



啟德河改善工程 Kai Tak River Improvement Works



綠化天台 Roof Greening



《大禹之後》媒體藝術展覽 Interactive Exhibition "After the Deluge"

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署長序言 Director's Statement

2017-18年度的可持續發展報告以「上善若水」為題:水滋潤萬物而不與之相爭,就正如本署默默為市民提供高效優質少因此對周遭環境的影響。「上善若水」也正切合我們近年積極推行的「藍綠建設」和「計學」,以往視為「鄰避建設」的渠務設施融入社區,讓市民接納和享用,並盡量減少施工時,以及設施運作期間對市民造成的滋擾。

The title of the Sustainability Report 2017-18 takes wisdom from the Chinese saying "The highest goodness is like water", since water benefits all things but does not compete with them. Similarly, without fanfare, the Drainage Services Department (DSD) provides effective and quality drainage and sewage treatment services to the public while striving hard to minimise their impact on the environment. This saying also corresponds to the concepts of "Blue-Green Infrastructure" and "Sponge City" we actively implement in recent years. Drainage and sewerage infrastructure used to be "Not in my backyard (NIMBY)" facilities, but by conforming to the environment, we are able to integrate the facilities with the community and have them accepted and enjoyed by the citizens. We also strive to avoid creating nuisance in the construction and operation of the facilities.

渠務署署長 唐嘉鴻

Edwin TONG Ka-hung Director of Drainage Services

(攝於經改善的林村河 Photo taken at improved Lam Tsuen River)



市區綠化河道走廊

Urban Green River Corridor

時代進步,進行河道改善工程時,除河道的排水功能外,還須提升其生態價值,以及計量將之融入四周環境,創建宜居城市之餘,更推廣親水、近水文化。近年,本署落已,其中學學大者是現工程,其中學學大者是現工程財務的「啟德河改善工程」。是項工程排,令完成的原德明渠活化成啟德河,提升其素,是的啟德明渠活化成啟德河,提升其大量線化及生態元素化及生態元素化及生態元素化及生態元素化及生態元素化及生態方面。我樂見該工程為市區河道改善工程,同時為往後同類工程立下楷模。



In this era of swift changes and in conducting river improvement works, we must enhance the drainage efficiency of the river and its ecological values and blend it as far as possible into the landscape. Apart from optimising livability, we must promote a water-friendly culture. Among the many river improvement projects we have implemented in recent years, the one conducted at Kai Tak River, which is nearing completion, is most significant and exemplary. Kai Tak Nullah of old days has been transformed into Kai Tak River, with its drainage capacity enhanced, and vast green and ecological elements introduced. The nullah, hygienic conditions of which were less than favourable, has been turned into an urban green river corridor. I am glad to witness the project's setting an example for future endeavours of the same kind, and re-defining the meaning of urban river improvement works.

氣候變化

Climate Change

2018年年初,我們剔除大埔洞梓路的水浸 黑點,令全港水浸黑點減至6個,足見部門 防洪工作的卓越成果。我們必定再接再厲, 加倍努力,務求消除全港所有水浸黑點。

2017年,受全球氣候變化影響,香港飽受 風暴吹襲。年內,共7個熱帶氣旋襲港,當 中5個更是8號或以上熱帶氣旋,平了1964及 1999年最多熱帶氣旋襲港的紀錄。另外, 8月23日,超強颱風「天鴿」襲港,香港天 文台一度發出10號颶風信號。「天鴿」威力 驚人,造成嚴重破壞,其引發的風暴潮, 加上天文大潮效應,更導致本港多處低窪地 區淪為澤國。雖然本署早已跟其他部門在 易受風暴潮影響的沿海窪地進行排水系統 改善工程,以及實施預警和應變措施,但 經「天鴿」一役,我們認為必須進一步檢視 極端風暴潮及越堤浪對沿海地區的影響。 然而,本署難以單打獨鬥,得與其他部門 齊心協作,以及社區配合,聯手出擊,方能 對應極端天氣的新挑戰。

In early 2018, we eliminated the flooding blackspot at Tung Tze Road, Tai Po, reducing the number of blackspots in the territory to six and evidently demonstrating the outstanding success of our flood prevention works. While the example of Tung Tze Road was a significant accomplishment, we are still committed to doubling our efforts to eliminate every blackspot in Hong Kong.

As a result of climate change, Hong Kong was repeatedly buffeted by typhoons in 2017. Seven tropical cyclones struck Hong Kong in the year, and on five of these occasions typhoon signal No. 8 or above were hoisted, which equalled the number of most tropical cyclones battering Hong Kong in a year recorded in 1964 and 1999 respectively. On 23 August, super typhoon "Hato" struck Hong Kong with tremendous force, requiring the hoisting of typhoon signal No. 10. It wreaked extensive damage. The storm surge it caused combined with astronomical high tide, resulted in floods in many low-lying areas of Hong Kong. Prior to the typhoon, DSD and other departments had carried out drainage improvement works in low-lying coastal areas vulnerable to storm surge, and precautionary and emergency measures were also taken. However, lessons of "Hato" led us to believe that further review of the effects of extreme storm surges and over-topping waves on coastal areas have to be conducted. Yet, solo endeavours of DSD alone might not be adequate to withstand the forces of nature. Other departments and the community as a whole must join hands to cope with the new challenges posed by extreme weather.

搬遷沙田污水處理廠往岩洞計劃

Relocation of Sha Tin Sewage Treatment Works to Caverns

為促進本港可持續發展,政府現積極開拓 土地資源,以滿足市民的住屋和社會發展 需要,當中發展岩洞為其中一個創新方案。 「搬遷沙田污水處理廠往岩洞計劃」擬將 現有廠房遷進亞公角女婆山的人工岩洞。 屆時,該廠將成為亞洲區內最大型的人工 岩洞污水處理廠。是項計劃已籌備多時, To promote sustainable development in Hong Kong, the Government is actively expanding land resources to meet the needs of housing and social developments. The use of caverns is one of the innovative measures. The "Relocation of Sha Tin Sewage Treatments Works (STSTW) to Caverns" project aims at relocating the existing plant into artificial caverns in Nui Po Shan of A Kung Kok. Upon completion of the project, the cavern-STSTW will be the largest of its kind in Asia. The project has been many years in the

我們亦曾舉辦多場公眾參與活動,聽取市 民意見。計劃首階段建造工程如箭在弦, 預計可於2019年年初展開。該廠遷址後, 可騰出約28公頃土地作其他有利民生的 用途。 making and many public engagement activities were organised to listen to the views of the public. We are now ready and raring to go on with the first phase of construction, which is anticipated to commence in early 2019. After the relocation of the STSTW, about 28 hectares of land will be released for other beneficial uses.

多行一步 推廣渠務工作

Taking the Extra Mile in Promoting Drainage Works

This is the fourth statement I have written for the Sustainability Report. During these four years, I witnessed the commencement and completion of projects large and small. In the process, I was deeply impressed by the drive of wholly dedicated colleagues, standing shoulder to shoulder to overcome all sorts of challenges and hardship. I am a firm believer that to boost the public's confidence in our Department, we must keep them abreast of our achievements. To this end, we daringly ventured into new frontiers and co-organised the new media art exhibition "After the Deluge" with the Hong Kong Art Development Council at the Tai Hang Tung Stormwater Storage Tank, Mongkok in January 2018. It was a publicity campaign of "hard" flood prevention work in the "soft" form of art. Over 10 000 people attended and it was widely acclaimed. I would like to take this opportunity to thank our colleagues for not only providing excellent services, but also for going the extra mile to promote them to the public.

放眼未來

Looking Ahead

為使服務日臻完善,本署與時並進,不斷研究引進新技術以利推展工程和營運設施,例如近年開始應用不同傳感器收集數據,以提升維修工作的效率及質素,並響應發展局推行建築信息模擬(BIM)技術的政策,因此投放資源培訓同事善用有關系統,務求提升工程設計的準確性及縮短施工期。

本署明年踏入30周年誌慶,我謹祝部門各項防洪和除污工程得以順利推展。「上善若水」出自《道德經》,常與《易經》的「厚德載物」呼應,我亦勉勵部門上下,盡小丁數不斷的環境中,秉承「以心為心,盡力盡心」的精神,時刻開放胸襟,迎接新的技術和思維,精益求精,為香港提供世界級的污水處理和雨水排放服務。

To improve its service, the Department is committed to keeping pace with the times. In implementation of projects and operation of facilities, we continuously endeavour to introduce new technologies into our work. One such example in recent years has been the application of sensors to collect data in order to enhance the efficiency and quality of maintenance works. Moreover, to support the policy of the Development Bureau to promote Building Information Modelling (BIM) technology, resources are deployed to train our colleagues to make good use of the system, so as to upgrade the accuracy of project design and shorten works period.

The following year will be DSD's Thirtieth Anniversary. I would like to wish the Department smooth sailing in taking forward various drainage and sewerage projects. "The highest goodness is like water" is an excerpt from Dao De Jing, which often echoes with "Only the virtuous can bear the utmost" from The Book of Change. In this environment that ever poses new challenges, I encourage our colleagues to follow the spirit of "Do it from the Heart", be open-minded to embrace new technologies and thinking, and strive for the best in order to provide world class sewage treatment and drainage services for Hong Kong.

常素

唐嘉鴻 渠務署署

渠務署署長 2018年12月



Edwin TONG Ka-hung

Director of Drainage Services December 2018



關於本報告 About this Report

本報告是向持份者匯報渠務署可持續發展表現的重要工具,當中詳述了本署去年在經濟、 環境及社會三方面的工作進展及成果。我們深信高透明度的報告能讓各界更深入了解本署 的工作及對環境、社會及經濟的影響,同時讓我們與持份者分享可持續發展的願景及期望, 鼓勵持份者為改善本署可持續發展表現出謀獻策。



- 1. 跑馬地地下蓄洪池 Happy Valley Underground Stormwater Storage Tank
- 2. 昂船洲污水處理廠 Stonecutters Island Sewage Treatment Works





As an important tool for communicating our sustainability performance to stakeholders, this Sustainability Report presents in details the work progresses and achievements of DSD in terms of the economic, environmental and social aspects in the past year. We strongly believe a report of high transparency can provide various sectors with a better understanding of our work and impacts on the environment, society and economy; at the same time, allow us to share our vision and aspirations in sustainable development with stakeholders, and encourage them to contribute more inspiring ideas to drive our sustainability performance.









題為「活化河道 上善若水」渠務署¹的2017-18 可持續發展報告(本報告),闡述2017-18 財政年度(2017年4月1日至2018年3月31日) 在經濟、環境及社會方面的可持續發展表現。

本報告依照全球報告倡議組織(GRI)出版的《可持續發展報告標準》的核心選項要求編寫而成。獨立核證機構審核本報告的準確度、可靠性和公信力,確保報告內容符合有關準則規定。核實聲明可參閱第132頁。本報告亦通過GRI標準的「實質性議題審核」,確認本報告按要求標示一般披露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,並備有3款文字編制(英文、繁體中文及簡體中文)。本報告亦備有簡短摘要,並提供網上及印刷版本。

歡迎持份者就本報告內容、報告方式,以及 本署在可持續發展方面的表現提供意見及 建議,以持續協助我們提升報告質素和加強 資料披露的相關性。請填妥本報告末端的 回應表格,並將之交回本署。 The 2017-18 Sustainability Report (this Report), titled "River Revitalisation for the Good of Water", elaborates sustainability performance of DSD¹ in terms of the economic, environmental and social aspects during the fiscal year 2017-18 (i.e. 1 April 2017 to 31 March 2018).

This report has been prepared in accordance with the GRI Standards: Core option. An independent accreditation agency has verified the accuracy, reliability and credibility of the Report, assuring that its contents comply with the requirements in the corresponding Standards. The verification statement can be found on page 132. The Report has also successfully completed the GRI Materiality Disclosures Service, for the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the Report.

The Report is available online in web-based HTML, PDF and text-only versions in three languages (English, traditional Chinese and simplified Chinese). An executive summary of the Report is also available with online and printed versions.

We welcome comments and suggestions from stakeholders on the report content, report approach as well as our sustainability performance, for which it can help enhance the quality of our report and relevance of our disclosure continuously. Kindly complete and return the feedback form appended to the Report to us.

We conducted a materiality assessment based on the GRI Standards to

identify the topics that pose greater impacts on us and our stakeholders, and from there we determined the report contents accordingly. The materiality



報告範圍及邊界 Reporting Scope and Boundary

我們根據GRI標準對議題進行實質性議題評估,以識別對本署及持份者影響較大的議題,並依此釐定相關內容。實質性議題評估過程由以下3個主要步驟組成:



第一步

邀請不同持份者參與 並收集他們的意見

First Step:

Invite different groups of stakeholders to gather their feedback

計劃開展 Project Launch



第二步:

透過焦點小組會議及 問卷調查收集持份者意見

Second Step:

Collect stakeholders' views by means of focus group meetings and questionnaires



assessment process consists of the following three major steps:

第三步:

得出實質性議題

Third Step: Identify material topics

> 計劃完成 Project Completion



為更了解持份者關注的可持續發展議題,本署自2012-13年起每年透過獨立顧問舉辦一系列持份者參與計劃,邀請員工、承辦商、顧問、環保團體、學者、公眾、議員等不同持份者參與,收集他們關注的議題,以及對本署可持續發展工作的意見及建議²。

To help distinguish topics about sustainability development in which stakeholders concern, we have been holding stakeholder engagement exercises through an independent consultant every year since 2012-13, where we invited different stakeholder groups such as staff, contractors, consultants, green groups, academics, members of the public and councilors to collect their issues of concern as well as their feedback and suggestions on our work about sustainability development².

To prepare this Report, we conducted focus group meetings and questionnaire surveys between April and June 2018 through independent consultants, inviting environmental and academic groups to discuss issues about the environment and other sustainable development matters relating to DSD. We have selected 18 material topics based on the results of the materiality assessment and recommendations made by stakeholders, senior management and our Taskforce on Sustainability Reporting. This Report includes six additional topics of concern which were not addressed in previous reports, mainly focusing on the performance of our contractors and staff. Topics include suppliers'/contractors' performance on environmental management, corruption prevention, occupational health and safety, staff training and support, grievance mechanism, as well as local employee ratio and employment policy.³ While making our best effort to present accurate data and information, we do not have direct control over some data and information which are provided by relevant parties that are beyond our direct remit.

本報告涵蓋的實質性議題及邊界如下:

Material topics covered in this Report and their corresponding boundaries are tabulated below:

類別 Categories	實質性議題 ⁴ Material Topics ⁴	邊界 ^{5, 6} Boundaries ^{5, 6}	
		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	V	v
	能源管理 Energy Management	V	✓
	污水及廢物處理 Effluents and Waste Treatment	V	✓
	氣味管理 Odour Management	V	✓
	物料使用 Use of Materials	V	
	水資源管理 Water Resources Management	V	
	評估供應商/承辦商的環境表現 Supplier's/Contractor's Environmental Assessment	V	
經濟 Economic	財務表現 Financial Performance	V	
	間接經濟影響 Indirect Economic Impacts	V	
	部門採購政策 Departmental Procurement Practices	V	
社會 Social	遵守法規 Compliance	V	
	預防貪腐 Corruption Prevention	V	
	內部溝通渠道 Internal Communication Channel	V	
	職業健康及安全 Occupational Health and Safety	V	
	客戶的滿意度調查結果 Results of Surveys on Customer Satisfaction	V	
	員工培訓及支持 Staff Training and Support	V	
	員工投訴機制 Grievance Mechanism	V	
	本地員工比例及聘用政策 Local Employee Ratio and Employment Policy	V	

² 102-42 ³ 102-44 ⁴ 102-47 ⁵ 102-46

⁶ 邊界意指本報告實質性議題涵蓋的範圍,包括本署辦事處及轄下設施,以及本署主要工程顧問和承辦商的日常運作。
Boundaries means the scope of material topics covered by this Report including DSD's offices and facilities, and the operations of our major consultants and contractors.



活化河道 上善若水

River Revitalisation for the Good Water

《老子》説:「上善若水。水善利萬物而不爭。」水,滋養萬物,是生命不可或缺的元素;水,不與萬物相爭,能包容萬物,適應各種各樣的環境。渠務署近年致力發展新意念,期望如「上善若水」般,優化排洪除污工作,提升市民生活質素,並嘗試不同創新技術,順應環境,將渠務設施融入社區。在設計河道時,我們引入活化水體概念,善用水的特質。如我們於早年完成的西貢蠔涌河和大埔林村河上游河道改善工程,以及將於2018年完成的啟德河改善工程,除了考慮如何有效排水外,上述工程還着重增加河道生物多樣性,並加入綠化元素、美化景觀,令河道與周邊環境充份融合,培育近水文化,促進香港的可持續發展以應對氣候變化所帶來的巨大威脅。



"Laozi" said: "The highest goodness is like water. Water benefits all things without struggle." Water, nourishing all things, is an indispensable element of life; water, being non-competitive in nature, embodies the quality of versatility that allow it to adapt to variety of environments. Aspiring to emulate water in recent years, DSD has been actively developing new ideas, optimising our works in flood prevention and sewage treatment to enhance the quality of life of the public and adopting different innovative technologies to follow the nature and integrate the drainage facilities into the community. When designing river channels, we promote the concept of revitalisation of water bodies to make good use of water's character. Recently completed river improvement projects that incorporated such concepts include Ho Chung River in Sai Kung and Upper Lam Tsuen River in Tai Po, as well as the Kai Tak River Improvement Works which will be completed in 2018. Going beyond the fundamental purpose of drainage, these projects aim to increase river biodiversity and integrate the river into the surrounding environment by introducing green elements and beautifying the scenery so as to foster water-friendly culture and promote Hong Kong's sustainability development to cope with the huge threats brought by climate change.







活化河道 創新理念 Innovative Ideas for River Revitalisation



早年建成的排水設施以防洪為主,時而勢易,市民逐漸關注水體生態保育及善用市區空間的重要性。因此,我們就《2015年施政報告》中的建議,在進行大型排水改善工程及新發展區的排水規劃時,積極在明渠及河道加入活化水體創新意念。

我們以具經濟效益及合乎生態的方式,提升排洪服務並引進具綠化和生態保育元素的可持續排水系統,包括種植多樣植物及營造天然溪澗環境,以保育河道生態系統及促進生物繁衍,增加河道生物多樣性。總括而言,除有效排水外,我們致力活化河道,並加入綠化元素、美化景觀、促進生物多樣性及親水和近水活動等目標,務求建設可持續排水設施,以營造更美好的居住環境。

Drainage facilities built in early years were mainly designed for flood prevention. As times change, the public is gradually concerned with the importance of protecting water ecology and effective use of urban space. In response, we have been following the recommendations put forward in the 2015 Policy Address. In both large-scale drainage improvement works and the planning of drainage networks for New Development Areas, we have actively introduced innovative ideas for revitalising water bodies in nullahs and river channels.

While employing cost-effective and ecologically responsible methods to optimise drainage services, we introduce sustainable drainage systems with green and eco-conservation elements, including planting a variety of vegetation and creating natural stream environments. These measures can preserve river ecosystems and promote wildlife growth to increase river biodiversity. In a nutshell, other than achieving effective river drainage, we aim to revitalise rivers, introduce green elements, beautify the scenery, as well as promote biodiversity and water-friendly activities so as to develop sustainable drainage facilities for creating a more liveable environment.



我們周詳規劃每段河道的特色,令排水設施與其他用地充分融合,並加強社區聯繫,實行一地多用,營造美好居住環境。 以下例子概述本署活化河道的理念、設計 及成效。 River sections are now undergoing detailed planning that ties in with their unique features, aiming to ensure full integration of drainage facilities with other land uses and strengthen community connectivity. This multi-purpose land use concept can create a better living environment. The examples below outline the concepts, designs and effectiveness of our river revitalisation initiatives.

蠔涌河和林村河上游河道改善工程

Ho Chung River and Upper Lam Tsuen River Improvement Works

渠務署分別於2007及2012年完成蠔涌河及林村河上游河道改善工程,大大紓緩區內的水浸風險。西貢蠔涌河及大埔林村河擁有極高生態價值,不少生物(包括鳥類、魚類、蜻蜓等)在兩河棲息。施工期間,我們盡力減低工程對環境和生態的影響,盡量縮小擴闊河道工程範圍,以保留河道原貌。

DSD completed Ho Chung River and Upper Lam Tsuen River Improvement Works in 2007 and 2012 respectively, thus alleviating the flood risk in the regions considerably. Ho Chung River in Sai Kung and Lam Tsuen River in Tai Po are of great ecological significance. Myriads of wildlife, including bird, fish and dragonfly species, inhabit in the two rivers. During construction, we did our utmost to minimise environmental and ecological impacts of our works and keep the land uptake during the river widening works to a minimum in order to preserve the original characters of the rivers.

蠔涌河和林村河上游工程前後風貌

Ho Chung River and Upper Lam Tsuen River before and after the improvement works



改善工程前的蠔涌河 Ho Chung River before the improvement works



改善工程後的蠔涌河 Ho Chung River after the improvement works



改善工程前的林村河 Lam Tsuen River before the improvement works



改善工程後的林村河 Lam Tsuen River after the improvement works

本署工程師更引入多個生態保育元素,為, 魚類和其他水生生物營造天然溪澗環境, 使河溪生態更多元化。以林村河為例,石籠 河岸及天然河床的植物蓬勃茂盛,維持該工 道原來水質及生物多樣性。林村河上游工程 完成後,本署委聘生態學專家進行長達4年 的生態監察。2017年的結果顯示,烏類及 大平,高大三人 魚類及蜻蜓的品種數量均恢復至工程的 數型,而林村河稀有品種一香港瘰螈的 量更勝從前,由工程前基線監測所得的200 多條,至最近錄得超過600條。可見工程團 隊的保育工作卓有成效,成績令人鼓舞。 Our engineers also enhanced biodiversity by introducing eco-conservation elements to the natural stream habits for fish and other aquatic wild life. In Lam Tsuen River, for example, plants that flourished on the gabion banks and natural riverbed have sustained both the original water quality and biodiversity of the water body. After completion of the Upper Lam Tsuen River Improvement Works, ecology professionals appointed by DSD conducted four years of ecological monitoring. In 2017, the study found that the numbers of bird, fish and dragonfly species were restored to pre-construction levels. In particular, the population of one rare species in Lam Tsuen River — Hong Kong Newt — exceeds the previous level from just over 200 recorded by pre-construction baseline monitoring to more than 600 recently. All these encouraging results stand witness to the project team's stellar performance in nature conservation.





棲息於林村河的生物 Wildlife inhabiting in Lam Tsuen River

河道生態保育元素

Eco-conservation Elements in Rivers

(▲ 採用天然河底,營造天然溪澗環境

Creating natural stream environment with natural riverbed

林村河上游河道亂石基底由原有河床物料的石塊和卵石 不規則重鋪而成,取代鋼筋混凝土河床,從而形成深池 及淺灘,模仿原有天然溪澗的環境,為土生的大小魚類 提供棲息空間,促使生物繁衍。

The rip-rap base of Upper Lam Tsuen River is restored with irregular cobbles and boulders of original riverbed materials, replacing the riverbed made of reinforced concrete. This type of riverbed simulates the original natural stream environment with pools and shallow shoals, providing ideal habitats for native fish species of all sizes to establish and thrive.



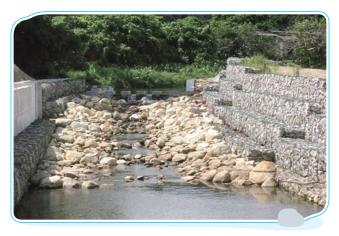
林村河上游的亂石基底 Rip-rap base in Upper Lam Tsuen River

▲ 魚梯

Fish ladders

在河床隨機放置石塊和卵石,形成魚梯,以產生更多漣漪、水窪及不規則水流模式,以營造天然溪澗環境,保持河道連貫,讓河道生物往返不同流域。

Randomly placed boulders and cobbles on the riverbed to form fish ladders to create more ripples, pools, and irregular flow patterns, hence simulating a natural stream flow environment and maintaining river flow continuity to allow river organisms to cross sections of the stream.



蠔涌河的魚梯由不規則的石塊和卵石形成 Randomly placed boulders and cobbles form the fish ladders in Ho Chung River



林村河上游3條「之」字型設計的魚梯,上設凹位,供魚類棲息 Three zig-zag fish ladders in Upper Lam Tsuen River designed with still water troughs to provide refuge for fish



蠔涌河的魚洞穴 Fish shelters in Ho Chung River

▲ 魚洞穴

Fish shelters

河岸牆的浪濺區設有多個獨立或互通的溪內庇護位,讓魚類 和其他水生動物於水漲及水流急速時棲身。

Holes in the splash zone of the river wall, both isolated and sets of interconnected ones inside the bank wall, provide refuge for fish and other aquatic animals during times of high tide and rapid flow.

▲ 導流板

Deflectors

蠔涌河的導流板由石塊堆成,與河岸牆成斜角,長度由2米至約4米不等,用以改變水流方向、流速和水深,藉此創造微生境,並使河岸一帶更多樣化,供各類物種生長。

The deflectors in Ho Chung River are formed by strips of rocks aligned obliquely along the river wall. Their lengths vary from two to about four metres, aiming to induce variations in flow direction and velocity, as well as create zones of different water depths. All these give rise to micro-habitats and diversity in the riparian zone for various species to establish.



蠔涌河的導流板 Deflectors in Ho Chung River

Gabion banks help promote vegetation

河道堤岸兩旁鋪設石籠以取代鋼筋混凝土河堤,石籠間 的罅隙有助植物生長。

Both banks are lined with gabions instead of reinforced concrete to encourage plant growth in the cracks.



林村河上游堤岸的石籠河岸 Gabion banks in Upper Lam Tsuen River



林村河河岸綠化 Greening along Upper Lam Tsuen River

▲ 廣種植物,綠化環境

Extensive planting for riverside greening

沿河岸兩旁廣植選植物,以改善河岸景觀及生物多樣性, 綠化河道。

Selected plants are planted extensively on channel sides to improve the scenery, biodiversity and river greening.

▲ 保育稀有物種

Conservation of rare species

香港瘰螈是林村河的原生物種,被國際自然保護聯盟列為「近危」的兩棲類動物。我們於林村河上游河道改善工程及每年 旱季工程進行前,撈捕工程範圍內的香港瘰螈,然後隨即將之遷往工程範圍外的上游河道。工程完成後,由於河道環境 回復至與以往相若,加上天然河床得以保留,瘰螈自然返回以往的棲身地。

Hong Kong Newt, a native species occurring in Lam Tsuen River, is a near-threatened amphibian on the International Union for Conservation of Nature and Natural Resourses (IUCN) list. Prior to the Upper Lam Tsuen River Improvement Works and annual dry weather works, we captured individuals in Lam Tsuen River within site and immediately rehabilitated them in the upper part of the river unaffected by works. Upon completion of the works, as the restored channel environment was very similar to its original state and the natural riverbed was well-preserved, the Hong Kong Newts re-colonised their former habitats.



香港瘰螈腹部橙色的不規則斑紋 The Hong Kong Newt characterised by irregular orange ventral patches

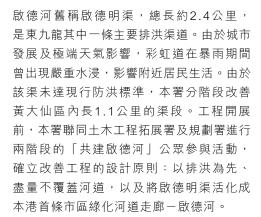


林村河上游河道改善工程進行前,工程團隊撈捕香港瘰螈 Project team capturing Hong Kong Newts before the Upper Lam Tsuen River Improvement Works



啟德河改善工程

Kai Tak River Improvement Works



工程於2011年10月分階段展開,預計 2018年完成,整項工程的核准工程預算費 用約為28億元。

Known as Kai Tak Nullah in the past, the approximate 2.4km Kai Tak River is one of East Kowloon's major drainage channels. Due to urban developments and extreme weather conditions, serious flooding occurred in Choi Hung Road during rainstorms, affecting nearby residents. As the nullah did not meet the current flood prevention standards, DSD implemented river improvement works in stages to improve the 1.1km section of the nullah in Wong Tai Sin. Before the project began, we rolled out "Building Our Kai Tak River", a two-stage public engagement programme, jointly with the Civil Engineering and Development Department and the Planning Department and finalised the design principles of the project: prioritising flood prevention, avoiding decking the channel as far as possible, and transforming Kai Tak Nullah into the first urban green river corridor in Hong Kong — Kai Tak River.

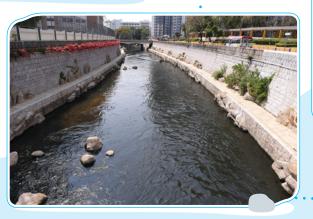
Construction works commenced in stages from October 2011 and are expected to be completed in 2018. The approved project estimate for the improvement works is about \$2.8 billion.

