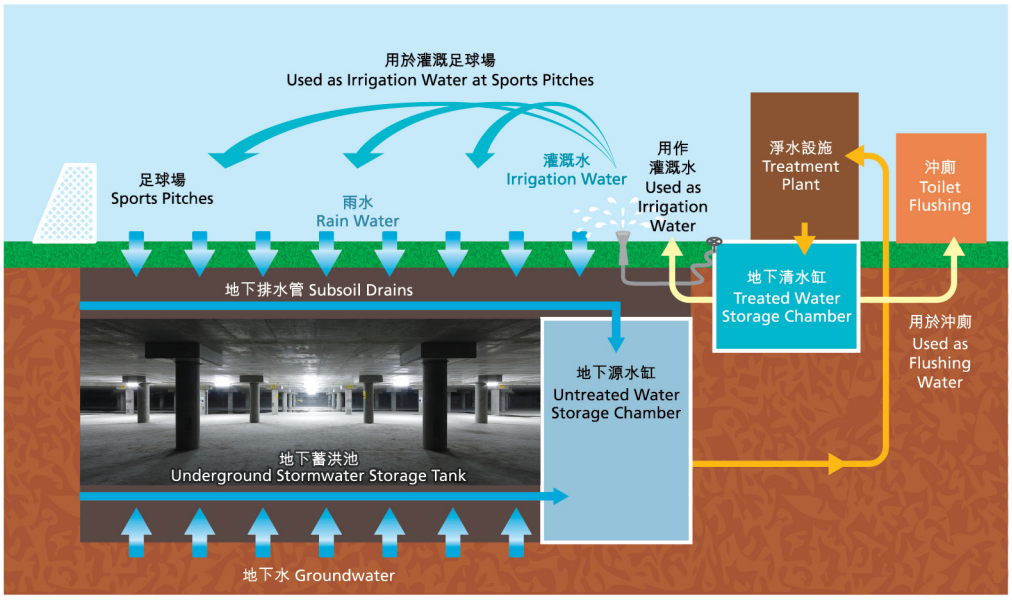
本署在新建設施引進可持續發展水資源管理概念，提高水資源的使用效率，當中的主要設計元素包括雨水集蓄系統、地下蓄洪系統、雨水花園及多孔透水路面等。2012至2016年間，完成的相關工程項目包括九龍城一號及二號污水泵房、荔枝角雨水排放隧道，以及跑馬地地下蓄洪計劃。

舉例而言，本署在跑馬地地下蓄洪計劃內興建了一個水資源採集及回用系統，收集地下水及運動場的灌溉水和雨水。收集的水資源經簡單處理後，會回用作11個球場的灌溉水及沖廁水，以節省珍貴食水。

DSD has incorporated concepts of sustainable water resources management into our newly constructed facilities to improve the utilisation rates of water resources. Major design elements include rainwater harvesting systems, underground stormwater storage systems, rain gardens and porous pavements, etc. Between 2012 and 2016, associated projects completed included the Kowloon City No. 1 and No. 2 Sewage Pumping Stations, Lai Chi Kok Drainage Tunnel, and Happy Valley Underground Stormwater Storage Scheme (HVUSSS).

For instance, the water harvesting system in the HVUSSS collects groundwater, rainwater and irrigation water from sports pitches which is then treated and reused for irrigation at 11 football pitches and toilet flushing to save scarce water resources.

跑馬地地下蓄洪池的水資源採集及回用系統
Water Harvesting System of HVUSSS



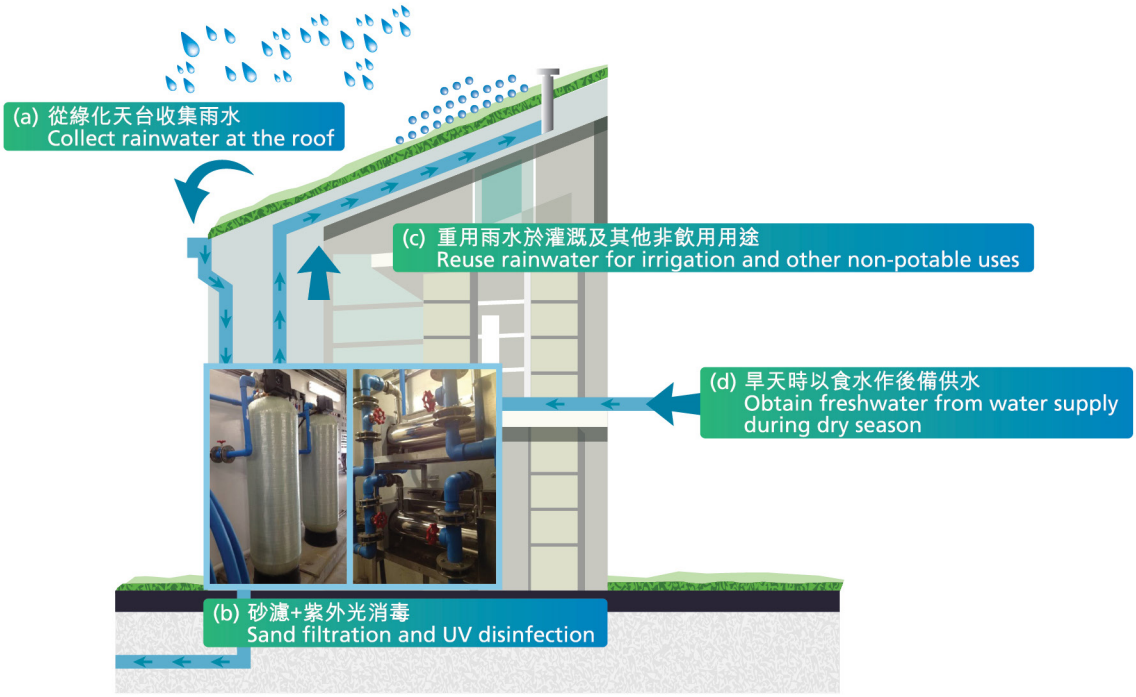
九龍城一號及二號污水泵房設有雨水集蓄設施，天台以透水物料鋪設，有助收集雨水。回收的雨水經砂濾和紫外光消毒後，會作灌溉及梯台瀑布裝飾等非飲用用途，有效減少用水。此外，泵房亦利用了以下設備提高用水效率：

- 雨量感應器，以便在雨天時會暫停灌溉；
- 保水土壤層，以提高灌溉效率；及
- 用水監察系統，以進一步約用水。

Both Kowloon City No. 1 and No. 2 Sewage Pumping Stations are equipped with rainwater harvesting facilities. The roofs are paved with pervious materials to support rainwater collection. Harvested rainwater is treated by sand filtration and ultraviolet (UV) disinfection for irrigation, water cascade and other non-potable uses, reducing water consumption effectively. In addition, the pumping stations are installed with the following devices to enhance the effective use of water:

- Rainfall sensors to suspend irrigation on rainy days;
- Water retention layer to enhance irrigation efficiency; and
- Water consumption monitoring system to improve water conservation.

九龍城一號及二號污水泵房的雨水集蓄設施
Rainwater harvesting facilities at Kowloon City No. 1 and No. 2 Sewage Pumping Stations



除此以外，本署亦採納各項環保設計，例如把水資源管理概念融入雨水花園的園境設計，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，並提供生物棲息地以加強生物多樣性。

Furthermore, DSD adopts various green designs, such as incorporating the concept of water resources management into rain garden landscaping design in which rainwater is filtered by garden plants and soil to improve run-off quality and reduce discharge into underground channels. Rain gardens can also beautify the environment and provide habitats to enhance biodiversity.

生產再造水
Water Reclamation

為支持政府在全面水資源管理策略下使用再造水的建議，本署繼續在轄下設施生產及使用再造水，並提高再造水設備在運作方面的可靠性。2016-17年度，本署平均每日生產約1,300立方米再造水作非飲用用途。

In line with the Government's initiative to use reclaimed water under the Total Water Management Strategy, DSD continues to produce and use reclaimed water within its facilities while improving the operational reliability of its water reclamation facilities. In 2016-17, DSD generated reclaimed water at an average rate of approximately 1,300 cubic metres per day for non-potable purposes.

沙田污水處理廠再造水設備
Water reclamation facilities at Shatin Sewage Treatment Works

氣味管理
Odour Management

污水在厭氧過程中會產生硫化氫，帶來令人厭惡的氣味。為減低渠務署轄下污水處理設施對附近居民的影響，我們採取以下3項氣味管理措施：

- 在污水源頭加入除味劑，從而抑制氣味產生；
- 覆蓋可能散發氣味的設施和組件；以及
- 安裝除味系統。

此外，我們會定期量度廠房的硫化氫水平，以監察氣味管理措施的成效及適時調整廠房操作。

Septic process of sewage will produce hydrogen sulphide which has a repulsive odour. To reduce the impact of DSD's facilities on nearby residents, we have undertaken the following three odour control measures:

- Adding deodourising agents into sewage to suppress odour at its source;
- Covering facilities and components which are likely to emit odour; and
- Installing deodorising systems.

In addition, we regularly measure the levels of hydrogen sulphide in our plants to monitor the effectiveness of the odour control measures and to timely adjust the plant operations as necessary.

小蠔灣污水處理廠氣味管理措施
Odour Control Measures at Siu Ho Wan Sewage Treatment Works

- 在污水處理過程中以氯化鐵代替明礬，藉此去除難聞氣味，同時令污泥更易沉澱
- 增設化學洗滌塔和活性碳過濾系統，更有效控制污泥處理系統產生的氣味
- 覆蓋紫外光消毒設施的渠道
- 派員每周進行氣味巡查，並委託香港實驗所認可計劃下的化驗所定期測量氣味水平
- 設立全天候收集廠內硫化氫水平和風速的氣象站，以監察氣味情況
- 以密封玻璃纖維強化塑膠蓋覆蓋初級沉澱池，並安裝生物滴濾塔

- Dosing ferric chloride as a replacement of alum in the sewage treatment process for suppressing unpleasant smell and increasing the efficiency of sludge sedimentation
- Installation of chemical scrubbers and activated carbon filter system for more effective control of exhaust from the sludge treatment system
- Covering channels of the UV disinfection system
- Carrying out weekly odour patrols by in-house staff and regular odour surveys by an accredited laboratory under the Hong Kong Laboratory Accreditation Scheme
- Installation of a weather station to collect 24-hour data of hydrogen sulphide levels and wind speed within the plants for monitoring the odour situation
- Installation of airtight fibreglass reinforced plastic covers and biotrickling filters for primary sedimentation tanks

初級沉澱池的密封玻璃纖維強化塑膠蓋
Fiberglass reinforced plastic covers for primary sedimentation tanks

生物滴濾塔
Biotrickling filters

淨化海港計劃第二期甲昂船洲污水處理廠的氣味管理措施

Odour Control Measures at Stonecutters Island Sewage Treatment Works (SCISTW) under Harbour Area Treatment Scheme (HATS) Stage 2A

- 在現有沉澱池、流動水槽及分隔槽安裝密封式玻璃纖維強化塑膠蓋面
- 安裝抽氣系統收集已覆蓋沉澱池、水槽和分隔槽內的氣體
- 採用生物滴濾塔技術處理抽出的氣體後才排放。生物滴濾塔技術是可靠而環保的辟味技術，其營運成本及操作維修保養要求較低；並能有效去除空氣中99%或以上的硫化氫，而硫化氫是污水處理廠最主要的氣味來源
- 在污泥脫水設施使用化學洗滌塔作為主要除味技術。洗滌塔所需空間較少，而且可處理不同強度的氣味

- Installation of fibreglass reinforced plastic covers with a gas-seal design on the existing sedimentation tanks, flow channels and chambers
- Installation of an exhaust system to collect foul gas within the covered tanks, channels and chambers
- Treatment of foul gas by biotrickling filter technology before discharge into open air. Biotrickling filter technology is a reliable and environmentally friendly odour removal technology with a low operation cost and minimum maintenance requirements which can remove 99% or more of hydrogen sulphide gas, the main source of odour in STW, for effective odour control
- Use of chemical scrubbers as the prime deodourisation technology for the sludge dewatering facility, as they can handle foul air of varying odour strengths within a compact footprint

昂船洲污水處理廠－已覆蓋的沉澱池
SCISTW - sedimentation tanks with covers

綠色辦公室
Green Office

我們致力在總部實踐綠色辦公室概念，在日常工作中滲入綠色文化，因此推行環保政策及措施，以提高員工的環保意識。

We make every effort to put the green office concept into practice at DSD headquarters. Green culture is introduced to every aspect of our day-to-day operation. Therefore, we have in place a series of green policies and measures to raise the environmental awareness of our staff.

擺放綠色植物
Green plants

打印機旁設置的廢紙回收箱
Waste paper collection box beside photocopier

環保採購
Green Procurement

本署一直支持政府的環保採購政策。2016-17年度，我們採購各類符合環保規格的產品，包括電器用品(如影印機、打印機、電風扇、電腦和冰箱)，以及辦公室耗材(如再造紙、塗改帶、鉛筆、充電電池、衞生紙和垃圾袋)。

此外，我們在工程項目中亦採用多種環保物料和產品，包括：

- 由回收碎玻璃製成的行人路磚；
- 循環再用木材；
- 太陽能板及太陽能發光二極體照明；以及
- 電動車和混能車。

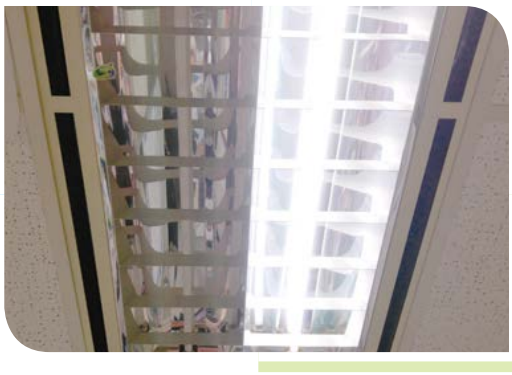
DSD has always supported the Government's green procurement policy. In 2016-17, we procured a wide variety of products complying with green specifications, including electrical appliances such as photocopiers, printers, electric fans, computers and refrigerators, and office consumables such as recycled paper, correction tapes, pencils, rechargeable batteries, toilet paper and garbage bags.

A wide range of green materials and products have also been introduced to our works projects, including:

- Paving blocks made from recycled glass;
- Recycled timber;
- Photovoltaic panels and photovoltaic LED lighting; and
- EVs and hybrid cars.

節約能源
Energy Saving

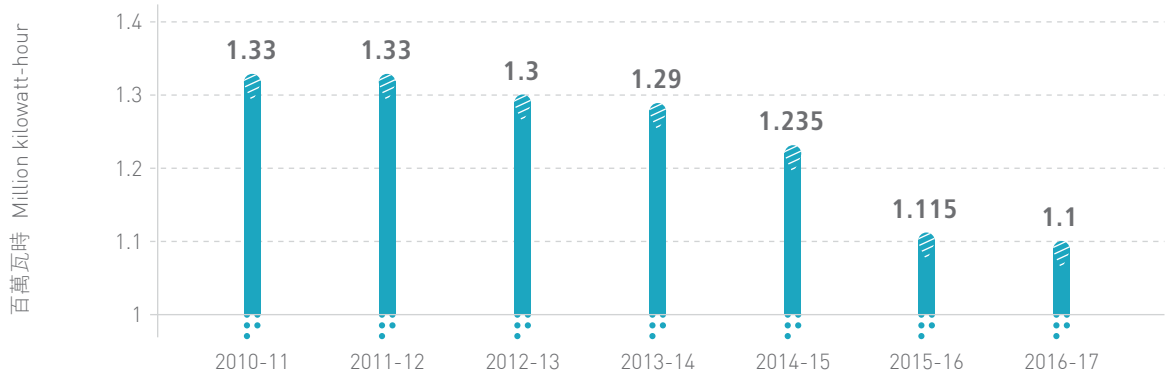
減少不必要的照明
Reducing non-essential lightings



在2014年施政報告中，政府公布會進一步加強推廣綠色建築及減少政府建築物用電。多年來，渠務署在辦公室實施了多項節能措施，包括把室溫設定攝氏25.5度、減少非必要照明，以及利用計時器於辦公時間後關掉公用辦公室設備。相比2010-11年度，2016-17年度的用電量減少約17%，顯示渠務署持續節能降耗的決心。

As announced in the 2014 Policy Address, the Government will further enhance the promotion of green buildings and reduce electricity consumption of government buildings. Over the years, DSD has implemented a number of energy saving measures in our offices, including setting the room temperature at 25.5°C, reducing non-essential lighting, and using timers to turn off shared office equipment after office hours. In 2016-17, we recorded approximately 17% reduction in energy consumption compared with 2010-11, demonstrating DSD's commitment to energy saving and consumption reduction.

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



廢物管理
Waste Management

為建設綠色辦公室，我們積極減廢及節約資源。除發出有關節約用紙的指引和綠色資訊外，我們亦鼓勵員工盡量採用雙面打印和重用信封。另外，我們特設各類回收站，回收打印機碳粉盒、充電電池、廢紙、塑料和金屬容器等，並定期巡查辦公室，以進一步提高員工的環保意識。

我們更於日常會議中使用平板電腦和手提電腦等電子產品，進行簡報和討論，積極推廣「無紙會議」，減少用紙。2016-17年度，渠務署共舉行約183次無紙會議，並以電子方式傳閱逾1,513份文件，用紙量約為9,285令，較2009-10年度減少約34%。

Dedicated to greening our offices, we actively reduce waste and conserve resources. Apart from releasing guidelines on reducing paper consumption and green tips, we encourage our staff to print on both sides and reuse envelopes as far as possible. Moreover, we set up various recycling stations to collect toner cartridges, rechargeable batteries, waste paper, plastic and metal containers, etc, as well as conduct regular office inspections to further increase the environmental awareness of our staff.

We have been actively promoting "paperless meetings" by using electronic devices such as tablets and laptop computers for presentations and discussions in day-to-day meetings to reduce paper consumption. In 2016-17, we held about 183 paperless meetings and circulated over 1,513 documents electronically, and used approximately 9,285 reams of paper, a decrease of about 34% compared with 2009-10.

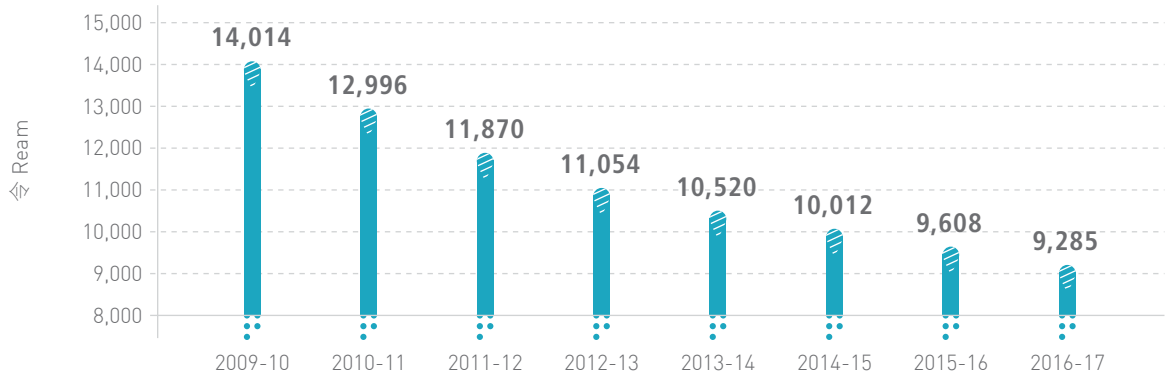
在2016-17年度，本署
In 2016-17, we

共舉行了約**183**次無紙會議，並以電子方式傳閱逾**1,513**份文件
held 183 paperless meetings and circulated over 1,513 documents electronically

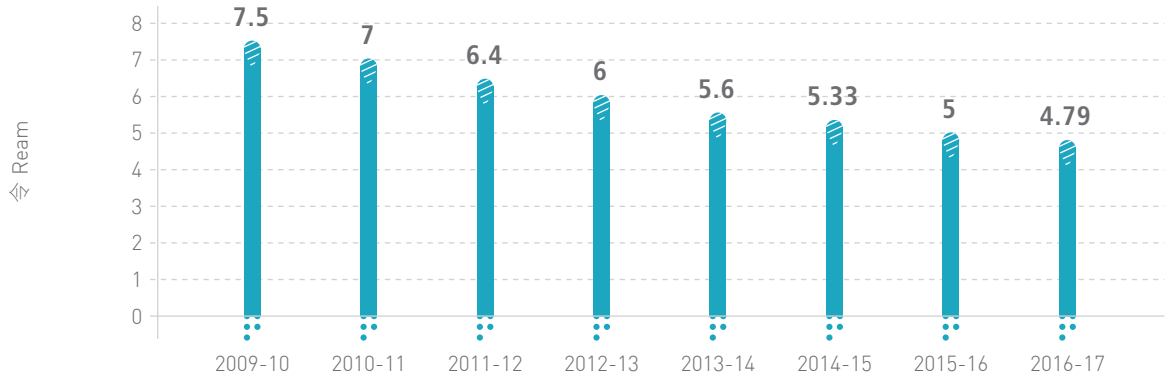
用紙量相約為**9,285**令，較2009-10年度減少約**34%**
Paper consumption was approximately 9,285 reams, down about 34% when compared with 2009-10

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 staff (ream)



培養可持續文化
Nourishing a Sustainable Culture

綠色先鋒由一群有志推動可持續發展文化的同事組成，並獲署方全力支持和鼓勵，以加強同事在辦公室和家中保護環境的責任，培養綠色生活習慣，減少浪費。2016-17年度，綠色先鋒舉辦及參與了以下活動：

- 綠色耕種比賽－善用本署設施的可用空間設置耕種地點，讓同事及家屬體驗耕種樂趣；
- 「愛•回書」舊書及影碟回收活動－收集和分享同事的舊書和影碟，從而促進資源循環使用，以及
- 國際海岸清潔活動－清理海洋公園旁及元朗下白泥泥灘的垃圾。

Formed by a group of colleagues dedicated to promoting a sustainable culture and with the full support and encouragement of DSD, the Green Champions endeavour to raise staff members' sense of environmental responsibility in offices and home, foster green living habits and minimise wastage. In 2016-17, the Green Champions organised and participated in the following activities:

- Green Farming Competition – making use of available areas within DSD facilities for colleagues and their families to experience the joy of farming;
- Books and Video Disc Exchange – collecting and sharing used books and video discs from staff members to promote sustainable use of resources; and
- International Coastal Clean-up – removing litter near Ocean Park and on a mudflat at Ha Pak Nai, Yuen Long.

綠色耕種比賽
Green Farming Competition

「愛 • 回書」舊書及影碟回收活動
Books and Video Disc Exchange

國際海岸清潔活動
International Coastal Clean-up

關愛員工
Care for Our Staff

本署深明部門的優勢來自人才。為此，我們一直將資源優先投放在員工發展上，讓他們提升技能，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及愉快的工作環境，並在工餘時舉辦各類康樂活動，鼓勵員工取得工作與生活之間的平衡。

Fully recognising that DSD's advantage is built on our people, we have always prioritised resources to support staff development. We are committed to capacity building as a means to promote career and personal development of staff. At the same time, we also place great emphasis on providing a safe and pleasant working environment, as well as organising a variety of recreational activities at leisure time to bolster work-life balance.

1. 親善探訪
Goodwill Visits

2. 香港街馬@九龍東 2016
HONG KONG STREETATHON @ Kowloon east 2016

3. 渠務署周年晚宴
DSD Annual Dinner

龍舟競賽
Dragon Boat Race

員工培訓與發展
Staff Training and Development

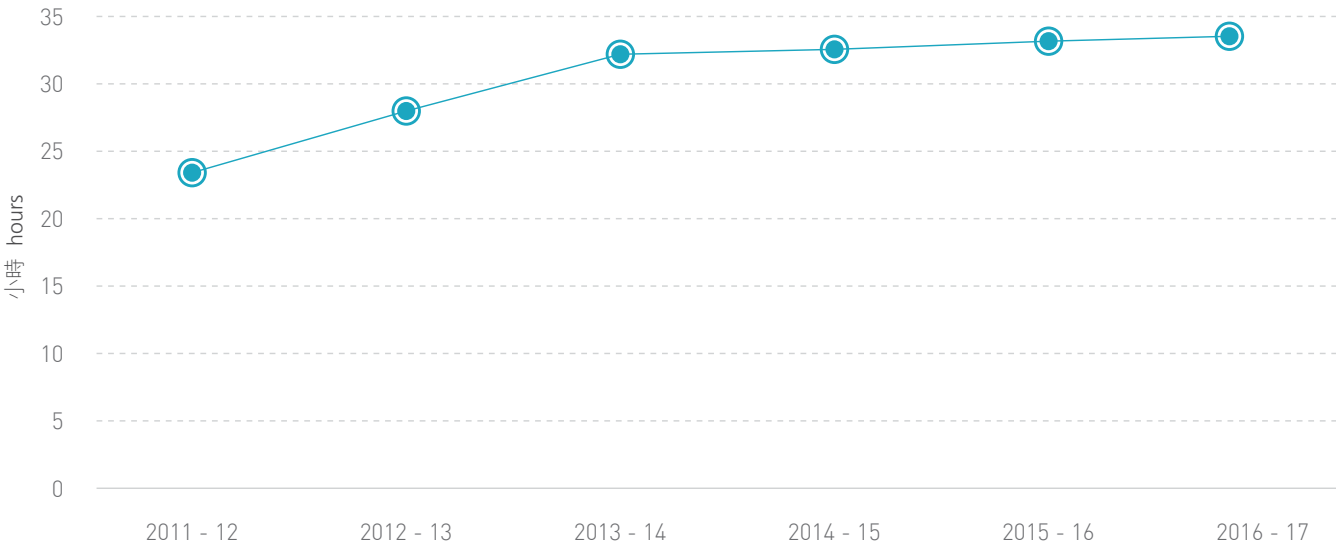
2016-17年度，我們一共為員工舉辦了674個培訓課程，當中包括入職培訓、內部培訓、職務考察、海外會議和各類研討會及工作坊等。這些多元化的培訓計劃，有助提升員工的專業技能和知識。

本署員工年內的平均培訓時數為33.4小時，遠超過香港人力資源管理學會2016年僱員培訓及發展需求調查公布的全港僱員平均培訓時數（18.3小時）。

In 2016-17, we organised a total of 674 training courses for our staff, including induction courses, in-house training, duty visits, overseas conferences, as well as seminars and workshops. Such diverse training is instrumental in enhancing professional skills and knowledge of the DSD team.

During the year, the average number of training hours per capita was 33.4, far exceeding the territory-wide average of 18.3 announced in the 2016 Training and Development Needs Survey published by the Hong Kong Institute of Human Resource Management.

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



入職訓練
Induction Courses

我們會為新同事安排入職課程，讓他們了解部門的工作和服務市民的承諾。2016-17年度，我們共舉辦了4次入職課程，共有197名新同事參與。

We arrange induction courses for new recruits to understand our works and commitment to serving the public. In 2016-17, we held four induction courses for a total of 197 newcomers.

職業安全與健康（職安健）培訓
Occupational Safety and Health Training

2016-17年度，我們就OHSAS 18001 職業健康及安全管理系統舉辦了兩個內部審核員的培訓課程，共有61名員工參加。

In 2016-17, we offered two internal auditor training courses for the OHSAS 18001 Occupational Health and Safety Management System for a total of 61 participants.

年內，我們亦為逾500名員工舉辦多達14類職安健培訓活動，相關課程如下：
During the year, we organised 14 types of Occupational Safety and Health (OSH) training for over 500 colleagues. The details are as follows:

2016-17年度舉辦的職安健培訓課程包括：
OSH training courses held in 2016-17:

建造業安全督導員課程
Construction Safety Supervisor Course

用電安全
Electrical Safety

叉式起重車新手操作員課程
Training Course for New Operators of Fork-lift Truck

叉式起重車操作員訓練重新甄審資格課程
Revalidation Training Course for Operators of Fork-lift Truck

化學品安全處理
Safe Handling of Chemicals

人力提舉及搬運
Manual Lifting and Handling

安全使用流動式鋁質通架
Safe use of Mobile Aluminum Towers

2016-17年度舉辦的其他安全培訓課程包括：
Other safety training courses held in 2016-17:

密閉空間核准工人 / 合資格人士之從事渠務署工程安全訓練課程
Confined Space Safety Training Course for Certified Workers Engaged in DSD's Works / Confined Space Safety Training Course for Competent Persons Engaged in DSD's Works

強制性基本安全訓練 / 重新甄審資格課程（建築工程）［建造業平安卡重溫課程］
Mandatory Basic Safety Training Revalidation Course (Construction Work) [Green Card Training Revalidation Course] / Mandatory Basic Safety Training Course (Construction Work) [Green Card Training Course]

密閉空間核准工人 / 合資格人士安全訓練課程
Safety Training Course for Certified Workers of Confined Spaces Operation / Safety Training Course for Competent Persons of Confined Spaces Operation

密閉空間核准工人安 / 合資格人士全訓練覆證課程
Safety Training Revalidation Course for Certified Workers of Confined Spaces Operation / Safety Training Revalidation Course for Competent Persons of Confined Spaces Operation

海外職務考察
Overseas Duty Visits

我們除安排參與本地培訓課程外，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，提升部門整體的服務質素。

In addition to local training programmes, we arrange overseas duty visits for colleagues so they can engage in professional exchange with overseas experts. By learning from overseas successful experience and introducing cutting-edge technology, we can optimise DSD's overall service quality.

東京防洪工程考察

2016年5月，本署同事和顧問代表一同到訪東京，考察當地的防洪策略及經驗。考察團一連四日到訪多個政府部門和私人機構，包括東京都建設局、東京都港灣局、交通省關東地方整備局、各地區的河川事務所等，更實地參觀主要工程項目，包括首都圈外洩洪水道、三鄉防洪泵房、辰巳防洪泵房、亀島川水閘、荏原泵廠及親水公園。

Duty Visit to Tokyo for Flood Protection Projects

In May 2016, DSD staff members and a consultant representative visited Tokyo to study the city's flooding prevention strategies and gain insight from their experience. During the four-day trip, the delegation visited a number of government institutions and private corporations, including the Bureau of Construction, Tokyo, Bureau of Port and Harbor Tokyo Metropolitan Government, Ministry of Transport Kanto Regional Development Bureau and River offices at various locations. They also made a number of site visits to the major associated facilities like the Outer Underground Discharge Channel, Misato Drainage Pumping Station, Tatsumi Drainage Pumping Station, Kamejima River Water Lock, factory of Ebara Corporation and water park.

考察團了解首都圈外郭放水路(洩洪水道)設施的佈局及功能
DSD delegates toured the Metropolitan Area Outer Underground Discharge Channel (flood discharge channel) to understand its function and operation

氣候變化脆弱性、影響和適應研究計劃(PROVIA)國際會議

2016年5月，本署同事遠赴荷蘭鹿特丹參加PROVIA國際會議，並出席C40連結三角洲城市研討會。本署代表與來自各國的代表互相交流各地應對氣候變化的經驗，並了解可持續排水系統的最新發展。

Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA) International Conference

In May 2016, our colleague went to Rotterdam of the Netherlands to attend the PROVIA International Conference and the C40 Connecting Delta Cities workshop. DSD's representatives exchanged views and experience with representatives from various countries on combating climate change, and learned the latest development on sustainable drainage system.

各大城市代表在研討會闡述應對氣候變化的最新發展，並分享經驗
Representatives from various countries exchanged views and shared experience on combating climate change

新加坡國際水週2016及職務考察

2016年7月，本署同事參加了新加坡國際水週2016及作實地參觀。兩年一次的新加坡國際水週於2016年7月10日至14日舉行，是一個全球性的平台，分享和共同創造創新的水處理方案。通過實地參觀及參與這次新加坡國際水週，本署同事與來自世界各地的持份者互相分享了施行政策及最佳的水處理實踐方法，同時亦對新加坡及其他國家的食水及污水處理行業的最新技術，有更深入的了解。

Singapore International Water Week 2016 cum Duty Visits

In July 2016, DSD colleagues attended the Singapore International Water Week (SIWW) 2016 and made duty visits in the city. Held from 10 to 14 July 2016, the biennial SIWW 2016 was a global platform to share and co-create innovative water solutions. The visits and participation in SIWW enabled DSD representatives to share policy implementation and best practices with stakeholders from all over the world, while gaining more knowledge about the latest technologies of the water and wastewater industries in Singapore and other countries.

考察團參觀樟宜污水處理廠
The delegation visited Changi Water Reclamation Plant

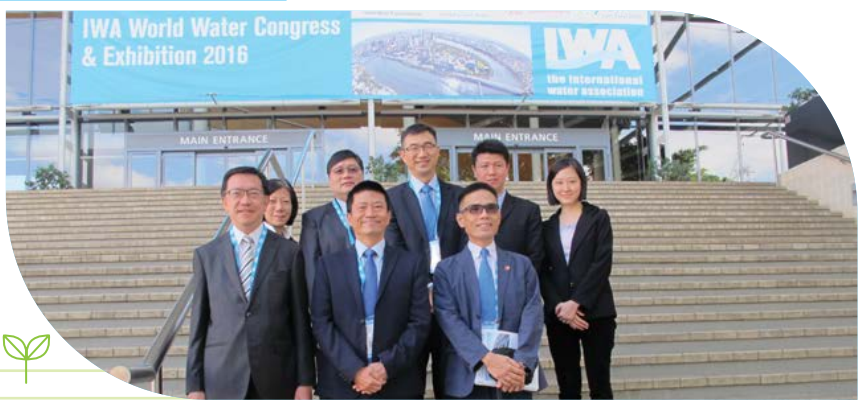
發展局常任秘書長(工務)韓志強先生(左二)、本署署長唐嘉鴻先生(右一)與新加坡官員會晤
Meeting of Mr. HON Chi-keung (second left), Permanent Secretary for Development (Works), Mr. Edwin TONG Ka-hung (first right), Director of Drainage Services, and Singapore government officials

澳洲布里斯本2016年國際水協會世界水大會及展覽會暨職務考察

2016年10月9至14日，本署同事參加了在澳洲布里斯本舉行的2016年國際水協會世界水大會及展覽會。考察團有機會與全球水資源管理專家交流，分享執行水資源管理政策及實務工作的心得，並對澳洲及其他國家有關可持續水資源管理的政策和科技加深了解。會上，本署和水務署共同宣布香港將於2019年首次主辦國際水協會亞太地區會議及展覽會。

International Water Association (IWA) World Water Congress and Exhibition 2016 in Brisbane cum Duty Visit

DSD colleagues attended the IWA Congress and Exhibition 2016 held in Brisbane, Australia, from 9 to 14 October 2016. Through the Congress and visits, the DSD delegation not only shared views on policy implementation and practices of water management with experts from all over the world, but also gained deeper insight into the sustainable water management policies and technologies in Australia and other countries. During the Congress, DSD and Water Supplies Department (WSD) announced that Hong Kong will host the IWA-ASPIRE Conference and Exhibition for the first time in 2019.



本署和水務署考察團在會場外合照
Group photo of DSD and WSD delegations at the event venue

職業安全與健康
Occupational Safety and Health

本署致力保障員工的職業安全與健康，故此我們為員工安排不同的職安健培訓課程，加強員工意識，讓他們能安全及有效率地完成日常工作。

Doing our utmost to assure Occupational Safety and Health (OSH), we provide a wide range of OSH training programmes for our staff to improve general awareness and ensure that their day-to-day tasks are accomplished safely and efficiently.

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

內部職安健事務

本署設立的安全督導委員會由副署長擔任主席，負責監察和統籌本署的職安健事務。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。我們亦設有多個監察委員會，包括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%。各委員會會定期舉行會議，檢視現有的健康與安全管理系統，確保系統與時並進，使相關工作更臻完善，保障員工的安全與健康。

In-house Occupational Safety and Health

Chaired by the Deputy Director of Drainage Services, the DSD Safety Steering Group is entrusted with monitoring and general supervision of all OSH affairs of the Department. The Group holds regular meetings with Division Heads to review in-house safety policies and procedures, and to announce the latest safety directives within the Department. We have also established a number of monitoring committees, namely, the Electrical and Mechanical Branch Safety Management Committee, the Sewage Treatment Works Safety and Health Management Committee, and the Direct Labour Force Safety Management Committee. They are all composed of DSD staff from different disciplines and grades who account for about 3% of the entire staff establishment. To safeguard our colleagues' safety and health, meetings are held regularly to review the existing OSH management systems to ensure they keep abreast of the times and seek room for further enhancement.

職安健推廣活動

我們致力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，詳情如下：

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 as listed below.

- 轄下28項工程項目參與發展局主辦的2016年公德地盤嘉許計劃
  28 DSD projects participated in the Development Bureau's Considerate Contractors Site Award Scheme 2016
- 舉辦2016年工地整潔獎勵計劃，共36項工程項目參與
  36 projects participated in the Construction Sites Housekeeping Award Scheme 2016 organised by DSD
- 為本署員工、顧問公司駐工地人員及承建商人員舉辦了2個安全講座
  Two safety talks were organised for DSD colleagues, site supervisory staff and representatives of contractors

員工康樂活動
Staff Recreational Activities

本署的職員康樂會成立至今，全力推行多項康樂活動，向員工提倡工作與生活平衡，同時增進彼此間的感情。

Since its inception, our Staff Club has made major efforts to foster work-life balance and strengthen rapport through a wide range of recreational activities.

體育競賽

除了參加香港馬拉松及龍舟競渡外，職員康樂會舉辦了多項熱門體育比賽及跨部門運動競賽，當中包括足球、籃球、乒乓球、壁球、桌球、網球、羽毛球、保齡球和飛鏢競賽等，讓員工一展身手。

Sports Competitions

Apart from participating in the Hong Kong Marathon and dragon boat races, our Staff Club also organised various in-house matches and inter-departmental tournaments of popular sports to give colleagues a chance to show their athletic strengths. These included football, basketball, table tennis, squash, snooker, tennis, badminton, bowling and darts.

本署於跨部門籃球比賽勇奪季軍
DSD won the second runner-up in the interdepartmental basketball competition

戶外活動及興趣班

我們亦安排各式各樣的戶外活動和興趣班，包括遠足、綠化講座、水晶珠製作班、攝影技巧教學班等，促進員工之間的關係。

Outdoor Activities and Interest Classes

To boost rapport among staff, we also arranged a variety of outdoor activities and interest classes. These included hiking, green seminar, crystal bead accessories design classes and photography classes.

行山活動
Hiking session

攝影技巧教學班
Photography class

龍舟競渡

本署的龍舟隊每年均積極備戰，一方面增強團隊的合作精神，另一方面亦可鍛鍊員工體魄，務求達至上下一心，爭取好成績。

Dragon Boat Race

The DSD dragon boat team has taken active part in many dragon boat races over the years. These competitions are excellent team spirit boosters and help maintain good health. With concerted effort, the team strive for the best results.

本署龍舟隊在第十三屆中華電力友誼盃龍舟賽 2016的合照
Group photo of the DSD team at the 13th CLP Dragon Boat Friendship Cup 2016

2016沙田龍舟競賽
2016 Shatin Dragon Boat Race

香港馬拉松2017

2017年，本署繼續踴躍參與香港馬拉松賽事。除了約60名員工和其親屬參賽外，顧問公司及承建商人員等合作夥伴亦一同參與，總人數多達230人。賽事中參賽者互勵互勉，振奮士氣，增強團隊的合作精神。

Hong Kong Marathon 2017

In 2017, DSD showed its continued support to the Marathon. Some 60 DSD staff members and their relatives joined the race. Counting consultant and construction contractors and other project partners, the number of DSD participants totalled 230. All through the race, runners spurred each other on to boost morale and brought team spirit into full play.

香港馬拉松2017
Hong Kong Marathon 2017

部門聖誕聯歡會

逾450位同事及嘉賓在2016年的部門聖誕聯歡會聚首一堂，共慶佳節。當日節目包括頒發有關環境管理及職員康樂會籌款的獎項和抽獎環節。

Christmas Party

Over 450 colleagues and guests joined the DSD Christmas Party 2016. The prize presentation for Green Management and Staff Club Fund-raising Campaign was a highlight, and the lucky draw brought excitement and festive joy.

時任發展局局長陳茂波先生及環境局局長黃錦星先生到訪部門聖誕聯歡會
Christmas Party, visited by Mr. Paul CHAN Mo-po, then Secretary for Development and Mr. WONG Kam-sing, Secretary for the Environment

周年晚宴

本年度的渠務署職員康樂會周年晚宴於2016年5月完滿舉行，出席的嘉賓及同事約300人。除頒發各項體育比賽獎項、進行幸運抽獎及問答環節外，大會還安排本署樂隊獻唱，場面熱鬧，台上台下開懷盡歡。

Annual Dinner

Organised by the DSD Staff Club, the Annual Dinner in May 2016 received around 300 guests and colleagues. Alongside prize presentation for sports competitions, lucky draw and group games, the DSD Band's performance marked an enjoyable night for all colleagues and guests.

祝酒儀式
Making a toast

本署樂隊與署長唐嘉鴻先生及副署長麥嘉為先生合唱
DSD Band, The Revival, jamming with Mr. Edwin TONG Ka-hung, Director of Drainage Services, and Mr. MAK Ka-wai, Deputy Director of Drainage Services

管理層親善探訪

本署自2013年6月起開展親善探訪計劃，旨在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，會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2016-17年度，管理層共進行了13次親善探訪，與20處辦公地點的員工溝通。

The Management's Goodwill Visits

Launched in June 2013, DSD's "Goodwill Visits" programme aims to reinforce communication between the management and frontline staff for closer connection. Under the programme, the Director and Deputy Director of Drainage Services as well as other directorate staff pay visits to frontline staff at work sites to openly express each other's concerns. In 2016-17, the management made 13 goodwill visits to communicate with colleagues from 20 operational sites.

親善探訪
Goodwill visits

1. 渠務署傳媒簡報 - 大澳
DSD Media Briefing - Tai O

2. 傳媒訪問 - 今日VIP
Media Interview - The Green Room

3. 傳媒訪問 - 跑馬地地下蓄洪計劃
Media Interview - Happy Valley Underground Stormwater Storage Scheme

媒體參與活動
Media Engagement Activities

渠務署不時舉行傳媒簡報會和接受專訪，並應邀參與資訊節目，以發布最新動態消息，藉此加強與各界交流，提升部門的公眾形象。本章節與大家分享本署年內的重點傳媒活動。

From time to time, DSD holds media briefings, attends interviews, and participates in informational programmes on invitation to announce its latest development, in order to enhance knowledge sharing with different parties and promote our public image. Some highlights during the year are presented in this chapter.

渠務署年度傳媒簡報會 2017
DSD Annual Media Briefing 2017

年度傳媒簡報會
Annual Media Briefing

2017年3月
Mar 2017

年度傳媒簡報會
Annual Media Briefing

本署於2017年3月16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，並帶領記者參觀新建成的跑馬地地下蓄洪池。

DSD held the Annual Media Briefing on 16 March 2017 to introduce our recent work on flood prevention and sewage treatment to the media and tour them around the newly constructed Happy Valley Underground Stormwater Storage Tank.

署長唐嘉鴻先生向傳媒簡介本署工作
Mr. Edwin TONG Ka-hung, Director of Drainage Services, briefed the media on DSD's work

唐先生向傳媒簡介跑馬地地下蓄洪計劃
Mr. TONG introduced the Happy Valley Underground Stormwater Storage Scheme (HVUSSS) to the media

唐先生接受傳媒訪問
Mr. TONG was interviewed by the media

渠務署工程及工作傳媒訪問
Media Interviews on DSD Projects and Works

2016年5月 May 2016

《文匯報》就「活化水體」專訪本署
Wen Wei Po Interviewed DSD about Revitalising Water Bodies

高級工程師梁華明先生簡介「活化水體」概念
Mr. Richard LEUNG Wah-ming, Senior Engineer, introduced the concept of revitalising water bodies

2016年5月4日，《文匯報》就「活化水體」專訪高級工程師梁華明先生，並實地視察經活化的大埔林村河上游。高級工程師何大昌先生及工程師鄭敏煒先生視察時，介紹河道各種綠化和生態保育措施，並分享保育香港瘰螈的經驗與成果。專訪刊於2016年5月16日的《文匯報》。

On 4 May 2016, Wen Wei Po conducted an interview with Mr. Richard LEUNG Wah-ming, Senior Engineer, on the topic of Revitalising Water Bodies. The interview was followed by a site visit to the revitalised upper Lam Tsuen River in Tai Po. During the site visit, Mr. Patrick HO Tai-cheong, Senior Engineer, and Mr. Marcus CHENG Man-wai, Engineer, introduced the ecological and greening elements incorporated in the river channel and shared their experience and achievements in conserving Hong Kong Newts. The interview was published in Wen Wei Po on 16 May 2016.

2016年7月 Jul 2016

新華社及鳳凰衛視就香港防洪工作專訪本署
Xinhua News Agency and Phoenix TV Interviewed DSD about Flood Prevention Works

總工程師何耀光先生(右)介紹本署的防洪策略
Mr. HO Yiu-kwong (right), Chief Engineer, introduced DSD's flood prevention strategy

新華社及鳳凰衛視分別於2016年7月8日、14及21日派員到訪本署跑馬地地下蓄洪池及荔枝角雨水排放隧道，訪問內容涵蓋本署的防洪策略、經驗和相關工程。

The Xinhua News Agency and Phoenix TV visited our Happy Valley Underground Stormwater Storage Tank and Lai Chi Kok Drainage Tunnel on 8 July, 14 July and 21 July 2016 respectively. The interviews covered DSD's flood prevention strategy, experience and related projects.