啟德河(黃大仙段)工程前後風貌

Kai Tak River (Wong Tai Sin Section) before and after the improvement works



改善工程前的啟德河 Kai Tak River before revitalisation



改善工程後的啟德河 Kai Tak River after revitalisation



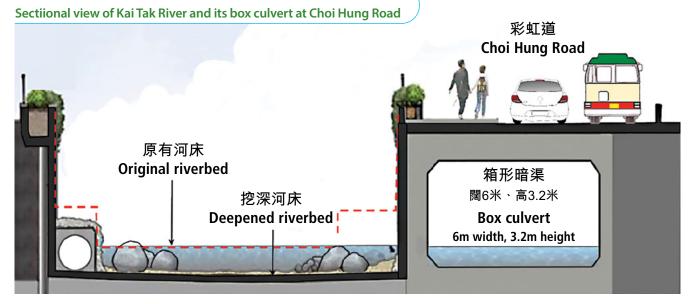
啟德河鳥瞰圖(摩士公園至樂善道段) Aerial view of Kai Tak River (section between Morse Park and Lok Sin Road)



改善工程的首要目標是提高啟德河的排洪能力。工程完成後,該河的排洪能力將達現行防洪設計標準,可抵禦200年一遇的暴雨,緩解黃大仙及新蒲崗一帶的水浸風險。

Improvement works were carried out mainly to enhance the drainage capacity of Kai Tak River. Upon completion of the works, Kai Tak River will meet the latest flood prevention design standards and be able to withstand rainstorms of a 200-year return period, alleviating the flood risks in Wong Tai Sin and San Po Kong areas.

彩虹道旁的啟德河和箱形暗渠切面圖



工程包括挖深原有河床,以及在彩虹道地底加建長400米的箱形暗渠

The works involved deepening of the original riverbed and constructing a 400m long box culvert underneath Choi Hung Road

渠務署亦把握機遇,一併優化該處的城市 景觀,為市民提供休憩景點,以改善居住 環境。啟德河改善工程因此加入不同綠化 及生態元素,將啟德河活化成市區綠化河道 走廊,展現河道與鄰近地區的緊密連繫。 DSD also seized the opportunity to improve the scenery of the local urban setting and provide leisure place for the public to enhance overall living environment of the area. To this end, greening and ecological elements were included in the Kai Tak River Improvement Works to revitalise this water body into an urban green river corridor that links the river closely with the local neighbourhood.

啟德河活化元素

Kai Tak River Revitalisation Elements

▲ 河邊花槽

Riverside planters

花槽種植的懸垂植物簕杜鵑,花期集中在春和秋二季,每年盛開兩次。簕杜鵑色彩鮮豔,能活化河壁,營造具特色及吸引力的河景。

Draping plant *Bougainvillea spectabilis* is planted in the roadside planters along the river. It usually blossoms twice a year (in Spring and Autumn). The dazzling colour adds special appeal to the river.



啟德河兩旁的簕杜鵑

Draping plant Bougainvillea spectabilis along the banks of Kai Tak River



盆中設有種植空間,讓植物在石縫生長,覆蓋河堤 The artificial rock planters offer space for crevice plants to grow and cover the embankments

▲ 仿石種植盆

Artificial rock planters

為模擬天然河岸的岩床, 啟德河河堤設置玻璃纖維鋼筋混凝土建造的仿石種植盆, 讓植物在石縫生長, 擴大該河的綠化範圍。

To simulate the bedrock of natural riverbeds, rocks made of glass fibre reinforced concrete were placed at the banks of Kai Tak River to allow plants to grow out of the rock crevices. This increases the greening area along Kai Tak River.

河床種植槽

Submerged planters

河道較寬之處設有河床種植槽,種植包括原生紅樹林 品種的水生植物,營造濕地環境。

In wider section of the river, submerged planters, with native mangroves species, are built to imitate a wetland habitat.



河床的水生植物 Riverbed aquatic plants



魚洞穴及導流石 Fish shelters and deflectors

▲洞穴及導流石

Fish shelters and deflectors

魚洞穴及導流石能改變水流方向及減低水速,從而形成靜水 區,供魚群在河道棲息。

Fish shelters and deflectors can change the flow direction and reduce flow speed, providing a refuge for fish to inhabit.

▲ 保留舊石牆

Preserving grantie walls

我們保留東光道一段已有70年歷史的麻石牆,並在牆下河壁鋪設麻石磚,配合舊有石牆。

The 70-year-old granite wall along Tung Kwong Road has been preserved. We have paved the riverwall with granite tiles to match with the grantie wall.



保留麻石牆 Preserving grantie walls

啟德河經活化後,我們更經常見到雀鳥及游魚於該河道棲息。

After revitalising the Kai Tak River, we often see birds and fishes on the riverside.

於啟德河棲息的鳥類包括小白鷺 Little egrets roosting in Kai Tak River







除了在現有排水工程引入活化河道概念,本署在新發展區的排水規劃中亦加入活化水體意念,為市民提供更美好的居住環境。香港土地彌足珍貴,經活化的市區河道及明渠可提供更多公共空間,讓市民走近河道,在河邊漫步、緩跑、以及踏單車等,進行各種近水活動。

In addition to integrating the river revitalisation concept into the existing drainage projects, DSD will continue to include water body revitalisation elements in New Development Area drainage plans to create better living environments for the community. Land is always precious in Hong Kong and revitalised urban channels and nullahs can create more public space where people can enjoy the waterfront and engage in water-friendly activities such as walking, jogging and cycling.

活化翠屏河

Revitalisation of Tsui Ping River

翠屏河原是貫穿翠屏道及敬業街旁的明渠, 座落觀塘區中央,毗鄰民居及繁盛工商 業區。基於河道水景特質,翠屏河有利成為 市區珍貴的河畔公共空間。活化翠屏河工 程除可加強河道防洪能力外,亦可將該河化 成為市民欣賞河景和進行休閒活動的新 地標。

活化翠屏河計劃包括以下工程項目:

- ♠ 活化現有明渠 提供富吸引力的水景設計及河景設施
- 2 河上增建園境平台,提供休閒用地
- 加建河道兩旁及連接河道兩岸的行人通道,以加強行人通道間的連繫和易行度,使翠屏河成為社區的綠化河道走廊
- 改建及翻新現有鯉魚門道的行人天橋
- 美化翠屏河旁的街道

Situated right at the heart of Kwun Tong, Tsui Ping River is a nullah running along Tsui Ping Road and King Yip Street. It is set in close proximity to residential and bustling commercial and industrial areas. Given its unique waterscape, Tsui Ping River is well-positioned to become a valuable urban riverside leisure space for public enjoyment. In sync with enhancing flood prevention capacity, the project will involve turning the existing nullah into a new landmark where the public can enjoy the river view and leisure activities.

The works under the Revitalisation of Tsui Ping River comprises the following:

- Revitalisation of the existing nullah through the provision of attractive waterscape design and water features
- 2 Provision of landscaped decks and amenity public space above the river
- § Provision of walkways along / across the river to enhance connectivity in order to transform Tsui Ping River into a green river corridor in the community
- 4 Modification of the existing footbridge across Lei Yue Mun Road; and
- **5** Beautification of streets adjacent to Tsui Ping River

翠屏河現貌及活化構想

Existing View of Tsui Ping River and the Revitalisation Concept



翠屏河現貌 Today's Tsui Ping River



活化翠屏河概念圖 Conceptual picture of Tsui Ping River Revitalisation





挑選有潛力的明渠進行活化

Selecting Potential Nullahs and Rivers for Revitalisation

同時,我們已檢視及評估全港主要明渠和河道的活化潛力,挑選合適的明渠進行活化。我們正深入研究大圍明渠(香粉寮至文禮閣)、火炭明渠(桂地新村至香港體育學院)、屯門河中游(兆康站至屯門站),以及佐敦谷明渠(沈雲山抽水站至佐敦谷游泳池)的活化方案,期望活化水體提升市民生活質素。

Meanwhile, we have reviewed and assessed the revitalisation potential of major nullahs and river channels in Hong Kong. We will select nullahs and river channels that are suitable for revitalisation. We are now conducting in-depth investigation on Tai Wai Nullah (from Heung Fan Liu to Man Lai Court), Fo Tan Nullah (from Kwai Tei New Village to Hong Kong Sports Institute), mid-stream of Tuen Mun River Channel (from Siu Hong Station to Tuen Mun Station), and Jordan Valley Nullah (from Shum Wan Shan Pumping Station to Jordan Valley Swimming Pool) to identify suitable revitalisation schemes with a view to enhancing quality of living by revitalising our water bodies.



大圍明渠現貌 Current view of Tai Wai Nullah



活化大圍明渠構想圖 Conceptual picture of the revitalised Tai Wai Nullah



火炭明渠現貌 Current view of Fo Tan Nullah



活化火炭明渠構想圖 Conceptual picture of the revitalised Fo Tan Nullah



屯門河中游現貌 Current view of mid-stream of Tuen Mun River Channel



活化屯門河中游構想圖 Conceptual picture of the revitalised mid-stream of Tuen Mun River



佐敦谷明渠現貌 Current view of Jordan Valley Nullah



活化佐敦谷明渠構想圖 Conceptual picture of the revitalised Jordan Valley Nullah



年度大事 重點輕描

Highlights of the Year

2017-18年度,本署的排污和防洪工作進 展良好,成效顯著。治理深圳河第四期工 程及昂船洲污水處理廠主泵房的首階段 維修工程相繼竣工,可見本署員工盡力盡 心,效率超卓。此外,我們繼續就多個工 程範疇及河道生態展開研究工作,更積 極探討發展污水處理和雨水排放服務, 鼓勵跨業界通力合作,推動創新科技發 展。本章與大家分享本年度大事及所得 獎項。

In 2017-2018, DSD progressed well in sewage and flood prevention and garnered remarkable results. The Regulation of Shenzhen River Stage 4 and the first stage of maintenance works of penstocks at the Stonecutters Island Sewage Treatment Works (SCISTW) Main Pumping Station were completed in tandem, reflecting the high efficiency and great dedication of our staff. During the year, we continued to conduct research on various scopes of works and river channel ecology, while sparing no effort in exploring ways to develop our sewage treatment and drainage services, as well as to promote cross-sectoral collaboration and pioneer innovative technologies. This chapter shares our highlights and awards in 2017-18.











治理深圳河第四期工程順利完竣 Completion of Regulation of Shenzhen River Stage 4



整項深圳河治理第四期工程已於2017年7月 圓滿竣工,工程費用約為8.5億港元。為提 升平原河河口至白虎山一帶的防洪能力,第 四期工程改善該段長約4.5公里的深圳河, 以及建造容量達8萬立方米的蓄洪湖泊。 湖中並加入綠化及生態保育元素,藉此營造 濕地生態環境。

深圳河是香港特別行政區(香港特區)和深圳經濟特區之間的分界河,全長37公里,流域面積達312平方公里,是香港梧桐河、平原河和新田溪流,以及深圳市沙灣河、布吉河和福田河的排放出口。過去兩岸經常氾濫成災,威脅深港兩地居民的生命財產安全。香港特區政府和深圳市政府決心整治該河,並成立聯合治理深圳河工作小組,專責監督有關工程。

治理深圳河工程分4期進行,總工程費用約為26.5億元。第一至三期工程先後於1997年、2000年及2006年竣工,將原長約18公里的深圳河拉直、擴闊和挖深,使之成為長13.5公里的新河道,大大提高其防洪能力,舒緩水浸風險,並改善河流環境及河道航運情況。

The Regulation of Shenzhen River Stage 4 was successfully completed in July 2017 at a construction cost of approximately \$0.85 billion. The works involved improving a 4.5 kilometres section of Shenzhen River between the Ping Yuen River estuary and Pak Fu Shan, and constructing a flood retention lake with a capacity of 80,000 cubic metres to upgrade flood prevention capacity of the area. We also introduced greenery and ecological conservation elements into the lake to create a wetland habitat.

Shenzhen River, a boundary river between Hong Kong Special Administrative Region (HKSAR) and Shenzhen Special Economic Zone, measures 37 kilometres in length with a catchment area of 312 square kilometres. It is the drainage outlet of Ng Tung River, Ping Yuen River and the San Tin streams on Hong Kong side as well as that of Shawan River, Buji River and Futian River on Shenzhen side. Regional flooding in these river catchments frequently threatened public safety and property on both sides of the river in the past. The HKSAR Government and the Shenzhen Municipal Government are determined to regulate the river; hence set up a Joint Working Group on Shenzhen River Regulation to oversee project implementation.

The entire Shenzhen River Regulation Project was carried out in four stages, costing about \$2.65 billion in total. Stage 1, Stage 2 and Stage 3 works of the project were completed in 1997, 2000 and 2006 respectively. The original 18 kilometres Shenzhen River was straightened, widened and deepened into a new river channel measuring 13.5 kilometres long. As flood prevention capacity was significantly improved, regional flooding hazards in the area along the river were effectively alleviated. The works also enhanced river environment and navigation.



治理深圳河第四期工程蓄洪湖鳥瞰圖 Aerial view of the flood retention lake under the Regulation of Shenzhen River Project Stage 4





渠務署2017研究及發展論壇 DSD Research & Development Forum 2017

渠務署2017研究及發展論壇於11月14日在香港科學館舉行,吸引逾500名本地學者、專業人士和業界代表參與,交流意見。本署更邀得業界翹楚、教授和專家就「智慧,環保及具抗禦力的污水管理」和「智慧,環保及具抗禦力的雨水管理」發表演説,分享處理污水和排放雨水應用高智能技術發展綠色創新的經驗,以促進業界合作和創新科技研發。

The DSD Research & Development Forum 2017 was successfully held on 14 November at the Hong Kong Science Museum. More than 500 local academics, professionals and industry representatives participated and exchanged ideas. Industry leaders, professors and experts were invited to deliver thematic speeches on "Smart, Green and Resilient Wastewater Management" and "Smart, Green and Resilient Stormwater Management", sharing their experience in the application of smart technologies for sewage treatment and stormwater drainage as well as the development of green innovation, so as to encourage sectorial collaboration and technological innovation development.



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



環境局常任秘書長唐智強先生(左六)、本署署長唐嘉鴻先生(左五)、本署副署長麥嘉為先生(左四)與上午論壇的講者合照 Group photo of Mr. Donald TONG Chi-keung, Permanent Secretary for the Environment (sixth left), Mr. Edwin TONG Ka-hung, Director of Drainage Services (fifth left), Mr. MAK Ka-wai, Deputy Director of Drainage Services (fourth left), and speakers of the morning session



發展局常任秘書長(工務)韓志強先生(右六)、發展局副秘書長(工務)麥成章先生(左六)、本署署長唐嘉鴻先生(左七)、本署副署長 麥嘉為先生(左五)與下午論壇的講者合照

Group photo of Mr. HON Chi-keung, Permanent Secretary for Development (Works) (sixth right), Mr. Vincent MAK Shing-cheung, Deputy Secretary for Development (Works) (sixth left), Mr. Edwin TONG Ka-hung, Director of Drainage Services (seventh left), Mr. MAK Ka-wai, Deputy Director of Drainage Services (fifth left), and speakers of the afternoon session



研究與發展重點

Highlights of Research & Development Studies



改善渠道生物多樣性研究

Study on Enhancement of Channel Biodiversity

為保育河道生態系統,本署積極推廣活化水體概念,在近年排水改善工程項目中引入綠化河道和生物多樣性元素,確保排水暢順、美化環境及促進生物多樣性。年內,我們實地試驗恢復河道生物(如螢火蟲)的棲息地,以活化河道和提升其生態價值。有關研究為活化明渠及河道提供具體可行方案,並有助評估改善水質和恢復河流棲息地對促進生物多樣性的成效。

Attempting to conserve river ecosystems, DSD has been actively promoting the concept of revitalizing water bodies. In recent years, channel greening and biodiversity features have been introduced in our drainage improvement projects for effective drainage, beautification and biodiversity enhancement. During the year, we commenced on-site trials to revitalise drainage channels and boost their ecological value through rehabilitation of habitats for water-related organisms such as fireflies. The study not only provided a specific and viable solution for nullah and river revitalisation, but also helped evaluate the effect of improved water quality and river habitat restoration on biodiversity enhancement.









- 1. 在軍地河河道復修工程中,我們重新 堆砌石塊,營造多孔隙讓生物棲息 Boulders re-arranged during the restoration of Kwan Tei River to create more pores and crevices as wildlife habitat
- 2. 螢火蟲在經修復的棲息地飛舞 Fireflies flying in the restored habitat
- 3. 河道修復試驗前的麻笏河 Ma Wat River before river restoration site trial
- 4. 河道修復試驗後的麻笏河 Ma Wat River after river restoration site trial















▲ 智慧渠務監測系統試驗計劃

Study on Smart Sewerage Monitoring System Pilot Scheme

為加強了解本署渠務管道的實時狀態及確保排水系統時刻正常運作, 我們與學者及業界展開智慧渠務監測系統試驗計劃,在沙井安裝不同 探測裝置以收集數據並進行分析,從而優化日常操作及維修工作。

To better understand the real-time situation of our drains and sewers and ensure the drainage system is in good operating condition at all times, we collaborated with academics and industrial partners on the Smart Sewerage Monitoring System Pilot Scheme. Various sensors were installed in manholes to collect data for analysis that would optimise our daily operation and maintenance works.



沙井內的數據收集器和超聲波傳感器能實時監測水位 變化

Data loggers and ultrasonic sensors in manholes can monitor real-time water level movements

▲ 氣味控制研究

Study on Odour Control

針對渠務管道產生的氣味及氣體,本署進行了排水及污水系統的氣味控制研究,評估水凝膠抑制排水系統中一種常見氣味(硫化氫)的成效。水凝膠透過抑制排水系統中的厭氧菌含量,減少硫化氫產生,從而有效控制氣味。

研究項目在本署轄下多個排水系統進行, 透過定期檢驗空氣及水樣本,監測水中細菌 及氣體濃度變化。本署第一階段研究期間, 已收集水凝膠在排水系統控制氣味的數據。 為更深入了解水凝膠消除氣味的效能及掌 握其最佳用法,本署正推出第二階段研究項 目,冀找出以水凝膠抑制其他氣味的效能, 以及在排水系統中全面使用水凝膠抑制氣味 的可行性。 To address the issue of odour and gases generated in sewers and drains, we conducted a study on controlling odour from drainage and sewage systems. The effectiveness of hydrogel for inhibiting common odour (Hydrogen Sulfide (H₂S)) was evaluated. It is found that hydrogel can inhibit the growth of anaerobic bacteria and reduce the generation of H₂S in drainage systems, which can in turn control the odour effectively.

The study was carried out in several drainage systems operated by DSD, involving regular testing of air and water samples, and monitoring changes in the bacteria and gas contents. Data on hydrogel controlling odour in drainage systems were obtained during the first stage of the study. To learn more about the effectiveness of hydrogel and its best application, DSD is commencing stage two of the study, aiming to identify the effectiveness of hydrogel in controlling other odours, as well as the feasibility of full application of hydrogel to suppress odour in drainage systems.







Study on Operating Conditions for the Co-digestion of Food Waste and Sewage Sludge

「廚餘、污泥共厭氧消化」技術能進一步 縮減固體體積和增加屬可再生能源的生物 氣體。因此,本署就此技術進行了一系列 實驗室規模的操作環境研究。與此同時, 政府於2016年《施政報告》提出進行的 「廚餘、污泥共厭氧消化試驗計劃」已進入 工程建造階段,預計於2019年開始運作。

The technology of "Food Waste/Sewage Sludge Anaerobic Co-digestion" can further reduce the volume of solids and increase the production of renewable energy - biogas. As a result, the Drainage Services Department has conducted a series of laboratory-scale studies on the operating conditions for this technology. At the same time, the engineering works of "Food Waste/ Sewage Sludge Anaerobic Co-digestion Trial Scheme" mentioned in the Policy Address of 2016 are at the construction stage and will commence operation in 2019.



除進一步縮減固體體積,「廚餘、污泥共厭氧消化技術」亦能增加生物氣體 In addition to further reducing the volume of solids, the technology of "Food Waste/Sewage Sludge Anaerobic Co-digestion" will also increase biogas production







大坑東蓄洪池《大禹之後》媒體藝術展覽

Interactive Exhibition "After the Deluge" at Tai Hang Tung Stormwater Storage Tank

2018年1月6至31日,本署首次借出轄下大 坑東蓄洪池作藝術展覽場地,與香港藝術 發展局合辦以水為主題的《大禹之後》媒體 藝術展覽。該池是全港首個及最大的地下 蓄洪池,容量達10萬立方米,自2004年啟 用至今,紓緩旺角一帶水浸風險。我們希望 以藝術手法全新演繹蓄洪池概念和用途, 讓市民進一步認識水的特性及香港的防洪 工作。是次展覽由本地藝術家伍韶勁先生 創作,利用經典神話《大禹治水》帶出現代 「大禹」的故事。市民參觀該池期間,可參 加導賞團了解池內展品。

From 6 to 31 January 2018, DSD co-organised with the Hong Kong Arts Development Council (HKADC) an art exhibition titled "After the Deluge" and offered the Tai Hang Tung Stormwater Storage Tank (THTSST) as an exhibition venue for the first time. THTSST is the first and largest stormwater storage tank in Hong Kong with a capacity of 100,000 cubic metres. Since its commissioning in 2004, it has successfully relieved the risk of flooding in Mongkok area. It was hoped that the concept and functions of the tank could be demonstrated by means of arts to enable the public to further understand the characteristics of water and flood prevention work in Hong Kong from a new perspective. This exhibition, created by a local artist, Mr. Kingsley NG, made use of the classic mythology of "Dayu Tames the Water" to bring out the contemporary "Dayu" story. While visiting THTSST, visitors could join a guided tour to learn more about the exhibits inside the tank.

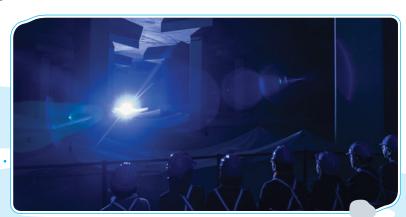


本署署長唐嘉鴻先生(左六)、副署長麥嘉為先生(左三)、香港藝術發展局主席王英偉博士(右七)、香港賽馬會慈善事務部主管(體育、 康樂、藝術及文化)陳淑慧女士(右六)、藝術家伍韶勁先生(左五)及嘉賓於《大禹之後》媒體藝術展覽開幕禮合照

Group photo of Mr. Edwin TONG Ka-hung, Director of Drainage Services (sixth left), Mr. MAK Ka-wai, Deputy Director of Drainage Services (third left), Dr. Wilfred WONG Ying-wai, Chairman of the Hong Kong Arts Development Council (seventh right), Ms. Rhoda CHAN, Head of Charities (Grant Making - Sports, Recreation, Arts & Culture) of the Hong Kong Jockey Club (sixth right), Mr. Kingsley NG, media artist (fifth left) and guests at the opening ceremony of "After the Deluge"



大坑東蓄洪池舉行《大禹之後》媒體藝術展覽 "After the Deluge" staged inside the THTSST







昂船洲污水處理廠主泵房水閘維修工程首階段工程順利完竣 Successful Completion of the First Stage of Maintenance Works of Penstocks at Main Pumping Station of Stonecutters Island Sewage Treatment Works (SCISTW)

2018年2月20日至3月4日,本署完成更換 昂船洲污水處理廠一號主泵房內兩和2.6米 (闊) x4.2米(高)和2.6米 (闊) x4.4米(高)以及重10公噸和3公噸)的 首階段工程。水閘維修工程分階段進行5次繞流排放(包括已進行6次繞流排放(包括已進行成。 排放),預計整項工程於2020年完成。 近總結首次繞流排放的經驗及審視環境的本 正總結首次繞流排放的經驗及審視環境,以改善 造果,以改善日後繞流排放的間,以環境 結果,以改善日後繞流排放時工程時, 並環境的影響。為減低維修工程時, 並環境的影響,本署規劃維修工程時, 近天程顧問進行詳細水質影響評估, 近天程顧問進行詳細水質影響評估, 近天空進 行繞流排放時採取緩解措施,同時密切監察 水質。 Between 20 February and 4 March 2018, DSD completed the first stage of replacement of two large penstocks (measuring 1.4 metres (wide) x 4.2 metres (high) and 2.6 metres (wide) x 4.4 metres (high); and weighing 10 tonnes and 3 tonnes respectively) inside the Main Pumping Station No.1 (MPS1) of SCISTW. The maintenance works were being implemented in stages, and would involve five rounds of bypasses (including the first discharge which was completed). The whole project is scheduled for completion in 2020. DSD is reviewing the operational experience of the first round of bypass and environmental monitoring results for improving the future bypass arrangement to ensure safety of works, minimise the duration of bypass as far as possible and reduce environmental impacts. With a view to minimising the impacts of the maintenance works on the environment and the public, DSD appointed engineering consultants to conduct detailed water quality impact assessment when planning the project. A series of mitigation measures were in place during bypass and water quality was closely monitored.



工程團隊把部分水閘組件拆除
The project team dismantled some of the penstock components





昂船洲污水處理廠鳥瞰圖 Aerial photo of SCISTW

首階段工程包括詳細勘測及拆卸兩道現有水 閘。兩個水閘位置特殊,設於地下34米、 主泵房的最外圍,其功用設計為於有需要時 於昂船洲污水處理廠一號主泵房及淨化海港 計劃深層污水隧道之間的交匯處,調節來 自淨化海港計劃第一期7間基本污水處理廠 (柴灣、筲箕灣、將軍澳、觀塘、土瓜灣、 青衣及葵涌基本污水處理廠)的污水流量。 這兩道水閘自2001年淨化海港計劃第一期 啟用已在使用,因其設計壽命即將結束, 所以需要作出更換。由於須關閉一號主泵房 以清除積存的污水,然後讓技術人員內進 維修,上述7間基本污水處理廠須進行臨時 污水繞流排放,即經過基本處理的污水不 會經昂船洲污水處理廠進行化學強化一級 處理,而是直接透過海底排放管排出維港。

昂船洲污水處理廠自2001年起投入服務,每天收集及處理來自維港兩岸的污水,經化學強化一級處理和消毒後才排放到維港以西海域,維港水質因而大大改善。

Stage I works included detailed survey and dismantling of these two existing penstocks. Located at a unique position at 34 metres underground of the outermost part of MPS1, these penstocks were designed for regulation, where necessary, of the incoming sewage flow at the intersection between MPS1 and the deep sewage tunnels of the Harbour Area Treatment Scheme (HATS) through which sewage from seven HATS Stage 1 Preliminary Treatment Works (PTW) (Chai Wan, Shau Kei Wan, Tseung Kwan O, Kwun Tong, To Kwa Wan, Tsing Yi and Kwai Chung PTW) was collected. These two penstocks were in use since commissioning of HATS Stage 1 in 2001 and were coming to the end of their design life hence needing replacement. As MPS1 has to be closed to empty the accumulated sewage before technicians can enter to carry out the maintenance works, temporary sewage bypass is necessary at the seven HATS Stage 1 PTWs, i.e. the sewage after preliminary treatment will be directly discharged to Victoria Harbour through submarine outfalls without chemically enhanced primary treatment at SCISTW.

Since coming into operation in 2001, SCISTW has been collecting and treating sewage from both sides of the harbour every day. Following chemically enhanced primary treatment and disinfection, the effluent is discharged into the waters west of the harbour. As a result, the water quality of the harbour has been significantly improved.





獎項及殊榮 Awards and Honours



4月 Apr

2017年4月20日 **20 April 2017**

本署網站(www.dsd.gov.hk)榮獲最佳.hk網站 獎2016「政府部門」組別的榮譽嘉許獎項

The website of DSD (www.dsd.gov.hk) was bestowed the Honourable Mention Award under the "Government Departments" category of the "Best .hk Website Awards 2016"



5月 May

2017年5月8日 8 May 2017

有關小蠔灣污水處理廠太陽能發電場的論文榮 獲香港工程師學會2017年度環境論文優異獎

DSD paper on the Solar Farm at Siu Ho Wan Sewage Treatment Works received the Merit Award of The Hong Kong Institute of Engineers' 2017 Environmental Paper Award



6月 Jun

2017年6月22日 **22 June 2017**

本署獲英國新工程合約用戶組織頒發「創新合約條款」組別大獎

DSD won the Winner Award in the "Contract Innovation through Additional Clauses" category from the United Kingdom's (UK) NEC Users' Group



8月 Aug

2017年8月

August 2017

本署可持續發展報告2015-16榮獲多項殊榮,其中包括:

DSD Sustainability Report 2015-16 received a number of awards, including:



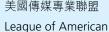
主辦機構 Organisers

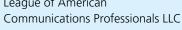


△ 2016 Vision Awards

● 年報組別 - 金獎 Gold Award in the category of Annual Report

● 全球最佳年報首50名 Top 50 Annual Reports Worldwide







2016 Inspire Awards

● 金獎 Gold Award

● 2016年最優秀企業出版刊物前25名 Top 25 Corporate Publishing Materials of 2016

美國傳媒專業聯盟

League of American
Communications Professionals LLC



▲ 2017 International ARC Awards

● 銅獎(綠色/環保年報)

MerComm, Inc.



▲ 2017 APEX Awards for Publication Excellence

Communications Concepts, Inc.