工程師陳綽文先生介紹荔枝角雨水排放隧道的運作
Mr. Lucas CHAN Cheuk-man, Engineer, introduced the operation of Lai Chi Kok Drainage Tunnel

2016年7月 Jul 2016

政府新聞處分享本署綠色建築理念
Information Services Department Shared DSD's Green Building Concept

2016年7月20日，政府新聞處到訪九龍城一號污水泵房，以了解政府「綠色城市」的理念。報道載於2016年10月2日的政府新聞網。

On 20 July 2016, representatives of the Information Services Department visited Kowloon City No. 1 Sewage Pumping Station (KCSPS No.1) to gain insight into the "Green City" concept of the Government. The interview was broadcast on news.gov.hk on 2 October 2016.

時任工程師潘詠芝女士簡介九龍城一號污水泵房的多項綠色建築概念
Ms. Gigi POON Wing-chi, then Engineer, introduced the various green building concepts of KCSPS No.1

2016年8月 Aug 2016

DBC數碼電台訪攝跑馬地地下蓄洪計劃
DBC Filmed Happy Valley Underground Stormwater Storage Scheme

2016年8月19日，DBC數碼電台「早晨八達通」節目一眾主持訪攝本署跑馬地地下蓄洪計劃工地。「早晨八達通」亦於同月26日就該計劃及搬遷污水處理廠往岩洞工程訪問總工程師簡漢成先生。

On 19 August 2016, the hosts of the Digital Broadcasting Corporation Hong Kong Limited (DBC) radio programme "Morning Octopus" visited and filmed the HVUSSS site. "Morning Octopus" also interviewed Mr. KAN Hon-shing, Chief Engineer, on 26 August 2016, featuring the HVUSSS and Relocation of Sewage Treatment Works to Caverns projects.

總工程師簡漢成先生(右)帶領「早晨八達通」主持參觀跑馬地地下蓄洪池
Mr. KAN Hon-shing (right), Chief Engineer, led the programme hosts of "Morning Octopus" to visit the Happy Valley Underground Stormwater Storage Tank

2016年9月 Sep 2016

中央電視台英語新聞頻道就香港防洪工程專訪本署
CCTV News Interviewed DSD on Flood Prevention Works

2016年9月19日中央電視台英語新聞頻道於派員到本署轄下防洪設施(包括跑馬地地下蓄洪池及荔枝角雨水排放隧道)進行採訪，內容涵蓋本署「防洪三招」，即截流、蓄洪和疏浚。專訪於同月24日播出。

On 19 September 2016, CCTV News visited our flood prevention facilities, including the Happy Valley Underground Stormwater Storage Tank and Lai Chi Kok Drainage Tunnel for an interview. The interview covered DSD's "three-pronged flood prevention strategies", namely flood interception, flood storage and drainage improvement. The interview was broadcast on 24 September 2016.

時任高級工程師李康年先生(左一)介紹荔枝角雨水排放隧道的構造和運作
Mr. Robin LEE Hong-nin (first left), then Senior Engineer, introduced the structure and operation of Lai Chi Kok Drainage Tunnel

2016年9月
Sep 2016

傳媒就「復修水生物棲息地以改善河道生物多樣性的研究和實地試驗」專訪本署
Media Interview on DSD's Study and Site Trial on Biodiversity Improvement of Drainage Channels through Rehabilitation of Habitats for Water-related Organisms

2016年9月26日，《蘋果日報》、《明報》、《星島日報》、《東方日報》和《南華早報》於就本署最近完成的「復修水生物棲息地以改善河道生物多樣性的研究和實地試驗」，訪問時任工程師譚傑帆先生以及該項目的顧問暨螢火蟲保育基金會會長麥肇峰先生。

該項目透過修復河道生境，有效提高河道生物多樣性，並復育珍貴品種的螢火蟲。專訪已於2016年10月11日刊登。

On 26 September 2016, Apple Daily, Mingpao, Singtao Daily, Oriental Daily and South China Morning Post conducted an interview with Mr. Keith TAM Kit-fan, then Engineer, and Mr. Mark MAK Siu-fung, the project consultant and the Founder of Firefly Conservation Foundation. The interview covered a recently completed project, "Study and site trial on biodiversity improvement of drainage channels through rehabilitation of habitats for water-related organisms".

The project has achieved biodiversity improvement through rehabilitation of habitats in river channels, and has successfully brought back rare firefly species to the trial site. The articles were published on 11 October 2016.

1 項目顧問麥肇峰先生介紹計劃詳情
Mr. Mark MAK Siu-fung, the project consultant, introduced the project details

2 時任工程師譚傑帆先生(左)講解河道修復工程
Mr. Keith TAM Kit-fan (left), then Engineer, elaborated the drainage channels works

3 螢火蟲在經修復的棲息地飛舞
Fireflies dancing in the restored habitat

2016年10月 Oct 2016

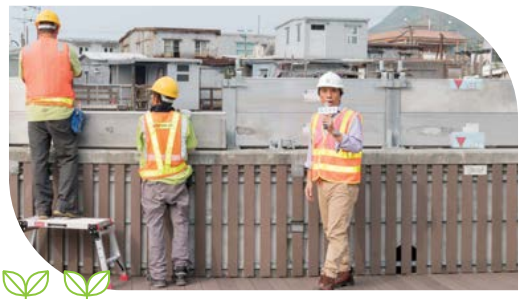
風暴潮措施傳媒簡報會
Media Briefing on Measures to Tackle Storm Surge

副署長麥嘉為先生向傳媒簡介本署「防洪三招」，即疏浚、蓄洪及截流

Mr. MAK Ka-wai, Deputy Director of Drainage Services, introduced the "three-pronged flood prevention strategies", namely drainage improvement, flood storage and flood interception

本署於2016年10月20日在大澳舉行簡報會，向傳媒講述本署應對風暴潮的具體措施。

DSD held a media briefing in Tai O on 20 October 2016 to introduce the media about DSD's concrete measures of tackling storm surge.



工程師黃文達先生(右)介紹大澳可拆卸式防洪屏障的操作及功能

Mr. Albert WONG (right), Engineer, presented the operation and function of removable flood protection devices in Tai O

2016年11月 Nov 2016

《香港商報》就南生圍河流導賞徑專訪本署
Hong Kong Commercial Daily Interviewed DSD about Nam Sang Wai River Education Trail

工程師余偉昌先生(中)講解拉姆薩爾濕地的生物多樣性及紅樹林特色

Mr. YU Wai-cheong (middle), Engineer, elaborated the biodiversity and features of mangroves in the Ramsar Site, Nam Sang Wai

2016年11月7日，《香港商報》就南生圍河流導賞徑訪問工程師余偉昌先生，以了解其參與導賞徑項目的經歷及日常職務。專訪刊於同年12月15日的《香港商報》。

On 7 Nov 2016, Mr. YU Wai-cheong, Engineer, gave an interview to Hong Kong Commercial Daily on the Nam Sang Wai River Education Trail, sharing his experience in the project as well as his daily duties. The interview was published in Hong Kong Commercial Daily on 15 December 2016.

2016年12月
Dec 2016

《中國日報》亞太分社訪問高級工程師梁華明先生
China Daily Asia Pacific Interviewed Mr. Richard LEUNG Wah-ming, DSD Senior Engineer

高級工程師梁華明先生講解本署「防洪三招」，即「上游截流、中游蓄洪、下游疏浚」
Mr. Richard LEUNG Wah-ming, Senior Engineer, illustrated DSD's "three-pronged flood prevention strategies", namely "upstream flood interception, mid-stream flood storage, and downstream local drainage improvement"

2016年12月7日，高級工程師梁華明先生就本署防洪策略及應對氣候變化的工作接受中國日報亞太分社採訪。專訪刊於同月29日的《中國日報亞洲版》。

On 7 December 2016, Mr. Richard LEUNG Wah-ming ,Senior Engineer, gave an interview to China Daily Asia Pacific on DSD's flood prevention strategies and efforts in combating climate change. The interview was published on China Daily Asia on 29 December 2016.

2017年1月
Jan 2017

傳媒就本署的渠道修復工程及技術專訪本署
Media Interview on DSD's Pipe Rehabilitation Works and Technologies

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2017年1月23日，《蘋果日報》、《香港01》、《經濟日報》、《明報》、《東方日報》、《成報》、《星島日報》和《文匯報》就本署的渠道修復工程及技術，專訪工程師陳裕棠先生及梁灝駿先生。專訪已於2017年1月27日刊登。

On 23 January 2017, Apple Daily, HK01, Hong Kong Economic Times, Mingpao, Oriental Daily, Singpao, Singtao Daily and Wen Wei Po conducted an interview with Engineers, Mr. Steve CHAN Yue-tong and Mr. Frankie LEUNG Ho-tsung. The interview covered DSD's pipe rehabilitation works and technologies. The relevant articles were published on 27 January 2017.

1 工程師陳裕棠先生介紹九龍、沙田及西貢污水幹渠修復工程
Mr. Steve CHAN Yue-tong, Engineer, introduced the rehabilitation of trunk sewers in Kowloon, Shatin and Sai Kung

2 工程師梁灝駿先生介紹螺旋纏繞修復技術的原理
Mr. Frankie LEUNG Ho-tsung, Engineer, introduced the operation of spiral wound rehabilitation technology (SPR™PE)

2017年1月 Jan 2017

《香港01》訪問工程師鄭敏煒先生
HK01 Interviewed Mr. Marcus CHENG Man-wai, Engineer

工程師鄭敏煒先生介紹林村河上游工程及其生態保育元素
Mr. Marcus CHENG Man-wai, Engineer, introduced the River Improvement Works in Upper Lam Tsuen and the ecological elements

2017年1月26日，工程師鄭敏煒先生就林村河改善工程接受《香港01》專訪，講解林村河上游河道改善工程的施工背景、生態考慮因素及工程進展，更帶領記者視察石籠、魚梯等生態保育元素，並介紹該河的稀有物種－香港瘰螈。專訪載於同年2月1日的《香港01》專頁。

On 26 January 2017, Mr. Marcus CHENG Man-wai, Engineer, gave an interview to HK01 on the Lam Tsuen River Improvement Works. Apart from explaining the background, ecological consideration and progress of the River Improvement Works in Upper Lam Tsuen, Mr. CHENG also showed the reporter the ecological elements such as the rockfill mattresses and fish ladder, and introduced the rare species, Hong Kong Newt, at Lam Tsuen River. The interview was published in HK01 on 1 February 2017.

2017年2月 Feb 2017

政府新聞處就本署的渠道修復技術及緊急事故控制中心專訪本署
Information Services Department Interviewed DSD on its Pipe Rehabilitation Technologies and the Emergency Control Centre

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2

2017年2月28日，政府新聞處訪問工程師梁灝駿先生及總工程監督黎超良先生，以了解本署在雨季前的準備工作，包括採用最新的渠道修復技術及啟用緊急事故控制中心。專訪載於2017年3月13日的政府新聞網。

On 28 February, the Information Services Department conducted an interview with Mr. Frankie LEUNG Ho-tsung, Engineer, and Mr. Sammy LAI Chiu-leung, Chief Technical Officer. The interview covered DSD's precautionary measures before rainy seasons, including the adoption of the latest pipe rehabilitation technologies and operation of the Emergency Control Centre (ECC). The interview was published on 13 March 2017.

1 工程師梁灝駿先生講解無開坑式修復技術
Mr. Frankie LEUNG Ho-tsung, Engineer, introduced the trenchless pipe rehabilitation technologies

2 總工程監督黎超良先生講解本署緊急控制中心的運作
Mr. Sammy LAI Chiu-leung, Chief Technical Officer, explained the operation of DSD's Emergency Control Centre

2017年3月
Mar 2017

《U周刊》就跑馬地地下蓄洪計劃專訪工程師唐鈞誠先生
U Magazine Interviewed Mr. Tommy TONG Kwan-shing, DSD Engineer, about Happy Valley Underground Stormwater Storage Scheme

2017年3月24日出版的《U周刊》
U Magazine published on 24 March 2017

2017年3月9日，工程師唐鈞誠先生就跑馬地地下蓄洪計劃接受《U周刊》專訪，講解計劃的背景資料、設計考量及環保節能設計。專訪刊於同月24日出版的《U周刊》。

On 9 March 2017, Mr. Tommy TONG Kwan-shing, Engineer, gave an interview to U Magazine on the Happy Valley Underground Stormwater Storage Scheme, introducing the background, design considerations and environmentally friendly features of the scheme. The article was published on U Magazine on 24 March 2017.

渠務署員工傳媒訪問
Media Interviews on DSD's Colleagues

2016年8月 Aug 2016

《東方日報》訪問時任工程師沈佩詩女士
Oriental Daily Interviewed Ms. Priscilla SUM Pui-sze, then Engineer

時任工程師沈佩詩女士向記者介紹她的日常工作
Ms. Priscilla SUM Pui-sze, then Engineer, introduced her work at DSD to the reporter

2016年8月26日，時任工程師沈佩詩女士接受《東方日報》專訪，講述其工作情況，以及簡介昂船洲污水處理廠改善工程。專訪分別於同年9月18及19日刊登。

On 26 August 2016, Ms. Priscilla SUM Pui-sze, then Engineer, gave an interview to Oriental Daily about her work as an engineer, and our upgrading works of the Stonecutters Island Sewage Treatment Works. The interview was published on 18 & 19 September 2016.

2016年8月 Aug 2016

《野外動向》訪問園境師唐翠珊女士
"Hong Kong Discovery" Interviewed Ms. Sandy TONG Chui-shan, Landscape Architect

2016年8月15日，園境師唐翠珊女士接受《野外動向》雜誌專訪，簡介本署的綠化工作。唐女士指，園境師設計及規劃渠務設施和渠道時，除考慮綠化效果外，亦強調生物多樣性，同時顧及長遠的保養問題。專訪於同年10月20日刊登。

On 15 August 2016, Ms. Sandy TONG Chui-shan, Landscape Architect, gave an interview to "Hong Kong Discovery" about the greening works of DSD. With the initiative to achieve greening effect, Ms. TONG explained that when designing and planning the greening works for facilities and channels, landscape architects try to enhance the biodiversity while considering the long-term maintenance factor. The interview was published on 20 October 2016.

園境師唐翠珊女士向記者介紹本署的綠化工程
Landscape Architect Ms. Sandy TONG Chui-shan introduced the greening work of DSD to the reporter

2016年9月 Sep 2016

《招職》訪問時任工程師沈佩詩女士
"Jiu Jik" Interviewed Ms. Priscilla SUM Pui-sze, then Engineer

2016年9月9日，時任工程師沈佩詩女士於接受《招職》專訪，分享她成為工程師的歷程和在本署的工作點滴。專訪於同年11月11日刊登。

On 9 September 2016, Ms. Priscilla SUM Pui-sze, then Engineer, gave an interview to "Jiu Jik" about her way of becoming an engineer as well as her work experience at DSD. The interview was published on 11 November 2016.

時任工程師沈佩詩女士向記者介紹昂船洲污水處理廠的運作
Ms. Priscilla SUM Pui-sze, then Engineer, introduced the operation of the Stonecutters Island Sewage Treatment works

2016年9月
Sep 2016

《蘋果日報》訪問高級工程師梁華明先生
Apple Daily News Interviewed Mr. Richard LEUNG Wah-ming, Senior Engineer

高級工程師梁華明先生與記者分享其繪畫興趣
Mr. Richard LEUNG Wah-ming, Senior Engineer, shared his interest in painting with the reporter

2016年9月19日，高級工程師梁華明先生接受《蘋果日報》專訪，講述其工作及繪畫興趣。專訪於同月29日刊登。

On 19 September 2016, Mr. Richard LEUNG Wah-ming, Senior Engineer, gave an interview to Apple Daily about his work and interest in painting. The interview was published on 29 September 2016.

2016年9月
Sep 2016

《經濟日報》訪問園境師唐翠珊女士
Hong Kong Economic Times Interviewed Ms. Sandy TONG Chui-shan, Landscape Architect

2016年9月27日，園境師唐翠珊女士接受《經濟日報》專訪，介紹本署的園境及綠化工作。其間，唐女士以本署多個綠化工程為例(包括九龍城污水泵房的草坪路面、垂直綠化和雨水花園、荔枝角雨水排放隧道上蓋的蝴蝶谷道寵物公園等)，展示如何採用園境規劃把綠化空間融入渠務設施及渠道，以營造自然和諧的優美環境。專訪刊於2016年10月1日的《經濟日報》。

On 27 September 2016, Ms. Sandy TONG Chui-shan, Landscape Architect, gave an interview to Hong Kong Economic Times (HKET) about DSD's landscaping and greening works. During the interview, Ms. TONG showcased our green effort applied to the facilities through the landscape design approach in a range of projects such as the grass pavements, vertical greening and rain garden of the Kowloon City Sewage Pumping Stations and the Butterfly Valley Road Pet Garden on the roof of the Lai Chi Kok Drainage Tunnel, for creating a beautiful environment integrated with the nature. The interview was published in HKET on 1 October 2016.

園境師唐翠珊女士簡介本署綠化工程
Ms. Sandy TONG Chui-shan, Landscape Architect, outlined the greening works of DSD

2016年9月 Sep 2016

《香港商報》訪問工程師梁爵麟先生
Hong Kong Commercial Daily Interviewed Mr. LEUNG Cheuk-lun, Engineer

工程師梁爵麟先生介紹林村河改善工程
Mr. LEUNG Cheuk-lun, Engineer, introduced Lam Tsuen River improvement works

2016年9月29日，工程師梁爵麟先生接受《香港商報》專訪，分享其在本署多年的工作經驗。專訪於同年10月13日刊登。

On 29 September 2016, Mr. LEUNG Cheuk-lun, Engineer, gave an interview to Hong Kong Commercial Daily about his years of work experience at DSD. The interview was published on 13 October 2016.

2016年10月 Oct 2016

《經濟日報》訪問工程師梁皓觀先生
Hong Kong Economic Times Interviewed Mr. Michael LEUNG Ho-kwun, Engineer

2016年10月13日，經濟日報專訪工程師梁皓觀先生，以了解其日常職務、學習心得及公餘興趣。其間，梁先生介紹其負責監督的石湖墟污水處理廠改善工程及廠內設施。專訪載於同年11月2日的《經濟日報》TOPick網站。

On 13 October 2016, Hong Kong Economic Times conducted an interview with Mr. Michael LEUNG Ho-kwun, Engineer about his work, learning tips and after-work interests, in which he introduced the facilities and improvement works of the Shek Wu Hui Sewage Treatment Works under his supervision. The interview was published in TOPick of Hong Kong Economic Times on 2 November 2016.

工程師梁皓觀先生介紹石湖墟污水處理廠的設施及進行中的工程
Mr. Michael LEUNG Ho-kwun, Engineer, introduced the facilities and on-going improvement works of Shek Wu Hui Sewage Treatment Works

2016年10月 Oct 2016

電視廣播有限公司《今日VIP》專訪本署同事
TVB's "The Green Room" Programme Interviewed DSD Colleagues

高級工程師梁華明先生和園境師唐翠珊女士(右)接受《今日VIP》訪問
Mr. Richard LEUNG Wah-ming, Senior Engineer, and Ms. Sandy TONG Chui-shan (right), Landscape Architect, were interviewed by TVB's "The Green Room" programme

2016年10月18日，高級工程師梁華明先生和園境師唐翠珊女士於接受《今日VIP》專訪，分別介紹本署的「活化水體」和園境工作。專訪分別於同年11月10日及17日播出。

On 18 October 2016, Mr. Richard LEUNG Wah-ming, Senior Engineer and Ms. Sandy TONG Chui-shan, Landscape Architect, attended an interview with TVB "The Green Room" programme, respectively introducing DSD's work on "Revitalising Water Bodies" and landscape architecture. The interviews were broadcast on 10 and 17 November 2016 respectively.

2016年10月 Oct 2016

《文匯報》訪問工程師梁皓觀先生及二級監工(電氣)鍾智偉先生
Wen Wei Po Interviewed Mr. Michael LEUNG Ho-kwun, Engineer, and Mr. Leo CHUNG Chi-wai, Works Supervisor II (Electrical)

2016年10月28日，《文匯報》專訪本署工程師梁皓觀先生及二級監工(電氣)鍾智偉先生，以了解其日常職務、學習心得及公餘興趣。專訪刊於同年11月7日的《文匯報》。

On 28 October 2016, Mr. Michael LEUNG Ho-kwun, Engineer, and Mr. Leo CHUNG Chi-wai, Works Supervisor II (Electrical) (WS II (E)), gave an interview to Wen Wei Po about their work, learning experience and off-duty interests. The interview was published in Wen Wei Po on 7 November 2016.

本署工程師梁皓觀先生(左一)分享工作點滴
Mr. Michael LEUNG Ho-kwun (first left), Engineer, shared his works life

本署樂隊「The Revival」2016年10月在渠務署開放日演出。二級監工(電氣)鍾智偉先生(左七)擔任結他手及主音
DSD's band, "The Revival", performed at the DSD Openday held in October 2016, Mr. Leo CHUNG Chi-wai (seventh left), WS II (E) was the guitarist and lead vocal

2016年11月 Nov 2016

《香港01》訪問工程師黃子冲先生
HK01 Interviewed Engineer Mr. Jack WONG Tsz-chung

工程師黃子冲先生介紹沙田污水處理廠的運作和污水處理流程
Engineer Mr. Jack WONG Tsz-chung shared the operation of Shatin Sewage Treatment Works and the sewage treatment process

2016年11月28日，工程師黃子冲先生就本署工作接受《香港01》專訪，講述香港渠務發展及他在沙田污水處理廠的日常工作。專訪載於同年12月2日的《香港01》專頁。

On 28 November 2016, Mr. Jack WONG Tsz-chung, Engineer, gave an interview to HK01 about the history of drainage system development and his daily work at the Shatin Sewage Treatment Works. The interview was published in HK01 on 2 December 2016.

2016年12月 Dec 2016

《香港01》訪問本署總工程監督黎超良先生
HK01 Interviewed Mr. Sammy LAI Chiu-leung, Chief Technical Officer

2016年12月2日，總工程監督黎超良先生就本署直屬員工隊工作接受《香港01》專訪。專訪載於同月7日的《香港01》專頁。

On 2 December 2016, Mr. Sammy LAI Chiu-leung, Chief Technical Officer, gave an interview to HK01 about the work of our Direct Labour Force. The interview was published on HK01's page on 7 December 2016.

本署總工程監督黎超良先生向記者介紹本署緊急控制中心的運作
Mr. Sammy LAI Chiu-leung, Chief Technical Officer, introduced to the reporter the operation of Emergency Control Center of the Department

2016年12月
Dec 2016

《大公報》專訪園境師唐翠珊女士及許樂謙先生
Ta Kung Pao Interviewed Ms. Sandy TONG Chui-shan and Mr. Stanley HOI Lok-him, Landscape Architects

園境師唐翠珊女士及許樂謙先生介紹本署的園境及綠化項目
Landscape Architects, Ms. Sandy TONG Chui-shan and Mr. Stanley HOI Lok-him introduced DSD's landscape and greening projects

2016年12月29日，園境師唐翠珊女士及許樂謙先生接受《大公報》的專訪，暢談參與的公共園境設計項目和園境及綠化工作。專訪已於2017年2月12日刊登。

On 29 December 2016, Ms. Sandy TONG Chui-shan and Mr. Stanley HOI Lok-him, Landscape Architects, gave an interview to Ta Kung Pao and shared some public landscape projects as well as landscape and greening works that they took part in. The interview was published in Ta Kung Pao on 12 February 2017.

2017年3月
Mar 2017

浸會大學新聞系刊物《新報人 》訪問時任高級工程師鄭雅思女士
San Po Yan, Publication of Department of Journalism Hong Kong Baptist University, Interviewed Ms. Ellen CHENG Nga-see, then Senior Engineer

2017年3月6日，時任高級工程師鄭雅思女士接受《新報人》專訪，分享其作為女工程師的經歷與感受。專訪刊於同月14日的《新報人》。

On 6 March 2017, Ms. Ellen CHENG Nga-see, then Senior Engineer, gave an interview to San Po Yan about her experience and feeling as a female engineer. The interview was published on San Po Yan on 14 March 2017.

時任高級工程師鄭雅思女士在跑馬地地下蓄洪計劃辦公室接受採訪
Ms. Ellen CHENG Nga-see, then Senior Engineer, attended the interview in the HVUSSS office

持份者參與活動
Stakeholder Engagement Activites

渠務署一直重視持份者的意見，年內積極透過不同渠道，舉行多元化的持份者參與活動，與社會上不同團體交流，介紹本署近期的重點工程項目，增加公眾對本署的認識。為了回饋社會，本署的員工亦積極舉辦不同的義工服務及慈善活動，為社會送上關懷。

DSD has always treasured stakeholders' comments. During the year, we staged a wide range of stakeholder engagement activities through various channels to facilitate exchange with all sectors of society and introduce our latest key projects in order to broaden public awareness of the Department's work. DSD staff also played an active role to show kind concern for the community through organising volunteer services and charity events.

渠務署開放日 2016
DSD Open Day 2016

1. 2017年香港花卉展覽
Hong Kong Flower Show 2017

2. 捐血活動
Blood Donation Activities

3. 團體參觀沙田污水處理廠
Group visit at Shatin Sewage Treatment Works

渠務署工程項目的公眾參與活動
Public Engagement Activities of DSD Projects

為確保本署的工程項目能夠順利進行，我們積極與項目團體及鄰近社區保持緊密聯繫，透過舉辦工作坊、專題會議、技術參觀及巡迴展覽，收集不同持份者的意見。相關的工程項目包括啟德河改善工程、活化翠屏河及淨化海港計劃第二期甲工程。

To ensure smooth progress of all DSD work projects, we maintain close contact with all project groups and the local communities. Stakeholders' views and suggestions are solicited through workshops, ad-hoc meetings, technical visits and roadshows. Relevant projects include Kai Tak River Improvement Works, Revitalisation of Tsui Ping River and Harbour Area Treatment Suheme (HATS) Stage 2A.

啟德河改善工程
Kai Tai River Improvement Works

啟德河改善工程旨在將啟德明渠活化成河道，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。

The Kai Tai River Improvement Works aims to improve the waterway formerly known as Kai Tai Nullah. By establishing a green river corridor and introducing landscaping and ecological elements, the project will boost drainage capacity and provide more open space to neighbouring communities.

早於工程開展前，本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，並盡力減低工程對居民造成的影響。

Prior to project commencement, DSD joined hands with the Civil Engineering and Development Department (CEDD) and Planning Department (PlanD) in launching "Building Our Kai Tak River", a two-stage public engagement programme. Since the project commenced in 2011, we have maintained close communication with various stakeholders, seeking to fully understand their concerns and minimise impacts of the construction project on residents.

我們一直與黃大仙區議會保持緊密的聯繫，並聽取當區區議員對工程的意見。2016年4月，我們安排了黃大仙區議會轄下的地區設施管理委員會成員，前往與啟德河改善工程相關的摩士公園(一號公園)作實地視察，介紹公園美化及改善工程。

We have also maintained close contact with members of the Wong Tai Sin District Council (WTSDC) and listened to their suggestions and comments on our works. In April 2016, we arranged a site visit to Morse Park (Park No.1), a site associated with the Kai Tak River Improvement Works, to brief the members of the District Facilities Management Committee under WTSDC on our beautification and improvement works in the park.

此外，我們亦多次安排香港工程師學會等團體，到啟德河改善工程的工地參觀。該學會於2017年3月舉辦了有關啟德河改善工程的技術研討會，我們獲邀擔任講者，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 also arranged site visits to Kai Tai River Improvement Works for groups from the Hong Kong Institution of Engineers (HKIE) and other organisations. HKIE hosted a technical seminar in March 2017 on the Kai Tak River Improvement Works. On the invitation of HKIE, a DSD speaker presented the project's goals, challenges and major techniques.

1. 2017年1月，香港工程師學會(土木分部)會員參觀啟德河改善工程工地
   HKIE (Civil Division) members visited the site of Kai Tak River Improvement Works in January 2017
2. 2017年3月，香港工程師學會(土木分部)舉辦有關啟德河改善工程的技術研討會
   Technical seminar on Kai Tak River Improvement Works hosted by HKIE (Civil Division) in March 2017

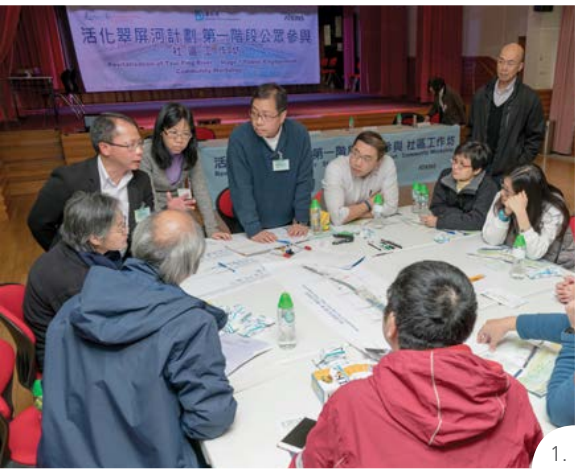
活化翠屏河
Revitalisation of Tsui Ping River

活化翠屏河計劃旨在利用水景、園境和生態概念，將翠屏道及敬業街旁的明渠活化成河道，為它注入生氣和活力，營造生境，亦能加強翠屏河的防洪功能，為社區帶來一個全新的近水休憩設施。

項目的勘查研究工作已於2015年展開。我們於2017年1月至3月舉辦了第一階段的公眾參與活動，介紹項目的初步設計概念及收集參與人士的意見和建議。於2017年1月12日及13日，我們分別諮詢了觀塘區議會和海濱事務委員會。為增加公眾人士對項目的了解及收集公眾意見，我們亦設立了項目網頁、安排巡迴展覽及派發工程小冊子，並安排了社區工作坊和專題小組會議，直接與公眾、地區人士、綠色團體、專業團體及學術團體溝通和交流。

The revitalisation of Tsui Ping River aims to transform the nullah along Tsui Ping Road and King Yip Street into a river through a revitalisation concept that comprises water features, landscaping and ecological enhancement. The goal is to green and invigorate the environment and create habitats while strengthening the flood protection capability of Tsui Ping River. It will become a new and vibrant riverine amenity for the community.

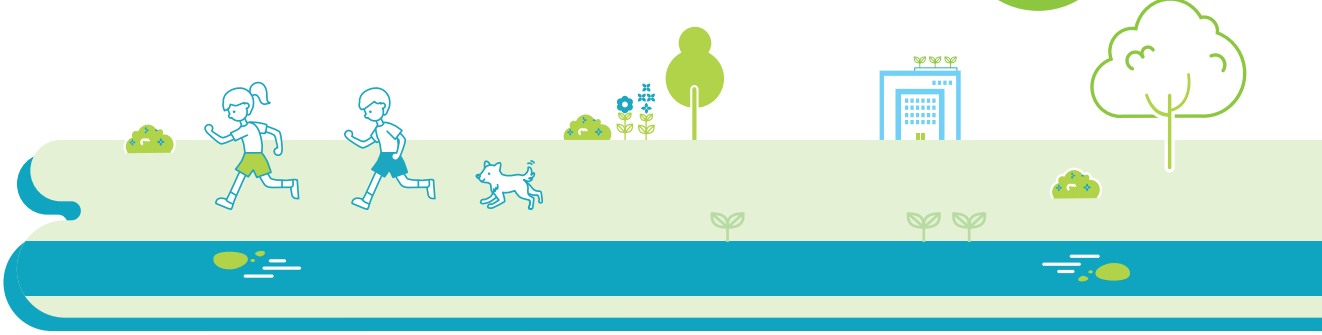
The investigation stage of the project commenced in 2015. DSD organised the Stage 1 Public Engagement between January and March 2017. A series of activities was launched to introduce our preliminary design concepts and solicit public opinions and suggestions. We consulted Kwun Tong District Council and the Harbourfront Commission on 12 and 13 January 2017. Other initiatives were also rolled out to provide more project details for the public and seek their comments, such as setting up a website, arranging roadshows and handing out project pamphlets. Community workshops and ad-hoc meetings were held to provide platforms for direct communication and exchange with the general public, members of the local community, green groups, professional bodies and academia.



1.


2.

1. 社區工作坊
   Community workshop
2. 與綠色團體、專業團體及學術團體進行專題小組會議
   Focus group meeting with green groups, professional bodies and academia



3. 在觀塘區內的港鐵站、大型屋邨和屋苑、商場及康文場地等地點舉辦巡迴展覽
Roving exhibitions at the MTR station, major residential estates, shopping malls and recreational venues in Kwun Tong district

4. 工程小冊子
Project pamphlets

淨化海港計劃第二期甲
Harbour Area Treatment Scheme (HATS) Stage 2A

淨化海港計劃第二期甲於2015年12月19日全面啟用，餘下正進行的包括部分設施的附屬工程，及園林種植和建築外觀特色等美化工程，我們在2016-17年度亦舉辦了多項公眾參與活動，致力向市民介紹淨化海港計劃第二期甲，當中包括：

HATS Stage 2A came into full operation on 19 December 2015. The remaining facilities works included some ancillary landscaping works and architectural features. In 2016-17, we staged a number of public engagement events to promote the HATS Stage 2A Project to the public, including:

- 每半年向持份者派發簡訊；
  Newsletters were issued to stakeholders half-yearly;
- 接待不同團體參觀昂船洲污水處理廠，並介紹工程的最新進展，包括內地政府官員、深水埗區議會、香港工程師學會、香港科技大學、浙江大學及鄰近居民等；
  Visits to the Stonecutters Island Sewage Treatment Works (SCISTW) with project updates were arranged for different groups and organisations including mainland government officials, Sham Shui Po District Council, the Hong Kong Institution of Engineers (HKIE), the Hong Kong University of Science and Technology, Zhejiang University and local residents;
- 工程義工團隊持續參與社區活動，例如探訪獨居老人等；及
  Volunteers from the project gave ongoing support and participated in community welfare activities, such as visiting elderly homes; and
- 於香港工程師學會舉行淨化海港計劃第二期甲啟用研討會。
  A Technical Seminar on the Commissioning of HATS Stage 2A was conducted at the HKIE.

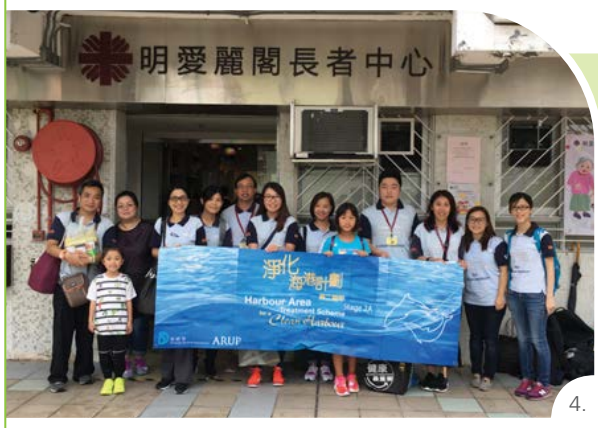
技術參觀及研討會
Technical Site Visits and Seminars

1. 2.

3.

1. 2016年6月23日，浙江大學參觀昂船洲污水處理廠，了解工程建造技術
   On 23 June 2016, a delegation from Zhejiang University visited SCISTW with particular focus on the construction technique
2. 2017年1月25日，於香港工程師學會舉辦淨化海港計劃第二期甲啟用研討會
   On 25 January 2017, a Technical Seminar on the Commissioning of HATS Stage 2A was conducted at the HKIE
3. 2017年2月17日，深水埗區議會議員及鄰近居民參觀昂船洲污水處理廠，了解污水處理過程及最新除味技術
   On 17 February 2017, members of Sham Shiu Po District Council and nearby residents visited SCISTW were briefed on the sewage treatment process and the latest odour control techniques

社區探訪
Community Visit



4.

4. 2016年9月10日，工程義工團隊到麗閣邨探訪長者
   On 10 September 2016, the project volunteer team visited the elderly home at Lai Kwok Estate

其他持份者參與活動
Other Stakeholder Engagement Activities

除了宣傳工程項目外，本署亦重視與業界、工作夥伴及社區的交流。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。另外，我們亦定期派員出席區議會會議，於不同的展覽會參展，以及接待不同社區團體和學校參觀轄下設施，向社區推廣本署的工作。

Alongside promotion and publicity initiatives, engaging the industry, working partners, and local communities in amicable exchange is another focal point of DSD's work. We continue to nurture a culture of cooperative partnership by holding various site visits, experience sharing sessions, and incentive programmes. Our representatives attend District Council (DC) meetings regularly and take part in many exhibitions. We also receive community groups and schools visiting DSD facilities to promote our operation to the public.

與工作夥伴攜手合作
Joining Hands with Working Partners

推廣職業安全與健康

一如以往，我們推行了多項工地安全改善措施及舉辦不同的活動，包括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。

經驗分享會

透過舉辦不同課題的經驗分享會，我們為工作夥伴提供互相交流知識及經驗的機會。在2016年第三季，我們分別邀請了機電工程署、中華電力有限公司與本署同事一同分享電力安全和電纜保護的經驗及作業提示，並重温現行相關法例、安全指引和工作守則。在2017年第一季，我們亦安排了另一次分享會，探討兩個在本署工地內發生的險失事故之起因，提醒與會者必須嚴格執行工地安全巡查及檢視程序，避免日後發生同類事故。

Promoting Occupational Safety and Health (OSH)

As in previous years, we rolled out multiple safety measures and activities, including experience sharing sessions and the Construction Sites Housekeeping Award Scheme, in an effort to raise the overall safety levels across our sites.

Experience Sharing Sessions

Through organising experience sharing sessions with different topics, we offer our working partners an opportunity to exchange knowledge and experience with one another. In the third quarter of 2016, we invited speakers from the Electrical & Mechanical Services Department (EMSD) and China Light Power Hong Kong Limited (CLP) to join our in-house colleagues to share their hands-on experience and tips on electricity safety and cable protection. Prevailing relevant legislation, safety guidelines and codes of practices were also reviewed. In the first quarter of 2017, we covered two near-miss incidents at DSD sites at another experience sharing session with a view to preventing recurrence in the future by studying the causes and reminding participants the necessity to strictly implement safety inspection and checking procedures.

本署同事、駐工地督導人員和承建商代表出席經驗分享會
DSD colleagues, site supervisory staff and representatives of contractors attended the experience sharing session

工地整潔獎勵計劃2016

除了提高本署同事、工程顧問及承建商的安全意識外，改善工地整潔情況亦是我們職業安全與健康管理的目標。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、衞生情況和蚊蟲防治，以及對環境滋擾的控制等。

參與2016年度工地整潔獎勵計劃的36支隊伍，在工地整理、環境保護、員工關顧、鄰舍關係等方面都有優異的表現。獲此佳績，實有賴承建商、工程顧問及本署同事共同發揮伙伴合作的精神。本署管理層在頒獎典禮上，呼籲各團隊發揮同理心，盡最大努力將施工期間對市民造成的影響減至最少，達致雙贏。

Construction Sites Housekeeping Award Scheme 2016

While striving to improve safety awareness amongst DSD colleagues, project consultants and contractors, we have also included housekeeping improvement at construction sites as an OSH management target. We have been organising the annual Construction Sites Housekeeping Award Scheme 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 36 participating teams staged stellar performance in housekeeping, environmental protection, staff caring and relationship with neighbourhood. This remarkable result was attributable to collaborative efforts of the contractors, project consultants and DSD colleagues. At the award presentation ceremony, DSD's senior management urged all project teams to strike for a win-win outcome by expanding empathy and using their best endeavour to minimise the impact of construction projects on the public.

總冠軍大獎工程團隊合照
The Grand Award Winning Team

採用新工程合約

本署積極採用新工程合約，以嶄新的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、共同管理及分擔工程的風險。此模式讓工程管理部門與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高施工效率。

過去8年，本署共批出32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。為積極向建造業界推廣此合約模式，本署在過去一年已批出了13份新工程合約，佔本署新工程合約總數超過40%。

Launch of New Engineering Contract

Through our proactive application of New Engineering Contract (NEC), DSD is implementing drainage works with our working partners by innovating collaboration. Comparing with conventional contract, NEC is more focused on advocating close cooperation, joint management and risk-sharing among all working parties. This approach establishes rapport between the project management division and contractors while preventing disputes, reducing risks arising from project delay, and improving construction efficiency.

In the past eight years, DSD has issued 32 NECs covering civil engineering projects, electrical and mechanical engineering projects, maintenance works and consultancy services. With a view to actively promote NEC to the construction industry, DSD has issued 13 NECs in the past year alone, which accounted for over 40% of the total number of NECs.

作為新工程合約的主要用戶，本署在過去一年積極舉辦專題研討會、工作坊和訓練課程，向業界不同持份者推廣新工程合約如何幫助提升工程成本效益和降低風險。在2016年10月20日，本署更與中華電力有限公司合辦了一個研討會，分享彼此在維修保養工程中使用新工程合約模式的實踐經驗。

As a major NEC user, DSD collaborated with different stakeholders in the construction industry to organise symposiums, workshops and training courses to promote how NEC can improve cost effectiveness and reduce risks. On 20 October 2016, DSD and CLP jointly organised a workshop to share our first-hand experience in using NEC in maintenance work contracts.

本署與中華電力有限公司合辦的新工程合約研討會
NEC Workshop jointly organised by DSD and CLP

持份者工作坊

我們在香港島北及新界北區小型渠務改善工程的工程建造合約中採用新工程合約，合約範圍包括為灣仔區、中西區、新界北區及元朗區內18個地點進行雨水排放系統及污水系統的小型改善工程。我們於2017年2月24日為此項工程舉辦了一個新工程合約夥伴工作坊，旨在為本署、承建商及顧問公司三方建立良好的夥伴關係，加強互助互信，並訂立共同目標。

Stakeholder Workshop

NEC was introduced in DSD's Minor Drainage Improvement Works in Northern Hong Kong Island and North District. The contract covered minor improvement works for stormwater drainage and sewerage systems at 18 locations in Wan Chai, Central and Western, North and Yuen Long Districts. On 24 February 2017, an NEC Partnering Workshop was held for this project, aspiring to build partnership and mutual trust, and to encourage cooperation and align the objectives of DSD with the Contractor and the Consultant.

本署為香港島北及新界北區小型渠務改善工程舉辦主要持份者參與的新工程合約夥伴工作坊
DSD organised a NEC Partnering Workshop with the major stakeholders of Minor Drainage Improvement Works in Northern Hong Kong Island and North District

工作坊的主持人分享了成功合作的四個基石—信任和合作、目標一致、持續改善及共同解決問題和作出決定。參加者透過參與活動，明白到如要有高素質的團隊表現，就需要挑戰自己的信念和假設。參加者亦透過模擬遊戲，體會各持份者需要通力合作才能達到雙贏。他們亦利用工作坊提供的工具，合作解決合約中較迫切的問題和訂立行動計劃。

At the workshop, the facilitator shared the four cornerstones for successful partnering: trust and cooperation, mutual objectives, continuous improvement and joint problem solving and decisions. Participants took part in exercises that showed the need to challenge our beliefs and assumptions if we were to excel as a team. There was also a simulation game that demonstrated how organisations needed to work together to achieve a win-win outcome. Tools were provided for the teams to solve pressing problems and devise action plans.

參加者在新工程合約夥伴工作坊參與集體活動
Participants in group exercise at the NEC Partnering Workshop

在交換各人的觀點後，參加者為合約訂下一致的共同目標，包括提早6個月完成工程、不超出預算、零意外和交收時零缺陷，更簽署了一份無約束力的合約夥伴協議。大家均十分投入及積極參與是次工作坊，而接下來最重要是能延續彼此在工作坊所建立的合作性和積極性。本著互助互信的精神，再加上新工程合約提供的高效項目管理工具，我們有信心能克服工程上的挑戰及達成合約的共同目標。

After expressing their individual views, participants reached consensus on the objectives for this contract, including early completion for 6 months, within budget, zero accident and zero defect at handover. A non-binding Partnering Charter for the contract was signed. Everyone enjoyed the workshop and contributed enthusiastically. The next important step is to build on this willingness to establish greater cooperation and to implement collaboratively the partnering improvement initiatives generated at the workshop. In the spirit of mutual trust and co-operation, and with the effective project management tools offered in NEC contract, we are confident that we can overcome challenges and achieve the mutual objectives of the contract.

PARTNERING CHARTER

Minor Drainage Improvement Works in Northern Hong Kong Island and North District
Contract No. DC/2015/05

十八羅漢・同心協力
水到渠成・豐生水利

MUTUAL OBJECTIVES

Time	31st Oct 2018, 100% completion
Cost	Within Budget
Safety	Zero Accident
Award	One Safety Award
Quality	Zero Defect at Handover
Complaint	Zero Substantiated Complaint
Public Recognition	Three Appreciation Letters

VALUES & BEHAVIOURS

- Trust
- Commitment
- Instant
- 有商有量
- Supportive
- Cooperation
- 通力合作
- Devoted

工作坊後簽訂的合約夥伴協議
Partnering Charter signed at the end of the Stakeholder Workshop

持份者訪問
Stakeholder Interview

梁永全先生
Mr. William W. C. LEUNG

助理總經理（建造）
Assistant General Manager (Construction)

俊和建築工程有限公司
Chun Wo Construction & Engineering Co., Ltd.