卓越獎(電子媒體 - 綠色)
 Awards of Excellence (Electronic Media - Green)

Bronze Award (Green/ Environmentally Sound Annual Report)



▲ 香港管理專業協會2017年度最佳年報獎 2017 HKMA Best Annual Reports Awards

● 優秀環境、社會及企業管治資料披露獎 Citation for Environmental, Social and Governance Disclosure



香港管理專業協會

The Hong Kong Management Association

9月 Sep

2017年9月7日

7 September 2017

跑馬地地下蓄洪計劃在2017公務員優質服務獎勵計劃中連奪兩獎,包括「點滴·宜居」榮獲「隊伍獎(專門服務)」 金獎,以及與康樂及文化事務署組成的「合作無「格」—相遇在跑馬地」獲得「部門合作獎」優異獎



Happy Valley Underground Stormwater Storage Scheme won two awards at the Civil Service Outstanding Service Award Scheme in 2017. "Drops•Livability" was awarded the Gold Prize under "Team Awards (Specialized Service)" and "Unfettered Collaboration – The Encounter in Happy Valley" was awarded the Meritorious Award with the Leisure and Cultural Services Department (LCSD) under "Partnership Award"







10月 Oct

2017年10月6日

6 October 2017

有關跑馬地地下蓄洪計劃的論文榮獲英國土木工程師學會出版獎 海外獎

DSD paper on the Happy Valley Underground Stormwater Storage Scheme received the Publishing Award (Overseas Publication) from the Institution of Civil Engineers of the UK



2017年10月11日

11 October 2017

時任高級工程師鄭雅思女士(圖右五)及工程師黃子英 先生(圖左三)榮獲2017年申訴專員嘉許獎(公職人員獎)

Ms. Ellen CHENG Nga-see, then Senior Engineer (fifth right), and Mr. Terry WONG Tze-ying, Engineer (third left), received Awards for Officers of Public Organisations at the Ombudsman's Awards 2017



11月 Nov

2017年11月2日

2 November 2017

高級文書主任鍾麗貞女士(圖右五)及 時任一級監工溫偉超先生(圖左三)於 公務員事務局局長嘉許狀計劃中獲得 嘉獎

Ms. Winky CHUNG Lai-ching, Senior Clerical Officer (fifth right) and Mr. Wan Wai-chiu, then Works Supervisor I (third left), received commendation under the Secretary for the Civil Service's Commendation Award Scheme





2017年11月6日 6 November 2017 望后石污水處理廠榮獲2016-2017年度中國建設工程魯班獎

Pillar Point Sewage Treatment Works was awarded the 2016-2017 Luban Prize for Chinese Construction Projects

2017年11月9日

9 November 2017

石湖墟污水處理廠一進一步擴建工程第1A期一前期 工程及坪輋路污水渠工程獲頒2017年歐特克香港建築 資訊模型大獎

Advance Works for Shek Wu Hui Sewage Treatment Works – Further Expansion Phase 1A and Sewerage Works at Ping Che Road was awarded Autodesk Hong Kong BIM Awards 2017



11月 Nov

2017年11月23日

23 November 2017

啟德河改善工程榮獲香港顧問工程師協會2017年 年獎

Kai Tak River Improvement Works was bestowed the Association of Consulting Engineers of Hong Kong (ACEHK) Annual Award 2017



12月 Dec

2017年12月 **December 2017**

渠務署義工隊獲頒社會福利署義務工作嘉許狀一 金狀(團體)

DSD Volunteer Team was awarded the Hong Kong Volunteer Award of Social Welfare Department – Gold Award (Organisation) by the Social Welfare Department



2017年12月15日

15 December 2017



港島西雨水排放隧道的急流漩渦進水口設計榮獲 建造業議會創新獎2017-可持續建築第一名

Supercritical Vortex Intakes for Hong Kong West Drainage Tunnel won the First Prize of Construction Sustainability in CIC Construction Innovation Award 2017

3月 Mar

2018年3月17日 17 March 2018

渠務署展區「光再生 花綻放」在2018年香港花卉 展覽獲得最佳展品(園林景點)大獎

DSD's exhibit "Energy Revives in Blossoms" was awarded the Grand Award for Outstanding Exhibit (Landscape Display) at Hong Kong Flower Show 2018





管治方針

Governance Approach

本署深信優良的機構管治是可持續發展的基石,亦是實現抱負、使命和信念的根本。本 成立至今,一直致力建立及維持優良的機構的 治,並以公眾利益為依歸。我們緊守管治的機則 由高級管理層帶領多個高效的事務委員會 管理系統,制訂可持續發展管理原則及監 時,我們熱衷聆聽內部及外部持份者的意見 時,我們熱衷聆聽內部及外部持份者的服務 以釐清我們工作目標及期望,為本署的服務者 工作制定更有效的策略,持續提升各界持份者 對我們管治的信心和信任。

DSD firmly believes that sound corporate governance is not only the bedrock of sustainable development, but also the foundation for achieving our vision, mission and values. Since our establishment, DSD has endeavoured to establish and maintain good corporate governance, with public interest at our heart. We adhere to the principle of good governance through the establishment of a number of highly efficient committees and management systems led by our senior management. They are entrusted with the tasks of formulating sustainability management principles, monitoring policy implementation and improving governance and development strategies timely. On the other hand, we are keen to listen to the views of both internal and external stakeholders to enable us to define our operational targets and expectations, which will in turn help us develop more effective strategies for our services and work and to continue to raise stakeholders' level of confidence and trust in our governance.







抱負、使命和信念

Vision, Mission and Values

本署於1989年成立,為香港特別行政區政 府發展局轄下9個部門之一。我們一直與時 並進,為香港提供專業卓越的防洪及污水處 理服務。我們的「抱負、使命和信念」貫徹 可持續發展理念,可見我們決心推動香港的 可持續發展,以應對氣候變化及城市發展帶 來的挑戰。

Established in 1989, DSD is one of the nine departments under the Development Bureau of the Government of the Hong Kong Special Administrative Region. Keeping abreast of the times, we provide professional and excellent flood prevention and sewage services. Our "Vision, Mission and Values" exemplifies the sustainability concepts, vividly demonstrating our commitment in promoting sustainable development in Hong Kong and rising up to challenges brought by climate change and urban development.

抱負 **Vision**

- 提供世界級的污水和雨 水處理排放服務,以促 進香港的可持續發展
- To provide world-class and stormwater drainage services enabling the sustainable development of Hong Kong

使命 Mission

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

信念 **Values**

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





高級管理層 Senior Management

本署的高級管理層以署長為首,並由一位 副署長及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。成員包括:

Headed by the Director of Drainage Services, the Department's senior management comprises a Deputy Director and four Assistant Directors who are responsible for making important policy decisions and overseeing the Department's daily operations, as well as formulating and reviewing our sustainability strategies and goals. The senior management team includes:



追数罢罢 巨

Director of Drainage Services

唐嘉鴻先生

Mr. Edwin TONG Ka-hung

٠.,

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/設計拓展

Assistant Director/Projects and Development

黄緒勤先生

Mr. WONG Sui-kan

4

助理署長/操作維修

Assistant Director/Operations and Maintenance

簡炎輝先生

Mr. Fedrick KAN Yim-fai

7

主任秘書

Departmental Secretary

李志江先生

Mr. Chris LI Chi-kong

5

助理署長/機電工程

Assistant Director/Electrical and 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

曾國良先生

Mr. Anthony TSANG Kwok-leung



組織架構

Organisational Structure

本署設有4個分科,包括污水處理服務科、 操作維修科、設計拓展科及機電工程科, 下設15個不同功能的分部。此外,總部另 設部門行政部、財務及物料供應部及技術 支援部,分別負責行政、會計及技術支援 工作。截至2018年3月,編制有1,940個常 額職位。

DSD consists of four branches, including Sewage Services Branch, Operations and Maintenance Branch, Projects and Development Branch and Electrical and Mechanical Branch and 15 subordinate functional divisions. In addition, administration, accounting and technical support are handled by the Departmental Administration Division, Finance and Supplies Section and Technical Support Group at our headquarters respectively. As at March 2018, we have a permanent staff establishment of 1,940.

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

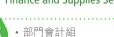


- 部門會計組

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





- Departmental Accounts Unit
- 物料供應組 Supplies Unit

4個分科各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:

Each of the four branches 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 protection, 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,以及為部門轄下的污水處理及防洪項目提供機電設計和裝置。

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 sewage treatment and flood protection projects of the Department.

污水處理服務科

Sewage Services Branch

負責推展包括淨化海港計劃等污水處理及收集系統和工程及徵收排污費。

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





在高級管理層的帶領下,本署已建立可持續發展的管理架構,探討多個可持續發展議題,提出適切建議以及監督相關工作。本署亦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,並設立多個溝通渠道,加強與持份者交流,聽取並回應他們對本署發展的意見,讓本署持續提升可持續發展表現。

Under the leadership of the senior management, DSD has established a sustainability management structure to address various topics specific to sustainable development, and to provide appropriate recommendations as well as supervise the related initiatives. We also actively adopt suitable international standards and management systems and invigorate our management approach with innovative ideas. Risks are properly managed and multiple channels are in place to enhance interaction with all stakeholders, and for us to address their feedback on our development, enable us to improve our sustainability performance continuously.

管理架構

Management Structure

我們設立了3個專責委員會及2個工作小組, 包括: We have set up three committees and two working groups, including:

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

During the reporting period, the Committee held two meetings discuss issues including energy saving, greening, emission reduction and waste reduction in detail, and to review the progress of the environmental initiatives.

安全督導委員會 Steering Group on Safety

安全督導委員會由副署長領 導,負責監察工地的安全表 現、制訂工地的安全標準及 指引、擬定改善措施及審視其 成效和執行維度。

報告期內,委員會共召開2次 會議,討論本署轄下設施及 工地的安全表現、職業安全與 健康(職安健)的內部和外部 審核,以及職安健培訓程和 推廣活動等議題。 Chaired by the Deputy Director, the Group is responsible for supervising the safety performance of DSD sites, establishing safety standards and guidelines at sites, formulating and improvement measures, and evaluating the execution and effectiveness of the undertakings.

During the reporting period, the Committee held two meetings to discuss topics including the safety performance of the facilities and construction site under DSD, internal and external audit of Occupational Safety and Health (OSH) and OSH training and promotion programmes.



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 2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2017研究 及發展論壇。年內,本署共 完成18個研究項目,課題涵蓋 藍綠建設、氣味控制、人工 濕地、熱島效應、污水及污泥 處理、再生能源及工程管理。 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 2017. In the year, DSD completed a total of 18 research projects on topics covering Blue-Green Infrastructure, odour control, artificial wetland, heat island effect, sewage and sludge treatment, renewable energy and project management.

能源及排放管理小組 Energy and Emission Management Team

節能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 在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 saving and emission reduction are 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 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, etc.

可持續發展報告工作 小組 Taskforce on

Taskforce on Sustainability Reporting 可持續發展報告工作小組由 副署長領導,就編製可持續發 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 substantive material topics, etc.



綜合管理體系

Integrated Management System

本署自2002年開始建立和落實符合國際標準的管理體系,至今已實施多套系統組成的綜合管理體系,涵蓋範疇包括品質、環境、職業安全與健康。

DSD has begun establishing and implementing management systems in line with international standards since 2002. To date, we have put in place an integrated management system made up of multiple systems that cover the aspects of quality, environment, and occupational safety and health.

2002

取得ISO 9001品質管理體系認證

Obtained ISO 9001 Quality Management System certification



2007

取得ISO 14001環境管理體系認證

Obtained ISO 14001 Environmental Management System certification

2012

取得OHSAS 18001職業安全衞生管理體系認證

Obtained OHSAS 18001 Occupational Health and Safety Management System certification

2014

元朗污水處理廠取得ISO 50001能源管理標準認證

Obtained ISO 50001 Energy Management System certification for Yuen Long STW

2014

轄下共9所設施取得ISO 55001資產管理標準認證

Obtained ISO 55001 AMS standard certification for nine DSD facilities

(2016)

轄下共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)

轄下共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

(2018)

轄下共229所設施取得ISO 55001資產管理標準認證

Obtained ISO 55001 AMS standard certification for 229 DSD facilities

我們秉持管理體系的「規劃-實施-檢查-行動」原則,不斷追求自我完善。年內, 我們展開對品質ISO 9001及環境管理體系 ISO 14001的內部檢討,務求於2018年9月 截止日期前順利轉換新舊版本,以回應 ISO 9001:2015及ISO 14001:2015新標準的 要求。

為更有效應對自然環境轉變、氣候變化及城市擴展帶來的挑戰,我們竭力優化資產管理以降低成本。自2013年起,本署分階段實施資產管理體系,加強管理轄下設施。由2014年5月至2018年5月,本署轄下22所污水泵房、污水處理廠及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。取得認證的泵房及廠房由2014年佔總數的3%增至2016年的5%,2017年更飆升至40%及2018年的73%。我們冀在2019年6月前,分階段為轄下其餘約80多所的渠務設施進行同類資產管理體系的認證審核。

We adhere to the "Plan-Do-Check-Act" approach of the management systems and strive for continuous self-improvement. During the year, an internal review was conducted on the ISO 9001 Quality Management System and ISO 14001 Environmental Management System with a mission to facilitate smooth transition from old version to the new ones and to meet the requirements of the new standards of ISO 9001:2015 and ISO 14001:2015 before the September 2018 deadline.

We strive to optimise asset management to reduce costs to better address the challenges posed by natural environmental change, climate change and urban sprawl. Since 2013, DSD has been implementing in stages an Asset Management System (AMS) to enhance management of our facilities. From May 2014 to May 2018, 22 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 such accreditation. The percentage of accredited pumping stations and treatment works grew from 3% in 2014 to 5% in 2016, before rising drastically to 40% and 73% in 2017 and 2018 respectively. We aim to extend similar AMSs to the remaining 80-plus DSD-operated drainage facilities in phases by June 2019.

聆聽持份者的意見

Voice of Our Stakeholders

我們重視與持份者坦誠溝通,在分享本署的理念及工程進度同時,致力聆聽和了解持份者關注的議題,以釐清我們的工作目標及期望。為此,我們設立多種渠道與持份者保持恆常溝通,就工程、日常運作及本署發展方針等事宜廣泛交流。詳情請參閱第九章 媒體參與活動及第十章 持份者參與活動。

We value open and candid communication with stakeholders. While sharing the Department's vision and progresses of our projects with stakeholders, we endeavour to listen to and understand their concerns so as to define our operational goals and expectations accordingly. To this end, we have established multiple channels to communicate with stakeholders regularly on matters relating to projects, daily operations and our development approaches. For details, please refer to **Chapter 9 Media Engagement Activities** and **Chapter 10 Stakeholder Engagement Activities**.

持份者¹ Stakeholder¹	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
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

² 102-40

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 Concern³
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 works ◆ 供應商/承辦商的環境表現 Environmental performance of suppliers/ contractors
專業團體 Professional Institutions	 渠務署國際會議 DSD International Conference 研究與發展論壇 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 works

自2012-13年起,我們已連續6年採用一套主動的持份者參與計劃。在編寫可持續發展報告前,邀請不同持份者,包括本署員工、專業機構、學術團體、環保組織、傳媒、工程顧問及承建商等,表達對本署的意見及期望。本年度的持份者參與計劃詳見第二章 關於本報告。

Since 2012-13, we have been conducting a proactive stakeholder engagement programme for six years in a row. Stakeholder groups, including DSD staff, professional institutions, academia, green groups, the media, project consultants and contractors, are invited to express their opinions expectations on us before writing up the sustainability report. For details of stakeholder engagement programme for this year, please refer to **Chapter Two About this Report**.

² 102-40

³ 102-43

4 102-44









2017-18年度防洪概要 Overview of Flood Prevention in 2017-18



2017年氣候驟變,颱風暴雨頻繁。超強 颱風天鴿8月襲港期間引發風暴潮,導致 多個沿海地區嚴重水浸,令防洪工作更具 挑戰。

年內的總降雨量為2,572毫米,略高於1981 至2010年2,400毫米的平均值約7.2%。 2017年,香港天文台共發出1次黑色、4次 紅色及15次黃色暴雨警告。全年唯一的 黑色暴雨警告於5月24日發出,當日廣泛地 區錄得最高每小時逾百毫米降雨量。極端 和局部降雨亦越漸頻繁;7月18日,天文台 共發出3次黃色暴雨警告,大埔區在2小時 內錄得135毫米的雨量,暴雨情況與黑雨信 號相等。年內,天文台亦發出5個8號或8號 以上的熱帶氣旋警告信號,平了1964年 和1999年的記錄。8月23日,超強颱風天鴿 襲港期間適逢天文大潮,鰂魚涌最高水位 達到海圖基準面以上3.57米,創1954年以 來第二高,僅低於1962年超強颱風溫黛創下 的海圖基準面以上3.96米。尖鼻咀錄得的 最高水位更達海圖基準面以上4.56米,是自 1974年有記錄以來新高。

There were drastic climate changes in 2017, with frequent typhoons and rainstorms. The storm surge caused by Super Typhoon Hato which hit Hong Kong in August led to severe flooding in many coastal areas of the city, posing new challenges to our flood prevention works.

The annual total rainfall in 2017 was 2,572 millimetres, slightly higher than the mean annual total rainfall of approximately 2,400 millimetres by approximately 7.2% between 1981 and 2010. In 2017, the Hong Kong Observatory (HKO) issued one Black, four Red and 15 Amber Rainstorm Warnings. The only Black Rainstorm Warning was issued on 24 May, on which day many areas recorded a maximum hourly rainfall of 100 millimetres. Extreme and localised precipitation events were also become more frequent. On 18 July, HKO issued three Amber Rainstorm Warning in total. Tai Po district, however, recorded a rainfall of 135 millimetres within two hours, an amount equalling that of Black Rainstorm Warning. During the year, HKO also issued five tropical cyclone warning signals No. 8 or above, matching the records in 1964 and 1999. Coinciding with the astronomical high tide during the attack of Super Typhoon Hato on August 23, the sea level at Quarry Bay peaked at 3.57 metres above Chart Datum, the second highest record since 1954 and only lower than the record high of 3.96 metres above Chart Datum set by Super Typhoon Wanda in 1962. A maximum sea level of 4.56 metres above Chart Datum was recorded in Tsim Bei Tsui, the highest since records began in 1974.



風災後,本署在鯉魚門當眼位置安裝水尺,顯示天鴿及以往颱風引致的最高海面水位,以加強市民認識及防禦風暴潮After the passage of typhoon, DSD installed staff gauge at prominent location of Lei Yue Mun which shows the maximum sea level of Super Typhoon HATO and past typhoons and helps to enhance public education and awareness of storm surge



為紓緩超強颱風天鴿為香港帶來的水浸風險,在颱風襲港前,本署已加強巡查及清理主要渠道及進水口,尤其是水浸黑點,以確保渠道暢通。此外,我們亦識別了一些容易受風暴潮影響而出現水浸的沿岸低窪地區,包括大澳、鯉魚門及西貢南圍等。政府部門

To minimise the flooding risk arising from the Super Typhoon Hato, DSD stepped up inspections and clearance of major drainage channels and inlets, particularly at flooding blackspots, to ensure that the drains are free from obstruction. Besides, we had identified several low-lying coastal areas that are susceptible to flooding arising from storm surge, such as Tai O, Lei Yue Mun and Nam Wai in Sai Kung. The Government has installed flood prevention

已為相關地區建造了防洪設施,包括升高河堤、裝設潮水閘或止回閥、建造防洪牆等,而天文台亦為上述地區設立風暴潮預警後,然,當收到天文台發出的風暴潮預警後,本署會在有關地點進行緊急水浸緩解工作,以減少水浸的影響。以大澳為例,本署於颱風來臨前已派駐十多人留守大澳,在河堤上通宵加裝臨時防洪屏障,提升河堤的防洪能力,以及應付緊急工作。

在暴雨期間,我們於8號颱風信號生效前已啟動緊急應變控制中心,並派遣應變小隊,動員超過30隊人員,接近120位同事,於較容易受水浸影響的地點駐守候命,以便及時檢查及疏通渠道、減低水浸風險。

facilities such as the construction of flood wall and installation of tidal gate and non-return flap valve. Also, the HKO had established an early alert system for the said locations. When storm surge alerts were issued by the HKO, DSD implemented emergency flood relief measures at relevant locations immediately with an aim to alleviate the flooding impact. Taking an example in Tai O, before the typhoon arrived Hong Kong, DSD deployed over 10 staffs staying in Tai O to install the temporary water-stop boards over the midnight to enhance the flood protection capacity of river wall and to handle emergency situations.

During the severe weather and before the Tropical Cyclone Warning Signal No. 8 is in force, we had activated the Emergency Control Centre and contingency teams were deployed to stand by at the locations prone to flooding, to ensure that inspections and drain clearance would be conducted in time to reduce flooding risk. Around 120 staffs under 30 teams had been mobilised.



本署署長唐嘉鴻先生(左二)向發展局局長黃偉綸先生 (中)講解加裝擋水板措施

Mr. Edwin TONG Ka-hung, Director of Drainage Services (second left), explained the installation of stop-logs to Mr. Michael WONG Wai-lun, Secretary for Development (centre)

在防洪工作上,本署主要按國際標準設計及建造雨水排放系統,並定期進行檢查及維修工作,確保轄下設施妥善運作。 2017-18年度,本署繼續推行多項防洪工程,亦正分階段檢討各區的雨水排放整體計劃,以提升相關地區的防洪能力及配合香港未來發展。 Striving to prevent flooding, DSD has designed and constructed drainage facilities with primary reference to international standards, and carries out regular inspections and maintenance works to ensure proper operation of our facilities. In 2017-18, DSD continued to implement various flood prevention projects. Meanwhile, we are reviewing the Drainage Master Plans (DMPs) of various districts in stages, so as to upgrade their flood protection level and tie in with Hong Kong's future development.







水浸黑點持續減少

Bringing Down the Number of Flooding Blackspot

我們於過去一年進行不同排水系統改善工程,並於2018年年初評估各項已完成的排水系統改善工程成效後,進一步剔除大埔洞梓路的水浸黑點,令全港水浸黑點由7個減至6個。餘下水浸黑點中,2個黑點的改善工程已完成,我們正監察其成效。為盡早剔除所有水浸黑點,其餘4個黑點的第一階段改善工程已完成;我們現正規劃和設計下一階段工程,並會在雨季期間密切監察該等地區的排水情況。

We implemented various drainage improvement works in the past year, and after evaluating the effectiveness of each completed drainage improvement works, we removed the flooding blackspot at Tung Tsz Road in Tai Po in early 2018, thus reducing the total number of flooding blackspots in the territory from seven to six. Among the six remaining flooding blackspots, drainage improvement works for two have been commissioned and their effectiveness is being monitored. In order to remove all the flooding blackspots as early as possible, the first stage improvement works for the other four blackspots have been completed while the next stage improvement works are under planning and design. We will closely monitor the drainage condition in these areas during the rainy season.



水浸黑點總數

Total Number of Flooding Blackspots



香港整體防洪策略

Overall Flood Prevention Strategy of Hong Kong

隨着城市化發展、地面徑流劇增及洪泛平原減少,令低窪地帶或沿海地區有機會出現水浸情況。為解決不同地方的水浸問題,本署按不同地勢特點制訂策略,利用「防洪三招」,即截流、蓄洪、疏浚的方法,有效減低因暴雨引致的水浸風險。

Compounded by urbanization, increase in surface runoff and reduction of flood plains, flooding may happen at certain districts in low-lying areas and coastal areas. To address the flooding problem in various places, we have developed a "three-pronged flood prevention strategy", i.e. stormwater interception, flood storage and drainage improvement, which has been proven effective in mitigating the flood risk arising from heavy rain.



防洪三招

Three-pronged in Flood Prevention Strategy

● 截流 Stormwater Interception 在半山建造雨水排放隧道,以截取中上游雨水,將之直接排入大海或其他河道和渠道

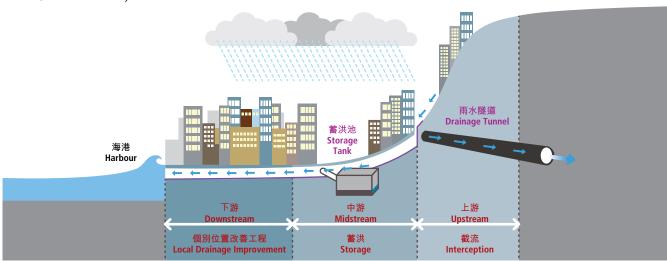
build drainage tunnels to intercept stormwater from the mid-levels and discharge it directly into the sea or to other channels and drains

▲ 蓄洪 Flood Storage 在中游地區建造蓄洪池以暫存部分雨量,減低下游洪峰流量

build storage tanks in the midstream for temporary stormwater storage to relieve the discharge load of the downstream drainage system

● 疏浚 Drainage Improvement 在原有河道進行治理工程或興建排洪河道和渠道,直接提升雨水排放系統的防洪能力

carry out river training works or build new drainage channels and drains to upgrade the capacity of drainage system



為配合香港的可持續發展及應對氣候變化,本署近年開始參照「海綿城市」概念,以「順應自然,彈性適應」的方式,促進雨水滲透到地底,以蓄洪、滯洪方式減少地面徑流,並收集部份雨水重用,以增強城市的水循環效應,提高城市的耐洪能力。

To support the sustainable development of Hong Kong and combat climate change, we adopt the "Sponge City" concept of "following the nature with resilience" to facilitate infiltration and reduce surface runoff through flood storage and retention. Part of the stormwater is collected and reused in a bid to optimise water recycling across the city and enhance the flood resilience level of the city.

「海綿城市 | 理念示意圖

現有排水設施的運作及維修保養

Operation and Maintenance of Existing Drainage Facilities

防治洪患,暢通的雨水排放系統不可或缺。 全港約有2,400公里地下雨水渠、360公里 人工河道、21公里雨水排放隧道,以及4個 地下蓄洪池均由本署管理。年內,我們檢查 逾2,290公里的雨水渠及河道。除了進行 定期檢查及維修保養工作外,我們亦定期 檢測設施的功能和結構,以及在雨季前後 清理淤塞物。 A clear drainage system is prerequisite to flood prevention. There are about 2,400 kilometres of underground stormwater drains, 360 kilometres of engineered channels, 21 kilometres of drainage tunnels, and four underground stormwater storage tanks in Hong Kong, all managed by DSD. During the year, we inspected over 2,290 kilometres of drains and rivers. Apart from regular inspections and preventive maintenance works, we conduct regular functional and structural checks and clear blockages before and after the wet season.



緊急事故及應變措施 Emergency and Response 緊急事故及暴風雨應變組織24小時運作,以統籌緊急事故的信息發放和資源調配事宜,並負責與政府 其他緊急應變單位協調

Emergency and Storm Damage Organisation (ESDO) operates round the clock to coordinate the dissemination of information relating to emergencies and allocation of resources, as well as 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

During heavy rainstorms, some stormwater in urban areas is diverted to storage tanks for temporary storage to relieve the burden of downstream drainage systems

現時,大坑東、上環、跑馬地及安秀道共4個蓄洪計劃已投入運作

Four stormwater storage schemes at Tai Hang Tung, Sheung Wan, Happy Valley and On Sau Road are now in operation

為進一步紓緩九龍區的水浸風險,本署已制訂不同的雨水蓄洪方案,並計劃下一步的勘察工作

To further relieve the flood risk in Kowloon, various stormwater storage schemes have been formulated and are under planning for further investigation



截流 Interception 在上游截取雨水,改道雨水流向,將之直接排出大海或河溪,從而大幅降低下游地區的水浸風險

Stormwater is intercepted at upstream and diverted for direct discharge to the sea or rivers, thereby substantially mitigating the flood risk in downstream areas

避免在下游市區進行大規模排水改善工程,從而減低對交通及公眾的影響

Obviate the need for large-scale drainage improvement works in downstream urban areas, thereby reducing the impacts on traffic and the public

現有4條總長約21公里的雨水排放隧道(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)已運作多年

Four drainage tunnels, including Kai Tak Transfer Scheme, and Hong Kong West, Lai Chi Kok and Tsuen Wan Drainage Tunnels, totalling 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

Drainage improvement works are carried out to straighten, widen and deepen rivers and to construct or enlarge underground drains

至今已改善逾100公里河道,另提升約93公里排水渠

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

▲ 雨水排放整體計劃檢討研究

為配合香港未來發展及應對氣候變化,本署就全港地區進行了雨水排放整體計劃研究和雨水排放研究。繼新界元朗及北區和跑馬地的檢討研究於2011年完成後,跑馬地的改善工程亦於2017年全面啟用。西九龍及東九龍的雨水排放整體計劃研究工作亦於2015年完成,部分改善工程正在籌劃中。

Drainage Master Plan (DMP) Review Study

To tie in with Hong Kong's future development and adapt to climate change, we have conducted DMP review studies and drainage studies on the whole territory of Hong Kong. The review studies of DMPs for Yuen Long and North District in the New Territories and Happy Valley were completed in 2011 whereas the improvement works at Happy Valley have been fully commissioned since 2017. The DMP Reviews for West Kowloon and East Kowloon were also completed in 2015 and some of the proposed improvement works are under planning.