承建商的話 Contractor's Note

作為渠務署跑馬地地下蓄洪計劃的承建商，我們負責地下蓄洪池主體、泵房以及相關排水渠的建設工程。地下蓄洪計劃採用了創新的新工程合約工程管理模式，與傳統的合約模式相比，新工程合約不單能讓我們與渠務署建立更緊密的互信協作關係，更可將渠務署日常工作時的優良文化，如減少用紙、節省能源和節約用水等環保措施，推展至工地的每個角落。由於項目的設施座落於跑馬地遊樂場內，渠務署與工程小組特意在地面設計上添加綠化元素，善用地下空間作防洪基建之餘，同時為市民提供一個舒適的休憩空間。

在工程項目開展前，渠務署已召開專題會議及伙伴合作工作坊，與我們商討工程上的細節，並詳述工程相關的環境及安全要求。渠務署在要求我們嚴格遵從工程規格的同時，更會因應不同的工程項目，鼓勵我們積極提供改善建議。從項目開始至今，渠務署一直對我們提出的各種新技術和設計方案保持開放態度，與我們一同商討新方案的可行性。當中，雨水重用的方案，便是經過各方通力合作，再加上渠務署專業意見後的共同成果。此外，渠務署人員更配合我們的工作模式，討論工程的事項，確保工程的進度。渠務署的管理層更多次到訪工地，鼓勵及聆聽前線員工的意見，貫徹「新工程合約」互信、協作、共同承擔風險和責任的精神。

As a contractor for the DSD's Happy Valley Underground Stormwater Storage Scheme (HVUSSS), we are responsible for constructing the underground stormwater storage tank, a pump house and the associated drains. This project is managed under the New Engineering Contract (NEC) which enables us to build a closer relationship and create partner synergy with DSD when comparing with the traditional type of contract. Such innovative approach also allows DSD to introduce its excellent operational culture to every corner of the project site, including green measures like reducing paper consumption, saving energy and water conservation. As the project facilities are located at the Happy Valley Recreation Ground, DSD and the project team have added green elements to the ground design, hoping to make the best use of underground space for flood control and at the same time, provide a comfortable leisure environment for the public.

Before project commencement, DSD hosted meetings and partnership workshops to discuss work details with us and explain corresponding environmental and safety requirements. While expecting strict adherence to the work specifications, DSD also encouraged us to offer suggestions for improvement for different types of works. DSD has been open to all new technologies and design that we have proposed throughout the project. Constructive discussions have been held with us to study the feasibility of these new alternatives. In particular, the proposed rainwater harvesting project is a joint success made possible through the concerted effort of all parties and DSD's c support. DSD colleagues even go one step further to adapt to our operation pattern and discuss project issues to ensure smooth progress according to schedule. DSD management has often visited the project site to show support to frontline staff and listen to their views. All these efforts exemplify the NEC spirit that advocates mutual trust, collaboration and sharing risks and liabilities.

渠務署的話 DSD's Note

跑馬地地下蓄洪計劃是本署防洪工作的重點項目，我們感激承建商與工程團隊的努力，在新工程合約下實施了多項減省措施，令整項工程不單比預期提早一年完工，更節省約9,000萬元的工程費用。在氣候變化日益加劇的環境下，極端天氣對香港市民日常生活帶來挑戰。渠務署在未來會繼續聆聽各持份者的意見，堅守信念提供用穩健可靠的防洪基建，以保障市民的生命和財產。

The Happy Valley Underground Stormwater Storage Scheme is our key project on flood prevention. We are grateful to the contractors and project team for implementing many saving measures under NEC. These efforts have led to project completion one year ahead of the schedule and a reduction of about $90 million project cost. With the growing impacts of climate change, extreme weather is posing challenges to our daily lives in Hong Kong. DSD will continue to listen to the feedback of all stakeholders and remains steadfast in our mission to provide more robust and reliable flood prevention infrastructure safeguard the lives and properties of the public.

與區議員聯繫
Liaison with District Council (DC) Members

為了與社區保持溝通，我們經常與區議員聯繫，定期派員出席區議會會議。年內，本署署長及部門代表出席了灣仔、屯門、大埔、葵青、深水埗及離島等區議會會議，向區議員講解相關地區的主要工程項目及聽取意見。

To maintain close links with the community, DSD representatives attend DC meetings regularly. During the year under review, the Director of Drainage Services and departmental representatives joined meetings convened by the Wan Chai, Tuen Mun, Tai Po, Kwai Tsing, Sham Shui Po and Island DCs to detail our major projects to DC members of relevant local districts and listened to their views.

2016年5月18日灣仔區區議員參觀跑馬地地下蓄洪計劃
Wan Chai District Council Members visited HVUSSS on 18 May 2016

2017年3月1日離島區區議員參觀小蠔灣污水處理廠太陽能發電場
Island District Council Members visited the Solar Farm at Siu Ho Wan Sewage Treatment Works (STW) on 1 March 2017

與環保團體保持溝通
Ongoing Communication with Green Groups

除了區議會外，我們亦重視與環保團體的交流。年內，我們與綠色力量、世界自然基金會香港分會、長春社、嘉道理農場暨植物園、香港觀鳥會、守護大嶼聯盟及創建香港進行了3次會面。雙方就不同議題交換了意見，包括提升河道生態價值、活化水體、促進生物多樣性和在本署的工程上推展親水文化等。

In addition to building links with DCs, we cherished communication with green groups. In the past year, DSD arranged three meetings to exchange views with Green Power, World Wide Fund for Nature Hong Kong, the Conservancy Association, Kadoorie Farm and Botanic Garden, the Hong Kong Bird Watching Society, Save Lantau Alliance and Designing Hong Kong. Discussions were held over wide-ranging issues, including enhancing the ecological value of rivers, revitalising water bodies, promoting biodiversity and fostering a water-friendly culture in DSD projects.

帶領環保團體代表參觀本署河道工程
Guided tour to river improvement work site for green group members

渠務科研茶聚2016
DSD R&D Tea Gathering 2016

此外，本署亦與業界及學術界保持緊密的聯繫。年內除舉辦了2016研究及發展論壇(詳情可參考**第二章 年度大事 重點輕描**)，本署於2016年4月21日在昂船洲污水處理廠舉辦了渠務科研茶聚2016，共有40位來自10個不同專上學院及科研機構的學者出席參與。

本署署長唐嘉鴻先生帶領一眾學者參觀昂船洲污水處理廠內設施，並分享了本署現時和未來科研及發展項目的範疇和方向；本署同事亦與一眾學者就最新的污水處理科技及其應用進行交流。是次活動加深本署和學者對彼此工作的認識，為將來的合作奠定基礎。

DSD maintains close ties with the industry and the academic circle. During the year, while hosting the DSD Research & Development Forum 2016 (for details see **Chapter 2 Highlights of the Year**), we held DSD R&D Tea Gathering 2016 at Stonecutters Island Sewage Treatment Works (SCISTW) on 21 April 2016. The event was attended by 40 academics from ten universities and research institutes.

Mr. Edwin TONG Ka-hung, Director of Drainage Services, led members of the academic circle for a tour to SCISTW facilities and shared with them the current and future directions and scope of DSD's Research & Development initiatives. DSD colleagues also presented the latest sewage treatment techniques and their applications. This event enabled DSD and the academics to gain insight in each other's work and paved the way for future collaboration.

渠務科研茶聚2016大合照
Group photo of DSD R&D Tea Gathering 2016

展覽及研討會
Exhibitions and Seminars

科學為民服務巡禮

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。2016年的主題為「回應 • 氣候展」。

2016年8月20日及10月5日，在科學館舉行的「科學為民十載情」講座中，本署總工程師簡漢成先生及高級工程

Science in the Public Service

DSD is a long-time supporter of the Science in the Public Service (SIPS), an annual campaign co-organised by several government bureaux and departments. The theme for SIPS 2016 is "Climate Change – Our Response".

During the "Science in the Public Service - Ten Years of Passion Lecture Series" at the Science Museum on 20 August and 5 October 2016, Mr. KAN Hon-shing, Chief Engineer, and Mr. Richard LEUNG Wah-ming, Senior Engineer, introduced the Happy Valley Underground Stormwater Storage Scheme

師梁華明先生，分別介紹跑馬地地下蓄洪計劃及活化水體理念，向公眾講解本署如何應對因市區急速發展及極端天氣帶來的水患。

(HVUSSS) and the concept of revitalising water bodies respectively. They explained to the public how we tackle flooding risks arising from rapid urban development and extreme weather.

本署高級工程師梁華明先生向公眾講解活化水體理念

Mr. Richard LEUNG Wah-ming, Senior Engineer, delivered a public talk on water bodies revitalisation

本署總工程師簡漢成先生(左)接受主辦單位代表致送紀念品

Mr. KAN Hon-shing, Chief Engineer, accepted a souvenir from a representative of the organiser

國際環保博覽 2016

2016年10月26日至29日，我們參加了在亞洲國際博覽館舉行的第11屆國際環保博覽。

參觀者除了可透過平板電腦和擴增實境技術認識岩洞污水處理設施的設計及運作外，亦可在工作人員的講解下進一步了解我們其中一項主要工程項目－搬遷沙田污水處理廠往岩洞。

Eco Expo Asia 2016

We participated in the 11th Eco Expo Asia held from 26 to 29 October 2016 at AsiaWorld-Expo.

Using visual tools in a tablet with augmented reality (AR) technology, visitors could get a quick idea of the design and operation of in-cavern sewage treatment facilities. DSD professionals also gave commentaries to better inform the public of our major project - Relocation of Shatin Sewage Treatment Works to Caverns.

本署署長唐嘉鴻先生(右二)與本署同事合照

Group Photo of Mr. Edwin TONG Ka-hung (second right), Director of Drainage Services and DSD colleagues

創新科技嘉年華2016

2016年10月29日至11月6日，本署於香港科學園舉辦的創新科技嘉年華參展，向市民推廣本署防洪工程的成效。為配合大會主題「智慧生活 • 創新香港」，本署在展覽中使用了創新的擴增實景技術，讓市民在視覺上彷如置身在跑馬地遊樂場內的地下蓄洪池。

InnoCarnival 2016

DSD joined the InnoCarnival held between 29 October 2016 and 6 November 2016 in Hong Kong Science Park to promote our flood prevention initiatives to the general public. Echoing the theme "Smart Living • Innovative Hong Kong", new AR technology was deployed in the DSD booth to give the public an immersive experience of the underground stormwater storage tank at the Happy Valley Recreation Ground.

本署同事在創新科技嘉年華使用擴增實景技術介紹跑馬地地下蓄洪計劃
Using Augmented Reality (AR) in InnoCarnival to showcase the Happy Valley Underground Stormwater Storage Scheme

中國海洋經濟博覽會2016

2016年11月24至27日，本署聯同港府駐粵經濟貿易辦事處(駐粵辦)，參加了由國家海洋局和廣東省政府於廣東湛江共同舉辦的中國海洋經濟博覽會2016。本年以「創新、綠色、開放、合作」為主題，共有來自53個國家的企業機構參與是次活動。本署於駐粵辦所設立的藍色海洋香港館，介紹本署的淨化海港計劃及搬遷沙田污水處理廠往岩洞工程。

2016 China Marine Economy Expo

Together with the Hong Kong Economic and Trade Office in Guangdong (GDETO), DSD joined the 2016 China Marine Economy Expo organised by the State Oceanic Administration and the Guangdong Provincial People's Government was held from 24 to 27 November 2016 in Zhanjiang, Guangdong. Flagging the theme "Innovation, Green Development, Opening up, Cooperation", this year's event attracted business enterprises from 53 countries. DSD's projects Harbour Area Treatment Scheme and Relocation of Shatin Sewage Treatment Works to Caverns were featured at the Hong Kong pavilion Blue Marine set up by the GDETO.

淨化海港計劃展板
Display panel of Harbour Area Treatment Scheme

2017年香港花卉展覽

2017年3月10日至19日，本署參加於維多利亞公園舉行的香港花卉展覽，本署展區「愛-賞花@濕地」獲得最佳設計(園林景點)大獎。展區設計融入「藍綠建設－你我共享」意念，為市民帶來親水體驗。

The Hong Kong Flower Show 2017

DSD was an exhibitor of Hong Kong Flower Show 2017 held between 10 and 19 March 2017 in Victoria Park. Our exhibit "Blossoms of Love – Wetland" was awarded the Grand Award for Design Excellence (Landscape Display). Evolved from the concept "Blue-Green Infrastructure for You and Me", the design gives visitors a water-friendly experience.

民政事務局局長劉江華先生(左三)於開幕典禮後參觀本署展區

Mr. LAU Kong-wah (third left), Secretary for Home Affairs and other officiating guests visited DSD's exhibit after the Opening Ceremony

本署展區讓學生親身體驗親水文化

Students experiencing the water-friendly culture at the DSD exhibit

本署展區夜景 — 象徵四季濕地樹木之藝術品

Night view of DSD's exhibit - colourful art pieces mimic wetland trees of the four seasons

社區活動
Community Activities

綠化數碼港海濱

2016年6月18日，本署於數碼港海旁舉行「綠化數碼港海濱」的植樹活動，邀請了30多位來自附近屋苑及學校的代表出席參與。隨著港島西雨水排放隧道工程和淨化海港計劃兩項工程順利竣工，位於數碼港海旁的前工程用地將會進行綠化，為附近社區提供一個舒適的休憩環境。

Greening the Cyberport Seafront

On 18 June 2016, we held a planting event "Greening the Cyberport Seafront" at the Cyberport seafront and invited more than 30 representatives from nearby housing estates and schools to join the event. Upon completion of the Hong Kong West Drainage Tunnel and the Harbour Area Treatment Scheme construction works, DSD would green the ex-construction site at Cyberport Seafront to provide pleasant leisure space for the local community.

當區居民積極參與植樹活動
Local residents pitching in at the planting event

渠務署開放日2016

2016年10月15日及16日，本署於沙田污水處理廠舉行開放日。活動主題為「藍綠建設－你我共享」，透過主題導賞、展板、模型展覽和攤位遊戲，介紹本署在防洪、污水處理和應對氣候變化方面的工作。

DSD Open Day 2016

DSD Open Day was held at the Shatin Sewage Treatment Works on 15 and 16 October 2016. Under the theme "Blue-Green Infrastructure for You and Me", the event presented DSD's work on flood prevention, sewage treatment and combating climate change through guided tours, display panels, model exhibitions and game booths.

本署管理層主持開幕典禮
DSD management officiated at the opening ceremony

本署首次舉辦了藍綠小先鋒訓練計劃，招募了逾200位中小學生參加。相片中的藍綠小先鋒於開放日向市民介紹本署的工作

More than 200 primary and secondary school students participated in DSD's first ever Blue-Green Ambassadors Training Programme. Pictured here, the Blue-Green Ambassadors introduced DSD's work to the public on the open day.

當日最受歡迎的導賞團，由本署同事帶領及講解，讓市民認識污水處理設施的運作

The guided tour was most popular with visitors. Led by DSD colleagues who provided commentaries, the public gained knowledge about the operation of sewage treatment facilities.

開放日節目豐富兼具教育意義，吸引了約18,000人次參與

The wide range of entertaining and educational programmes attracted more than 18,000 visitors on the open day.

渠務署工作影子計劃

2016年12月30日，本署舉辦第四次渠務署工作影子計劃，再次與香港基督教服務處－觀塘樂Teen會合作，為超過20位來自觀塘區的中四至中六學生，安排為期一天的工作。活動旨在協助年青人建立人生價值觀和提早規劃未來。 同學們被派往不同分部，在

Job Shadowing

We continued our joint effort with Hong Kong Christian Service - Kwun Tong Happy Teens Club and rolled out the 4th DSD Job Shadowing Activity on 30 December 2016. Over 20 Form 4 to Form 6 secondary students from Kwun Tong District took on one-day "jobs" under the scheme. The activity aims to assist young people in establishing life values and encouraging them to make an early start in future planning. The students were assigned to "work" in different divisions under the guidance of 10 workplace mentors,

10位工作導師指導下工作，例如了解本署活化河道的工程和協助化驗工作等。同學們在活動期間積極參與工作導師所給予的職務，並透過導師的分享加深了解自己的性格特質。

gaining knowledge about DSD's river revitalisation projects and assisting laboratory work. Everyone carried out the "duties" assigned by the workplace mentors earnestly. This interaction with the mentors was a great opportunity for self-discovery.

本署助理署長簡炎輝先生(左四)頒發紀念狀予工作導師和同學
Workplace mentors and students awarded certificates of appreciation by Mr. KAN Yim-fai (forth left), Assistant Director/Operations & Maintenance

工作導師和同學投入參與破冰遊戲
Mentors and students fully engaged in the ice breaking game

參觀及外展教育活動
Educational Visits and Outreach

團體參觀

本署每年均接待不同社區團體和學校參觀轄下設施，向公眾推廣部門的工作。於2016年，我們共接待逾8,000名來自中小學、內地及海外等不同機構的訪客。

Group Visits

Every year, DSD promotes our departmental work by hosting visits for different community groups and schools at our facilities. In 2016, we received over 8,000 visitors from primary and secondary schools as well as Mainland and overseas organisations.

大學生參觀沙田污水處理廠
University students visiting Shatin STW

小學生參觀荔枝角雨水排放隧道
Primary school students visiting Lai Chi Kok Drainage Tunnel

中學生參觀元朗排水繞道人工濕地
Secondary school students visiting Yuen Long Bypass Floodway Engineered Wetland

外展教育活動

我們定期推行外展教育計劃，到訪學校向師生講解本署的工作和工程項目。於2016年，我們到訪了13所學校，向師生簡介本署的防洪和污水處理工作。

Educational Outreach

We conduct educational outreach programmes regularly, visiting schools and introducing the Department's work and projects to students and teachers. In 2016, we visited 13 schools and gave them an overview on DSD's work in flood prevention and sewage treatment.

於本地學校進行外展教育計劃
Educational outreach programme at local schools

持份者訪問
Stakeholder Interview

陳永勤教授
Professor CHEN Yongqin, David

香港中文大學地理與資源管理學系
Department of Geography and Resource Management, The Chinese University of Hong Kong

教育界意見 Academia's Note

我們主要在教育及研究方面與渠務署合作。我們會帶領學生參觀渠務署的污水處理及防洪設施，並會參與有關城市水資源及河流管理的研究等。多年來，渠務署除了改善維港水質外，亦一直竭力綠化啟德河及翠屏河等現有河道，透過改善生態和景觀，優化毗鄰環境。此外，我們亦欣賞渠務署不遺餘力地舉辦多項社區外展活動，包括渠務科研茶聚及中小學外展教育計劃，透過交流最新的污水處理科技及其應用，加深渠務署和學界對彼此工作的認識。

我們期望渠務署舉辦更多標誌性的社區活動，例如以專題展覽或宣傳片形式介紹有關防洪或污水處理的工作及渠務署的最新動向，讓市民了解香港現時既安全且可靠的公共基礎設施，以提高市民對親水的信心和興趣，推廣香港的親水文化。

We collaborate with DSD mainly in the areas of education and research. We have arranged visits to DSD sewage treatment plant and flood prevention facilities for our students, and participated in research studies on urban water resources and river management. Over the years, DSD has spared no effort to improve water quality of Victoria Harbour and strove to enrich the green landscape of existing waterways such as Kai Tak River and Tsui Ping River. By revitalising the ecological environment and scenery, DSD makes the surrounding areas more pleasant and vibrant. DSD is commended for its dedication to community outreach such as, R&D Tea Gatherings and the School Outreach Education Programmes. These platforms help promote the exchange of latest sewage treatment technologies and their applications, enabling mutual understanding of daily work between DSD and the education sector.

We anticipate DSD to organise more iconic community activities, such as themed exhibitions and Announcements in the Public Interest, to promulgate the latest news about flood prevention, sewage treatment and the department. With better knowledge of the safe and reliable public infrastructure that Hong Kong has in place, the public will have greater confidence and interest in water-friendly activities. It will foster a water-friendly culture in Hong Kong.

渠務署的話 DSD's Note

渠務署一向重視持份者對本署工作的意見，並會在檢討及籌劃新發展時，充分考慮這些寶貴意見及建議。日後，我們會舉辦更多社區教育活動及計劃，進一步推廣親水文化，加深公眾對香港水資源可持續發展的認識。

DSD highly values stakeholders' comments on our work, which will be fully considered when we review our performance and make future development plans. In the future, we will organise more community educational activities and programmes to push forward the water-friendly culture and raise public awareness of the sustainable development of water resources in Hong Kong.

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

工作以外，本署同事亦積極利用公餘時間，參與各類義工服務及慈善活動，盡一己之力服務社會。年內，本署義工隊共參與20項義務工作，總服務時數逾1,000小時。

At their leisure, DSD colleagues are always keen to take part in volunteer service and charity activities for the benefit of our community. During the year, DSD Volunteer Team participated in 20 volunteer activities, clocking 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

2016年，本署義工隊繼續與樂天倫飯堂合辦「愛 • 與孩同行」活動，透過為基層兒童安排不同的探訪及參觀活動，一起探索成長。2016年5月，我們特意安排了小朋友參觀中文大學賽馬會氣候變化博物館，分享本署在應對氣候變化的工作。於2016年10月，我們亦邀請了小朋友及其家長一起參與本署於沙田污水處理廠所舉辦的渠務署開放日，親身經歷「污水處理之旅」的導賞團，多角度了解我們在污水處理和防洪方面的工作。

In 2016, our Volunteer Team continued to join hands with Joyful Family Canteen to launch "Lovely Trip with the Kids". A series of visits and outings were arranged for children from low-income families. We travelled, explored and grew together with the participants. In May 2016, we arranged a visit to the Chinese University of Hong Kong's Jockey Club Museum of Climate Change, taking the chance to learn our efforts to combat climate change. In October 2016, we invited the children and their families to our DSD Open Day at Shatin STW. Through participating in the "Sewage Treatment Journey" guided tour and other interactive booths, they learned about various aspects of our sewage treatment and flood prevention initiatives.

沙田污水處理廠「污水處理之旅」導賞團
"Sewage Treatment Journey" guided tour at Shatin STW

小朋友參觀中文大學賽馬會氣候變化博物館
Kids on their visit to the Chinese University of Hong Kong's Jockey Club Museum of Climate Change

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

一如以往，本署義工隊於每年7月至12月均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，閒聊生活點滴，互相關懷，義工與長者漸漸成為「老友記」。我們更特意在12月的聖誕聯歡會送上手工藝品，以表祝福。

於2016年9月及12月，本署義工隊亦參與了探訪獨居長者的活動，藉此表達對獨居長者的一點關懷。2017年1月，我們亦參加了家居清潔迎新春大行動，為旺角區獨居長者家庭進行家居清潔及送上關懷。

2017年3月，本署職員康樂會與義工隊聯同歷耆者舉辦模擬高齡衣體驗活動，透過穿上高齡衣，讓同事體驗長者的身體限制，令他們將來在工作上與長者接觸，或參與長者義工服務時，更能了解長者的需要，一起建設年齡共融的長者友善社區。

Similar to previous years, the DSD Volunteer Team made monthly visits to the Helping Hand Lai Yiu Bradbury Care Home between July and December. Running handicraft workshops, chatting and showing concern for each other during these monthly meetings, the volunteers and the elderly residents have developed fond relationships. In the December Christmas gathering, we presented them with handicrafts made by our volunteers as a well-wishing gesture.

In September and December 2016, our Volunteer Team visited elderly who lived alone to give them holiday cheer and warmth. We also provided spring cleaning services in January 2017 for elderly residents living alone in Mong Kok to celebrate the upcoming Lunar New Year.

In March 2017, the DSD Staff Club and Volunteer Team invited Eldpathy to arrange an Elderly Simulation Programme. Dressed in specially designed suits that restricted vision and movability, participants experienced the body constraint that an elderly person may have. This exercise made colleagues more aware of elderlys physical constraints so they would be more attentive to their needs when interacting with them at work or providing elderly volunteer service. Hand in hand, we can build an age-friendly community and encourage inter-generational harmony.

本署義工隊探訪麗瑤白普理護老院
The DSD Volunteer Team visiting the Helping Hand Lai Yiu Bradbury Care Home

「愛 • 希望」- 香港紅十字會捐血活動
"Love and Hope": Blood Donation Session

2016年12月，本署職員康樂會與義工隊聯合舉辦捐血活動，為有需要人士延續生命，點燃希望。

In December 2016, our Staff Club and Volunteer Team co-organised a blood donation session. Precious blood was collected to save lives and bring hope.

本署同事踴躍參與捐血活動
Many colleagues support blood donation

慈善籌款活動
Fundraising Activities

此外，我們於年內亦參與了多項社會慈善籌款活動，包括：

We also joined many community fundraising events throughout the year, including:

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；及
"Skip Lunch Day", "Love Teeth Day" and "Dress Casual Day" to raise funds for services delivered by various social welfare agencies of the Community Chest; and

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。
Fundraisers of different charity groups to help the disadvantaged, including World Vision's "Skip-A-Meal" and "Oxfam Rice Event" by Oxfam Hong Kong.

完成目標
Meeting the Targets

本章節列出了我們於2016-17年度的可持續發展表現，以及2017-18年度訂定的新目標。我們把目標與成果列入環保事務、社會事務及常規服務三個範疇，從而更進一步檢討及改善渠務署的表現。

In this chapter, we summarised our sustainability performance in 2016-17 and targets set for 2017-18. We have categorised our targets and achievement in the area of environmental issues, social issues and routine services in order to continuously review and improve our sustainability performance.

1. 渠務署渠道修復工程
   DSD's Pipe Rehabilitation Works
2. 林村河
   Lam Tsuen River
3. 維多利亞港
   Victoria Habour
4. 小蠔灣污水處理廠
   Siu Ho Wan Sewage Treatment Works

環保事務
On Environmental Issues

2016-17 年度環保事務目標 Environmental Targets 2016-17	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 2016-17 年度起，在 3 年內採用 3 項嶄新的低污染技術或預防污染措施 Adopt 3 new clean technologies or pollution prevention measures within a 3-year period starting from 2016-17	小蠔灣污水處理廠採用光伏電池板技術的太陽能發電場已於 2016 年 12 月投入運作，我們會繼續於未來兩年在我們的營運中引入兩項新的低污染技術。 A solar farm based on photovoltaic cell technology was commissioned in December 2016 at Siu Ho Wan STW. We expect to adopt 2 new clean technologies in our operation in the coming 2 years.
開展 3 項關於低污染技術的研發項目 Conduct 3 R&D items for clean technologies	達標。我們已開展 3 項研發項目，包括採用生態植被概念的渠道設計、以亞硝酸提升生物氣產量和生物氣燃料電池的可行性研究。 Target met. We have commissioned research projects on low impact drainage design based on bioswale/raingarden concept, enhancement of biogas production from sludge with nitrous acid application and applicability of biogas-fuelled fuel cell.
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% 符合法定的環境影響評估程序 Achieve 100% compliance with the statutory EIA process	達致 100% 符合法定的環境影響評估程序。 100% compliance with the statutory EIA process achieved.
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 6 times each year to consider sustainability matters	達標。於 2016-17 年度，我們舉辦了超過 6 次會議、論壇及社區活動。 Target met. In 2016-17, more than 6 meetings / forums / community activities were conducted.
再造水或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	92% 達標。年內，我們平均每天使用 1,387 立方米再造水或回用雨水以取代淡水消耗。 Target 92% met. During the year, we used an average of 1,387 cubic metres of reclaimed water or harvested water per day to substitute freshwater consumption.
進行 2 次新的碳審計和 5 次監督碳審計 Conduct 2 new carbon audits and 5 surveillance carbon audits	達標。我們共完成了 2 項新的碳審計和進行了多於 5 項監督碳審計。 Target met. We conducted 2 new carbon audits and more than 5 surveillance carbon audits.

2016-17 年度環保事務目標 **Environmental Targets 2016-17**	成果 **Achievement**
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 of green roof and 150 square metres of vertical greening	達標。共建造了 4,200 平方米綠化天台和 170 平方米垂直綠化。 Target met. We built 4,200 square metres of green roof and 170 square metres of vertical greening.
種植 2,000 棵樹及 60,000 叢灌木 Plant 2,000 trees and 60,000 shrubs	超額完成。種植了 10,000 棵樹及 80,000 叢灌木。 Target met and exceeded. We planted 10,000 trees and 80,000 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 the department**	
達致 100% 遵守環保法例 Achieve 100% compliance under environmental legislation	99.8% 達標。年內有一項測定超過了《水污染管制條例》牌照的排放標準。 Target 99.8% met. There was one exceedance of WPCO licence standard in the year.
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 2015-16 年度減少 1% 的用紙量 Reduce paper consumption by 1% compared to 2015-16	達標。用紙量較 2015-16 年減少了超過 3%。 Target met. Paper consumption was reduced by more than 3% compared to 2015-16.
節約 140 萬度電，即 2006-07 年基準能源消耗量的 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	超額完成。2016-17 年度我們共節省了 154 萬度電。 Target met and exceeded. We saved 1.54 million kilowatt-hoursin 2016-17.
由 2016-17 年度起，在 3 年內將電動車佔有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	進度良好。於 2016-17 年度，電動車的行車里數為整體車輛的行車里數的 11.3%。 The progress was promising. In 2016-17, 11.3% of total mileage of work transport was covered by electric vehicles.

2017-18 年度環保事務目標
Environmental Targets 2017-18

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 2017-18 年度起，在 3 年內採納 3 項嶄新的低污染技術或預防污染措施
Adopt 3 new clean technologies or pollution prevention measures within a 3-year period starting from 2017-18

開展 3 項關於低污染技術的研發項目
Conduct 3 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

達至 100% 符合法定環境影響評估的程序
Achieve 100% compliance with the statutory 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 6 times each year to consider sustainability matters

再造水或回用雨水的使用量達到平均每日 1,500 立方米
Use 1,500 cubic metres of reclaimed water or harvested water per day

進行一項新的碳審計和 6 項監督碳審計
Conduct 1 new and 6 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 cubic metres of green roof and 150 cubic metres of 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 the department

達至 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

較 2016-17 年度減少 0.5% 的用紙量
Reduce paper consumption by 0.5% compared to 2016-17

節省 160 萬度電，即 2006-07 年度基準能源消耗量的 0.64%
Save energy of 1.6 million kilowatt-hours which is equivalent to 0.64% of energy consumption of the base level in 2006-07

由 2016-17 年度起，在 3 年內將電動車佔有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

2016-17 年度社會事務目標 Social Targets 2016-17	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 Maintain 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 3.8 宗工傷意外。 3.8 occupational injuries per 1,000 staff per year were reported in the reporting period.
盡量減低渠務署合約工程的工傷意外率 Minimising the accident rate in DSD's contracts	
渠務署合約工程的工傷意外率應低於每 100,000 工時 0.6 宗職業工傷意外 Maintain less than 0.6 reportable accident per 100,000 man-hours worked in DSD's contracts	報告期內每 100,000 工時有 0.11 宗職業工傷意外。 0.11 reportable accident per 100,000 man-hours worked was reported 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 Organise at least 2 in-house workshops on safety and health	達標。共舉辦了兩次署內職安健工作坊。 Target met. 2 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% 的渠務署合資格新建工程合約及 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」 Achieve at least 80% of DSD's eligible new works contracts and 30% of eligible maintenance term contracts participated in Development Bureau's Considerate Contractors Site Award Scheme (CCSAS)	達標。全部 22 項渠務署合資格新建工程均參加了發展局的「公德地盤嘉許計劃」；而 9 項合資格維修定期工程中，則有 6 項 (67%) 參加了該計劃。 Target met. All of the 22 eligible new works contracts participated in CCSAS while out of the nine eligible maintenance term contracts, six (67%) of them participated in the Scheme.

2017-18 年度的社會事務目標 **Social Targets 2017-18**	指標 **Indicators**
盡量減低渠務署員工的工傷意外率 Minimising accident rate for DSD staff	渠務署員工的工傷意外率每年每 1,000 名員工應少於 10 宗職業工傷意外 Maintain not more than 10 occupational injuries per 1,000 staff per year
盡量減低渠務署合約工程的工傷意外率 Minimising the accident rate in DSD's contracts	渠務署合約工程的工傷意外率應低於每 100,000 工時 0.6 宗職業工傷意外 Maintain less than 0.6 reportable accident per 100,000 man-hours worked in DSD's contracts
舉行內部簡報會，確保專業、技術及工地督導人員、顧問和承建商時刻具有職安健意識 Maintaining safety and health awareness of professional, technical and site supervisory staff, consultants and contractors with in-house briefing	最少舉辦兩次署內職安健工作坊 Organise at least two in-house workshops on safety and health
提高承建商的職安健意識 Promoting the awareness on safety and health amongst contractors	達致最少 80% 的渠務署合資格新建工程合約及 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」 Achieve at least 80% of DSD eligible new works contracts and 30% of eligible maintenance term contracts participated in Development Bureau's Considerate Contractors Site Award Scheme (CCSAS)

常規服務
Our Routine Services

服務 Service	承諾 Pledge	2016-17 年工作目標 Performance Achievement Target 2016-17	成果 Achievement
清理堵塞污水管 / 排水渠 Clearance of blocked sewers/ drains	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	99%	99.88%
	於翌日正午前回應在下午一時後接獲的的投訴 Respond before noon of next day for complaints received after 1 pm	99%	99.75%
	市民對清理工作的滿意程度 [1] Customers satisfy with the clearing work[1]	95%	98.51%
公共渠務 / 污水系統接駁渠管的技術審核 Technical audit for connection to the public drainage/ sewerage systems	於接獲 HBP1 表格後 9 個工作天內回應 Reply to the applicant within nine working days upon receipt of HBP1 application	99%	99.31%
回應關於污水處理服務帳項的書面查詢 Response to written enquiries on sewage services accounts	於兩個工作天內作出初步回應 Initial respond within 2 working days	100%	100%
	於一個月內詳細回覆 Full reply within a month	98%	99.36%
回應投訴 Response to complaints	於 10 天內回應 Respond within ten calendar days	98%	98.85%
提供渠務系統紀錄圖則 Provision of drainage record plans	於即日安排查閱 Allow inspection of drainage record plans within the same day	95%	100%
	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%	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	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%	99.74%

於2017-18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 2017-18 to monitor and ensure our routine service quality.

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.

核實聲明

HKQAA
HONG KONG QUALITY ASSURANCE AGENCY
香港品質保證局

核實範圍

香港品質保證局已對渠務署2016-2017年可持續發展報告(以下簡稱「報告」)的內容進行獨立驗證，報告根據全球報告倡議組織(GRI)《可持續發展報告標準》(GRI標準)的核心選項進行匯報。核實範圍包括對渠務署在報告期內(即2016年4月1日至2017 年3月31日)，發表有關可持續發展表現的數據和資料進行核對。這報告陳述了其對可持續發展的承諾，努力和表現。

保證程度和核實方法

核實方法是參照國際準則，有關收集核實證據的幅度，是參考國際準則所訂定進行合理保證的原則而制定，以確保能擬定核實結論。核實的內容是按照GRI標準的「核心選項」而定。

核實過程確認報告的內容披露和表達方式，並且對相關工作進行核對，包括有關編制報告和管理流程的資料、與持份者溝通的方法及結果、重要的可持續發展範疇、有關可持續發展表現數據的計算方法、記錄和滙報程序與及收集，整理和匯總可持續發展表現數據的流程和撿查程序。核實組選取報告內具有代表性的數據和資料進行查核，以確保其計算方法、記錄，整理和報告過程為合理可信。

獨立性

渠務署負責收集和準備所有在報告內陳述的資料。香港品質保證局不涉及收集和計算此報告的數據或參與編撰此報告。香港品質保證局的核實過程是絕對獨立於渠務署。

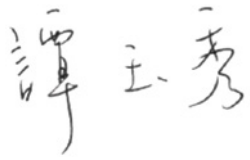
結論

香港品質保證局基於核實的結果總結：

- 報告適切地涵蓋GRI標準中載述的實質議題及其可持續發展表現；及
- 報告平衡地，清晰地，具比較性和及時地將渠務署的可持續發展表現闡述；及
- 報告內的數據和資料可靠和完整。

渠務署不斷積極地與其持份者溝通，採納意見並且及時地回應，加強報告的透明度讓持份者清晰了解渠務署在重要可持續發展事宜的表現。此報告能實質地反映渠務署的具體可持續發展範疇和其重要性。

香港品質保證局



譚玉秀
企業業務總監

2018年1月

VERIFICATION STATEMENT

HKQAA
HONG KONG QUALITY ASSURANCE AGENCY
香 港 品 質 保 證 局

Scope of Verification

Hong Kong Quality Assurance Agency (HKQAA) has been engaged by Drainage Services Department (DSD) to undertake an independent verification for its Sustainability Report 2016-2017 (Refer to as "The Report") which was prepared in accordance with the Core Option of the Global Reporting Initiative (GRI) Sustainability Reporting Standards ("the GRI Standards"). The scope of HKQAA's verification covers the data and information associating with DSD's sustainability performance for the period 1st April 2016 to 31st March 2017. The Report states DSD's commitments, efforts and progress of performance towards sustainability.

Level of Assurance and Methodology

The process applied in this verification was based on international standard. Our evidence gathering process was designed to obtain a reasonable level of assurance as set out in the standard for the purpose of devising the verification conclusion and the extent of this verification process undertaken was provided for the core aspects of the GRI Standards.

In order to understand the process that DSD adopted to ascertain the key sustainability issues and impacts, the Report compilation process was discussed including stakeholder engagement and materiality assessment processes. Also, system and process for collecting, collating and reporting sustainability performance data were verified. Our verification procedure performed covered 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 also thoroughly examined during the verification process.

Independence

DSD is responsible for the collection and presentation of the information presented. HKQAA does not involve in calculating, compiling, or development of the Report. Our verification activities are independent from DSD.

Conclusion

On the basis of our verification results and in accordance with the verification procedures undertaken, it is the opinion of the HKQAA's verification team that:

- The material topics and its sustainability performance specified in the GRI Standards have been adequately addressed in the Report; and
- The Report illustrates DSD's sustainability performance on the significant aspects in a balance, comparable, clear and timely manner; and
- The data and information stated in the Report are reliable and complete.

DSD has been engaging with its stakeholders continuously and being very responsive to the feedback gathered from the stakeholder engagement process by improving its disclosure regarding the material issues that are of importance to the department and of high level interest by stakeholders. The Report reflects appropriately DSD's sustainability context and materiality.

Signed on behalf of Hong Kong Quality Assurance Agency

Jorine Tam
Director, Corporate Business

January 2018

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	2012-13	2013-14	2014-15	2015-16	2016-17
渠務署 By DSD (302-1)						
電力[1] Electricity[1]	千兆焦耳（百萬千瓦時） GJ (Million kWh)	864,000 (240)	890,244 (247)	947,646 (263)	988,740 (275)	**984,800** **(274)**
汽油 Gasoline						
徵用車隊 Pool cars	千兆焦耳（公升） GJ (Litre)	1,046.19 (31,862)	877.48 (26,724)	893.14 (27,048)	824.63 (24,974)	**627.25** **(18,995)**
部門車隊 AM cars	千兆焦耳（公升） GJ (Litre)	4,315.08 (130,675)	4,103.83 (124,278)	3,799.29 (115,060)	3,496.86 (105,901)	**3,173.29** **(96,097)**
生物氣[2] Biogas[2]	百萬立方米 million m^3	10	9	10	10	**7**
處理每單位體積污水的平均用電量 Average electricity consumption per unit volume of sewage treated (302-3)	千瓦時 kWh	0.2388	0.2409	0.2591	0.2716	**0.2886**
渠務署的承建商 By DSD's contractors (302-2)						
電力 Electricity	千兆焦耳（百萬千瓦時） GJ (Million kWh)	沒有相關數據 Figures not available	137,952 (38.32)	23,328 (6.48)	97,798 (27.17)	**56,616** **(15.73)**
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)	**4,473** **(135,461)**
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)	**12,525** **(343,571)**

溫室氣體排放量[3] Greenhouse Gas (GHG) Emissions[3]

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
渠務署 By DSD						
購買電力(範圍2) Electricity purchased (Scope 2)(305-2)	二氧化碳，以公噸計算 Tonnes CO_2e	168,000	173,103	184,265	187,611	**191,492**
燃燒汽油(範圍1) Gasoline combustion (Scope 1) (305-1)						
徵用車隊 Pool cars	二氧化碳，以公噸計算 Tonnes CO_2e	75.19	63.07	63.83	65.90	**44.83**
部門車隊 AM cars	二氧化碳，以公噸計算 Tonnes CO_2e	308.39	336.53	271.54	249.93	**226.79**
渠務署的承建商 By DSD's contractors (305-3)						
購買電力(範圍3) Electricity purchased (Scope 3)	二氧化碳，以公噸計算 Tonnes CO_2e	沒有相關數據 Figures not available	26,824	4,536	19,016	**11,009**
燃燒燃料(範圍3)[4] Fuel consumption (Scope 3)[4]	二氧化碳，以公噸計算 Tonnes CO_2e	沒有相關數據 Figures not available	7,865	2,824	3,561	**1,218**

1 總耗電量包括稅務大樓、九龍政府合署及西區裁判法院的辦公室，及本署轄下防洪和污水處理設施(包括污水處理廠、污水泵房及雨水泵房)。
The total electricity consumption includes the office at Revenue Tower, Kowloon Government Offices and Western Magistracy, and DSD's flood prevention and sewage treatment facilities (including sewage treatment works, sewage pumping stations and stormwater pumping stations).

耗水量 Water Consumption

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
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 (303-1)	立方米 m^3	2,078,729	1,709,925	2,085,560	2,050,936	**2,433,500**
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	1,194	1,151	1,565	1,512	**1,332**
再造水佔用水量百分比 Percentage of water reclaimed (303-3)	%	0.06	0.07	0.08	0.07	**0.05**

污水處理 Sewage Treatment

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
經處理的污水量 Volume of sewage treated (306-1)	百萬立方米 Million m^3	1,001	1,021	1,011	1,007	**1,015**
從污水移除的生化需氧量 Biochemical oxygen demand (BOD) removed from sewage	公噸 Tonnes	100,677	109,579	115,681	124,569	**151,406**
從污水移除的懸浮固體 (SS) 量 Suspended solids (SS) removed from sewage		146,208	169,792	207,738	242,933	**277,232**
從污水移除的氮量 Nitrogen removed from sewage		5,310	6,067	6,820	6,551	**6,683**
從污水移除的脱水污泥量 Dewatered sludge removed from sewage		300,965	298,093	355,220	392,396	**410,526**
從污水移除的隔離物量 Screenings removed from sewage		13,334	13,663	15,817	15,172	**14,823**
從污水移除的砂礫量 Grits removed from sewage		4,741	4,903	5,429	6,631	**6,513**

廢物管理 Waste Management (306-2)

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
建築及拆卸廢料 Construction & demolition materials						
運往堆填區的建築及拆卸廢物 [5] C&D waste disposed of to landfills[5]	10^3 公斤 10^3 kg	8,525	6,093	6,420	6,998	**5,801**
運往公眾堆填區的建築及拆卸廢物 [5] C&D waste disposed of to public fill areas[5]	10^3 公斤 10^3 kg	765,105	584,018	238,662	235,735	**170,162**
可循環再造廢料收集量 Recyclable waste collected						
廢紙 [6] Waste paper[6]	公斤 kg	11,983	13,284	28,918	19,360	**20,587**
鋁罐 [7] Aluminium cans[7]	公斤 kg	14.15	14.76	30.70	19.73	**29.51**
膠樽 [7] Plastic bottles[7]	公斤 kg	29.92	27.78	43.70	20.71	**18.76**

2 *由污水處理廠產生。*
Generated from sewage treatment works.

3 *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.

4 *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.

5 *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.

6 *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.

7 *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 (301-1)

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
渠務署 By DSD						
紙張總用量 Total paper consumption	令 Reams	11,054	10,520	10,012	9,608	**9,285**
A4 紙張用量 A4 paper	令 Reams	10,696	10,080	9,452	9,357	**8,992**
A3 紙張用量 A3 paper	令 Reams	358	440	470	251	**293**
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)	11,054 (100%)	10,520 (100%)	10,012 (100%)	9,608 (100%)	**9,285 (100%)**
每名員工紙張用量（以職員編制計算） Paper consumed per staff (By establishment)	令 Reams	6.0	5.6	5.3	5.0	**4.8**
渠務署的承建商 By DSD's contractors						
鋼筋 Rebar	公噸 Tonnes	沒有 相關數據 Figures not available			7,165	**10,643**
鋼 Steel	公噸 Tonnes				3,171	**3,402**
磚塊 Bricks	立方米 m^3				30	**5,817**
水泥 Cement	公噸 Tonnes				2,406	**2,248**
沙漿 Cement Mortar	立方米 m^3				263	**640**
混凝土 Concrete	立方米 m^3				50,616	**73,175**
沙 Sand	公噸 Tonnes				12,586	**24,117**
石料 Stones	公噸 Tonnes				9,617	**31,898**
辦公室用紙 Office paper	公噸 Tonnes				27	**40**

綠化 Greening

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
總種植樹木數量 Trees Planted	數目 No.	1,996	2,169	570	2,300	**10,000**
增設的綠化天臺面積 Area of Green Roof Added	平方米 m^2	3,200	4,902	6,051	4,015	**4,200**
生物氣發電量 Equivalent Electricity Generated from Biogas	百萬度電 Million kWh	30	27	28	32	**21**

社會工作表現 Social Performance

員工 Staff

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
職員編制 Staff Establishment (102-7)	人數 No.	1,856	1,862	1,883	1,914	**1,937**
首長級人員 Directorate	人數 No.	18	18	18	18	**18**
專業人員 Professional	人數 No.	292	292	306	310	**310**
技術人員及工地督導人員 Technical & Site Supervisory	人數 No.	820	827	838	865	**884**
一般職系人員 General & Common Grades	人數 No.	525	526	524	526	**531**
第一標準薪級人員 Model Scale I	人數 No.	201	199	197	195	**194**
培訓 Training						
培訓課程 [8] Training courses[8]	數量 No.	278	584	624	654	**674**[9]
受訓員工 Trainees	人數 No.	9,848	6,574	7,159	8,019	**9,042**
員工培訓時數 Training hours received	小時 Hours	52,597	54,517	57,600	58,520	**57,737**
員工平均培訓時數 [10] Average Training Hours per Staff[10]	小時 Hours	28.3	31.6	31.8	33.0	**33.4**
培訓總開支 [8] Total expenditure on training[8]	港元 HK$	4,756,800	3,856,237	4,201,000	3,585,011	**3,046,283**[11]
受傷 Injury (403-2)						
渠務署員工受傷個案 [12] Staff injury cases[12]	數量 No.	12	10	11	13	**7**
員工因工傷放取病假 No. of sick leave for officers injured on duty	日數 Days	1,237	603	914.5	870.5	**800.5**[13]

8 *數字包括內部和外界座談會/工作坊/培訓課程/參觀 。*
The number includes internal and external seminars/ workshops/ training courses/ visits.