目前進度 Current progress

現時,元朗及新界北區研究建議的改善工程正在設計中,而西九龍及東九龍的雨水排放整體計劃部分改善工程亦在 籌劃中。沙田、西貢、大埔及港島北的排水系統改善工程亦將於今年制定,並擬於2019年展開下一階段的勘查研究 工作。大嶼山及離島區、淺水灣及大潭和屯門、荃灣及葵青區的3項雨水排放整體計劃檢討研究目前正在進行中。

At present, the improvement works proposed on the studies for Yuen Long and North District in the New Territories are under design. Some proposed improvement works for West Kowloon and East Kowloon are also under planning. This year, drainage improvement works in Sha Tin, Sai Kung, Tai Po and Northern Hong Kong Island will also be formulated and the next stage of investigation is targeted to commence in 2019. As for Lantau and Outlying Islands, Repulse Bay and Tai Tam, Tuen Mun, Tsuen Wan and Kwai Tsing, the three DMP review studies are currently underway.

▲ 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,同時將之活化成為市區綠化河道走廊, 供市民享用。

Kai Tak River Improvement Works

The project aims to improve the flood protection levels of East Kowloon by reconstructing and rehabilitating a some 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 the river 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,排洪工程預計於 2018年年中完成。整項工程預算費用約為 28億元。

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



Kai Tak River before (left) and after (right) the Improvement Works

▲ 西九龍雨水排放系統改善計劃 – 水塘間轉運隧道計劃

為提升西九龍的防洪能力以應對氣候變化帶來的挑戰,我們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,把九龍水塘群接收的地面徑流轉運至下城門水塘。此計劃可額外提供每年約340萬立方米食水。

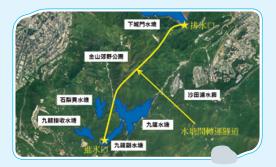
West Kowloon Drainage Improvement – Inter-reservoirs Transfer Scheme (IRTS)

In an attempt to enhance the flood prevention capacity of West Kowloon to cope with the challenges posed by climate change, we plan 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 the surface runoff collected from the Kowloon group of reservoirs to Lower Shing Mun Reservoir. The IRTS will generate an annual additional fresh water yield of about 3.4 million cubic metres.

目前進度 Current progress

工程預計於2019年第一季展開,2022年完成。整項工程預算費用約為12.2億元。

Construction works are scheduled for commencement in the first quarter of 2019 for completion in 2022. The estimated project cost is about \$1.22 billion.



水塘間轉運隧道計劃的位置 Location of Inter-reservoirs Transfer Scheme



水塘間轉運隧道計劃位於九龍副水塘的隧道進水口位置 Location of the tunnel intake of Inter-reservoirs Transfer Scheme at the Kowloon Byewash Reservoir

▲ 活化翠屏河

活化工程詳細設計於2017年12月展開。 工程旨在改善環境、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,同時美化毗鄰的行人 道,以及透過增建河邊走道和園景平台以 加強行人通道間的連繫和易行度。

Revitalisation of Tsui Ping River

Detailed design for the revitalisation works has already begun in December 2017. Through environmental, ecological and scenic enhancement, we are transforming a some one-kilometre nullah along King Yip Street, King Yip Lane and Tsui Ping Road into Tsui Ping River. 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

我們將在九龍東進行活化工程,並於2017年12月展開詳細設計。 第二階段的公眾參與活動於2018年5月至7月進行,內容包括巡迴 展覽和社區工作坊,以蒐集公眾對計劃及最新活化方案的意見。

We will be conducting revitalisation works in Kowloon East following the commencement of detailed design in December 2017. The stage two public engagement exercise will be conducted from May to July 2018 with activities including roving exhibitions and community workshops for collecting views on the project and the updated revitalisation plan.



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



2017-18年度污水處理概要

Overview of Sewage Treatment and Sewerage System in 2017-18

除了疏導雨水,收集、處理及排放本港日常產生的污水亦是本署核心服務之一。本署致力提供世界級污水處理服務,透過不同污水處理程序及先進技術,大大減低污染物排放。我們亦定期進行維修保養工作,確保污水收集、處理和排放設施有效運作。展望未來,我們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,保護本港水域水質,促進香港可持續發展。

Apart from stormwater drainage, one of the core services of the Department is to collect, treat and discharge daily sewage generated in Hong Kong. DSD is committed to providing world-class sewage treatment services through adopting various sewage treatment processes and advanced technologies to significantly reduce the discharge of pollutants. We also carry out regular repair and maintenance works to ensure the effective operation of our sewerage, treatment and disposal facilities. Looking ahead, we will continue to expand the coverage of the sewerage system and to improve the sewage treatment facilities to protect the water quality within Hong Kong waters and promote the sustainable development of Hong Kong.



每日平均處理約280萬立方米污水,年度污水總處理量10.07億立方米

Treatment of about 2.8 million cubic metres of sewage on average every day and 1,007 million cubic metres of sewage in total in the year



污水收集網絡總長約1,770公里

Total length of sewerage network about 1,770 kilometres



公共污水收集網絡服務香港約

93.5% Jul

Public sewerage network serves around 93.5% of Hong Kong's population¹



年度污泥收集及處理約

380,000公噸

About 380,000 tonnes of sludge collected and treated in the year



本署轄下共有314所污水處理設施

A total of 314 DSD owned sewage treatment facilities

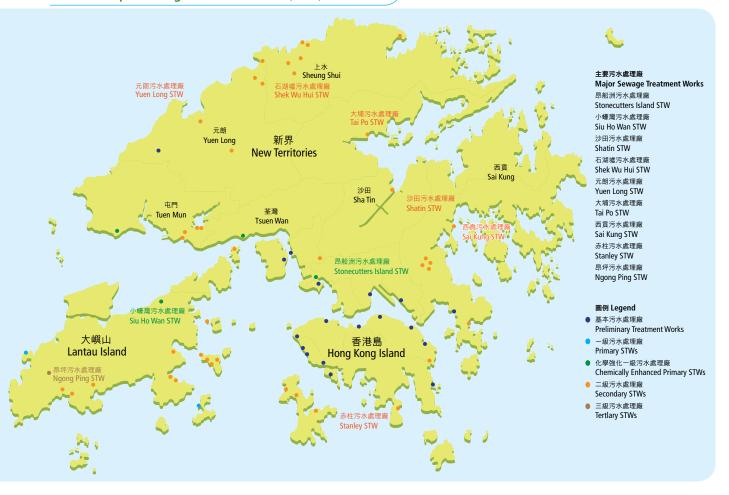
¹ 以有繳付排污費的住宅水務帳戶計算 based on the no. of domestic water bill accounts with sewage charges levied



2017-18年度污水處理廠位置圖

Location Map of Sewage Treatment Works (STW) in 2017-18



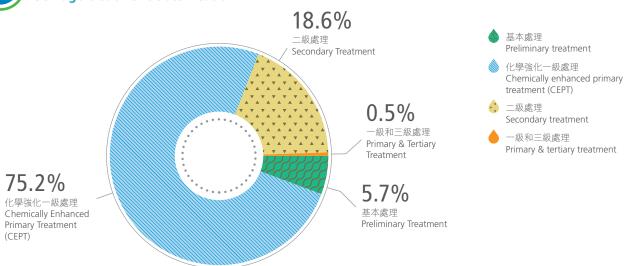


2017-18年度,我們共處理約10.07億立方米 污水,以及收集和處理約38萬公噸污水處理 過程產生的污泥,當中污水處理分類如下: In 2017-18, a total of about 1,007 million cubic metres of sewage was treated. Also, about 380,000 tonnes of sludge produced in the sewage treatment process were collected and treated. The sewage treatment classification was as follows:



污水處理分類

Sewage treatment classification



專業化驗分析服務

Professional Laboratory Services

要確保經處理的污水排放符合法例要求,專業的化驗服務至關重要。本署下設多個化驗室,提供多個範疇的化驗服務。沙田中央化驗室及昂船洲化驗室於1999年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,確認測試環境樣室(水及廢水)的認可資格。昂船洲化驗室於2007年獲得測試化學樣本的認可資格。身責測試處理污水的化學品的主要成分。沙田中央化驗室於2016年3月購置一台自動生化需氧量測試分析儀以提高效率,並於2017年7月獲得HOKLAS認證,是香港首間獲此認證的實驗室。

我們採用化驗室信息管理系統,令實驗室的 工作流程自動化,更可整合化驗結果及操作 數據,有助監察排放水水質,以及加強決策 和調控污水處理過程。

為了提升儀器的準確度及監察污水處理過程的水質和效率,我們會定期收集樣本及分析污水,以確保經處理的污水符合排放標準。年內,本署轄下化驗室的認可測試項目達32項,完成超過261,623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。

Professional laboratory services are imperative in ensuring that treated sewage meets the statutory requirements. DSD operates a number of laboratories to provide various types of laboratory services. 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 the main components of chemicals used in sewage treatment. In addition, a new biochemical oxygen demand (BOD) automatic analyser was purchased by the Shatin Central Laboratory in March 2016 to enhance efficiency. HOKLAS accreditation was obtained in July 2017, making the Shatin Central Laboratory the first laboratory in Hong Kong to be accredited for BOD test using this automatic analyser.

The adoption of the Laboratory Information Management System not only automate laboratory work flow, but also facilitates the consolidation of laboratory results and operation data to assist us in monitoring effluent quality and to enable more effective decision making and control of the sewage treatment process.

To improve precision of instruments and monitor water quality and efficiency of the sewage treatment process, we carry out sewage samplings and analyses regularly to ensure that treated sewage meets specified discharge requirements. During the year, 32 of our laboratory tests were accredited and over 261,623 analyses in total were conducted. The analytical results of effluent quality of major sewage treatment works can be found on our website.



自動生化需氧量測試分析儀 BOD automatic analyser

規劃、設計及建造新的污水處理設施

Planning, Design and Construction of New Sewerage Facilities

● 淨化海港計劃

淨化海港計劃是政府推行的最重要基建項目之一,旨在透過收集和處理維港兩岸污水,改善維港水質。計劃分兩期進行,建造工程歷時20載,總費用高達258億元。計劃第一期及第二期甲設施分別於2001年12月及2015年12月全面啟用。

Harbour Area Treatment Scheme (HATS)

The Harbour Area Treatment Scheme (HATS) is one of the most important governmental infrastructure projects in Hong Kong aiming to improve the water quality of Victoria Harbour by collecting and treating sewage from both sides of the harbour. The project was carried out in two phases, with construction works spanning two decades at a total cost of \$25.8 billion. The facilities of HATS Stage 1 and Stage 2A were fully commissioned in December 2001 and December 2015 respectively.

目前進度 Current progress

為了提升計劃的整體運作靈活性及穩定性,工程團隊經多月籌備及規劃更換兩台大型水閘,最終於2018年3月順利進行更換昂船洲污水處理廠一號主泵房內大型水閘的首階段工作,詳細勘測地下34米的兩台大型水閘,以及局部拆卸現有水閘。

To improve the operational flexibility and stability of the entire HATS system, the project team spent months on preparation and planning for replacement of the two large penstocks. In March 2018, the first stage of replacement of two large penstocks was carried out which involved a detailed survey and partial dismantling of the two existing penstocks located at 34 metres below ground level inside the Main Pumping Station No.1 of the Stonecutters Island Sewage Treatment Works.



淨化海港計劃的布局圖 Layout Plan of HATS

◆ 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水管工程

現時位於東涌及小蠔灣之間的加壓污水管 是區內唯一污水輸送渠管,負責把區內收 集所得的污水輸送至小蠔灣污水處理廠。 該污水管至今已使用20年,因此接近其 25年的設計壽命。為了配合香港國際機 和東涌新市鎮規劃的發展需求,增建一條機 阿污水管實在刻不容緩,以便檢查及維修現 有污水管,並提高污水收集系統的可靠性。 工程範圍主要包括興建一條長約6.5公里, 直徑1,200毫米的加壓污水管,以及相關的 接合和附屬工程。該加壓污水管能應付每天 額外6萬立方米的污水流量。

Construction of Additional Sewage Rising Main and Rehabilitation of the Existing sewage Rising Main between Tung Chung and Siu Ho Wan

The existing sewage rising main between Tung Chung and Siu Ho Wan is the only pipe for conveying sewage collected within the areas to the Siu Ho Wan Sewage Treatment Works. It has been in operation for 20 years, approaching its design life of 25 years. It is imperative to provide an additional sewage rising main so as to examine and maintain the existing one in order to meet the demand of the development of Hong Kong International Airport and Tung Chung New Town Extension as well as enhancing the reliability of the sewerage system. The major scope of the works includes the construction of sewage rising main of about 6.5 kilometres with a diameter of 1,200 millimetres and associated connection and ancillary works. The proposed sewage rising main can cope with an additional 60,000 cubic metres of sewage flow per day.

目前進度 Current progress

工程於2016年8月展開,並會分階段進行,預計2025年竣工。整項工程預算費用約13.6億元。

The project commenced in August 2016 and are implemented in phases for anticipated completion in 2025. The estimated project cost is about \$1.36 billion.



東涌污水泵房利用隧道鑽挖機進行非開挖工程 Trenchless works using tunnel boring machine at Tung Chung Sewage Pumping Station

現有梅窩污水處理廠於1985年啟用,為梅窩涌口、銀灣邨及梅窩碼頭一帶收集的污水進行二級處理。為配合預期的人口增長及擬議的鄉村公共污水收集系統擴展計劃所增加的污水流量,我們於2007年聘請顧問公司研究提升該廠處理能力的可行性。研究建議,該廠的污水處理量應從每日約1,190立方米增至約3,700立方米,以應付未來增加的污水流量。工程亦包括改善廠內的污泥處理和除味設施,以及園林綠化工作。

Upgrading of Mui Wo Sewage Treatment Works (STW)

The existing Mui Wo STW was commissioned in 1985, providing secondary treatment to sewage collected from Mui Wo Chung Hau, Ngan Wan Estate and Mui Wo Ferry Pier areas. To cater for the increase in sewage flow due to the forecast growth in population and proposed extension of the village public sewerage, we engaged a consultant in 2007 to study the feasibility of upgrading the treatment capacity of Mui Wo STW. The study recommended that the treatment capacity of Mui Wo STW should be increased from about 1,190 cubic metres per day to 3,700 cubic metres per day in order to cope with the escalation of future sewage flow. The works also include the improvement of the sludge treatment and deodourisation facilities alongside associated greening works.

目前進度 Current progress

工程於2012年動工,並於2018年4月大致完成。整項工程預算費用約7.67億元。

Construction works commenced in 2012 and will be substantially completed in April 2018. The estimated project cost is about \$767 million.



梅窩污水處理廠 Mui Wo Sewage Treatment Works

(▲ 新圍污水處理廠改善工程(第一期)

新圍污水處理廠現時主要提供基本污水處理服務,每日污水處理量為164,100立方米。為了改善本港西北水域的水質並配合地區人口增長,我們冀透過新圍污水處理廠改善工程第一期,把該廠的污水處理量增至每日20萬立方米,而污水處理水平則提升至化學強化一級處理,並加設紫外線消毒。

Upgrading of San Wai Sewage Treatment Works (Phase 1)

Currently, the San Wai STW mainly provides preliminary sewage treatment with a capacity of 164,100 cubic metres per day. In order to improve the water quality of the north-western waters and cope with the growing population in the area, we expect that the Upgrading of San Wai STW (Phase 1) project will increase the treatment capacity to 200,000 cubic metres per day and that the treatment level will be upgraded to chemically enhanced primary treatment with ultraviolet disinfection.

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為期15年的營運及維修工作。整項工程預算費用約31.4億元。

This project procured through a Design-Build-Operate (DBO) contract commenced in May 2016 for scheduled 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 15 years. The estimated project cost is about \$3.14 billion.



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)



新圍污水處理廠改善工程(第一期)工地鳥瞰圖 Aerial view of construction site for Upgrading of San Wai STW (Phase 1)

⚠️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,包括在沙田九肚建造一所污水泵房,以及為沙田9個和大埔2個未鋪設污水設施的地區鋪設長約12公里的污水渠,以改善吐露港水質及11個未有鋪設污水設施的地區的衞生情況。

Tolo Harbour Sewerage of Unsewered Areas

We are carrying out sewerage works in Shatin and Tai Po to improve both the water quality of Tolo Harbour and sanitation 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。整項工程預算費用約3.64億元。

Construction works commenced in 2013 for scheduled completion in November 2018. The estimated project cost is about \$364 million.

↑ 石湖墟淨水設施

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,以解決污水與 日俱增的問題,並提升該廠至三級污水處理 水平的淨水設施,確保排放符合更高的環境 要求,保護后海灣的生態環境。我們亦會藉 機改善廠房外觀及環保表現,提升其水資源 保育教學功能,使該淨水設施成為具代表性 的多元化社區設施。

Shek Wu Hui Effluent Polishing Plant

In line with the rapid development of North District, we will expand the treatment capacity of Shek Wu Hui STW in phases to deal with the issue of ever-increasing sewage. The plant will be upgraded to an effluent polishing plant with tertiary treatment level to ensure that the discharge complies with the stricter environmental requirements, thus protecting the ecological environment of Deep Bay. We will also take this opportunity to revamp its exterior and environmental performance, and promote its educational function in water conservation so as to transform Shek Wu Hui STW into an iconic and multipurpose community facility.

目前進度 Current progress

項目分階段進行。前期工程於2015年年中展開,預計2019年完成。石湖墟淨水設施主體工程將分階段進行, 現正進行設計工作。

This project is executed in stages. Advance works commenced in mid-2015 for expected completion in 2019. The main works of Shek Wu Hui Effluent Polishing Plant will be implemented in stages. The detailed design is in progress.



石湖墟污水處理廠 Shek Wu Hui STW



石湖墟淨水設施初步設計圖 Preliminary design layout of Shek Wu Hui Effluent Polishing Plant

★ 大角咀櫻桃街、荃灣及九龍西的 早季截流設施

現時大角咀櫻桃街、荃灣及九龍西的雨水渠均受污染的旱流影響,導致九龍西沿海水質欠佳,產生氣味問題。為改善情況,本署正沿新油麻地避風塘海濱、荃灣和九龍西,建造共9個新的旱季截流設施,並提升43個現有旱季截流設施,於旱季時截取雨水渠中受污染的旱流,將之轉送污水處理廠處理後再排放出海。

Dry Weather Flow Interceptors (DWFI) at Cherry Street, Tai Kok Tsui, Tsuen Wan and West Kowloon

The stormwater drains at Cherry Street, Tai Kok Tsui, Tsuen Wan and West Kowloon are currently affected by polluted dry weather flow, causing water quality and odour problems within West Kowloon waters. To improve the situation, DSD is constructing 9 new DWFIs and upgrading 43 existing DWFIs along the New Yau Ma Tei Typhoon Shelter waterfront and in Tsuen Wan and West Kowloon, so as to intercept and divert the polluted dry weather flow in stormwater drains during dry seasons to sewage treatment works for treatment

and discharge to the sea.

目前進度 Current progress

於大角咀櫻桃街、荃灣及九龍西的工程已於2017年9月展開,預計2022年完工。總工程預算費用約9.42億元。

Construction works at Cherry Street, Tai Kok Tsui, Tsuen Wan and West Kowloon commenced in September 2017 for scheduled completion in 2022. The total estimated cost of the project is about \$942 million.



櫻桃街旱季截流設施模擬圖。工程完成後,截流器 上蓋的園景設施會開放公眾享用

Photomontage of the DWFI at Cherry Street. After project completion, the landscaped area above the DWFI will be open for public enjoyment

▲ 觀塘污水泵房優化工程

為配合區內發展,我們將優化現有觀塘污水泵房,以提供一個容量達16,000立方米的地底污水調節設施,以及安裝通風和氣味控制設施。工程亦包括將廠房天台建成園景平台,提升泵房景觀和提供約10,000平方米的公共空間供公眾享用。

Enhancement Works for Kwun Tong Sewage Pumping Station

To support local development, the enhancement works for Kwun Tong Sewage Pumping Station will involve the construction of an underground sewage balancing facility with a capacity of 16,000 cubic metres and provision of ventilation and odour control equipment. A landscaped deck at the roof will also be constructed to enhance the visual appearance of the pumping station and provide a public open space of about 10,000 square meters for public enjoyment.

目前進度 Current progress

工程於2017年12月展開,採用新工程合約下的「工程建造合約C選項」,預計2022年完成。工程預算費用約10.54億元。

Construction works commenced in December 2017 for targeted completion in 2022. The project adopted Engineering and Construction Contract (ECC) Option C under New Engineering Contract. The estimated project cost is about \$1,054 million.



觀塘污水泵房優化工程完工構想圖 Photomontage of enhancement works for Kwun Tong Sewage Pumping Station

▲ 搬遷沙田污水處理廠往岩洞工程

搬遷沙田污水處理廠往城門河對岸女婆山開挖的岩洞,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 Sewage Treatment Works (STSTW) to Caverns

The relocation of the STSTW to the caverns to be excavated in Nui Po Shan at the other side of Shing Mun River can release some 28 hectares of land on the existing site for other beneficial uses and improve the living environment of the district.

目前進度 Current progress

未來重置在岩洞的沙田污水處理廠將是香港 同類設施中規模最大的。搬遷計劃須分階段 推展,暫定為5個階段:工地開拓和連接隧 道建造工程:主體岩洞建造工程:污水處理 設施裝置工程;上游污水收集系統及泵房改 動和建造工程;以及現有沙田污水處理廠解 除運作和拆卸工程。

現階段正進行工程勘測及設計工作。我們正 為第一階段的工地開拓及連接隧道工程向立 法會申請撥款,並計劃於2019年展開工程。



搬遷沙田污水處理廠往岩洞 Relocation of STSTW to Caverns

The future cavern complex for the relocated STSTW will be the largest of its type ever built in Hong Kong. It needs to be implemented in stages. Tentatively, the Project will be implemented in 5 stages, namely: site preparation and access tunnel construction; main caverns construction; sewage treatment facilities installation; modification and construction of upstream sewerage and pumping stations; and decommission and demolition of existing STSTW.

Site investigation works and design are currently underway. We are seeking funding approval from the Legislative Council for the site preparation and access tunnel under Stage 1 Contract, which are scheduled for commencement in 2019.

▲ 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其附近 水體的水質。現時進行中的鄉村污水收集系 統工程分別位於北區、大埔、沙田、屯門、 西貢及離島。

Expansion of Village Sewerage

DSD strives to expand the public sewerage systems in villages to improve hygienic conditions and water quality in rural areas. Construction works for village sewerage projects are currently underway in North District, Tai Po, Sha Tin, Tuen Mun, Sai Kung and Outlying Islands.

目前進度 Current progress

截至2018年3月,我們已為220多條鄉村鋪設公共污水渠,亦正為另外約40條鄉村進行相關工程。目前,尚有約240條鄉村的工程正在規劃和設計中。

As at March 2018, we have laid public sewerage for over 220 villages. The works for some other 40 villages are in progress and the schemes for some 240 villages are under planning and design.



〔▲ 管理地下排水及污水收集網絡

Managing Underground Drainage and Sewerage Networks

About 4,600 kilometres of underground drains and sewers are managed by DSD. These underground pipes have been put in service for 29 years on average and over 1,800 kilometres of them have been used for 30 years or more, with many of them showing signs of wear and tear. Structural failure of seriously deteriorated pipes may even result in soil erosion and road subsidence, affecting the normal operation of the pipelines and bringing adverse impacts on traffic, environment and public safety. In view of this, in addition to regular inspections, we are striving to implement a territory-wide rehabilitation programme for aged stormwater drains and sewers using a 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 technology to efficiently maintain our underground pipe networks and achieve greater cost-effectiveness of our works. In 2017-18, we rehabilitated storm drains and sewers with a total length of about 18 kilometres, at a cost of about \$166 million.

污水處理服務收費概要

Overview of Sewage Services Charges

為實踐污染者自付原則,本署自1995年4月 1日起推行污水處理服務收費計劃。根據該 計劃,凡接駁至公共污水渠的處所,其用戶 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。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 sewer. The sewage services charges are composed of Sewage Charge (SC) and Trade Effluent Surcharge (TES). There are currently 27 trades required to pay the TES.

帳單及用水量統計數字

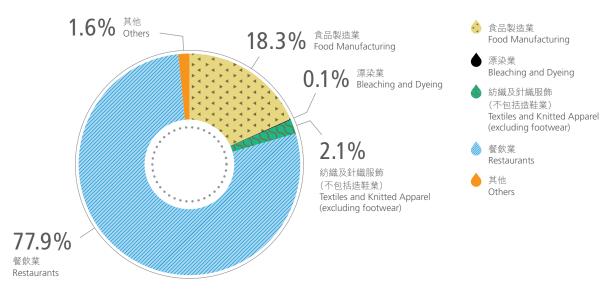
全港約有299萬個自來水用戶,其中約277萬 用戶須繳付排污費。在工商業用戶中,約有 28,000用戶須繳付工商業污水附加費。工商 業污水附加費繳納戶所屬行業分布見下圖。

Billing and Water Consumption Statistics

Among some 2.99 million water utility users in Hong Kong, about 2.77 million are required to pay the SC. Among the non-domestic users, about 28,000 are required to pay the TES, the distribution of which is as follows.



2017-18年度工商業污水附加費繳納戶所屬行業 Distribution of TES Accounts in 2017-18 by Trade



重新評估工商業污水附加費收費率及 排放比率

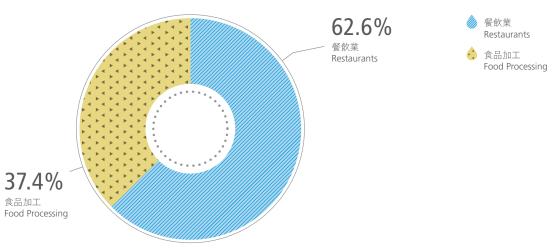
如非住宅用戶認為其排放的污水濃度或排放 比率低於法例列明的數值,可申請重新評估 工商業污水附加費的收費率或排放比率。獲 重新評估的收費率有效期為3年。

Reassessment of TES Rate and Discharge Factor

Non-domestic consumers may apply for 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.



2017-18年度申請重新評估化學需氧值用戶的所屬行業 Accounts Applying for Chemical Oxygen Demand (COD) Reassessment in 2017-18 by Trade



客戶查詢

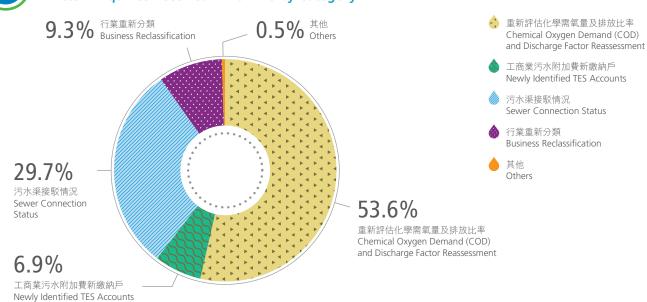
為了提供更優質服務,我們除了設有24小時 熱線外,在多個範疇亦訂定服務承諾,務求在 適當時間內解答市民的查詢。2017-18年度, 我們共接獲4,479宗有關污水處理服務收費 的電話及書面查詢,當中所有的書面查詢, 均在收到後一個月內正式回覆。

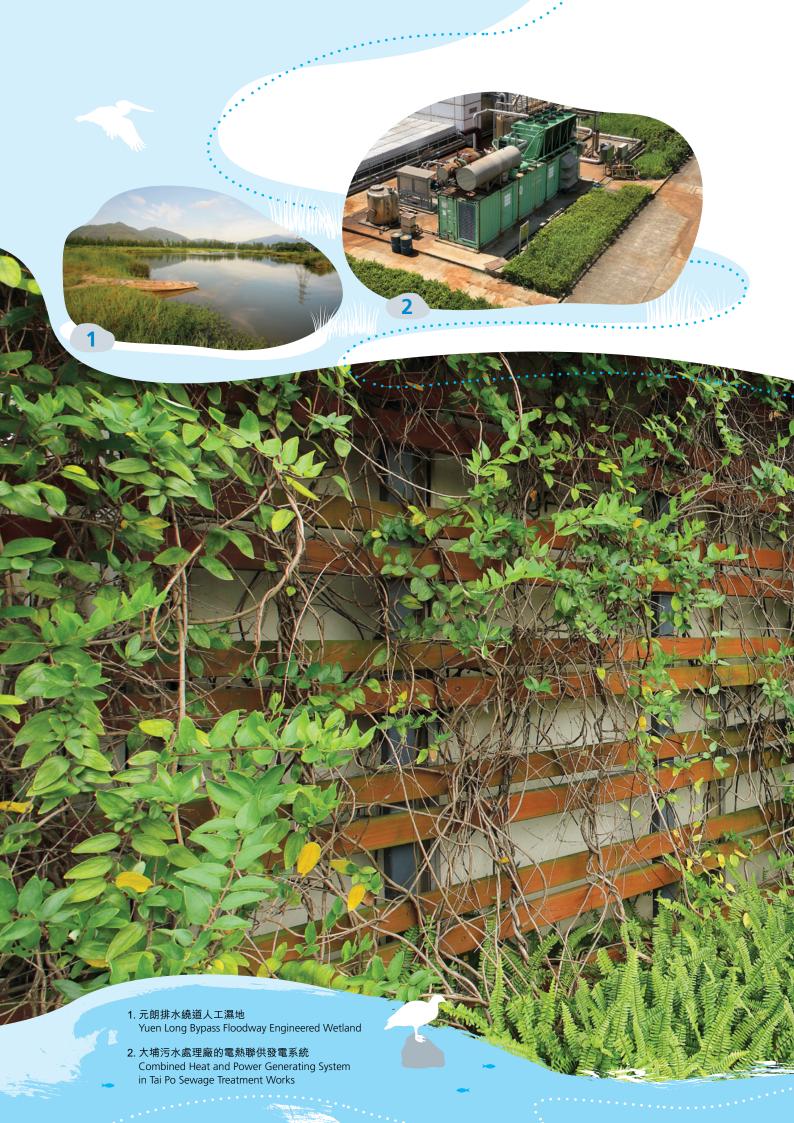
Customer Enquiry

In order to provide better services, we set up a 24-hour hotline and establish performance pledges on different areas of our services to address public enquiries in a timely manner. In 2017-18, we received a total of 4,479 written and telephone enquiries about our sewage services charges, of which all the written enquiries were formally replied within a month.



2017-18年度收到的各類書面查詢 Written Enquiries Received in 2017-18 by Category







環境管理

Environmental Management

渠務署多年來就環境管理引進嶄新工程技術和管理措施,在各工作範疇中加入可持續發展元素,積極推廣可持續發展理念(包括水資源管理、綠化天台及節能減排),令工程項目與自然環境雙生共融,減低對環境的影響。

Throughout the years, DSD has been introducing cutting-edge engineering technologies and strategic measures in environmental management. We incorporate sustainability elements into all aspects of work and actively promote the concept of sustainable development, covering water resources management, roof greening, energy conservation and emissions reduction, to make the projects blends with the natural environment and mitigate environmental impacts.







水資源管理

Water Resources Management





渠務署在新建設施引進水資源管理概念,務 求提升各項設施的水資源利用效率,加強採 集及回用珍貴水資源,以支持可持續發展。 部分主要設計元素包括水資源採集及回用系統、地下蓄洪及回用系統、雨水花園,以及 多孔誘水路面等。

DSD has incorporated the concept of water resources management into our newly constructed facilities to improve the water resources utilisation rates and step up harvesting and reusing precious water resources so as to support sustainable development. Some major design elements include water harvesting systems, underground stormwater storage systems, rain gardens and porous pavements, etc.

水資源採集及回用系統 Water Harvesting System

▲ 跑馬地地下蓄洪計劃水資源採集【 及回用系統

本署就跑馬地地下蓄洪計劃興建水資源採集及回用系統,以收集地下水、運動場的灌溉水和雨水。由於經收集的水資源水質較佳,經簡單消毒處理已能達非飲用用途的回用水標準,並可供跑馬地遊樂場內11個球場作灌溉用途及提供沖廁水予場內兩所更衣室和附近的兩所公共廁所,以節省珍貴食水。此外,系統亦為食物環境衞生署提供回用水,清洗跑馬地及灣仔一帶街道。

Water Harvesting System of Happy Valley Underground Stormwater Storage Scheme (HVUSSS)

DSD constructed a water harvesting system under the HVUSSS to collect groundwater, irrigation water and rainwater from sports pitches. As the collected water is of better quality, it can attain the standard of reclaimed water for non-potable use after simple disinfection and be reused for irrigation at 11 football pitches and toilet flushing at two changing rooms within the Happy Valley Recreation Ground (HVRG) and two public toilets in the vicinity to save precious drinking water. The system also supplied reclaimed water to the Food and Environmental Hygiene Department (FEHD) for street cleaning in Happy Valley and Wan Chai districts.



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



與食物環境衞生署合作, 利用回用水清洗街道 Working with FEHD to use reclaimed water for street cleaning



採集及回用的水資源用於灌溉球場草地 Irrigating football pitches with harvested and reclaimed water resources

渠務署將可持續發展概念融入荔枝角雨水排放隧道的設計,在隧道集水區收集的水資源會進行過濾及加氯消毒處理。隧道自2014年啟用後,經過濾及加氯消毒處理的雨水可供蝴蝶谷道寵物公園作沖廁、灌溉及洗滌用途。

Lai Chi Kok Drainage Tunnel Stormwater Harvesting System

DSD incorporated the concept of sustainable development into the design of Lai Chi Kok Drainage Tunnel (the Tunnel). The water resources collected from the Tunnel catchment area are filtered and disinfected by chlorination. Since the Tunnel came into operation in 2014, the treated stormwater has been supplied to Butterfly Valley Road Pet Garden for toilet flushing, irrigation and cleansing.



蝴蝶谷道寵物公園 Butterfly Valley Road Pet Garden



荔枝角雨水排放隧道雨水收集及回用系統 Lai Chi Kok Drainage Tunnel Stormwater Harvesting System



九龍城一號污水泵房的梯台瀑布水景 Water cascade at Kowloon City No. 1 Sewage Pumping Stations

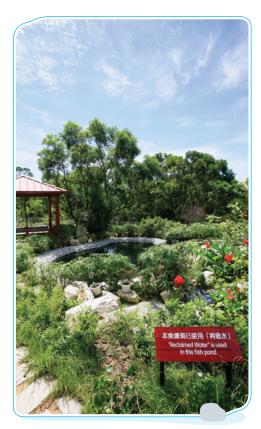
〔▲ 九龍城一號及二號污水泵房的雨水集蓄設施

位於啟德的九龍城一號及二號污水泵房,其設計融入多項水資源管理概念,包括雨水花園及雨水集蓄設施等。雨水花園利用植物和沙土過濾雨水,以改善徑流水質及減少排入地下水道的水量。天台以多孔透水物料鋪設,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。泵房亦利用雨量感應器、保水土壤層、用水監察系統等設備來進一步提高用水效率。

Rainwater Harvesting Facilities at Kowloon City No. 1 and No. 2 Sewage Pumping Stations

Kowloon City No. 1 and No. 2 Sewage Pumping Stations in Kai Tak incorported a number of water resources management features, including rain garden and rainwater harvesting facilities, etc. The rain garden filters rainwater with plants and soil to improve runoff quality and reduce discharge into underground channels. The roofs are paved with porous materials to facilitate rainwater collection. Harvested rainwater is treated by sand filtration and ultraviolet (UV) disinfection for irrigation, water cascade and other non-potable uses, thus reducing water consumption effectively. The pumping stations are also installed with devices such as rainfall sensors, water retention layer and water consumption monitoring system to further enhance the water utilisation rate.

再造水 Water Reclamation



昂坪污水處理廠觀賞魚池 Fishpond in Ngong Ping Sewage Treatment Works

沙田污水處理廠的再造水生產設施於2011年年初投入運作,主要由3組過濾部件組成,包括碟形過濾器、超過濾薄膜,以及逆滲透薄膜,每日能生產1,000立方米再造水,供清洗廠房、灌溉園林、沖廁及稀釋化學品。

The water reclamation facilities in the Shatin Sewage Treatment Works, which were commissioned in early 2011, mainly comprising three filtration parts, namely disc filters, ultrafiltration membranes and reverse osmosis membranes, and are capable of generating 1,000 cubic metres of reclaimed water every day for plant cleaning, irrigation, toilet flushing and chemical dilution.

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,並提高有關設備在運作方面的可靠性。2017-18年度,我們平均每日生產約1,340立方米再造水作非飲用用途。本署最具規模的再造水生產設施位於昂坪污水處理廠及沙田污水處理廠。

昂坪污水處理廠是香港首間處理再造水的三級污水處理廠,於2006年 正式投入運作。該廠生產的再造水安全無味,現供昂坪的公廁及昂坪 纜車站作沖廁用途。部分再造水亦會用於飼養廠內魚池的觀賞魚,以及 作廠內有監控的灌溉之用。

In line with the Government's initiative to use reclaimed water under the Total Water Management Strategy, DSD continues to generate and use reclaimed water within its facilities while improving the operational reliability of its water reclamation facilities. In 2017-18, we generated reclaimed water at an average rate of approximately 1,340 cubic metres per day for non-potable purposes. Our largest water reclamation facilities are located in the Ngong Ping Sewage Treatment Works and Shatin Sewage Treatment Works.

The Ngong Ping Sewage Treatment Works, operated since 2006, is the first tertiary sewage treatment plant in Hong Kong with reclaimed water treatment facility. Safe and odourless reclaimed water produced by this plant is now supplied to public toilets in Ngong Ping and the Ngong Ping Cable Car Terminal for flushing. Some of the reclaimed water is used for rearing ornamental fish in fish ponds and controlled irrigation within the sewage treatment works.



沙田污水處理廠再造水生產設施展覽 Exhibits of Shatin Sewage Treatment Works water reclamation facilities











綠化天台有助紓緩市區空氣污染、降低 室內溫度、減少建築物的能源消耗、美化建 築物,以及為野生動物創造棲息地,從 而改善周邊環境的生物多樣性。進行規劃 時,我們會聘請合資格人士評估選址及其 可負荷重量,待完成詳細設計後才展開建造 工程。2017-18年度,我們為轄下下列9個 設施完成天台綠化工程:

- 荃灣污水泵房 **Tsuen Wan Sewage Pumping Station**
- 石涌凹污水泵房 **Shek Chung Au Sewage Pumping Station**
- 昂船洲污水處理廠(污泥脱水設施) **Stonecutters Island Sewage Treatment Works (Sludge Dewatering Facility)**



北角基本污水處理廠綠化天台 Green roof of North Point Preliminary Treatment Works



灣仔東基本污水處理廠綠化天台 Green roof of Wan Chai East Preliminary Treatment Works

Roof greening is an effective mitigation measure to improve air pollution in urban areas, lower indoor temperature and reduce building energy consumption. It also can beautify building appearance and creates wildlife habitats to improve biodiversity of surrounding environment. When identifying sites for green roofs, we engage qualified persons to assess viable locations and their respective load-bearing capacities. Construction is carried out only after detailed design is completed. In 2017-18, we carried out roof greening for the following 9 DSD facilities:





昂船洲污水處理廠污泥脱水設施綠化天台 Green roof of Stonecutters Island Sewage Treatment Works Sludge Dewatering Facility

昂船洲污水處理廠二號主泵房綠化

Green roof of Main Pumping Station No.2 of Stonecutters Island Sewage Treatment Works

- 北角基本污水處理廠 **North Point Preliminary Treatment Works**
- 灣仔東基本污水處理廠 **Wan Chai East Preliminary Treatment Works**
- 中環基本污水處理廠 **Central Preliminary Treatment Works**





中環基本污水處理廠綠化天台 Green roof of Central Preliminary Treatment Works

- 麻布尾污水泵房(林村谷污水收集系統第二階段工程) Ma Po Mei Sewage Pumping Station (Lam Tsuen Valley Sewerage, Stage 2)
- 白牛石污水泵房(林村谷污水收集系統第二階段工程) Pak Ngau Shek Sewage Pumping Station (Lam Tsuen Valley Sewerage, Stage 2)
- 社山村污水泵房(林村谷污水收集系統第二階段工程) She Shan Tsuen Sewage Pumping Station (Lam Tsuen Valley Sewerage, Stage 2)







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



渠務署自2007年起參與由環境局成立的氣候變化跨部門工作小組,制訂適應氣候變化的政策及措施,以降低溫室氣體排放及應對氣候變化。政府於2017年公布《香港氣候行動藍圖2030+》(《行動藍圖》),大力推動可再生能源的使用。為作配合,本署積極推行節能措施,並利用水力及太陽能發電和生物氣產能。

面對全球暖化問題,本署積極與其他城市和 地區保持緊密聯繫,並加入國際組織C40 城市氣候領導聯盟旗下連結三角洲城市, 代表香港特區政府與其他三角洲城市交流 防洪技術;此外,亦是粵港應對氣候變化 聯絡協調小組成員。 Since 2007, DSD has joined the Inter-departmental Working Group on Climate Change set up by the Environment Bureau for formulating polices and measures in adapting climate change to reduce greenhouse gas emissions and combat climate change. In support of "Hong Kong's Climate Action Plan 2030+" (Action Plan) published by the Government in 2017 that encourages extensive use of renewable energy, DSD has actively implemented energy-saving initiatives and adopted hydropower, solar power and biogas to generate energy.

To address global warming, DSD maintains close connection with other cities and regions and join the Connecting Delta Cities, a subsidiary of the international organisation C40 Cities Climate Leadership Group, and represents the HKSAR Government to exchange flood prevention techniques with other delta cities. DSD is also a member of the Hong Kong/Guangdong Joint Liaison Group on Combating Climate Change.

節能和採用可再生能源新措施

Newly Implemented Measures for Saving Energy and Harnessing Renewable Energy

2017-18年度,我們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,同時增加 使用可再生能源。本署推行的節能措施 包括:

- 以發光二極管燈取代傳統熒光燈;
- 優化污水處理廠及污水泵房的操作流程及 更換能源效益較高的設備;以及
- 安裝太陽能光伏板。

年內,上述措施共節省約210萬度電(相當於減碳約1,470噸¹)。

- In 2017-18, we continued to optimise the operation of our sewage treatment works and sewage pumping stations, as well as replace aging equipment with more energy efficient ones to save energy. Concurrently, we promoted wider use of renewable energy. The measures in place include:
- Replacing conventional fluorescent lamps with light emitting diode (LED) lamps;
- Optimising operation procedures and replacing equipment with more energy efficient ones at sewage treatment works and sewage pumping stations; and
- Installing photovoltaic solar panels.

During the year, the above measures saved about 2.1 million kilowatt-hours of electricity (equivalent to carbon reduction of about 1,470 tonnes¹).

(▲ 電動車

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2018年3月底,本署共有31部電動車。2017-18年度,本署在各區污水處理廠及污水泵房共設46台中速充電器,方便司機隨時充電。

Electric Vehicle

Powered by batteries, the operation of electric vehicles (EV) does not involve gasoline combustion or produce emissions, which helps improve street-level air quality in Hong Kong. As at end March 2018, there were 31 EVs in our fleet. In 2017-18, there were totally 46 medium EV chargers installed in our sewage treatment works and sewage pumping stations across Hong Kong to make charging more convenient and readily available.

¹ 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 CO₂ equivalent per kilowatt-hours.



◆ 昂船洲污水處理廠 水力渦輪發電系統

我們在昂船洲污水處理廠安裝水力渦輪發電系統,利用流動污水的液壓能量推動渦輪機,繼而產生電力供廠內設施使用。發電設施全自動運作,電腦系統會因應污水處理廠每日的污水流量,自動調節發電機的轉速,以提升輸出功率。該系統的設計容體達到23千瓦,預計每年可產生高達12萬度電,不單節省電費,還善用水力,從而減少碳排放。我們正計劃於昂船洲污水處理廠安裝第二組水力渦輪發電系統。

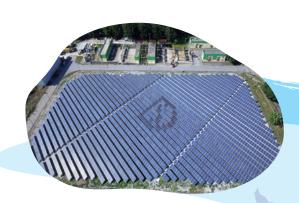
Hydro-turbine System at Stonecutters Island SewageTreatment Works (SCISTW)

We have installed a hydro-turbine system, which ultiises sewage flow hydraulic energy to move the turbine impellers which in turn generate electricity for in-house use at SCISTW. It is an entirely automated operation with a computer system regulating the generator speed according to daily sewage flow rate so as to enhance operating efficiency. The hydro-turbine system has a design capacity of 23 kilowatt and is expected to generate up to 120,000 kilowatt-hours of electricity per year. This system not only saves electricity costs, but also makes good use of hydropower to reduce carbon emissions. We are planning to install the second hydro-turbine system at SCISTW.



昂船洲污水處理廠的水力渦輪 發電系統 Hydro-turbine system at SCISTW

> 小蠔灣污水處理廠的 太陽能發電場 Solar Farm at Siu Ho Wan STW



於污水處理設施裝設 太陽能光伏板

截至2018年3月底,渠務署已在轄下主要設施,包括沙田污水處理廠、元朗污水處理廠、 石湖墟污水處理廠、昂船洲污水處理廠等,共 11所污水處理廠及12所污水泵房安裝太陽能 光伏板,以盡量利用廠房空間收集太陽能。 當中,小蠔灣污水處理廠的太陽能發電場 裝置發電容量達1,100千瓦,是香港目前規模 最大的太陽能發電系統。2017-18年度,本署 光伏系統的總發電容量約為1,390千瓦。我們 會繼續在其他設施廣泛應用可再生能源。

Installation of Photovoltaic Solar Panels in Sewage Treatment Facilities

As at end March 2018, DSD has installed photovoltaic (PV) panels in 11 sewage treatment works (STW) and 12 sewage pumping stations (SPS) to harness solar energy by maximising the use of the space of the plants. These major facilities include Shatin STW, Yuen Long STW, Shek Wu Hui STW and Stonecutters Island STW, etc. In particular, the Solar Farm at Siu Ho Wan STW has a generation capacity of 1,100 kilowatts, making it the largest PV system in Hong Kong at present. In 2017-18, the total generation capacity of our PV systems is about 1,390 kilowatts. We will continue to extend the use of renewable energy.

▲ 生物氣轉化為能

在二級污水處理過程中收集到的污泥,在厭氧消化過程中會產生生物氣;生物氣中約含65%甲烷(其餘成分主要為二氧化碳),屬可再生能源。我們利用電熱聯供發電機和渦輪系統燃燒生物氣,從而產生電能和熱能供廠房使用。截至2017-18年度,沙田、大埔和石湖墟污水處理廠共裝有5台電熱聯供發電機,總發電量為3.6兆瓦;沙田及元朗污水處理廠則共裝有2台渦輪發動機,總發電量為280千瓦。年內,各污水處理廠透過生物氣所產生的總能源相等於約2,700萬度電。

Converting Biogas to Energy

Sludge collected from secondary sewage treatment produces biogas during anaerobic digestion process. Biogas is a form of renewable energy which contains 65% methane (the remaining components mainly being carbon dioxide). DSD has installed combined heat and power (CHP) generators and gas-turbines that run on biogas to generate electricity and thermal energy for in-house use. As of 2017-18, a total of five CHP generators, with a combined capacity of 3.6 megawatt, have been installed at Shatin STW, Tai Po STW and Shek Wu Hui STW, while two gas-turbines with a total capacity of 280 kilowatts have also been in place in Shatin STW and Yuen Long STW. During the year, the total energy generated by biogas in our STWs was equivalent to about 27 million kilowatt-hours.

此外,我們計劃於沙田、大埔和元朗污水處理廠等污水處理設施增設電熱聯供發電機及渦輪系統,以充分利用在污泥處理過程中產生的生物氣。系統裝妥後,總發電量將達5.4兆瓦。

To maximise the use of biogas generated during the sludge treatment process, we plan to install additional CHP generation and gas-turbine systems at our sewage treatment facilities such as Shatin STW, Tai Po STW and Yuen Long STW. On completion of these installations, the total power generation capacity will reach 5.4 megawatt.







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

(♦) 廚餘、污泥共厭氧消化研究項目

本署與環境保護署(環保署)合作,在大埔 污水處理廠進行為期6年的「廚餘、污泥 共厭氧消化試驗計劃」。由環保署收集和 預先處理的廚餘,會送到大埔污水處理廠 與污泥進行共厭氧消化,以產生生物氣, 提供再生能源供本署設施使用。目前試驗 計劃已進入工程建造階段,預計2019年 年初完成。

碳審計

Carbon Audit

為進一步減少日常運作所釋放的溫室氣體,本署積極為轄下廠房進行碳審計,以找出主要排放源。年內,我們分別為西貢污水處理廠、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、小蠔灣污水處理廠,以及赤柱污水處理廠進行碳審計。透過適當的措施如降低機器耗能、提升運作效率,以及利用可再生能源等方法,我們成功減少了溫室氣體排放量。

日後,本署會持續為更多污水處理廠進行碳審計,並採取合適的減碳措施,以及利用最環保的方法為市民提供優質雨水排放和污水處理服務。

Study on Food Waste/Sewage Sludge Anaerobic Co-digestion

We are conducting a six-year Food Waste/Sewage Sludge Anaerobic Co-digestion Trial jointly with the Environmental Protection Department (EPD) in Tai Po STW. Pre-treated food waste, collected by EPD, will undergo anaerobic co-digestion with the sludge in Tai Po STW for biogas production and to provide renewable energy for the use of our facilities. Currently, the engineering works of the trial are at the construction stage and the anticipated completion date is early 2019.

To reduce greenhouse gas emissions effectively from daily operations, we actively conduct carbon audits at our plants to identify major sources of emissions. During the year, carbon audits were carried out at Sai Kung STW, Sham Tseng STW, Stonecutters Island STW, Tai Po STW, Shatin STW, Shek Wu Hui STW, Siu Ho Wan STW and Stanley STW. With appropriate measures like reducing energy consumption of machinery, enhancing operation efficiency and using renewable energy, we have successfully lowered greenhouse gas emissions.

In the future, DSD will continue to conduct carbon audits in more STWs and adopt appropriate carbon reduction measures to provide quality stormwater drainage and sewage treatment services for the public in the most environmentally friendly manner.



2016及2017年碳排放量(以公噸二氧化碳當量計算)

Carbon Footprint in 2016 and 2017 (in tonnes of CO₂ equivalent)

```
總碳排放量 Total Carbon Emissions
                 48,894
   昂船洲污水處理廠
                 範圍一 Scope One: 6 | 範圍二 Scope Two: 48,888
Stonecutters Island STW
                 45,168
                 範圍一 Scope One:7 | 範圍二 Scope Two: 45,161
                 沙田污水處理廠
                 範圍一 Scope One: 1,189 I 範圍二 Scope Two: 21,130
        Shatin STW
                 ...... 18,915
                 範圍一 Scope One: 2,219 | 範圍二 Scope Two: 16,696
                 大埔污水處理廠
                 範圍一 Scope One: 396 | 範圍二 Scope Two: 9,886
        Tai Po STW
                 範圍一 Scope One: 388 | 範圍二 Scope Two: 8,717
                 ************************** 8,229
   石湖墟污水處理廠
                 範圍一 Scope One: 464 | 範圍二 Scope Two: 7,765
   Shek Wu Hui STW
                 ...... 6,911
                 範圍一 Scope One: 523 | 範圍二 Scope Two: 6,388
                2,960
   小蠔灣污水處理廠
                 範圍一 Scope One: -7 | 範圍二 Scope Two: 2,967
    Siu Ho Wan STW
                2,758
                 範圍一 Scope One:-8 | 範圍二 Scope Two:2,766
                 ****** 2,342
    赤柱污水處理廠
                 範圍一 Scope One: 36 | 範圍二 Scope Two: 2,306
       Stanley STW
                ::::: 2,109
                 範圍一 Scope One: 36 I 範圍二 Scope Two: 2,073
                 111 1,166
    西貢污水處理廠
                 |範圍一 Scope One: 16 | 範圍二 Scope Two: 1,150
      Sai Kung STW
                 範圍一 Scope One: 16 | 範圍二 Scope Two: 1,073
                 1,122
    深井污水處理廠
                 範圍一 Scope One: 10 I 範圍二 Scope Two: 1,112
    Sham Tseng STW
                                                                          2016
                 1.128
                 範圍一 Scope One: 9 I 範圍二 Scope Two: 1,119
                                                                          2017
```

(🖢 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) N2O emissions (in tonnes of CO2 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

拿 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 ²

² 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.





為在工作環境中推廣綠色文化,我們致力實 踐綠色辦公室理念,實行環保政策及措施, 從而提高員工的環保意識。 We make every effort to practise the green office concept in every aspect of our day-to-day operation. A series of green policies and measures are in place to raise the environmental awareness of our staff.

廢物管理

Waste Management

為貫徹綠色辦公室理念,我們實施多項源頭減廢措施,包括發出節約用紙指引及綠色資訊,以鼓勵員工盡量善用紙張兩面和重用信封。另外,我們設置打印機碳粉盒、充電電池、廢紙、塑料和金屬容器等回收站,並定期巡查辦公室,進一步提高員工的環保意識。

為邁步向前,我們積極推廣「無紙會議」, 鼓勵員工在日常會議中以平板電腦和手提電 腦等電子產品進行簡報和討論,減少用紙。 此外,本署於2017年年中開始推行電子 傳真。自2018年起,署內各總務部已利用 電子傳真收發文件。現時,本署共設有 142個電子傳真號碼。 Bringing the green office concept into full play, we have introduced a number of measures to reduce waste at source. These include issuing guidelines on reducing paper consumption and green tips, and encouraging our staff to use both sides of paper and reuse envelopes whenever possible. We also set up collection points to recycle used toner cartridges, rechargeable batteries, waste paper, plastic and metal containers, as well as conduct regular office inspections to heighten environmental awareness among our staff.

Forging ahead with the green office concept, 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 addition, we have begun promoting e-fax since mid-2017. As from 2018, all DSD administration divisions have switched to e-fax for document transmission. We now have 142 e-fax numbers department-wide.

推行「無紙會議」 Implementing "paperless meetings"







共舉行約210次無紙會議,並以電子方式傳閱 逾1,700份相關文件

DSD held about 210 paperless meetings and circulated more than 1,700 relevant documents electronically





Total paper consumption was 9,231 reams, down about 34% compared with 2009-10

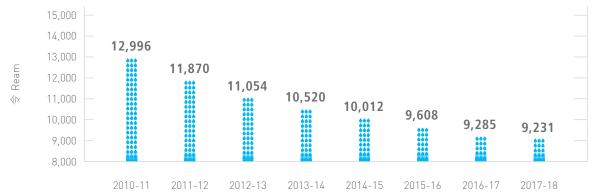






總用紙量(令)

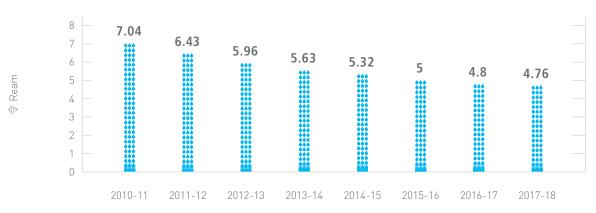
Total paper consumption (ream)





每名員工用紙量(令)

Paper consumption per staff (ream)



注:截至2018年3月31日的總用紙量(令)及每名員工用紙量(令) Note: Total paper consumption (ream) and paper consumption per capita (ream) as at 31 March 2018



▲ 響應政府減少塑膠廢物

政府致力保護環境,推動源頭減廢,由 2018年2月20日起停止在政府場地設置的 自動售賣機出售1公升或以下的塑膠樽裝飲 用水。為作響應,署內唯一設於沙田污水處 理廠的自動售賣機已停止出售塑膠樽裝水。

Playing its part to protect the environment, the Government has made strong efforts in promoting waste reduction at source. Since 20 February 2018, automatic vending machines at government venues has no longer offered plastic bottled water of one litre or less. In support of this initiative, DSD has ceased to sell plastic bottled water in its only vending machine in Shatin STW.

Supporting the Government's Call to Reduce Plastic Waste



沙田污水處理廠的自動售賣機停止 出售塑膠樽裝水前(左)及後(右) Vending machine in Shatin STW before (left) and after (right) the ban of plastic bottled water





節約能源

Energy Saving

在《行動藍圖》中,政府進一步加強推廣綠色建築及減少政府建築物用電量。事實上,本署多年來在辦公室推行多項節能措施,包括把室溫設定在攝氏25.5度、減少非必要照明,以及設定計時器於辦公時間後關掉公用辦公室設備,用電量因而持續大幅下降。相比2010-11年度,2017-18年度的用電量減少約18.7%,顯示本署致力保護環境。

減少非必要照明 Reducing non-essential lighting

As reinforced in "Action Plan", the Government would step

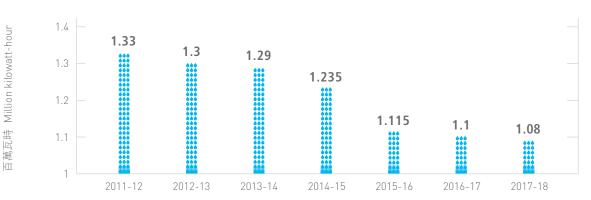


up the promotion of green buildings and reduce electricity consumption of government buildings. As a matter of fact, over the years, DSD has implemented a number of energy saving measures in our offices, including setting the room temperature at 25.5°C, reducing non-essential lighting, and using timers to turn off office equipment after office hours. Our electricity consumption has dropped significantly as a result. In 2017-18, we recorded approximately 18.7% reduction in energy consumption compared with 2010-11, showing our efforts in protecting the environment.