9 *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。*
The number includes training courses held by CSTDI and staff-initiated external courses.

10 *以職員實際人數計算。*
Based on the staff strength.

11 *數字只包括本地培訓。*
It includes local training only.

12 *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.

13 *數字包括在2015-16年度批出，但在2016-17年度實現的病假日數。*
The number includes sick leave days granted in 2015-16 but enjoyed in 2016-17.

2016-17年度職員編制 Staff Breakdown in 2016-17

	單位 Unit	以實際人數計算 By Strength
員工人數 No. of Staff (102-8)	人數 No.	1,729
以職位分類 By Post		
首長級人員 Directorate	%	1.0
專業人員 Professional	%	16.8
技術人員及工地督導人員 Technical & Site Supervisory	%	48.3
一般職系人員 General & Common Grades	%	26.4
第一標準薪級人員 Model Scale I	%	7.5
以僱用類型分類 By Employment Type (102-8)		
全職 Full-time	%	100
兼職 Part-time	%	0
以僱用合約分類 By Employment Contract (102-8)		
永久合約（男性） Permanent (Male)	%	82.6
永久合約（女性） Permanent (Female)	%	17.4

	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	%	8.9
30-39 歲 Age 30-39	%	20.5
40-49 歲 Age 40-49	%	24.9
50-59 歲 Age 50-59	%	44.0
60 歲或以上 Age 60 or above	%	1.7
以國籍分類 By Ethnicity		
中國 Local	%	100
外國 Non-local	%	0
以性別分類 By Gender (102-8)		
男性 Male	%	82.6
女性 Female	%	17.4

2016-17年度高級管理人員編制 Senior Management Breakdown in 2016-17

	單位 Unit	以實際人數計算 By Strength
員工人數 No. of Staff	人數 No.	6
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	%	0
50-59 歲 Age 50-59	%	100
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

2016-17年度員工培訓時數[14] Training Hours Breakdown in 2016-17[14]

職位 Type of Staff	員工人數 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 Staff	18	1,737	96.5
專業人員 Professional Grade Staff	290	24,190	83.4
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 Staff	1,421	31,810	22.3

2016-17年度員工流失量[15] Staff Turnover in 2016-17[15]

	單位 Unit	男性 Male	女性 Female
20-29 歲 Age 20-29	人數 No.	2	0
30-39 歲 Age 30-39	人數 No.	2	0
40-49 歲 Age 40-49	人數 No.	2	0
50-59 歲 Age 50-59	人數 No.	9	3
60 歲或以上 Age 60 or above	人數 No.	68	6

2016-17年度新入職員工[16] New Employee Hires in 2016-17[16]

	單位 Unit	男性 Male	女性 Female
新入職員工 No. of New Employee Hires	人數 No.	76	19
以年齡分類 By Age			
20-29 歲 Age 20-29	人數 No.	33	12
30-39 歲 Age 30-39	人數 No.	22	3
40-49 歲 Age 40-49	人數 No.	12	1
50-59 歲 Age 50-59	人數 No.	9	3
60 歲或以上 Age 60 or above	人數 No.	0	0

14 *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.

15 *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.

16 *以上數字包括於2016年4月1日至2017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 2016 to 31 March 2017.

意外率 Accident Rate (403-2)

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
死亡數目 Number of fatalities						
總死亡數目 No. of Fatalities	數量 No.	0	2	0	1	**0**
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.	0	2 (男性) 2 (Male)	0	1 (男性) 1 (Male)	**0**
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 [17] Construction and maintenance works carried out directly by DSD's staff[17]	–	0	0	0	0	**0**
由承辦商負責的建築及維修工程 [17] Construction and maintenance works undertaken by DSD's contractors[17]	–	0	0.012	0	0.011	**0**
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 [17] Construction and maintenance works carried out directly by DSD's staff[17]	數量 No.	12	10	11	13	**7**
由承辦商負責的建築及維修工程 [17] Construction and maintenance works undertaken by DSD's contractors[17]	數量 No.	36	33	18	14	**8**
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 [17] Construction and maintenance works carried out directly by DSD's staff[17]	–	0.18	0.15	0.17	0.20	**0.10**
由承辦商負責的建築及維修工程 [17] Construction and maintenance works undertaken by DSD's contractors[17]	–	0.19	0.21	0.13	0.16	**0.11**

社區工作及慈善捐款 Community Work and Charitable Contributions (203-2)

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
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	589	800	1,000	1,200	**1,115**
已完成的義工服務數目 Number of voluntary projects completed	人數 No.	18	21	25	27	**20**
員工募捐 Employee fundraising	千港元 HK$ thousands	56	67	73	65	**53**

17 我們目前沒有按性別收集相關數據。
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 (201-1)

		單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
經常開支 Recurrent Expenditure	個人薪酬 Personal Emoluments	百萬元 $M	769.3	793.5	839.8	882.3	**917.2**
	部門開支 [18] Departmental Expenses[18]	百萬元 $M	1,141.4	1,178.9	1,286.4	1,487.8	**1,646.9**
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	**1,910.7**	**1,972.4**	**2,126.2**	**2,370.1**	**2,564.1**

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

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
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	11,288	12,311	12,975	13,983	**14,445**
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	49,872	78,749	80,483	72,402	**70,093**
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.	20	20	17	18	**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.	77	87	81	73	**69**

18 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	2012-13	2013-14	2014-15	2015-16	2016-17[19]
排污費收入 Sewage Charge Revenue	百萬元 $M	776	875	955	1,047	**1,161**
工商業污水附加費收入 Trade Effluent Surcharge Revenue	百萬元 $M	207	222	227	222	**232**
其他收入 Other Revenue	百萬元 $M	40	44	45	48	**45**
總收入 Overall Revenue	百萬元 $M	**1,023**	**1,141**	**1,227**	**1,317**	**1,438**
開支（不包括折舊） Expenditure (excluding depreciation)	百萬元 $M	(1,538)	(1,593)	(1,759)	(2,149)	**(2,341)**
折舊 Depreciation	百萬元 $M	(808)	(851)	(840)	(1,043)	**(1,517)**
總開支 Overall Expenditure	百萬元 $M	**(2,346)**	**(2,444)**	**(2,599)**	**(3,192)**	**(3,858)**
（虧損） (Deficit)	百萬元 $M	**(1,323)**	**(1,303)**	**(1,372)**	**(1,875)**	**(2,420)**

污水處理服務收回經營成本比率 Sewage Services Operating Cost Recovery Rate[20]

	單位 Unit	2014-15	2015-16	2016-17[19]
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	1,269	**1,393**
排污費及工商業污水附加費開支[21] Expenditure of Sewage Charge and Trade Effluent Surcharge[21]	百萬元 $M	1,715	2,101	**2,296**
收回經營成本比率 Operating Cost Recovery Rate	%	68.9	60.4	**60.7**

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

	2012-13	2013-14	2014-15	2015-16	2016-17[19]
自來水用户數目（以千計） Number of water accounts (in thousand)	2,820	2,860	2,881	2,907	**2,955**
需繳付排污費的用户數目（以千計） Number of water accounts liable to pay sewage charge (in thousand)	2,610	2,640	2,663	2,689	**2,735**
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)	22	23	24	25	**27**

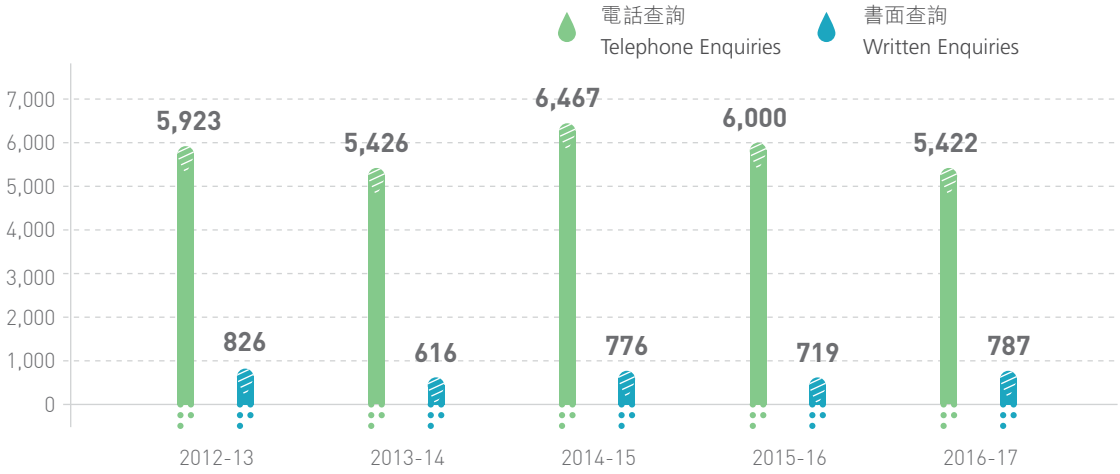
19 *2016-17年度數字只屬暫時性，有待污水處理服務帳目委員會確認。*
The 2016-17 figures are provisional and subject to endorsement by the Sewage Services Accounts Committee.

20 *本表的收入及開支總額均不包括「其他雜項服務」。*
"Miscellaneous services" are excluded from the revenues and expenditure in this table.

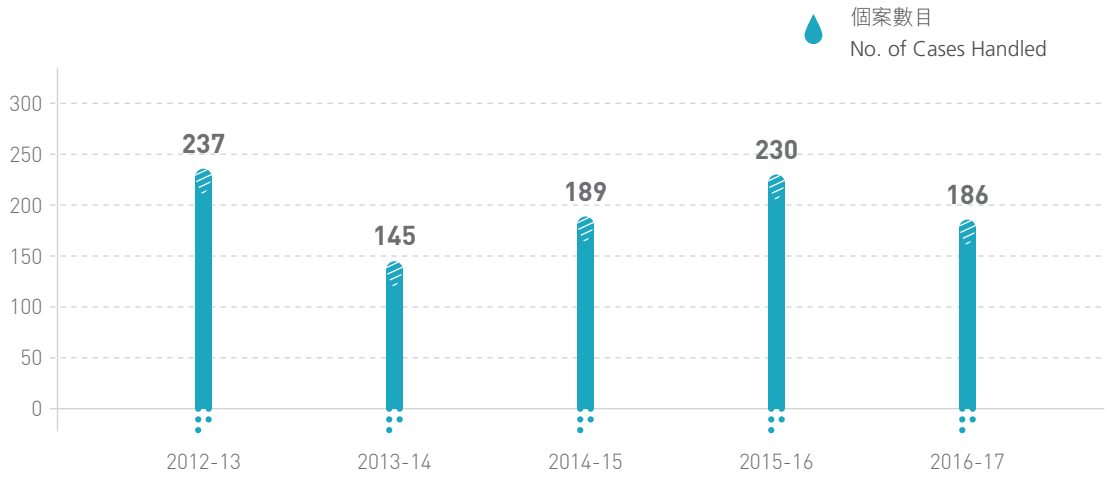
21 *現時，本署並未透過排污費及工商業污水附加費收回折舊的開支。*
Depreciation is not recovered through the Sewage Charge and Trade Effluent Surcharge at present.

常規服務 Routine Services

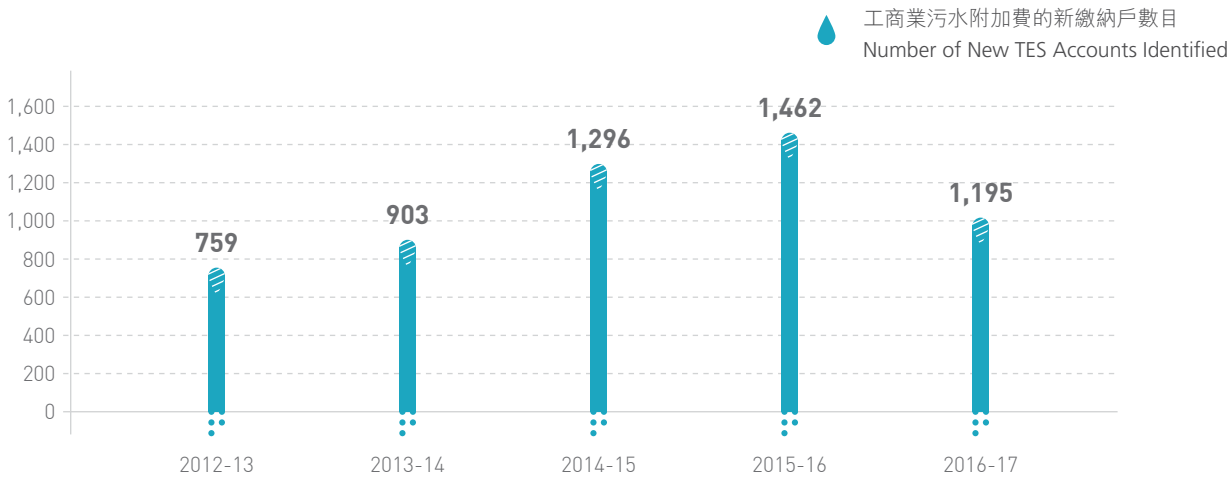
過去5年接到有關污水處理服務的顧客查詢數目
Number of Enquiries about Sewage Services Received for the Past Five Years



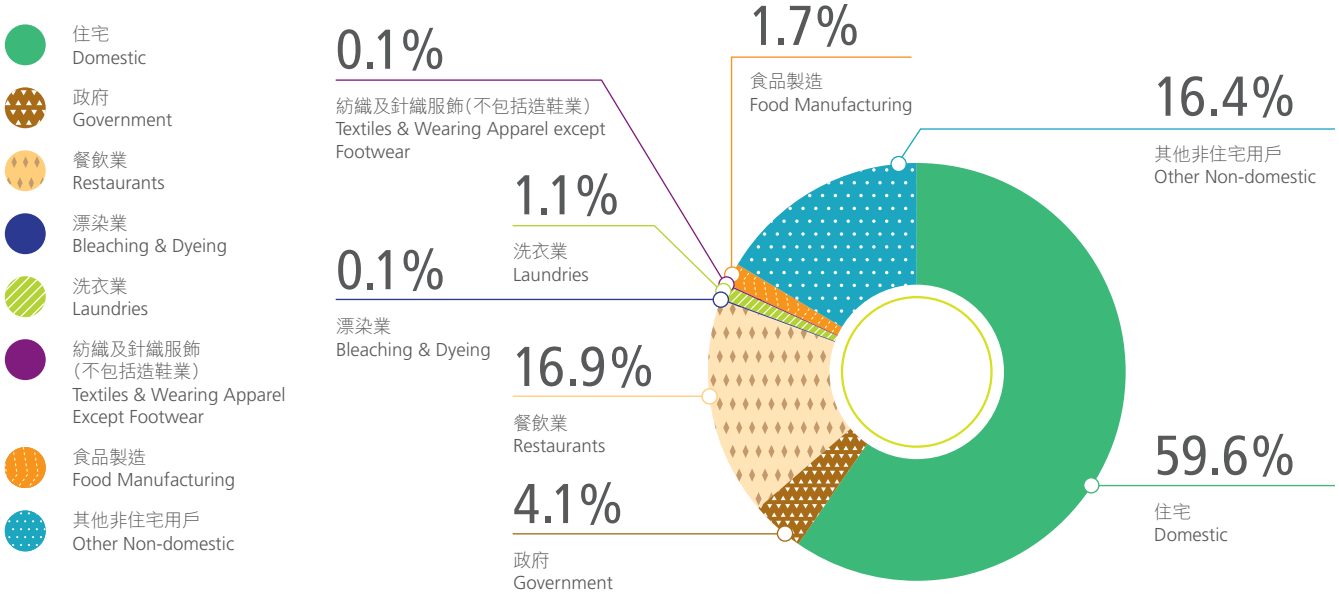
過去5年所處理有關行業重新分類的申請
Business Reclassification Applications Handled for the Past Five Years



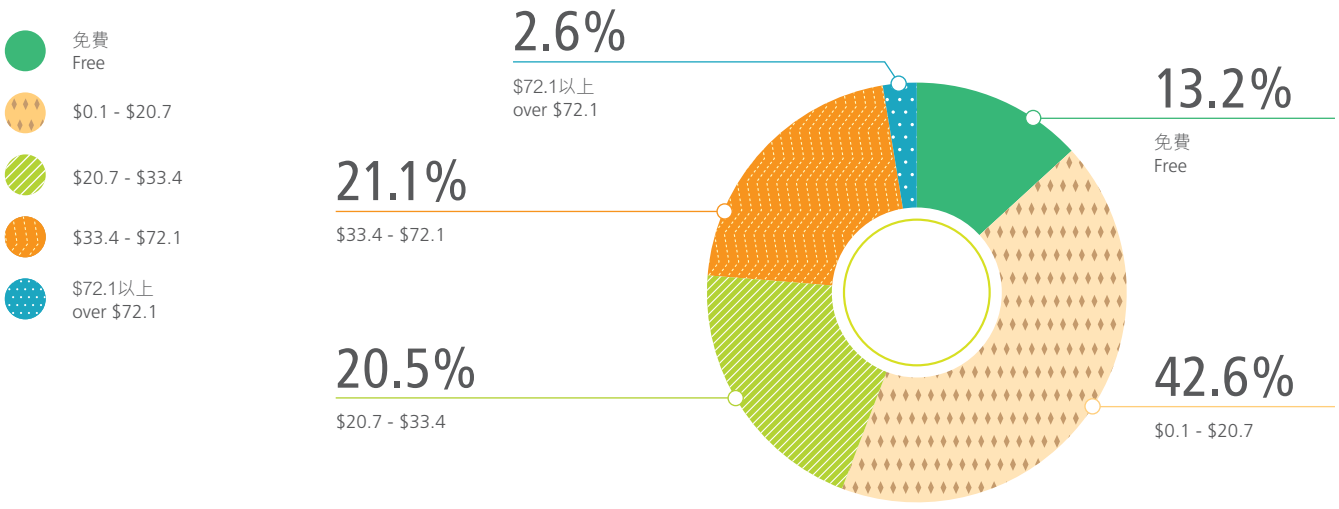
過去5年所發現工商業污水附加費的新繳納戶數目
Number of New TES Accounts Identified for the Past Five Years



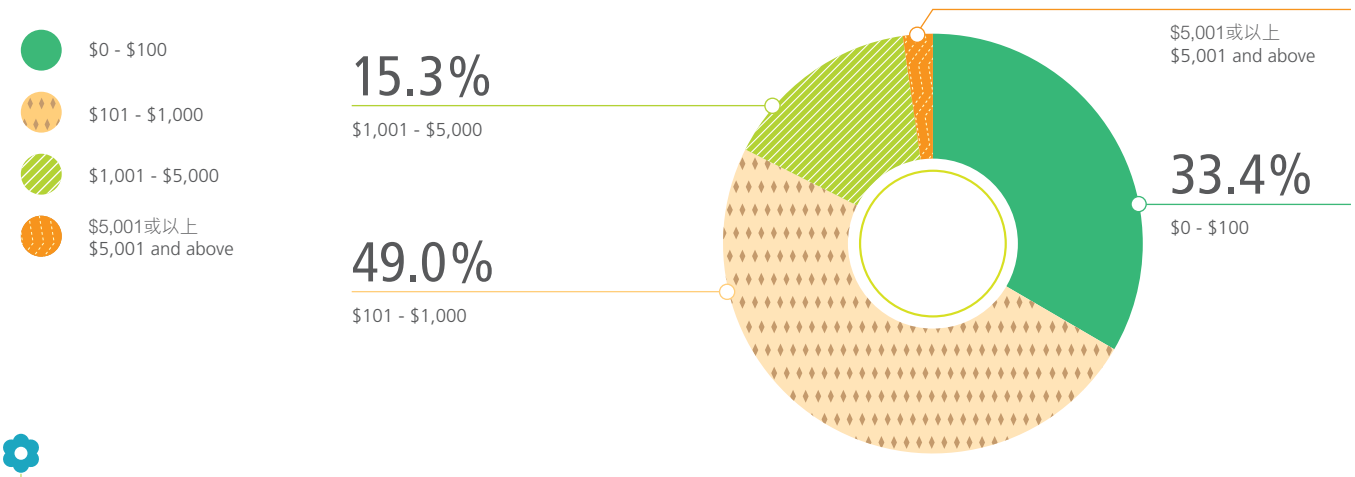
2016-17年度污水排放用戶用水量(555百萬立方米)－用戶情況
Water consumption of Sewered Accounts (555 Million m³) – Customers Pattern in 2016-17