渠務署辦公室用電量

Electricity consumption by DSD offices



綠色採購

Green Procurement

渠務署一直積極支持政府的環保採購政策,在採購貨品及服務時顧及環保因素。 2017-18年度,我們採購各種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。

本署工程項目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。

Always in strong support of the Government's green procurement policy, DSD gives due consideration to environmental factors when procuring goods and services. In 2017-18, we purchased a wide variety of products complying with green specifications, including electrical appliances such as photocopiers, printers, electric fans, computers and refrigerators, and to 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 projects, including:

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

北角基本污水處理廠透水路面和草磚 Porous pavement and grasscrete panels in North Point Preliminary Treatment Works



培養可持續文化

Nourishing a Sustainable Culture

綠色先鋒由致力參與和推動可持續生活方式 的同事組成,在署內舉辦多元化活動及分享 環保小貼士,並向環保管理委員會反映同事 意見,從而加強同事的環保意識及促進可持 續發展。2017-18年度,綠色先鋒舉辦以下 環保活動:

- 綠色耕種比賽-在本署設施的可用空間增設耕種地點,既能綠化環境,亦可讓同事及家屬一嘗耕種樂。
- 2.「愛・回書」舊書、兒童玩具及影碟回收 活動一收集和分享同事的舊書、兒童玩具 和影碟,鼓勵善用現有資源。

Formed by a group of colleagues dedicated to participating in and promoting sustainable culture, the Green Champions organise a host of activities and share green tips. They also reflect staff's view to the Green Management Committee so as to increase green awareness among colleagues enhance sustainable development. In 2017-18, the Green Champions organised the following activities:

- 1. Green Farming Competition setting up additional farming lots in available areas within DSD facilities for greening and for colleagues and their families to experience the joy of farming.
- 2. Books, Children's Toys and Video Discs Exchange collecting and sharing used books, children's toys and video discs from staff to promote sustainable use of resources.







- 「愛●回書」舊書、兒童玩具及影碟回收活動, Books, Children Toys and Video Disc Exchange Activity
- 3. 綠色耕種比賽 Green Farming Competition
- 4. 員工家屬體驗耕種樂趣 Family farming fun



部門上下踴躍參與活動,有助提升本署員工的的環保意識。部門樂見同事積極投入,在工作上更注重環保,致力實踐能源效益及減低碳足跡。

All DSD staff participated actively in these activities, which has helped heighten their green awareness. We are very pleased to see colleagues' enthusiasm in promoting environmental protection and efforts in achieving energy efficiency and reducing carbon footprint at work.



關愛員工 Caring for Our Staff

員工是我們的重要資產。我們致力投放資源在員工發展及培訓方面,亦注重員工的身心 健康。除了確保工作環境安全外,我們亦積極舉辦各類康樂活動,以助同事舒展身心 及加強團體精神。

Our staff are our important asset. Apart from allocating resources to staff development and training, we take the physical and mental well-being of our colleagues at our heart. In addition to providing a safe working environment, we have actively lined up a wide range of recreational activities to help our staff relax and strengthen team spirit.









- 1. 建造業安全周嘉年華 Construction Safety Week Carnival
- 2. 將軍澳龍舟比賽2017 Tseung Kwan O Dragon Boat Competition 2017
- 3. 單車河道遊 Riverside Cycling Trip











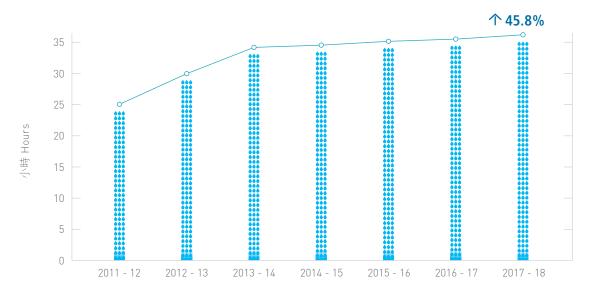
員工培訓與發展 Staff Training and Development

多年來,我們透過多元化的培訓計劃,提升新入職和在職員工的專業知識和技能。 2017-18年度,我們為員工舉辦了638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。 本署員工年內的平均培訓時數為35小時, 較上年度增長4.79%,亦較全港僱員平均 培訓時數18.1小時高93.4%1。 Over the years, we have provided diversified training programmes to enhance the professional knowledge and skills of new and existing staff. In 2017-18, we organised a total of 638 training courses for our staff, including induction courses, in-house training, duty visits, overseas conferences, as well as various seminars and workshops, etc. The average number of training hours per capita during the year was 35, an increase of 4.79% compared with the previous year and exceeding the territory-wide average of 18.1 by 93.4%¹.



員工平均培訓時數

Average Number of Training Hours Per Capita



入職課程

Induction Courses

我們為新入職同事安排入職課程,協他們了解部門的運作和服務承諾。2017-18 年度,我們共舉辦了5次入職課程,共有214名新同事參與。

We arrange induction courses for new recruits to help them understand ourperformance pledges. In 2017-18, we held five induction courses for a total of 214 newcomers.

¹ 資料來自香港人力資源管理學會2017年僱員培訓及發展需求調查 Source: 2017 Training & Development Needs Survey of the Hong Kong Institute of Human Resource Management



職業安全與健康培訓

Occupational Safety and Health Training

為保障員工的職業安全與健康(職安健), 我們於2017-18年度為逾2,000名員工舉辦 多達21項職安健及其他安全培訓課程, 課程名稱與受訓人數如下: To safeguard the occupational safety and health (OSH) of our colleagues, we organised as many as 21 OSH and other safety training courses for more than 2,000 employees in 2017-18. Course details and attendance breakdown are as follows:



項號 Item		職安健及其他安全培訓課程名稱 OSH and Other Safety Training Course Titles	受訓人數 Number of Attendees
1	P	工場噪音評估合格證書課程 Certificate of Competence in Workplace Noise Assessment	6
2		建造業安全督導員課程 Construction Safety Supervisor Course	57
3		如何避免在工作中被狗隻咬傷 Dog Bite Safety	25
4		電力安全 Electrical Safety	120
5	No.	叉式起重車新手操作員課程 Training Course for New Operators of Fork-lift Truck	15
6	₽ P	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	27
7		化學品安全處理 Safe Handling of Chemicals	57
8		安全使用磨輪 Safe Use of Abrasive Wheels	22
9		安全施工程序 Safe Working Cycle	18
10		人力提舉及搬運 Manual Lifting and Handling	18
11		氣體焊接安全訓練課程 Gas Welding Safety Training Course	19



項號 Item	職安健及其他安全培訓課程名稱 OSH and Other Safety Training Course Titles	受訓人數 Number of Attendees
12	安全使用流動式鋁質通架 Safe use of Mobile Aluminium Towers	16
13	OHSAS 18001 職業健康及安全管理系統內部審核員培訓課程 OHSAS 18001 Occupational Health and Safety Management System Internal Auditor Training Course	61
14	密閉空間核准工人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	351
15	密閉空間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 Competent Persons Engaged in DSD's Works	223
16	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 Revalidation Course]	265
17	強制性基本安全訓練課程(建築工程)[建造業平安卡課程] Mandatory Basic Safety Training Course (Construction Work) [Green Card Training Course]	111
18	密閉空間作業核准工人安全訓練課程 Safety Training Course for Certified Workers of Confined Spaces Operation	163
19	密閉空間作業合資格人士安全訓練課程 Safety Training Course for Competent Persons of Confined Spaces Operation	173
20	密閉空間作業核准工人安全訓練重新甄審資格課程 Safety Training Revalidation Course for Certified Workers of Confined Spaces Operation	235
21	密閉空間作業合資格人士安全訓練重新甄審資格課程 Safety Training Revalidation Course for Competent Persons of Confined Spaces Operation	98
	總數 Total	2,080

海外考察

Overseas Duty Visits

除了安排本地培訓課程外,我們亦鼓勵員工 到海外考察,擴闊視野。透過與當地專家 交流,我們可研究及借鑒外國經驗,有助 本署引進先進科技,提升服務質素。 In addition to local training programmes, we encourage our colleagues to conduct overseas duty visits to broaden their horizons. Through exchanges with overseas experts, we can study and learn from their experience, which help us adopt cutting-edge technologies and hence, optimise our services.

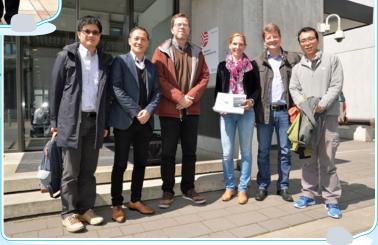
2017年5月,本署同事遠赴德國,出席在柏林舉行的第12屆管道技術會議,以及在卡塞爾舉行的污水處理技術設備展覽會。考察團亦參觀當地的聚乙烯喉管生產廠房及工程工地,了解敷設聚乙烯喉管的工序,並與負責處理奧斯納布魯克排污事務的營運商進行交流。

Duty Visit to Pipe Technology at Germany

In May 2017, our staff visited Germany to attend the 12th Pipeline Technology Conference (PTC) in Berlin and Ro-Ka-Tech, an exhibition and trade fair for sewage treatment techniques and equipment in Kassel. The delegation also toured a local polyethylene (PE) pipe production plant and construction site to learn about PE pipe laying works, and engaged in exchanges with a drainage services company in Osnabrück.



第12屆管道技術會議 12th Pipeline Technology Conference



造訪奧斯納布魯克負責排污事務的營運商 Visiting a drainage services company in Osnabrück

2017年9月,本署同事在馬來西亞吉隆坡參加兩年一度的第七屆國際水協會亞太地區會議及展覽會。同事除了宣傳將於2019年在香港舉行的第八屆國際水協會亞太地區會議及展覽會外,亦與各地專家交流水資源管理策略及科技的最新發展資訊。透過一連串實地參觀活動,加深對當地防洪及污水處理發展的認識。



本署代表於會議期間演講,介紹香港污水 處理的最新發展

DSD representative delivering a presentation at the Conference on the latest development of sewage treatment in Hong Kong

▲ 政府建築資訊模型座談會及智慧建築會議暨職務考察

2017年10月,本署同事與發展局及各工務部門代表,一同出席在新加坡舉行的2017年政府建築資訊模型(BIM)座談會及2017年智慧建築會議暨職務考察活動。座談會及會議為公共界別的機構及行業從業員舉行多個論壇,讓業界分享經驗及建築資訊模擬的最新科技。本署同事亦到訪當地主要的建築師樓、工程顧問公司及科技公司,與他們資深的建築資訊模型從業員交流建築資訊模型的應用及經驗。

The 7th International Water Association Asia Pacific Regional Group (IWA-ASPIRE) Conference and Exhibition

In September 2017, DSD colleagues attended the 7th IWA-ASPIRE Conference and Exhibition, a biennial event, in Kuala Lumpur, Malaysia. In addition to promoting the 8th IWA-ASPIRE Conference and Exhibition which will be hosted in Hong Kong in 2019, our colleagues exchanged information on the latest development of water resource management strategies and technologies with experts from all over the world. They also deepened their understanding on the development of the local flood prevention and wastewater treatment via a series of site visits.



本署同事與其他香港代表在國際水協中國香港地區委員會的展覽攤位前合照 DSD colleagues and other Hong Kong representatives pictured in front of the exhibition booth of IWA Regional Committee of Hong Kong, China

The Government BIM Symposium and Build Smart Conference cum Duty Visit

In October 2017, our colleagues joined the representatives from the Development Bureau, and the Works Departments on a trip to Singapore for the Government BIM Symposium 2017 and Build Smart Conference 2017 cum Duty Visit. The symposium and conference offered various forums for public sector organisations and industry practitioners to share experience and the latest BIM technologies. DSD staff also visited major architects, engineering consultants and IT companies and exchanged ideas on BIM applications and real-life experience with their senior BIM practitioners.



本署同事與發展局及各工務部門代表在會場合照 DSD colleagues pictured with representatives from Development Bureau and the Works Departments at the event venue



▲ 阿姆斯特丹國際水週及職務考察

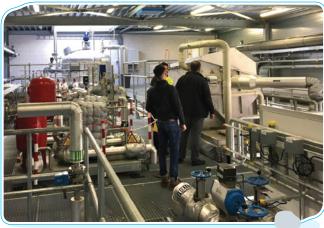
2017年11月,本署同事遠赴荷蘭出席2017 年阿姆斯特丹國際水週,參觀採用先進污水 或污泥處理技術的污水處理廠及廢物焚化 處理設施。通過參與是次活動及實地考察, 本署同事進一步了解先進污水及污泥處理 技術和相關工程系統。

Amsterdam International Water Week and Duty Visit

In November 2017, our colleague attended the Amsterdam International Water Week 2017 in the Netherlands. He visited sewage treatment plants equipped with advanced sewage or sludge treatment technologies as well as a waste incineration plant of the city. Through taking part in the event and site visits, our colleague has learnt more about cutting-edge sewage and sludge treatment technologies and related engineering systems.



2017年阿姆斯特丹國際水週研討會現場 A snapshot of the Amsterdam International Water Week 2017



參觀荷蘭阿珀爾多倫污水處理廠污泥處理設施 Visiting the sludge treatment facilities at the Apeldoorn Sewage Treatment Plant in the Netherlands

2017年12月,本署應邀出席在日本東京工業 大學舉行的生態與土木工程學會國際研討會 2017,與來自世界各地的與會者分享本署 應對氣候變化的策略和目標,以及河道綠色 建設的研究成果和經驗。同事亦參觀當地 的防洪及活化河道建設,例如大師河原河川 防災中心、多摩川的超級防洪堤、鶴見川的 滯洪區,以及江戶川區內的親水公園、綠道 及河道,汲取日本在防洪及河道活化方面 的技術和寶貴經驗。

Tokyo International Seminar cum Duty Visit

In December 2017, by invitation, DSD attended the Ecology and Civil Engineering Society International Symposium 2017 held in the Tokyo Institute of Technology, Japan. Our colleagues shared the Department's strategies and goals on combating climate change with participants from around the globe, and highlighted our achievements and experience in the academic study of river greening. The delegation also visited the flood prevention and river revitalisation projects of the city, such as Taishi-gawa River Disaster Prevention Centre, Super-levees at Tama River, Tsurumi River Retarding Basin as well as river parks, green walks and rivers in Edogawa City, to gain insight into Japan's technologies and precious experience in flood prevention and river revitalisation.

生態與土木工程學會國際研討會2017 Ecology and Civil Engineering Society International Symposium 2017







員工安全與健康 Staff Safety and Health

除了為員工提供培訓及發展機會外,我們亦致力確保所有員工能在安全及健康的環境下工作。本署早於2012年取得OHSAS 18001職業健康及安全管理系統認證,並設有安全督導委員會,負責監察和統籌本署的職安健事務,確保消除或有效受控制員工的職安健風險。

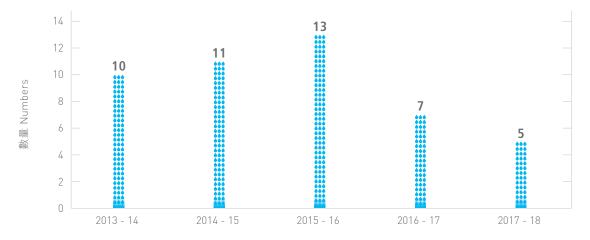
除此之外,我們亦設有多個監察委員會,包括機電工程科安全管理委員會、污水處理廠安全及健康管理委員會,以及直屬員工隊安全管理委員會。各委員會均由署內不同職系和職級的人員組成,佔部門整體人員編制約3%。各委員會定期舉行會議,討論及檢視與職安健相關的事項和措施。2017-18年,共有5項工傷事件及20件意外事故。

In parallel with providing staff with training and development opportunities, we strive to ensure a safe and healthy working environment for the entire workforce. We obtained the OHSAS 18001 Occupational Health and Safety Management System Certification in as early as 2012, and have set up a Safety Steering Group to oversee and coordinate the OSH affairs of the Department, ensuring that OSH risks are eliminated or effectively controlled.

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. Meetings are held regularly to discuss and review OSH-related issues and measures. In 2017-18, there are 5 staff injuries cases and 20 accidents cases.

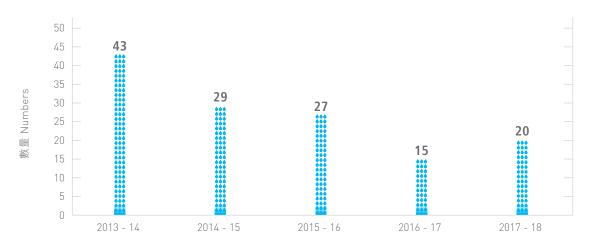


員工受傷個案[#] Staff injuries[#]



- # 員工受傷個案指根據《僱員補償條例》呈報導致死亡或喪失工作能力超過3天的工傷個案。
- * Staff injury cases refer to cases of occupational injuries reported under Employee's Compensation Ordinance, resulting in death or incapacity for work over 3 days.





職安健推廣活動

OSH Promotional Activities

我們積極舉辦和參與職安健推廣活動,為本署培育安全文化。2017-18年度,本署參與的活動如下:

- 轄下31項工程項目參與發展局主辦的 第24屆公德地盤嘉許計劃
- 37項工程項目參與本署舉辦2017年工地 整潔獎勵計劃
- 為本署員工、顧問公司駐工地人員及承建 商代表舉辦兩個安全講座

To foster a culture of work safety within the Department, we actively organise and participate in OSH promotional campaigns. The activities we took part in 2017-18 are listed below:

- 31 DSD projects participated in the 24th Considerate Contractors Site Award Scheme held by the Development Bureau
- 37 projects participated in the Construction Sites Housekeeping Award Scheme 2017 organised by DSD
- Two safety talks were organised for DSD colleagues, resident site staff of consultants and representatives of contractors



獲獎合約團隊代表於第24屆公德地盤嘉許計劃頒獎典禮合照

Representatives of the winning contract teams pictured at the award ceremony for the 24th Considerate Contractors Site Award Scheme







員工康樂活動 Staff Recreational Activities

為促進各部別同事的溝通和認識,以及推廣 工作和生活平衡,本署職員康樂會定期舉辦 多項康樂活動。 To facilitate communication among staff from different divisions, and promote work-life balance, our Staff Club organises a wide range of recreational activities periodically.

香港馬拉松2018

Hong Kong Marathon 2018

本署除了約30名員工和其親屬踴躍參與本年賽事外,亦邀得顧問公司及承建商等合作夥伴一同參與,總人數多達83人。賽事期間,參賽者互相打氣,充分體現團隊合作精神。

In 2018, approximately 30 staff members and their relatives took part in the race. Our consultants, contractors and other partners were also invited to join the race, making up a strong team of 83. During the race, runners cheered for each other, bringing team spirit into full play.



香港馬拉松2018 Hong Kong Marathon 2018

龍舟競渡

Dragon Boat Race

本署龍舟隊自成立以來,除了定期訓練外, 多年來一直積極參與不同賽事,冀能讓員工 強健體魄外,亦能提升團隊的凝聚力。

Since its establishment, DSD dragon boat team has been training regularly and actively participating in various dragon boat races over the years. We hope these activities can help our staff maintain good health and establish stronger group cohesiveness.



本署龍舟隊於長洲國慶小龍公開賽2017勇奪男女子銀碗賽亞軍及男子工商 機構組金碟賽季軍

Our team won the first runner-up in Silver Bowl Race (Mixed) and the second runner-up in the Corporate Team (Male) of National Day Small Dragon Boat Open Race 2017 in Cheung Chau



體育競賽

Sports Competitions

為促進員工身心健康,本署職員康樂會除了 參加馬拉松及龍舟競賽外,亦積極參與 其他機構舉辦的體育活動,以及籌辦各類跨 部門運動競賽,包括足球、籃球、乒乓球、 壁球、桌球、網球、羽毛球、保齡球和飛鏢 賽事等,讓同事一展身手。

To promote colleagues' physical and mental wellness, in addition to joining marathon and dragon boat races, our Staff Club actively participates in sports activities held by other organisations and organised inter-departmental sports tournaments for colleagues to unleash their potentials. The sports include football, basketball, table tennis, squash, snooker, tennis, badminton, bowling and darts, etc.



建造業議會2017開心長跑 Construction Industry Council Happy Run 2017 . .



發展局水運會2017 Development Bureau Swimming Gala 2017



戶外活動及興趣班

Outdoor Activities and Interest Classes

本署員工興趣廣泛,上至烹飪,下至攝影。 為此,職員康樂會安排舉辦各樣的戶外 活動和興趣班,包括本地旅行

團、單車遊、遠足、綠化講座. 烹飪班、攝影技巧教學班及

水晶珠製作班等。

Our staff have a wide variety of interests, ranging from cooking to photography. In this connection, our Staff Club organised various outdoor activities and interest classes, including local tours, cycling

> trips, hiking, green seminars, cooking classes, photography technique classes and crystal bead accessories design classes, etc.

渠記廚房烹飪班 DSD cooking class



單車河道遊 Riverside cycling trip

周年晚宴

Annual Dinner

一年一度的渠務署職員康樂會周年晚宴於2017年5月圓滿舉行,出席的嘉賓及同事約300人。當晚除了頒發各項體育比賽獎項、進行幸運抽獎及有獎問答遊戲外,署長及副署長更與渠務署樂隊(the Revival)一同獻唱,眾人開懷盡歡。

The DSD Staff Club Annual Dinner was successfully held in May 2017, receiving around 300 guests and colleagues. Adding icing on theprize presentation for sports competitions, lucky draw and prize quiz, the Director and Deputy Director of DSD performed with the Revival, DSD Band. It was a happy and memorable evening for all.



祝酒儀式 Making a toast



本署署長唐嘉鴻先生(右)及副署長麥嘉為先生(左)與渠務署樂隊合唱 Mr. Edwin TONG Ka-hung, Director of Drainage Services (right) and Mr. MAK Ka-wai, Deputy Director of Drainage Services (left) jamming with the Revival, DSD Band

部門聖誕聯歡會 Christmas Party

逾460位嘉賓及同事在2017的聖誕聯歡會聚 首一堂,共慶佳節。於聯歡會上,同事獻唱聖 詩和進行幸運抽獎,氣氛歡騰,樂也融融。

Over 460 colleagues and guests joined DSD Christmas Party 2017 to celebrate the festive season. Christmas carols by colleagues and lucky draw brought more fun and joy.



環境局局長黃錦星先生(左二)、發展局常任秘書長(工務)韓志強先生(右三)、本署署長唐嘉鴻先生(左三)及多位已榮休的前任署長在本署的聖誕聯歡會共聚一党

Christmas gathering for Mr. Wong Kam-sing, Secretary for the Environment (second left), Mr. HON Chi-keung, Permanent Secretary for Development (Works) (third right), Mr. Edwin TONG Ka-hung, Director of Drainage Services (third left), and retired Directors of Drainage Services

親善探訪

Goodwill Visits

我們十分重視員工意見,為加強管理層與前線員工的交流,本署自2013年6月起推行親善探訪計劃。本署署長、副署長和其他首長級人員每年均會到前線員工的工作地點進行親善探訪,了解員工關心的議題,深化彼此的聯繫。2017-18年度,管理層共進行了9次親善探訪,與12處辦公地點的員工溝通。

We value staff feedback greatly. To enhance exchanges between the management and frontline staff, DSD introduced the Goodwill Visit Programme in June 2013. The Director and Deputy Director of Drainage Services as well as other directorate staff pay visits to frontline staff at their workplace annually, listening to their concerns and deepening ties with them. In 2017-18, the management made a total of 9 goodwill visits to communicate with frontline staff at 12 operational sites.





親善探訪 Goodwill visits





媒體參與活動 Media Engagement Activities

媒體是我們對外發布消息及與公眾溝通的重要夥伴。我們 年內繼續行辦傳媒簡報會並接受媒體採訪,亦應邀參與媒體 舉辦的資訊節目,簡介及分享社會關注的項目,致力提升 部門形象,加深大眾對渠務署工作的認識。本章節介紹本署 年內參與的重點媒體活動,包括管理層與傳媒溝通、有關本署 工程、工作和員工的傳媒專訪,以及電視及電台資訊節目。

The media is our important partner in disseminating news and communicating with the public. During the year, apart from continuing to hold media briefings and attend interviews, we participated in informative programmes organised by media to brief and share the projects that are of public concern, striving to enhance the Department's image and deepen the public's understanding of our work. Key media activities in the year are highlighted in this chapter, including exchanges between the management and media, media interviews on DSD projects, work, and staff, as well as TV and radio informative programmes.





- 1. 傳媒專訪跑馬地地下蓄洪計劃 Media interview on Happy Valley Underground Stormwater Storage Scheme
- 2. 傳媒訪問本署園境師 Media interview with our Landscape Architect





管理層與傳媒溝通

Exchanges between the Management and Media





Nov 2017 11月

傳媒專訪署長唐嘉鴻先生

Media Interview with Mr. Edwin TONG Ka-hung, Director of Drainage Services

2017年11月9日,本署署長唐嘉鴻先生接受傳媒專訪,介紹本署的河道活化和風險為本的修復老化渠道計劃,以及搬遷沙田污水處理廠往岩洞的工作。專訪分別於同月13及20日刊登。

On 9 November 2017, Mr. Edwin TONG Ka-hung, Director of Drainage Services, attended media interview to present DSD's river revitalisation and risk-based pipe rehabilitation works, as well as the Relocation of Sha Tin Sewage Treatment Works (STSTW) to Caverns. The interview was published on 13 and 20 November 2017 respectively.



署長唐嘉鴻先生向傳媒簡介渠務署工作 Mr. Edwin TONG, Director of Drainage Services, presenting DSD's work to the media

Mar 2018 3月

年度傳媒簡報會

Annual Media Briefing

2018年3月27日,本署舉行年度傳媒簡報會,向傳媒簡介防洪及污水處理工作的最新情況,並帶領記者參觀於2018年完工的啟德河改善工程。

On 27 March 2018, DSD held the Annual Media Briefing to brief the media about the latest situation of its flood prevention and sewage treatment. A media tour to the Kai Tak River Improvement Works that was completed in 2018 was also arranged.



署長唐嘉鴻先生向傳媒講解啟德河改善工程 Mr. Edwin TONG, Director of Drainage Services, introducing the Kai Tak River Improvement Works to the media



署長唐嘉鴻先生向傳媒簡介渠務署工作 Mr. Edwin TONG, Director of Drainage Services, briefing the media on DSD's work





渠務署工程及工作傳媒專訪

Media Interviews on DSD Projects and Work

May 2017 5月

活化翠屏河傳媒專訪

Media Interviews on Revitalisation of Tsui Ping River

2017年5月2日,《明報》、《星島日報》、《南華早報》、《大公報》及《文匯報》就活化翠屏河計劃專訪時任總工程師簡漢成先生及高級工程師陳克強先生。專訪於同月8日刊登。

On 2 May 2017, Ming Pao, Sing Tao Daily, South China Morning Post, Ta Kung Pao and Wen Wei Po interviewed Mr. KAN Hon-shing, then Chief Engineer, and Mr. CHAN Hak-keung, Senior Engineer, regarding the Revitalisation of Tsui Ping River project. The interview was published on 8 May 2017.



時任總工程師簡漢成先生(左二)及高級工程師陳克強先生(左一)簡介活化翠屏河計劃的工程目的及範圍Mr. KAN Hon-shing, then Chief Engineer (second left), and Mr. CHAN Hak-keung, Senior Engineer (first left), presenting the objectives and scope of the Revitalisation of Tsui Ping River project

Aug 2017 8月



高級工程師陳克強先生(左一)講解活化翠屏河計劃的概念 Mr. CHAN Hak-keung, Senior Engineer (first left), presenting the concept of the Revitalisation of Tsui Ping River project 同年8月10日,高級工程師陳克強先生就活化翠屏河 計劃接受《香港01》採訪。專訪於同月14日刊登。

On 10 August 2017, Mr. CHAN Hak-keung, Senior Engineer, was interviewed by HK01 on the Revitalisation of Tsui Ping River project. The interview was published on 14 August 2017.



May 2017 5月

雨水排放整體計劃檢討研究傳媒專訪 Media Interview on the Drainage Master Plan Review Studies

2017年5月29日,《明報》就本署的雨水排放整體計劃檢討研究及防洪策略,訪問時任總工程師何耀光 先生。專訪於同年6月5日刊登。

On 29 May 2017, Ming Pao interviewed Mr. HO Yiu-kwong, then Chief Engineer, to learn more about DSD's Drainage Master Plan Review Studies and flood prevention strategies. The interview was published on 5 June 2017.



時任總工程師何耀光先生(左)介紹本署的防洪策略 Mr. HO Yiu-kwong (left), then Chief Engineer, presenting DSD's flood prevention strategies

Jun 2017 6月

雨水排放隧道及地下蓄洪池傳媒專訪

Media Interviews on Drainage Tunnels and Underground Stormwater Storage Tank

2017年6月7日,新華社派員到訪本署跑馬地地下蓄 洪池,專訪時任總工程師簡漢成先生,以了解本署的 雨水排放隧道及蓄洪池的建造和運作情況。專訪於 同月12日在《新華網》刊登。

On 7 June 2017, the representatives of the Xinhua News Agency visited our Happy Valley Underground Stormwater Storage Tank and interviewed Mr. KAN Hon-shing, then Chief Engineer, on the construction and operation of DSD's drainage tunnels and stormwater storage tank. The interview was published on Xinhuanet on 12 June 2017.



時任總工程師簡漢成先生(右一)簡介跑馬地地下蓄洪池 計劃

Mr. KAN Hon-shing, then Chief Engineer (first right), giving a briefing on the Happy Valley Underground Stormwater Storage Scheme

Aug 2017 8月



時任總工程師簡漢成先生(左)介紹跑馬地地下蓄洪計劃的 構造及運作

Mr. KAN Hon-shing, then Chief Engineer (left), explaining the structure and operation of HVUSSS

2017年8月18日,瑞士報章《Le Temps》派員到本署 跑馬地地下蓄洪計劃工地進行採訪,內容涵蓋香港的 防洪策略、該計劃的背景資料及其可持續發展設計。 專訪於同年9月25日刊登。

On 18 August 2017, the representatives from Swiss newspaper Le Temps visited the site of the Happy Valley Underground Stormwater Storage Scheme (HVUSSS) for an interview, taking note of Hong Kong's flood prevention strategies as well as the background and the sustainable design of HVUSSS. The interview was published on 25 September 2017.

Sep **2017** 9月 同年9月12日,《香港01》就跑馬地地下蓄洪計劃的 運作訪問本署。專訪於同月18日刊登。

On 12 September 2017, DSD was interviewed by HK01 on the operation of HVUSSS. The interview was published on 18 September 2017.



工程師袁佩姍女士(右)介紹跑馬地地下蓄洪計劃的運作Ms. Priscilla YUEN Pui-shan , Engineer (right), outlining the operation of HVUSSS



Sep 2017 9月



高級工程師鄭保源先生(右)向記者講解雨水截流的概念 Mr. Paul CHENG, Senior Engineer (right), presenting the stormwater interception concept to the reporter

2017年9月25日,高級工程師鄭保源先生就港島西雨水排放隧道、荔枝角雨水排放隧道,以及荃灣雨水排放隧道的日常運作和維修工作接受《文匯報》訪問。專訪於同年10月3日刊登。

On 25 September 2017, Mr. Paul CHENG Po-yuen, Senior Engineer, gave an interview to Wen Wei Po on the daily operation and maintenance works of Hong Kong West Drainage Tunnel, Lai Chi Kok Drainage Tunnel and Tsuen Wan Drainage Tunnel. The interview was published on 3 October 2017.

Jan 2018 1月

污水處理廠設施運作傳媒專訪

Media Interviews on Sewage Treatment Works Operation

2018年1月10日,《大公報》就沙田污水處理廠的運作及環境保育措施,採訪高級機電工程師唐遠峯先生及 環境保護主任陳正豪先生。專訪於同月18日刊登。

On 10 January 2018, Ta Kung Pao interviewed Mr. Raymond TONG Yuen-fung, Senior Electrical and Mechanical Engineer, and Mr. Albert CHAN Ching-ho, Environmental Protection Officer, to understand the operation and environmental conservation measures of STSTW. The interview was published on 18 January 2018.



高級機電工程師唐遠峯先生(左)講解污水處理流程 Mr. Raymond TONG, Senior Electrical and Mechanical Engineer (left), presenting the sewage treatment process



環境保護主任陳正豪先生(右)講解渠務署在推展工程 時,十分重視保育生物多樣性

Mr. Albert CHAN, Environmental Protection Officer (right), highlighting DSD's effort in promoting biodiversity conservation during the implementation of projects

Jan 2018 1月



高級機電工程師唐遠峯先生(左)接受《香港商報》訪問 Mr. Raymond TONG, Senior Electrical and Mechanical Engineer (left), at the interview with Hong Kong Commercial Daily

同年1月17日,《香港商報》就沙田污水處理廠的日 常運作專訪高級機電工程師唐遠峯先生。專訪於同月 21日刊登。

On 17 January 2018, Mr. Raymond TONG Yuen-fung, our Senior Electrical and Mechanical Engineer, gave an interview to Hong Kong Commercial Daily about the daily operation of STSTW. The interview was published on 21 January 2018.



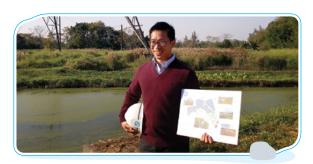
Dec **2017** 12月

環境保育工作專訪

Media Interview on Environmental Conservation

2017年12月20日,《香港商報》就環境保育及元朗 排水繞道人工濕地的生態價值訪問本署。專訪於 2018年1月28日刊出。

On 20 December 2017, Hong Kong Commercial Daily interviewed DSD on environmental conservation work and the ecological value of Yuen Long Bypass Floodway Engineered Wetland. The interview was published on 28 January 2018.



環境保護主任陳正豪先生帶領記者參觀元朗排水繞道人工 濕地

Mr. Albert CHAN Ching-ho, Environmental Protection Officer, giving the reporter a guided tour to Yuen Long Bypass Floodway Engineered Wetland

Jan 2018 1月

綠色建設傳媒專訪 Media Interview on Greening Works



園境師許樂謙先生(左一)介紹小蠔灣污水處理廠的植物 苗圃

Mr. Stanley HOI, Landscape Architect (first left), introducing the planting nursery in SHWSTW

2018年1月11日,政府新聞處到訪沙田污水處理廠及小蠔灣污水處理廠的植物苗圃,以了解渠務設施的園境和綠化工作。園境師許樂謙先生和時任園境師唐翠珊女士表示,渠務署致力推動綠色建設,有效改善污水處理設施的環境和景觀,以及提高設施的生態價值。報道載於同月21日的政府新聞網。

On 11 January 2018, Information Services Department (ISD) visited STSTW and the planting nursery in Siu Ho Wan Sewage Treatment Works (SHWSTW) to learn about DSD's landscaping and greening works at sewerage facilities. Mr. Stanley HOI Lok-him, Landscape Architect and Ms. Sandy TONG Chui-shan, then Landscape Architect, affirmed the Department's commitment in promoting greening works, improving the environment and scenic value of sewage treatment works, and enhancing their ecological significance. The interview was broadcast on news.gov.hk on 21 January 2018.

Feb **2018** 2月

可再生能源傳媒專訪

Media Interview on Renewable Energy

2018年2月9日,《東方日報》在沙田污水處理廠訪問機電工程師吳嘉榮先生,以了解渠務署應用可再生能源,包括生物氣和太陽能的情況。專訪於同年3月4日刊登。

On 9 February 2018, Oriental Daily interviewed Mr. Barry NG Ka-wing, Electrical and Mechanical Engineer, at STSTW about DSD's applications of renewable energy, including biogas and solar energy. The interview was published on 4 March 2018.



機電工程師吳嘉榮先生(右)介紹本署應用的可再生能源,並展示生物氣發電過程使用的污泥

Mr. Barry NG, Electrical and Mechanical Engineer (right), presenting the renewable energies used by DSD and showing sludge used in the generation of electricity by biogas



員工人物傳媒專訪

Media Interviews on DSD's Colleagues

Jul 2017 7月

通渠工朱運秋女士

Ms. CHU Wun-chau, Leading Sewerman

2017年7月7日,《蘋果日報》、《香港01》、《明報》、《東方日報》、《成報》、《星島日報》、《南華早報》、《大公報》及《文匯報》專訪渠務署成立以來首位女通渠工朱運秋女士。朱女士分享工作點滴,並介紹本署直屬員工隊的主要工作。專訪於同月17日出版。

On 7 July 2017, Apple Daily, HK01, Ming Pao, Oriental Daily, Sing Pao, Sing Tao Daily, South China Morning Post, Tai Kung Pao and Wen Wei Po conducted an interview with Ms. CHU Wun-chau, our first ever female Leading Sewerman. Ms. CHU shared her work experience as well as the major duties of Direct Labour Force in DSD. The articles were published on 17 July 2017.



女通渠工朱運秋女士示範運用藤具清理渠道 Ms. CHU Wun-chau, female Leading Sewerman, demonstrating drain cleansing with rattan tool

Nov 2017 11月

園境師林震峰先生

Mr. Peter LAM Chun-fung, Landscape Architect



園境師林震峰先生(左)向記者分享沙田污水處理廠的 美化工程

Mr. Peter LAM, Landscape Architect (left), sharing with the reporter the beautification works at STSTW

2017年11月30日,園境師林震峰先生接受《香港01》 專訪,分享其日常工作及沙田污水處理廠的美化 工程。專訪於同年12月11日刊登。

On 30 November 2017, Mr. Peter LAM Chun-fung, our Landscape Architect, gave an interview to HK01 sharing his daily work and beautification works at STSTW. The interview was published on 11 December 2017.



Jan 2018 1月

技術主任范錦成先生

Mr. Tim FAN Kam-shing, Technical Officer

2018年1月12日,技術主任范錦成先生接受《香港01》 專訪,介紹繪畫圖則的工作,並示範新及傳統的繪圖 方法。專訪於同月26日刊登。

On 12 January 2018, Mr. Tim FAN Kam-shing, Technical Officer, was interviewed by HK01 on the drawing works. New versus traditional methods of drawing were demonstrated as well. The interview was published on 26 January 2018.



技術主任范錦成先生(右)介紹繪畫圖則過程 Mr. Tim FAN, Technical Officer (right), presenting the plan drawing process

Jan 2018 1月

高級機電工程師唐遠峯先生、時任高級化驗師鄧天祜先生、工程師馮鎮江先生, 以及環境保護主任陳正豪先生

Mr. Raymond TONG Yuen-fung, Senior Electrical and Mechanical Engineer, Mr. Daniel TANG Tin-wu, then Senior Chemist, Mr. FUNG Chun-kong, Engineer and Mr. Albert CHAN Ching-ho, Environmental Protection Officer

2018年1月18日,《星島日報》專訪高級機電工程師 唐遠峯先生、時任高級化驗師鄧天祜先生、工程師 馮鎮江先生,以及環境保護主任陳正豪先生,以 了解其日常職務及公餘興趣。專訪於同月26及27日 刊登。

On 18 January 2018, Mr. Raymond TONG Yuen-fung, Senior Electrical and Mechanical Engineer, Mr. Daniel TANG Tin-wu, then Senior Chemist, Mr. FUNG Chun-kong, Engineer, and Mr. Albert CHAN Ching-ho, Environmental Protection Officer, gave an interview to Sing Tao Daily about their daily work and spare-time interests activities. The interview was published on 26 and 27 January 2018.



高級機電工程師唐遠峯先生(左二)、時任高級化驗師 鄧天祜先生(右二)、工程師馮鎮江先生(左一),以及 環境保護主任陳正豪先生(右一)簡介其日常職務

Mr. Raymond TONG, Senior Electrical and Mechanical Engineer (second left), Mr. Daniel TANG, then Senior Chemist (second right), Mr. FUNG Chun-kong, Engineer (first left), and Mr. Albert CHAN, Environmental Protection Officer (first right), giving an overview of their daily work

Jan 2018 1月

工程師方偉鵬先生

Mr. Andy FONG Wai-pang, Engineer

2018年1月19日,工程師方偉鵬先生接受《明報》 及《成報》訪問,講述在本署的工作經歷與感受。 訪問於同月25日刊登。

On 19 January 2018, Mr. Andy FONG Wai-pang, Engineer, gave an interview to Ming Pao and Sing Pao, expressing his work experience and feelings with DSD. The interview was published on 25 January 2018.



工程師方偉鵬先生(右)與記者分享推展污水收集和處理工程所面對的挑戰,以及在本署的工作經歷與感受

Mr. Andy FONG, Engineer (right), highlighting the challenges encountered during the implementation of sewerage and sewage treatment projects, and his work experience and feelings with DSD

Jan 2018 1月

高級電氣督察陳紹基先生

Mr. CHAN Siu-kee, Senior Electrical Inspector

2018年1月22日,高級電氣督察陳紹基先生接受 《成報》訪問,分享在本署26年的工作點滴及公餘興 趣。專訪於同月25日刊登。

On 22 January 2018, Mr. CHAN Siu-kee, Senior Electrical Inspector, was interviewed by Sing Pao on his 26-year working life at DSD and his spare-time interests. The interview was published on 25 January 2018.



高級電氣督察陳紹基先生與記者分享工作點滴及曾任國際 足球裁判的經歷

Mr. CHAN Siu-kee, Senior Electrical Inspector, sharing his working life and experience as a former Federation Internationale de Football Association (FIFA) referee Feb 2018 2月

助理工程師關鎮謙先生及見習工程師陳婉倩女士

Mr. Martin KWAN Chun-him, Assistant Engineer and Ms. Rachael CHAN Yuen-sin, Civil Engineering Graduate



工程師關鎮謙先生(左)及見習工程師陳婉倩女士介紹他們所參與的三年見習土木工程師培訓計劃Mr. Martin KWAN, Engineer (left), and Ms. Rachael CHAN, Civil Engineering Graduate introducing the 3-year CEG

2018年2月14日,工程師關鎮謙先生及見習工程師陳婉倩女士接受《大公報》及《文匯報》訪問。訪問中,他們介紹參與的三年見習土木工程師培訓計劃,並分享他們的工作規劃和在本署的工作經歷。專訪於同月23日刊登。

On 14 February 2018, Mr. Martin KWAN Chun-him, Engineer, and Ms. Rachael CHAN Yuen-sin, Civil Engineering Graduate, gave an interview to Ta Kung Pao and Wen Wei Po. During the interview, they introduced the 3-year Civil Engineering Graduate (CEG) training programme they joined and shared their career path planning and work experience with DSD. The interview was published on 23 February 2018.

Feb **2018** 2月

工程師馮鎮江先生 Mr. FUNG Chun-kong, Engineer

training programme they joined

2018年2月23日,工程師馮鎮江先生接受《明報》 專訪,簡介他在本署的工作和推展工程時所遇到的 挑戰,亦分享了他成為工程師的心路歷程。專訪於 同年3月13日刊登。

On 23 February 2018, Mr. FUNG Chun-kong, Engineer, gave an interview to Ming Pao about his job duties at DSD and the challenges encountered during the implementation of projects. He also shared his experience in becoming an engineer. The interview was published on 13 March 2018.



工程師馮鎮江先生(左)簡介他在本署曾擔任的職務,當中包括籌備跑馬地地下蓄洪池的開幕典禮

Mr. FUNG Chun-kong, Engineer (left), outlining his job duties in DSD, including preparation for the opening ceremony of Happy Valley Underground Stormwater Storage Tank



參與電視及電台資訊節目

Participation in TV and Radio Informative Programmes

香港電台節目《大氣候》

Radio Television Hong Kong (RTHK) Programme "Climate Watcher"

Apr 2017 4月



2017年4月22日,香港電台第一台資訊節目《大氣候》就 渠務署應對氣候變化的工作訪問時任總工程師何耀光先生, 以了解截流、蓄洪與疏浚等防洪策略及可持續的海綿城市 概念。專訪於當日播出。

On 22 April 2017, "Climate Watcher", an informative programme broadcast by Radio Television Hong Kong (RTHK) Radio 1, interviewed Mr. HO Yiu-kwong, then Chief Engineer, on DSD's works in combating climate change to understand DSD's flood prevention strategies including flood interception, flood storage and drainage improvement as well as the sustainable concept of Sponge City. The interview was aired on the same day.



時任總工程師何耀光先生(中)講解本署應對氣候變化的策略 Mr. HO Yiu-kwong, then Chief Engineer (centre), explaining DSD's strategies in combating climate change



時任機電工程師黃子冲先生(右一)向節目主持介紹污水處理流程 Mr. Jack WONG, then Electrical & Mechanical Engineer (first right), introducing the sewage treatment process to the host

澳門廣播電視節目《綠◆惜家園》 Teledifusão de Macau (TDM) TV Programme

2017年5月5日,澳門廣播電視節目《綠◆惜家園》就污水處理 專訪時任機電工程師黃子冲先生,訪問內容涵蓋香港的污水 處理概況、污水處理流程,以及本署的環保和社區參與工作。 專訪於同年7月19日播出。

On 5 May 2017, Mr. Jack WONG Tsz-chung, then Electrical & Mechanical Engineer, attended a TDM TV programme to give an overview of the sewage treatment situation and processes in Hong Kong, as well as DSD's effort in environmental protection and community engagement. The interview was broadcast on 19 July 2017.

香港電台節目《政壇新秀訓練班》 RTHK Radio Programme "Young Politian"

2017年7月15日,香港電台第二台資訊節目《政壇新秀訓練班》就本署的地下防洪工程專訪時任總工程師簡漢成先生,讓市民了解香港的防洪策略,並介紹跑馬地地下蓄洪計劃的運作及各種環保節能設計。專訪於同年8月12日播出。

On 15 July 2017, Mr. KAN Hon-shing, then Chief Engineer, gave an interview to "Young Politician", an informative programme of RTHK Radio 2, about DSD's underground works for flood prevention, to inform the public of the flood prevention strategies in Hong Kong, as well as the operation and various environmentally friendly and energy-saving features adopted in HVUSSS. The interview was aired on 12 August 2017.



時任總工程師簡漢成先生(中)接受香港電台第二台訪問 Mr. KAN Hon-shing, then Chief Engineer (centre), interviewed by RTHK Radio 2

電視廣播有限公司節目《時事多面睇》 TVB Programme "A Closer Look"

Aug 2017 8月



時任總工程師何耀光先生(左一)講述本署應對颱風的具體措施Mr. HO Yiu-kwong, then Chief Engineer (first left), outlining DSD's specific typhoon measures

2017年8月24日,時任總工程師何耀光先生就本署應對颱風的 工作接受新聞節目《時事多面睇》採訪。專訪於當日播出。

On 24 August 2017, Mr. HO Yiu-kwong, then Chief Engineer, gave an interview to "A Closer Look", a news feature programme about our efforts in combating typhoon. The interview was broadcast on the same day.

電視廣播有限公司節目《都市閒情》 TVB Programme "Pleasure and Leisure"

2017年9月4日,時任高級工程師袁嘉慧女士就水浸成因及應對 颱風措施接受《都市閒情》訪問。專訪於當日直播。

On 4 September 2017, Ms. Esther YUEN Ka-wai, then Senior Engineer, was interviewed by "Pleasure and Leisure" regarding the causes of flooding and typhoon measures. The interview was broadcast live on the same day.



時任高級工程師袁嘉慧女士(左二)接受《都市閒情》訪問 Ms. Esther YUEN, then Senior Engineer (second left), interviewed by "Pleasure and Leisure"

Sep 2017 9月

工程師袁佩姍女士(右)講解跑馬地地下蓄洪計劃的運作 Ms. Priscilla YUEN Pui-shan, Engineer (right), explaining the operation of HVUSSS

電視廣播有限公司節目《東張西望》 TVB Programme "Scoop"

2017年9月13日,《東張西望》採訪隊訪攝本署跑馬地地下蓄洪 計劃工地,以了解其具體運作。專訪於同年10月4日播出。

On 13 September 2017, the "Scoop" programme crew visited and filmed the HVUSSS site to get a full picture of its operation. The interview was broadcast on 4 October 2017.





持份者參與活動

Stakeholder Engagement Activities

與各界持份者建立互動和長遠的夥伴關係,是渠務署可持續發展的重要一環。本署樂向 持份者簡介轄下工程項目,並聆聽不同意見。年內,我們為持份者安排多樣活動,同時 積極參與社區活動。本署員工更投入義務工作及慈善活動,身體力行,回饋社會。

DSD's sustainable development hinges upon building an interactive and long-term partnerships with our stakeholders. We are happy to introduce our work projects to our stakeholders, while listening to different opinions. During the year, we organised a wide range of stakeholder engagement activities and actively participated in community events. DSD staff members even played a direct role to give back to society by involving in volunteer services and charitable activities.









公眾參與活動 Public Engagement Activities



為使公眾認識本署工程及服務為社區帶來的裨益及影響,我們在不同工程階段舉辦公眾參與活動,包括社區宣傳活動、技察及工作坊,向公眾及鄰近社區講述工程目的及進度。年內涉及公眾參與活動的主要工程項目,包括啟德河改善工程和淨化海港計劃第二期甲工程。此外,我們亦參與多項大型社區活動及展覽,因應本署服務範疇設計活動。

To keep the public informed of the benefits and impacts of DSD projects and services on the communities, we organised public engagement activities, including community outreach, technical visits and workshops for the general public and neighbouring communities at various work stages to introduce project objectives and progresses. During the year, major works projects that involved public engagement activities included the Kai Tak River Improvement Works and Harbour Area Treatment Scheme (HATS) Stage 2A. DSD also attended a number of large-scale community programmes and exhibitions where we designed activities with the purpose of recounting different aspects of DSD services.

渠務署工程項目公眾參與活動

Public Engagement Activities of DSD Projects



▲ 啟德河改善工程

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, 我們一直與持份者保持緊密溝通,並向持份 者及公眾發放工程資訊,聆聽他們對工程的 意見,務求回應他們所關注的議題,並盡力 減少建造工程對居民的影響。

社區活動及宣傳

為讓市民更了解建造工程及加強他們對 啟德河和社區的歸屬感,本署於2017年4月 在河旁的摩士公園(一號公園)舉辦「活化 啟德河一社區種植日」,藉此推動「共建 啟德河」精神。參與人士包括聖公會基德 小學師生、黃大仙區議員,以及本署啟德河 工程團隊。

除派發通訊刊物以增加外界對工程的了解外,我們亦專誠安排了黃大仙區議員參觀啟德河改善工程的工地,為他們講述工程進度。此外,本署作為「賽馬會鼓掌•創你程計劃」的參與機構,於2018年3月安排順德聯誼總會鄭裕彤中學的學生參觀啟德河。其間,本署職員除了向同學介紹部門的日常工作及講解啟德河改善工程外,更分享職涯規劃和工作心得。

Kai Tai River Improvement Works

Prior to project commencement, DSD joined the Civil Engineering and Development Department (CEDD) and Planning Department (PlanD) to launch "Building Our Kai Tak River", a two-stage public engagement programme. Ever since the commencement of the project in 2011, we have maintained close communication with various stakeholders and provided project information to stakeholders and the public, so as to address their concerns and minimise the impacts of the construction project on residents as far as possible.

Community Activities and Publicity Efforts

To enhance the public's understanding of the project and strengthen their sense of belonging to Kai Tak River and the local community, DSD held the "Revitalisation of Kai Tak River – Community Planting Event" in April 2017 at Morse Park (Park No.1) adjoining the river to promote the spirit of "Building Our Kai Tak River". The event was attended by pupils and teachers from S.K.H. Kei Tak Primary School, members of Wong Tai Sin District Council and the our Kai Tak River Improvement project team.

Apart from disseminating newsletters to enhance public understanding of the project, we especially arranged a visit to the Kai Tak River Improvement Works project site for members of Wong Tai Sin District Council to brief them on the works progress. In addition, as a participating organisation of Clap for Youth@JC, DSD arranged a visit to Kai Tak River for students from Shun Tak Fraternal Association Cheng Yu Tung Secondary School in March 2018. During the visit, DSD staff not only introduced the daily work of the Department and the Kai Tak River improvement works, but also shared their career planning and work experience with the young visitors.





2017年4月,聖公會基德小學師生參與「活化啟德河-社區種植日」 In April 2017, pupils and teachers from S.K.H. Kei Tak Primary School participated in the "Revitalisation of Kai Tak River – Community Planting Event"



2018年2月,黃大仙區議員參觀啟德河 In February 2018, Wong Tai Sin District Council members visited Kai Tak River



2018年3月,本署職員向同學介紹部門的日常工作 In March 2018, our staff shared their daily duties with students

實地考察

過去一年,我們安排多個機構的人士,包括 深圳市水務局人員和香港大學社會科學學院 「賽馬會惜水•識河計劃」參加者,到啟德 河進行實地考察,讓他們了解改善工程的 目的、挑戰和主要技術應用情況。

Site Visits

In the past year, several site visits to Kai Tak River were arranged for groups of various organisations, including members of the Shenzhen Water Resources Bureau and participants of the Jockey Club Water Initiative on Sustainability and Engagement (JC-WISE) of Faculty of Social Sciences, the University of Hong Kong, in order to give them an understanding of the project's objectives, challenges and application of advanced technologies.



2017年11月,深圳市水務局代表到訪啟德河 In November 2017, representatives of Shenzhen Water Resources Bureau visited Kai Tak River



2017年11月,「賽馬會惜水·識河計劃」的參加者參觀啟德河 In November 2017, JC-WISE participants visited Kai Tak River



▲ 淨化海港計劃第二期甲

我們在2017-18年度舉辦多項公眾參與活動,致力向市民推廣淨化海港計劃第二期甲工程,當中主要包括:

- 每半年向鄰近持份者派發簡訊: Distribution of newsletters to neighbourhood stakeholders half-yearly;
- ▶接待多個團體,包括工程及科技學會、建造業議會及環保署等,以及內地政府官員參觀昂船洲污水處理廠,並向他們介紹工程最新進展;

Arrangement of visits to the Stonecutters Island Sewage Treatment Works (SCISTW) for various groups and organisations on project updates, including engineering and technology professional institutions, Construction Industry Council and the Environmental Protection Department as well as mainland officials;

● 接受傳媒專訪,包括成報、星島日報、明報及東周刊。 Giving interviews to media including Sing Pao Daily News, Sing Tao Daily, Mingpao and Eastweek.



Harbour Area Treatment Scheme (HATS) Stage 2A

We organised various public engagement events throughout 2017-18 to promote the HATS Stage 2A Project to the public. Our key public engagement activities included:





2017年8月2日,北京市水務局代表團到訪昂船洲污水處理廠,了解工程建造技術

On 2 August 2017, the Beijing Water Authority delegation visited SCISTW to learn about construction technique

2017年11月21日,高級工程師郭志權先生就淨化海港計劃第二期甲工程接受《東周刊》訪問

On 21 November 2017, Mr. Kenley KWOK Chi-kuen, Senior Engineer, attended an interview by Eastweek on HATS Stage 2A



社區活動及展覽

Community Activities and Exhibitions

年內,本署舉行及參與多項不同類型的社區 活動及展覽,包括:

【▲ 香港工程師學會創意嘉年華2017

2017年6月11日,本署參與在九龍灣國際 展貿中心舉行的香港工程師學會創意嘉年華 2017。本署展區以「搬遷沙田污水處理廠 往岩洞」及「石湖墟污水處理廠改善計劃」 為主題,介紹設計中的污水處理設施。 DSD hosted and participated in various community activities and exhibitions during the year, as detailed below:

Hong Kong Institution of Engineers (HKIE) Fiesta 2017

On 11 June 2017, DSD took part in Hong Kong Institution of Engineers (HKIE) Fiesta 2017 at Kowloonbay International Trade & Exhibition Centre. The themes of "Relocation of Sha Tin Sewage Treatment Works to Caverns" and "Shek Wu Hui Sewage Treatment Works Improvement Project" were featured at DSD booth, introducing the sewage treatment facilities at the design stage.



本署員工運用虛擬實境技術,讓參加者「用 眼睛去旅行」,遊覽設計中的沙田污水處理 廠及石湖墟污水處理廠, 不單能加深參與者 對污水處理設施的設計及運作的認識,更讓 他們親身體驗污水處理設施如何與四周環境 渾成一體。當日,本署樂隊The Revival亦 應邀演出,為嘉年華增添熱鬧氣氛。

With the use of virtual reality (VR) technology, DSD staff offered visitors a "Travel with Your Eyes" experience to explore the design of the Shatin Sewage Treatment Works and Shek Wu Hui Sewage Treatment Works under design. This VR tour not only gave participants a better idea of the design and operation of sewage treatment facilities, but also a first-hand experience of how our sewage treatment facilities could blend in with

the community. Live performance by our band "The Revival" added joy and entertainment

to the fiesta.



市民踴躍參與虛擬實境旅程,探索 未來的污水處理廠

The public was keen to participate in the VR journey to explore our future sewage treatment facilities

本署署長唐嘉鴻先生(左六)與樂隊The Revival演出後合照 Mr. Edwin TONG Ka-hung, Director of Drainage Services (sixth left), took a picture with our band "The Revival" after the performance



▲ 科學為民服務巡禮

一如以往,本署參與年度科學為民服務 巡禮,向市民介紹政府部門和相關機構的 科學工作,以及如何應用科技提供公眾 服務。2017年科學為民服務巡禮的主題 為「STEM(科學·技術·工程·數學)在公眾 服務的應用」。

2017年8月13日,本署工程師鄧加月女士聯 同土木工程拓展署高級工程師張繼祥先生, 以及香港天文台科學主任李國麟先生,在 科學館舉行大澳防洪多面睇講座,向公眾 講述大澳水浸的成因,以及在設計和推行 大澳防洪措施上所遇到的挑戰、考 量及解決方案。他們更主動與

大眾討論如何加強香港應 對極端天氣的能力。

Science in the Public Service

As in previous years, DSD took part in the annual "Science in the Public Service" event to introduce the scientific work and application of technology by government bureaux/departments and other related organisations to the public. The 2017 event was held with the theme of "Application of STEM in Public Services".