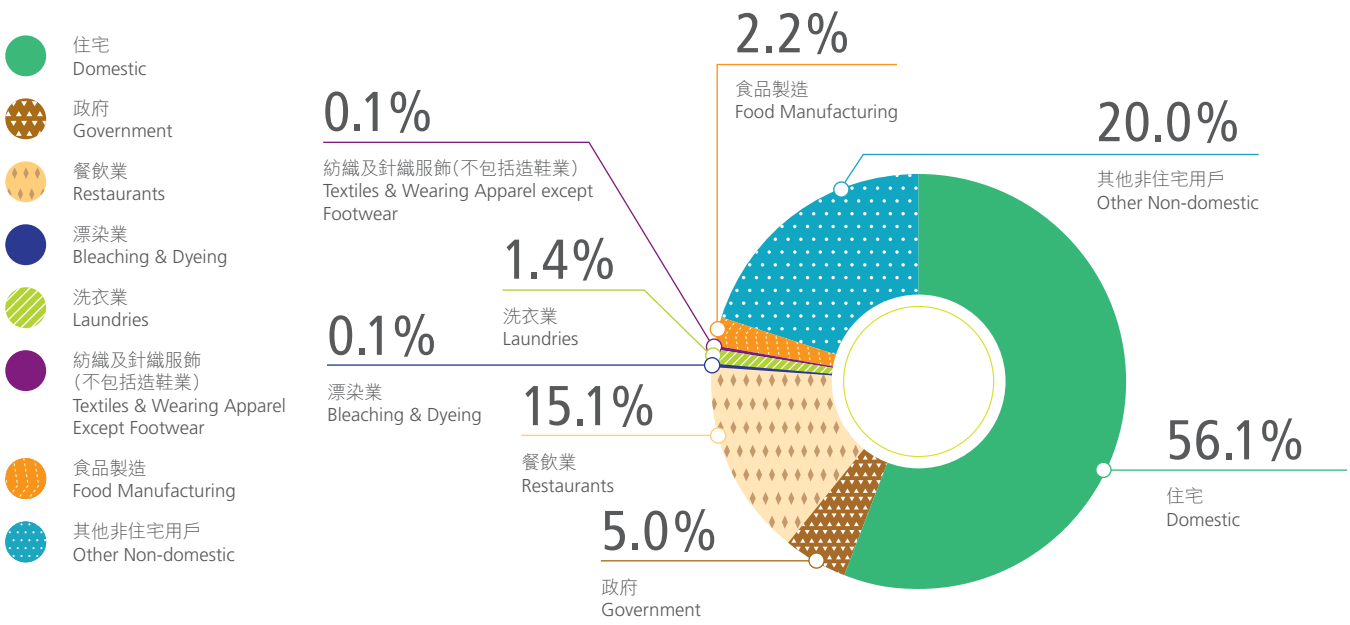
住宅用戶 － 2016-17年度排污費收費情況(港元/月)
Domestic Accounts - Sewage Charge Payment Pattern in 2016-17 (HK$/month)



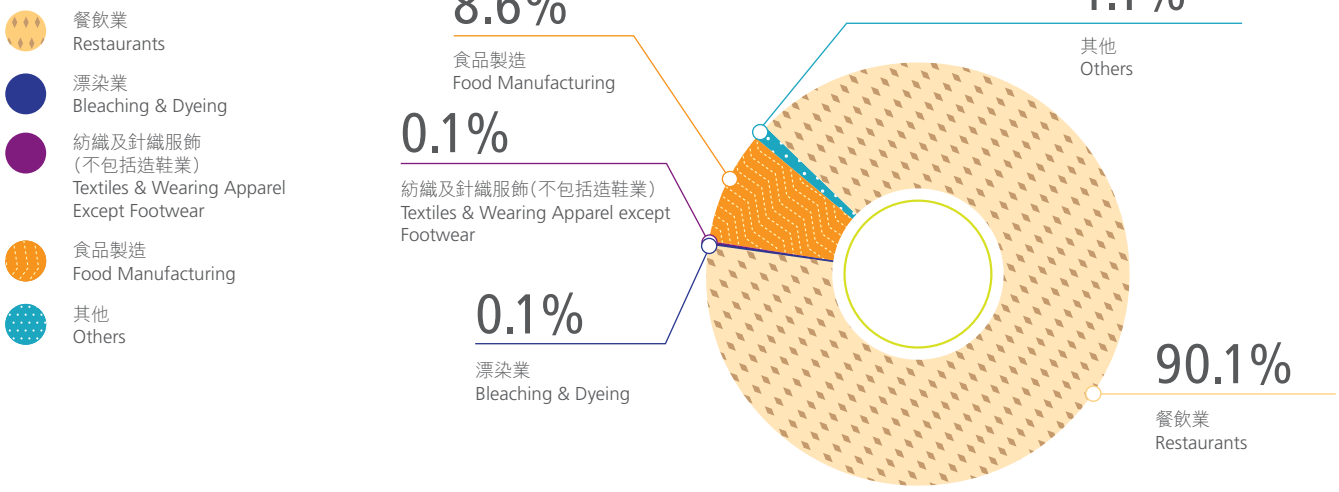
工商業污水附加費用戶 － 2016-17年度工商業污水附加費收費情況(港元/月)
TES Accounts - TES Payment Pattern in 2016-17 (HK$/month)



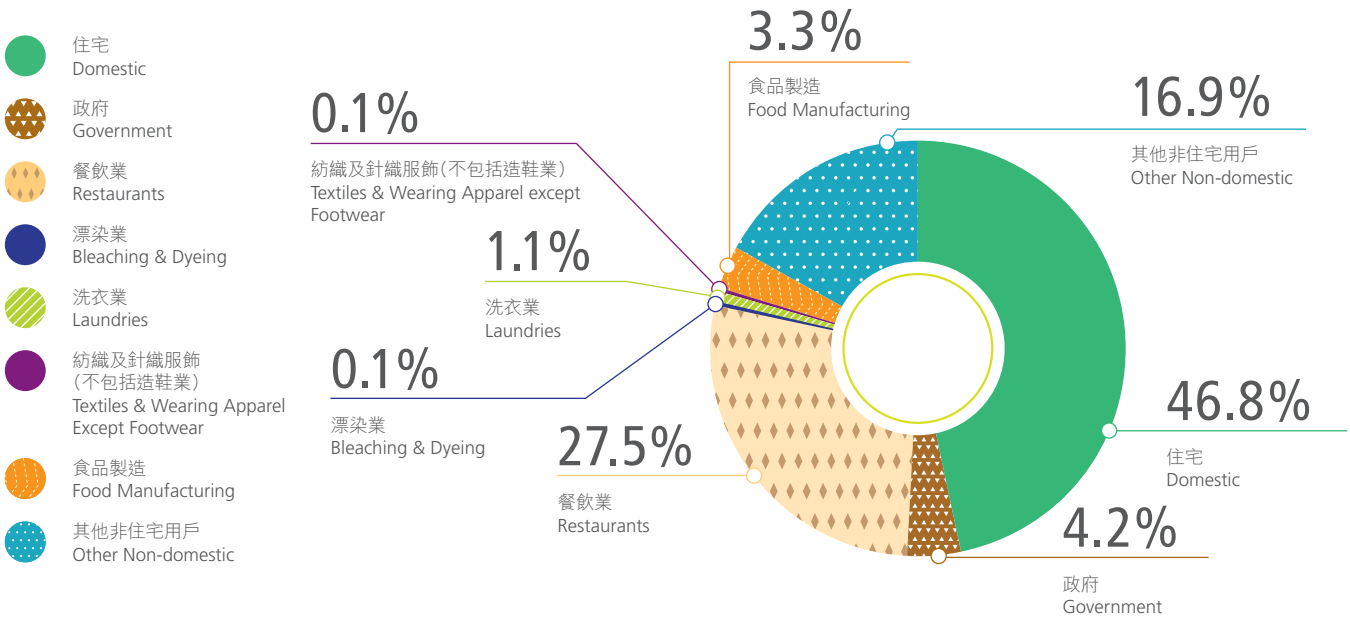
排污費(1,161百萬港元)－2016-17年度用戶種類收費情況[22]
Sewage Charge ($1,161 M) – Revenue Pattern by Type in 2016-17[22]



工商業污水附加費(232百萬港元)－2016-17年度用戶種類收費情況[22]
Trade Effluent Surcharge ($232 M) – Revenue Pattern by Type in 2016-17[22]



排污費及工商業污水附加費(1,393 百萬港元)－2016-17年度用戶種類收費情況[22]
Sewage Charge and Trade Effluent Surcharge ($1,393 M) – Revenue Pattern by Type in 2016-17[22]



其他主要數據 Other Key Statistics

	單位 Unit	2012-13	2013-14	2014-15	2015-16	2016-17
防洪 Flood Prevention						
水浸黑點總數 Total Number of Flooding Blackspots	數目 No.	13	11	10	8	**7**
污水處理 Sewage Treatment						
公共污水收集網絡覆蓋(佔人口百份率)[23] Coverage of public sewerage (population percentage) [23]	–	93.3%	93.4%	93.4%	93.5%	**93.5%**
污水收集網絡總長度 Total length of sewerage network	公里 km	1,683	1,695	1,700	1,700	**1,755**
污水處理設施總數 Total no. of sewage treatment facilities	數目 No.	292	293	297	300	**304**
污水總處理量 Volume of Sewage Treated	百萬立方米 Million m^3	1,001	1,021	1,011	1,007	**1,015**
基本處理 By Preliminary Treatment		306	303	228	138	**45**
一級處理 By Primary Treatment		5	5	5	5	**5**
化學強化一級處理 By Chemically Enhanced Primary Treatment (CEPT)		525	541	606	690	**779**
二級處理 By Secondary Treatment		165	172	172	174	**186**
三級處理 By Tertiary Treatment		0.2	0.15	0.14	0.14	**0.17**

22 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.

23 以有繳付排污費的住宅水務帳戶計算。
Based on the number of domestic water bill accounts with sewage charges levied.

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

Materiality Disclosures Drainage Services Department (HKSARG) Dec 2017 Service

可持續發展報告標準 GRI Standards	一般披露 General Disclosures		參照/直接解釋/省略資料的原因 Reference/Direct Answer/Reasons for Omissions	頁數 Page No.	外部認證 External Assurance
GRI 102：一般披露 2016 GRI 102: General Disclosures 2016	**機構簡介 Organisational Profile**				
	102-1	機構名稱 Name of the organisation	關於本報告 About this Report	P.8	✓ (P.136-137)
	102-2	業務活動、品牌、產品及服務 Activities, brands, products, and services	渠務署主要職責 Our Core Responsibilities	P.44 - 59	✓ (P.136-137)
	102-3	機構總部的位置 Location of headquarters	香港灣仔稅務大樓 43樓 Hong Kong, 43/F Revenue Tower, Wanchai	-	✓ (P.136-137)
	102-4	營運地點 Location of operations	只限香港 Hong Kong only	-	✓ (P.136-137)
	102-5	擁有權及法律形式 Ownership and legal form	屬於香港特區政府的一部分 Part of the Hong Kong SAR Government	-	✓ (P.136-137)
	102-6	所服務的市場 Markets served	渠務署為香港市民提供污水和雨水處理排放服務。 DSD provides wastewater and stormwater drainage services to the general public in Hong Kong.	-	✓ (P.136-137)
	102-7	機構的規模 Scale of the organisation	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.145-146	✓ (P.136-137)
	102-8	有關僱員及其他員工的資料 Information on employees and other workers	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.141-144	✓ (P.136-137)
	102-9	供應鏈 Supply chain	持份者參與活動 Stakeholder Engagement Activities 渠務署與工作夥伴緊密合作，借助他們的技術及經驗，推行各項污水及雨水處理排放工程。 DSD works closely with its partners, leveraging their expertise and experience to assist us in implementing various wastewater and stormwater drainage projects.	P.110-114 -	✓ (P.136-137)
	102-10	機構與其供應鏈方面的重大改變 Significant changes to the organisation and its supply chain	沒有顯著改變 No significant changes	-	✓ (P.136-137)
	102-11	謹慎方針或原則 Precautionary Principle or approach	管治方針 Governance Approach	P.38-40	✓ (P.136-137)
	102-12	由外部所制定的倡議 External initiatives	年度大事 重點輕描 Highlights of the Year 持份者參與活動 Stakeholder Engagement Activities	P.28-31 P.125-127	✓ (P.136-137)
	102-13	機構參與的協會的會員資格 Membership of associations	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.136-137)

可持續發展報告標準 GRI Standards	一般披露 General Disclosures		參照/直接解釋/省略資料的原因 Reference/Direct Answer/Reasons for Omissions	頁數 Page No.	外部認證 External Assurance
	策略 Strategy				
	102-14	最高決策者的聲明 Statement from senior decision-maker	署長序言 Director's Statement	P.4-5	✓ (P.136-137)
	道德與誠信 Ethics and Integrity				
	102-16	價值、原則、標準和行為規範 Values, principles, standards, and norms of behaviour	管治方針 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.34	✓ (P.136-137)
	管治 Governance				
	102-18	管治結構 Governance structure	管治方針 Governance Approach	P.34-37	✓ (P.136-137)
	102-20	管理層在經濟、環境和社會議題方面的責任 Executive-level responsibility for economic, environmental, and social topics	管治方針 Governance Approach	P.38-39	✓ (P.136-137)
	102-32	機構可持續發展報告的最高委員會 Highest governance body's role in sustainability reporting	關於本報告 About this Report	P.9	✓ (P.136-137)
	持份者參與 Stakeholder Engagement				
	102-40	持份群體清單 List of stakeholder groups	管治方針 Governance Approach	P.41-43	✓ (P.136-137)
	102-41	集體談判協議 Collective bargaining agreements	沒有 Nil	-	✓ (P.136-137)
	102-42	界定及挑選持份者 Identifying and selecting stakeholders	關於本報告 About this Report	P.8	✓ (P.136-137)
	102-43	引入持份者參與的方針 Approach to stakeholder engagement	關於本報告 About this Report 管治方針 Governance Approach	P.8 P.41-43	✓ (P.136-137)
	102-44	提出的主要議題及關注事項 Key topics and concerns raised	關於本報告 About this Report 管治方針 Governance Approach	P.9 P.41-43	✓ (P.136-137)
	報告方式 Reporting practice				
	102-45	財務報表所包含的單位 Entities included in the consolidated financial statements	關於本報告 About this Report	P.8	✓ (P.136-137)
	102-46	界定報告內容及議題界限 Defining report content and topic Boundaries	關於本報告 About this Report	P.9	✓ (P.136-137)
	102-47	重要議題清單 List of material topics	關於本報告 About this Report	P.9	✓ (P.136-137)
	102-48	重整信息 Restatements of information	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.136-137)

可持續發展報告標準 GRI Standards	一般披露 General Disclosures		參照/直接解釋/省略資料的原因 Reference/Direct Answer/Reasons for Omissions	頁數 Page No.	外部認證 External Assurance
	102-49	匯報上的改變 Changes in reporting	沒有顯著改變 No significant change	-	✓ (P.136-137)
	102-50	匯報期 Reporting period	關於本報告 About this Report	P.8	✓ (P.136-137)
	102-51	上一份報告的日期 Date of most recent report	2016年12月 December 2016	-	✓ (P.136-137)
	102-52	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.136-137)
	102-53	查詢報告的聯絡點 Contact point for questions regarding the report	回應表格 Feedback Form	-	✓ (P.136-137)
	102-54	按照 GRI 標準提出的的匯報申述 Claims of reporting in accordance with the GRI Standards	關於本報告 About this Report	P.8	✓ (P.136-137)
	102-55	全球報告倡議組織 (GRI) 內容索引 GRI content index	關於本報告 About this Report 附錄二－全球報告倡議組織內容索引 Appendix 2 - GRI Content Index	P.8-9 P.151-156	✓ (P.136-137)
	102-56	外部認證 External assurance	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.136-137)

可持續發展報告標準 GRI Standards	特定議題標準 Topic-specific Standards		參照/直接解釋/省略資料的原因 Reference/Direct Answer/Reasons for Omissions	頁數 Page No.	外部認證 External Assurance
	經濟 Economic				
	經濟績效 Economic Performance				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.145-146	✓ (P.136-137)
GRI 201：經濟績效 2016 GRI 201: Economic Performance 2016	201-1	機構所產生及分配的直接經濟價值 Direct economic value generated and distributed	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.145-146	✓ (P.136-137)
	201-2	氣候變化所造成的財務影響及其他風險與機會 Financial implications and other risks and opportunities due to climate change	管治方針 Governance Approach 環境管理 Environmental Management	P.39-40 P.69	✓ (P.136-137)
	間接經濟影響 Indirect Economic Impacts				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		持份者參與活動 Stakeholder Engagement Activities	P.110-114	✓ (P.136-137)

可持續發展報告標準 GRI Standards	特定議題標準 Topic-specific Standards		參照/直接解釋/省略資料的原因 Reference/Direct Answer/Reasons for Omissions	頁數 Page No.	外部認證 External Assurance
GRI 203：間接經濟影響 2016 GRI 203: Indirect Economic Impacts 2016	203-2	重大間接經濟影響 Significant indirect economic 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。有關詳情請參閱第十章持份者參與活動。 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 10 Stakeholder Engagement Activities. 附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	- P.144	✓ (P.136-137)
	採購實務 Procurement Practices				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		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/en/guide-to-procurement.htm.	-	✓ (P.136-137)
GRI 204：採購實務 2016 GRI 204: Procurement Practices 2016	204-1	本地供應商採購的支出比例 Proportion of spending on local suppliers	100%	-	✓ (P.136-137)
	環境 Environmental				
	物料 Materials				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		環境管理 Environmental Management	P.73-76	✓ (P.136-137)
GRI 301：物料 2016 GRI 301: Materials 2016	301-1	所採用原材料的重量或體積 Materials used by weight or volume	環境管理 Environmental Management 附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.73-76 P.140	✓ (P.136-137)
	能源 Energy				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		管治方針 Governance Approach 環境管理 Environmental Management	P.38-40 P.65-68	✓ (P.136-137)
GRI 302：能源 2016 GRI 302: Energy 2016	302-1	機構內部的能源消耗量 Energy consumption within the organisation	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.138	✓ (P.136-137)
	302-2	機構外的能源消耗量 Energy consumption outside of the organisation	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.138	✓ (P.136-137)
	302-3	能源強度 Energy intensity	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.138	✓ (P.136-137)
	302-4	減少能源消耗 Reduction of energy consumption	環境管理 Environmental Management 完成目標 Meeting the Targets	P.65-68 P.130-131	✓ (P.136-137)

可持續發展報告標準 GRI Standards	特定議題標準 Topic-specific Standards		參照/直接解釋/省略資料的原因 Reference/Direct Answer/Reasons for Omissions	頁數 Page No.	外部認證 External Assurance
	水 Water				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		管治方針 Governance Approach 環境管理 Environmental Management	P.38-40 P.70-71	✓ (P.136-137)
GRI 303：水 2016 GRI 303: Water 2016	303-1	依來源劃分的總取水量 Total water withdrawal by source	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.139	✓ (P.136-137)
	303-3	水資源回收及再利用 Water recycled and reused	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.139	✓ (P.136-137)
	生物多樣性 Biodiversity				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		環境管理 Environmental Management	P.62-63	✓ (P.136-137)
GRI 304：生物多樣性 2016 GRI 304: Biodiversity 2016	304-1	機構所擁有、租賃、管理的營運地點或其鄰近地區位於環境保護區或其他高生物多樣性價值的地區 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	環境管理 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.63 -	✓ (P.136-137)
	排放物 Emissions				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		管治方針 Governance Approach 環境管理 Environmental Management	P.38-40 P.65-68	✓ (P.136-137)
GRI 305：排放物 2016 GRI 305: Emissions 2016	305-1	直接溫室氣體排放(範疇1) Direct (Scope 1) GHG emissions	環境管理 Environmental Management 附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.65-68 P.138	✓ (P.136-137)
	305-2	能源間接溫室氣體排放(範疇2) Energy indirect (Scope 2) GHG emissions	環境管理 Environmental Management 附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.65-68 P.138	✓ (P.136-137)
	305-3	其他間接溫室氣體排放(範疇3) Other indirect (Scope 3) GHG emissions	環境管理 Environmental Management 附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.65-68 P.138	✓ (P.136-137)
	305-5	減少溫室氣體的排放量 Reduction of GHG emissions	環境管理 Environmental Management	P.65-68	✓ (P.136-137)
	廢污水及廢棄物 Effluents and Waste				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		渠務署主要職責 Our Core Responsibilities	P.46	✓ (P.136-137)

可持續發展報告標準 GRI Standards	特定議題標準 Topic-specific Standards		參照/直接解釋/省略資料的原因 Reference/Direct Answer/Reasons for Omissions	頁數 Page No.	外部認證 External Assurance
GRI 306：廢污水及廢棄物 2016 GRI 306: Effluents and Waste 2016	306-1	按水質及排放目的地劃分的排水量 Water discharge by quality and destination	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.139	✓ (P.136-137)
	306-2	按類別及處置方法劃分的廢物 Waste by type and disposal method	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.139	✓ (P.136-137)
	306-3	嚴重洩漏 Significant spills	年內，渠務署發生了14宗污水溢漏個案，總漏量約為36,750立方米(少於我們每年污水處理量的0.01%)。我們立即採取了糾正行動，沒有對環境造成重大影響。 During the year, a total of 14 sewage spills were reported and the total volume of sewage spill was about 36,750 cubic metres.(smaller than 0.01 per cent of our annual sewage treated). Corrective actions were taken immediately without causing any significant environmental impacts.	-	✓ (P.136-137)
	遵守環境法規 Environmental Compliance				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		完成目標 Meeting the Targets	P.130-131	✓ (P.136-137)
GRI 307：環境法規遵循2016 GRI 307: Environmental Compliance 2016	307-1	違反環境法律和法規 Non-compliance with environmental laws and regulations	渠務署於2016-17年度，並沒有該類別的違規情況。 No non-compliance with environmental laws and regulations in 2016-17.	-	✓ (P.136-137)
	職業健康及安全 Occupational Health and Safety				
GRI 103: 管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		關愛員工 Care for Our Staff 持份者參與活動 Stakeholder Engagement Activities	P.80-81 P.110	✓ (P.136-137)
GRI 403：職業健康及安全 2016 GRI 403: Occupational Health and Safety 2016	403-2	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 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	附錄一－主要統計數據 Appendix 1 - Key Statistics and Data	P.144	✓ (P.136-137)
	遵守社會經濟法規 Socioeconomic Compliance				
GRI 103：管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		完成目標 Meeting the Targets	P.133-134	✓ (P.136-137)
GRI 419：社會經濟法規遵循 2016 GRI 419: Socioeconomic Compliance 2016	419-1	違反社會及經濟領域方面的法律和規定 Non-compliance with laws and regulations in the social and economic area	渠務署於2016-17年度，並沒有該類別的違規情況。 No non-compliance with laws and regulations in the social and economic area in 2016-17.	-	✓ (P.136-137)

渠務署可持續發展報告2016-17回應表格

感謝你閱讀本報告。你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。希望你能抽空完成以下問卷，表達意見，謝謝。

1. 你對以下有關本報告的陳述有多認同：

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

2. 請評價我們的可持續發展報告2016-17及可持續發展表現：

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

3. 你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. 你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. 你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. 你認為我們於來年的報告應增加哪些內容？

_____

_____

_____

_____

_____

_____

7. 你從何處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：_____

10. 你會否希望於將來收取我們的報告/資訊？

☐ 會
☐ 不會

11. 若日後你想獲得我們發表的報告/資訊，請提供你的聯絡資料：

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：**3103 0033**
郵寄地址：**香港灣仔告士打道 5 號稅務大樓 43 樓**

多謝你的寶貴意見！

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經理(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 2016-17

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

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

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

2. Please rate our Sustainability Report 2016-17 and sustainability performance:

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

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

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

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

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

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

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

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

_____

_____

_____

_____

_____

_____

_____

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

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

8. Other suggestions or opinions:

_____

_____

_____

_____

_____

9. Which of the following best describes you?

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

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: **3103 0033**
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

渠務署
Drainage Services Department

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