On 13 August 2017, Ms. Annie TANG Ka-yuet, DSD Engineer, joined Mr. Henry CHEUNG Kai-cheung, Senior Engineer of the Civil Engineering and Development Department, and Mr. LEE Kwok-lun, Scientific Officer of the Hong Kong Observatory at the Tai O Flood Protection Forum held in the Hong Kong Science Museum to inform the public the causes of flooding in Tai O, as well as the challenges, considerations and solutions for designing and implementing flood prevention measures in Tai O. The three

> speakers even took the initiative to discuss with the public on how Hong Kong could better combat extreme weather.

> > 本署工程師鄧加月女士(右)接受主辦單位代表致送紀念品 Ms. Annie TANG Ka-yuet, DSD Engineer (right), receiving a souvenir from a representative of the organiser

▲ 創新科技嘉年華2017

2017年10月21至29日,本署參加在香港 科學園舉行的創新科技嘉年華,展出跑馬地 地下蓄洪計劃及小蠔灣污水處理廠太陽能 發電場兩個工程項目。我們利用工程模型及 實體發電板組件,向市民介紹工程項目的創 新元素,並推廣本署推行藍綠建設的願景。

InnoCarnival 2017

From 21 to 29 October 2017, DSD joined the InnoCarnival held in the Hong Kong Science Park and showcased two projects, namely the Happy Valley Underground Stormwater Storage Scheme (HVUSSS) and Solar Farm at Siu Ho Wan Sewage Treatment Works. With the aid of a physical model and solar panel components, visitors learnt more about the innovative elements of the two projects and our vision of promoting blue-green infrastructure.



本署署長唐嘉鴻先生(右二)與同事在創新科技嘉年華 的渠務署攤位合照

Mr. Edwin TONG Ka-hung, Director of Drainage Services (second right) and colleagues pictured in front of DSD's booth at InnoCarnival

▲ 國際環保博覽2017

Eco-Expo Asia 2017

From 26 to 29 October 2017, DSD participated in the 12th Eco Expo Asia held at AsiaWorld-Expo. With the theme of "DSD's renewable energy and energy efficiency initiatives and achievements". Our exhibition booth featured display panels, video clips about the operation of the Solar Farm at Siu Ho Wan Sewage Treatment Works and real-time operating information of the Solar Farm, as well as PV panels commonly used in the Solar Farm and different parts of the world. Through the display panels, video clips and briefings by our staff, visitors could understand more about the application of renewable energy at DSD, including solar power and biogas produced in the sewage treatment process, as well as technologies for enhancing energy efficiency of our facilities.



環境局局長黃錦星先生(中)在本署署長唐嘉鴻先生(左)及助理署長/機電工程 崔偉誠先生(右)陪同下參觀本署的展區

Mr. WONG Kam-sing, Secretary for the Environment (centre), accompanied by Mr. Edwin TONG Ka-hung, Director of Drainage Services (left), and Mr. CHUI Wai-sing, Assistant Director/ Electrical & Mechanical (right), visiting DSD's exhibit



公眾參觀本署的展區 Visitors at our exhibition





▲ 渠務署開放日2018

2018年1月27及28日,本署在沙田污水處理廠舉行以「除污淨流 未雨綢繆」為題的開放日,透過新增設的「親子探索遊」、導賞團、專題展覽和攤位遊戲等多項活動,加深市民對本署在防洪、污水處理、應對與減緩氣候變化方面工作的認識。我們今年繼續舉辦「藍綠小先鋒訓練計劃」,招募來自10間學校逾200位中小學生參加。一連兩日的開放日廣受歡迎,吸引超過19,000名市民入場參觀,打破歷年記錄。

DSD Open Day 2018

On 27 and 28 January 2018, we held DSD Open Day at the Shatin Sewage Treatment Works. Under the theme of "Clean Up Our Water, Prepare for the Rainy Day", the Open Day featured our work in flood prevention, sewage treatment and climate change adaption and mitigation through various activities, including the newly initiated "Parent-child Discovery Journey", guided tours, thematic exhibitions and game booths. We organised the "Blue-Green Ambassadors Training Programme" again this year, recruiting more than 200 students from 10 primary and secondary schools. The two-day event was well received by the public with a record number of more than 19,000 visitors.





Mr. Edwin TONG Ka-hung, Director of Drainage Services (third left), Mr. MAK Ka-wai, Deputy Director of Drainage Services (third right), and Assistant Directors officiating at the opening ceremony



藍綠小先鋒(前排左三)向市民講解本署工作 A Blue-Green Ambassador (third left, front row) explaining DSD's work to the public



本署同事帶領導賞團,以及講解污水處理設施的運作 DSD colleagues conducting guided tours and explaining the operation of sewage treatment facilities





"Parent-child Discovery Journey" was first introduced this year. Participants could visit each sewage treatment checkpoint shown on the guided map and mail the postcard upon collecting all the stamps

▲ 2018年香港花卉展覽

2018年3月16至25日,本署參加在維多利亞公園舉行的香港花卉展覽,本署展區「光再生 花綻放」獲得最佳展品(園林景點)大獎。展區以兩棵「太陽能樹」為中心,其高低有致的花瓣狀擺設旋轉外展,猶如盛放中巨型花朵的花蕊,配合本年花卉展覽的主題「心花放」。展品除了反映本署致力在廠房設施應用可再生能源,亦加深市民對光伏發電的認識。

Hong Kong Flower Show 2018

From 16 to 25 March 2018, we took part in the Hong Kong Flower Show 2018 held at Victoria Park and our exhibit "Energy Revives in Blossoms" was awarded the "Grand Award for Outstanding Exhibit (Landscape Display)". The exhibit was designed with a serial of undulating petal features swirled from the central power-generating solar trees, mimicking stamens of the two huge blooming flowers, to tie in with this year's theme "Joy in Bloom". The displays publicised DSD's commitment in the application of renewable energy at its facilities and deepened the public's understanding of photovoltaic power generation.



本署副署長麥嘉為先生(左七)、助理署長/設計拓展黃緒勤 先生(右七)、助理署長/機電工程崔偉誠先生(左五),以及 工作團隊代表渠務署領取最佳展品(園林景點)大獎

Mr. MAK Ka-wai, Deputy Director of Drainage Services (seventh left), Mr. WONG Sui-kan, Assistant Director/Projects & Development (seventh right), Mr. CHUI Wai-sing, Assistant Director/Electrical & Mechanical (fifth left) and the project team receiving the "Grand Award for Outstanding Exhibit (Landscape Display)" on behalf of DSD

本署署長唐嘉鴻先生(前排中)、助理署長/設計拓展黃緒勤 先生(前排右一),以及工作團隊於展區內合照

Group photo of Mr. Edwin TONG Ka-hung, Director of Drainage Services (second right, front row), Mr. WONG Sui-kan, Assistant Director/Projects & Development (first right, front row) and the project team at DSD's exhibit





渠務署展區夜景 Lighting design of DSD's exhibit at evening



善用循環再用物料-重用的太陽能板、原木、竹筒和石籠 Making good use of recycled materials: reused PV panels, wood logs, bamboo slats and gabions

▲ 2018香港科學節

為提高公眾對科學與科技的關注和興趣, 本署響應香港科學館主辦的2018香港科學 節,於3月17日至4月25日期間舉行公眾 講座及參觀活動。

HK SciFest 2018

To raise public awareness and interest in science and technology, a talk and visits were arranged by DSD between 17 March and 25 April to support "HK SciFest 2018" organised by the Hong Kong Science Museum.



2018年3月17日,本署在沙田污水處理廠化驗室舉行「污水處理實驗室」活動,向參加者解釋污水處理涉及的科學知識

On 17 March 2018, an activity named "Sewage Treatment Laboratory" was held at Shatin Sewage Treatment Works to explain to participants the scientific knowledge involved in sewage treatment



2018年4月8日,約40名市民參觀建於岩洞的赤柱污水處理廠,以 了解污水處理的過程及地下空間的規劃

On 8 April 2018, about 40 visitors toured Stanley Sewage Treatment Works built in caverns to explore the sewage treatment process and planning of underground space

2018年4月21日,本署時任高級環境保護主任容建基先生就《香港河溪生態多面睇》演講,介紹本署河道改善工程中的可持續及綠化元素

On 21 April 2018, Mr. YUNG Kin-ki, then Senior Environmental Protection Officer, delivered a lecture titled "Exploring Freshwater Life in Hong Kong" to introduce the sustainable and green elements in our river improvement works







2018年4月22日,本署高級工程師黎玉安先生主持《跑馬地地下蓄洪計劃知多D》講座,介紹本署防洪工作及跑馬地地下蓄洪計劃。及後約30名市民到訪跑馬地地下蓄洪池,以了解計劃的多項創新概念,包括智能水閘、水資源回用系統及環保節能設計

On 22 April 2018, Mr. Simon LAI Yuk-on, Senior Engineer, delivered a talk titled "Know More about Happy Valley Underground Stormwater Storage Scheme" to introduce the flood prevention works of the department and the Happy Valley Underground Stormwater Storage Scheme (HVUSSS) project. About 30 people visited Happy Valley Underground Stormwater Storage Tank to understand the innovative elements of the Project, including the smart movable weir, water harvesting system and energy saving design







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



本署亦著重與工作夥伴之間的溝通,並致力 以多種形式推廣職業安全與健康(職安健); 同時,我們也積極採用新工程合約,以嶄新 合作模式與工作夥伴推展渠務工程。 DSD places great emphasis on communication with our working partners. We endeavour to promote occupational safety and health (OSH) through various channels and at the same time adopt new engineering contracts to implement drainage projects with our partners under a brand new model of collaboration.

推廣職業安全與健康

Promoting Occupational Safety and Health (OSH)

為推廣職安健,我們推行多項工地安全改善措施及舉辦不同活動,包括經驗分享會、 實地考察及工地整潔獎勵計劃,讓工作夥伴 交流知識及經驗。 Aiming to promote OSH, we rolled out a number of site safety improvement measures and activities, including experience sharing sessions, site visits and Construction Sites Housekeeping Award Scheme for our project partners to exchange knowledge and experience.



經驗分享會及實地考察

Experience Sharing Sessions and Site Visits

我們於本報告年度第三季舉辦3場有關工地安全的經驗分享會,分別邀請了多個分部的同事、顧問和承建商分享經驗及知識。此外,我們舉辦4次實地考察,包括3次安排員工實地考察港鐵沙田至中環綫工地南面通風大樓至金鐘站鐵路隧道建造工程(合約編號1128)工地,以及安排業界人士參觀昂船洲污水處理廠的淨化海港計劃第二期甲工程工地。

In the third quarter of the reporting year, we organised three experience sharing sessions on site safety. Colleagues from different divisions, consultants and contractors were invited to share their experience and knowledge. We also hosted four site visits, including three sessions for staff to the construction site of MTR Sha Tin to Central Link – South Ventilation Building to Admiralty Tunnels (Contract No. 1128), and another session for industry members to the construction site of HATS Stage 2A construction site at Stonecutters Island Sewage Treatment Works.



承建商員工向參觀淨化海港計劃第二期甲工程工地的業界人士示範如何利用手提電動工具進行安全測試 Contractors demonstrating to industry members how to conduct a safety test with portable electrical tools at the HATS Stage 2A construction site





工地整潔獎勵計劃 2017

Construction Sites Housekeeping Award Scheme 2017

除了致力提高本署同事、工程顧問及承建商的安全意識外,我們非常關注工地整潔。 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、工程顧問及承建商攜手合作,改善工地整潔。

本年度工地整潔獎勵計劃有37支隊伍參與,當中12支獲頒「最佳工地整潔獎」或「優異獎」。參與隊伍在工地整潔、環境保護、員工關顧、鄰舍關係等方面均表現出色。本署管理層在頒獎典禮上致辭時表示,建築工地意外率、工作效率、員工歸屬感及公眾形象,全賴良好的工地管理及工地整體環境整潔,並表揚參與隊伍於施工期間考慮周全無微不至,至使對市民的影響降至最低,達致雙贏。

While striving to improve safety awareness amongst DSD colleagues, project consultants and contractors, we highly value good housekeeping at construction sites. We have been organising the Construction Sites Housekeeping Award Scheme every year since 2004 to encourage our colleagues, project consultants and contractors to make concerted efforts to improve site tidiness and cleanliness of our construction sites.

This year's scheme attracted 37 participating teams, 12 of which received the "Best Construction Sites Housekeeping Award" or the "Meritorious Award". Performance of all participants in housekeeping, environmental protection, staff caring and relationship with neighbourhood was stellar. DSD's senior management gave a speech at the award presentation ceremony, remarking that the construction site accident rate, work efficiency, sense of belonging among staff and public image hinged on sound site management and the overall cleanliness and tidiness of the site environment. Participating teams were commended for their due consideration during construction to minimise impacts on the public leading to a win-win outcome.



本署管理層、安全顧問組同事及得獎隊伍合照 Group photo of DSD senior management and colleague of Safety Advisory Unit with the winning teams











採用新工程合約

Launch of New Engineering Contract

相較傳統工程合約,新工程合約提倡各方 緊密合作、共同管理及分擔工程風險。此 模式讓工程管理部門與承建商建立良好夥伴 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9年,本署共批出44份新工程合約,涵蓋土木工程項目、機電工程項目、維修工程和工程顧問服務等範疇。為了建造業界積極推廣此合約模式,本署過去 一年批出13份新工程合約,佔本署新工程合約總數約30%。與此同時,本署已完成 12份新工程合約,其中跑馬地地下蓄洪計 劃提早14個月完工,並節省約1億1,000萬 工程費用,成績令人鼓舞。

既為新工程合約的主要用戶,本署過去一年 積極舉辦及參與專題研討會、工作坊和訓練 課程,向業界不同持份者推廣新工程合約 如何提升工程成本效益和降低風險。2017年 9月29日,本署時任總工程師簡漢成先生在 新工程合約亞太區用戶組織周年會議中,合 與會者分享跑馬地地下蓄洪計劃使用新合約 條款的經驗;而本署副署長麥嘉為先生亦於 同年11月18日參加由香港工程師學,與 香港建造商會合辦的新工程合約工程合約的 經驗及願景。 Compared with the conventional engineering contract, the new engineering contract (NEC) encourages close cooperation, joint management and risk sharing among all working parties. This approach allows the project offices to establish rapport with contractors, hence avoiding disputes, reducing the risks arising from project delay and improving productivity.

In the past nine years, we have awarded 44 NECs covering civil engineering projects, electrical and mechanical engineering projects, maintenance works and project consultancy services, etc. With a view to promoting NEC to the construction industry, we awarded 13 NECs last year, which accounted for about 30% of the total number of the Department's NECs. Meanwhile, we have already completed 12 NECs, among which the HVUSSS achieved a very encouraging result of 14-month early completion with an estimated saving of around \$110 million in project cost.

As a major NEC user, DSD actively organised and joined symposiums, workshops and training courses last year to promote to various stakeholders in the construction industry how NEC could improve cost effectiveness and reduce risks. On 29 September 2017, Mr. KAN Hon-shing, then Chief Engineer, shared the experience of piloting an innovative contract clause in the HVUSSS during the NEC Asia-Pacific Users' Group Annual Conference. Meanwhile, Mr. MAK Ka-wai, Deputy Director of Drainage Services, attended the NEC Workshop co-organised by the Hong Kong Institute of Engineers (HKIE) and Hong Kong Construction Association on 18 November 2017, sharing DSD's experience and vision in using NECs with young engineers.



2017年11月18日,本署參與由香港工程師學會及香港建造商會合辦的新工程合約工作坊

On 18 November 2017, DSD participated in the NEC Workshop co-organised by Hong Kong Institute of Engineers (HKIE) and Hong Kong Construction Association



夥伴工作坊

Partnering Workshop



在新工程合約模式下,大角咀櫻桃街箱形雨水渠旱季截流設施建造工程(詳見第六章渠務署主要職責一污水處理概要)的工程團隊於2018年1月30日舉辦夥伴工作坊,藉此加強本署、工程顧問和承建商三方之已關係,以及訂定共同目標。三方管理層以至前線員工均有出席。參加者透過團體活動,明白到工程成功的關鍵在於善問夥伴長處、創新求變,並平衡各方意見,作出決定。參加者亦討論及探討工程所面對的各項困難,體會到群策群力的重要性。

Under the NEC contract form, the project team of "Construction of dry weather flow interceptor at Cherry Street box culvert" in Tai Kok Tsui (For details see **Chapter Six – Our Core Responsibilities – Overview of Sewage Treatment and Sewerage System**) hosted a Partnering Workshop on 30 January 2018. The Workshop aimed at strengthening mutual trust and cooperation and setting common goals among DSD, project consultants and contractors. Management and frontline staff of DSD, project consultants and contractors participated in the workshop. Through group activities, participants learnt that for a project to be completed successfully, strengths of each partner have to be used wisely, project team members should be innovative and decisions shall be made after balancing the views of all parties. Participants also exchanged views and discussed the challenges encountered during the construction works, and acknowledged the importance of teamwork.



2018年1月30日,「夥伴工作坊」參加者合照 On 30 January 2018, group photo of Partnering Workshop participants



參加者在工作坊為工程訂定共同目標 Participants setting common goals at the Workshop

參加者分組討論後,為工程訂下一連串共同 目標,包括提早12個月完工、節省工程 開支0.5%、達致零意外及零環保檢控, 以及每年獲取最少一個獎項及5封嘉許信, 並就此簽署夥伴協議。藉著新工程合約的合 作模式以及其提倡「互助互諒,迎難而上;

節流開源,創新求勝」的精神,我們有信心與夥伴攜手克服種種挑戰,在改善大角咀一帶的水質及環境之餘,工程可不超出預算及提早完成。

參加者在工作坊簽訂的夥伴 協議

Partnering Charter signed by participants at the Workshop



After group discussions, participants set a series of mutual objectives, including advancing project completion by 12 months, reducing project cost by 0.5%, achieving zero accident and zero environmental summon, as well as winning at least one award and five commendation letters every year. A partnering charter was signed accordingly. By dint of the partnering approach of NEC and its underlying spirit of advocating mutual support and

understanding, overcoming challenges, striving for cost savings and innovating for success, we are confident that by joining forces with our partners we can overcome all challenges. We will make our best endeavour to improve the water quality and environment of the Tai Kok Tsui area within budget and to achieve early project completion.



參加者在工作坊設計的工程 項目標誌

Project logo designed by participants at the Workshop



與區議員聯繫

Liaison with District Council (DC) Members

為確保本署的服務切合社區需要,我們經常與區議員聯絡,定期參與區議會會議。 年內,本署署長及部門代表出席中西區、 北區、元朗、觀塘、沙田及西貢等區議會 會議,向區議員講解相關地區的主要工程 項目,並交換意見。

To ensure that our services are in tune with the needs of the community, we always maintain close links with DC members and attend DC meetings regularly. During the year, the Director of Drainage Services and departmental representatives attended meetings convened by the DCs of the Central and Western District, North District, Yuen Long, Kwun Tong, Sha Tin and Sai Kung and others to explain our major projects to DC members. Views were exchanged during the meetings.



2017年9月5日,本署代表出席元朗區議會會議 On 5 September 2017, DSD representatives attending the Yuen Long District Council meeting



2018年3月6日,本署代表出席西貢區議會會議 On 6 March 2018, DSD representatives attending the Sai Kung District Council meeting



與環保團體保持溝通

Ongoing Communication with Green Groups

就本署工程的環保及保育議題,我們主動 與環保團體建立長遠合作關係。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 觀鳥會及創建香港進行3次會面。雙方就不 同議題交換意見,包括提升河道生態價值、 活化水體、促進生物多樣性、在本署的工程 推展親水文化和操作維修工作相關的環保 事宜等。 When dealing with environmental protection and conservation issues of DSD projects, we take a proactive stance on maintaining long-term relationships with green groups. In the past year, we arranged three meetings to exchange views with the Green Power, World Wide Fund for Nature Hong Kong, Conservancy Association, Kadoorie Farm and Botanic Garden, Hong Kong Bird Watching Society and Designing Hong Kong. Discussions were held over wide-ranging issues, including enhancing the ecological value of rivers, revitalising water bodies, promoting biodiversity, fostering a water-friendly culture in DSD projects and environmental issues related to operation and maintenance work.

2017年4月28日,本署代表帶領環保團體代表參觀本署於麻笏河的河道改善工程

On 28 April 2017, DSD representatives arranged guided visit to river improvement work site at Ma Wat River for green group members



持份者訪問 Stakeholder Interview

















鄭睦奇博士 綠色力量總監

Dr. Luk-ki CHENGDirector, Green Power



Green Group's Note

我們喜見渠務署不遺餘力地推動河道生態 保育。多年來,我們與渠務署主要在河道 活化及渠道生態管理方面上合作,而其中的 南生圍河流導賞徑及「河去河從」屯門河 教師工作坊旨在提高市民對保護本港河流的 意識。我們近期的「賞•識東涌河」生態 保育計劃亦榮幸得到渠務署成為我們的支持 機構,以協助動員更多市民參與河道保育的 工作。

日後,我們期望渠務署在開展更多河道活化的工程項目中,不僅只關注防洪及排污問題,更可考慮關注市民對康樂和公共空間等社會訴求。我們亦希望渠務署能加強討論非點源水污染問題及推廣使用再造水,以進一步保障香港的水質。

We are very pleased to see the strong commitment of DSD towards conservation of river channels. Over the years, our works with DSD mainly lie in the areas of river revitalisation and drainage ecology management in Hong Kong, including the designation of the Nam Sang Wai River Education Trail and Tuen Mun River Teachers Workshop under programme, Rivers Reviving that aim to enhance public awareness on conservation of Hong Kong rivers. In one of our recent projects – In-To Tung Chung River, we are delighted to have DSD to be our supporting organisation to help mobilise wider public engagement on river conservation.

Apart from maintaining a close relationship with Green Groups, we genuinely appreciate the open-mindedness of DSD and in valuing our opinions and suggestion. Throughout our collaboration and green group liaison meetings, the comments made to DSD on ecological enhancement in channel projects, preservation of local species during construction, and the greening elements of DSD's facilities were considered and addressed timely.

In the future, we anticipate to see more projects from DSD that will not only address flood prevention and sewage treatment but can also match with public's need for recreation and public space. We hope to have more heated discussion from DSD to address non-point source water pollution in storm drains and promote the wider adoption of reclaimed water that can further protect the water quality in Hong Kong.

渠務署的話 Our response

非常感謝各環保團體對本署工作的支持, 他們的寶貴意見及建議對本署保育河道生態 環境至為重要,讓我們進行河道工程時能更 有效地保育棲息於河道中的物種。期待日後 能與不同環保團體繼續合作,致力為香港 建構更美好的生活環境。 We would like to thank various green groups that have supported our work. Their valuable feedback and suggestions have been an important factor which enabled us to conserve the river ecology in Hong Kong, so as to better protect the species inhabiting in the rivers. We look forward to further collaboration with various green groups in future, striving to provide a better living environment in Hong Kong.









與業界及教育界交流

Exchange with the Industry and Education Sector

本署非常重視與業界互動交流,年內除舉辦2017研究及發展論壇(詳見**第四章 年度大事 重點輕描**)外,亦透過科研茶聚及研討會主動與本地學者、專業人士、業界代表、其他持份者及政府部門分享本署工作。同時,本署亦接待多個社區團體和學校參觀轄下設施,介紹本署各分部的工作。

DSD highly values the interaction and exchanges with the industry. During the year, apart from hosting the Research & Development (R&D) Forum 2017 (For details see **Chapter Four – Highlights of the Year**), we took the initiative to share the Department's work with local academics, professionals, industry representatives, other stakeholders and government departments through R&D tea gatherings and seminars. In addition, we received visitors from community groups and schools touring our facilities where we briefed them on the operation of various DSD divisions.

技術交流

Technical Exchange

(▲ 渠務科研茶聚2017

本署於2017年4月6日在跑馬地地下蓄洪計劃的工地舉辦渠務科研茶聚2017,共有40位來自11間專上學院及科研機構的學者應邀出席。

本署署長唐嘉鴻先生帶領一眾學者參觀跑馬 地地下蓄洪計劃的設施,並簡述本署現時和 未來科研及發展項目的目標。本署同事亦與 學者交流最新的雨水管理和污水處理的技術 及其應用情況。是次活動加深本署和學者對 彼此工作的認識,為日後合作奠定基礎。

DSD Research & Development Tea Gathering 2017

On 6 April 2017, the "DSD R&D Tea Gathering 2017" was held at the HVUSSS site. The event was attended by invitation by 40 academics from 11 universities and research institutes.

Mr. Edwin TONG Ka-hung, Director of Drainage Services, led the academics around the HVUSSS facilities and shared with them the Department's current and future goals of research and development initiatives. Our colleagues also exchanged with the academics on the latest stormwater management and sewage treatment techniques and their applications. The event enabled DSD and the academics to understand each other's work better and paved the way for future collaboration.



本署署長唐嘉鴻先生、副署長麥嘉為先生、一眾本署同事及學者合照 Group photo of Mr. Edwin TONG Ka-hung, Director of Drainage Services, Mr. MAK Ka-wai, Deputy Director of Drainage Services, DSD colleagues and the academics

▲ 京港合作水專題論壇

2017年11月28日,第21屆「北京·香港經濟合作研討洽談會」在香港會議展覽中心揭幕。洽談會同日下午,本署聯同北京市水務局、發展局、水務署和環境保護署(環保署)合辦「京港合作水專題論壇」,交流兩地在供水、防洪和排污等政策的經驗。

出席嘉賓包括北京市水務局局長金樹東先生、發展局常任秘書長(工務)韓志強先生、環保署副署長區偉光先生、水務署助理署長陳仲勤先生、本署署長唐嘉鴻先生及本署副署長麥嘉為先生。論壇當日,北京市水務局和本署更簽訂合作協議,訂立未來合作目標、領域、方式及溝通機制等,為日後兩地在防洪和排污的管理奠定基礎。

北京市水務局局長金樹東先生(左)和本署署長唐嘉鴻 先生(右)簽訂合作協議

Mr. JIN Shu-dong, Secretary of Beijing Water Authority (left), and Mr. Edwin TONG Ka-hung, Director of Drainage Services (right), signing the cooperation agreement

Beijing-Hong Kong Cooperation Water Forum

On 28 November 2017, the 21st Beijing Hong Kong Economic Cooperation Symposium was held at the Hong Kong Convention and Exhibition Centre. In the afternoon of the event day, we co-organised a forum regarding the topic of water with the Beijing Water Authority, Development Bureau, Water Supplies Department and Environmental Protection Department to exchange the experience between Beijing and Hong Kong in water supply, flood prevention and sewage treatment policies.

Guests included Mr. JIN Shu-dong, Secretary of Beijing Water Authority, Mr. HON Chi-keung, Permanent Secretary for Development (Works), Mr. Elvis AU Wai-kwong, Deputy Director of Environmental Protection, and Mr. CHAN Chung-kun, Assistant Director of Water Supplies, Mr. Edwin TONG Ka-hung, Director of Drainage Services and Mr. MAK Ka-wai, Deputy Director of Drainage Services. On the same day, a cooperation agreement was signed between the Beijing Water Authority and DSD on the target, scope, and means of future and communication mechanism, etc. The agreement laid a solid foundation for future collaboration between Beijing and Hong Kong in flood prevention and sewage treatment.



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

我們積極配合本港通識教育科的學習範疇, 為本地中小學生定期安排外展教育活動, 務求以靈活多變的教學模式加強同學對 氣候變化、保護環境和珍惜水資源等議題的 了解。 In active support of the learning areas of Liberal Studies in Hong Kong, we organise educational outreach activities regularly for local primary and secondary school students. We hope that through this flexible teaching approach, students can learn more about issues such as climate change, environmental protection and cherishing water resources.

▲團體參觀

年內,我們共接待約11,000名來自中小學、內地及海外等多個機構的訪客,安排他們參觀小蠔灣污水處理廠、荔枝角雨水排放隧道、沙田污水處理廠以及元朗排水繞道人工濕地等本署設施。

♦ Group Visits

During the year, we received about 11,000 visitors from primary and secondary schools as well as various mainland and overseas organisations. Tours were arranged to our facilities, including Siu Ho Wan Sewage Treatment Works, Lai Chi Kok Drainage Tunnel, Shatin Sewage Treatment Works and the engineered wetland of Yuen Long Bypass Floodway, etc.



小學生參觀小蠔灣污水處理廠 Primary school students visiting Siu Ho Wan Sewage Treatment Works



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



中學生參觀沙田污水處理廠 Secondary school students visiting Shatin Sewage Treatment Works



大學生參觀元朗排水繞道人工濕地 University students visiting the engineered wetland of Yuen Long Bypass Floodway

▲ 外展教育活動

年內,我們到訪15所學校進行外展教育活動,除了講解香港的污水處理和排放及防洪工作外,亦向師生簡介本署日常工作。

Educational Outreach

During the year, we conducted educational outreach programmes at 15 schools, to explain the sewage treatment and discharge, as well as flood prevention in Hong Kong. We also presented the DSD's daily operations.





在本地學校進行外展 教育計劃 Educational outreach programme at a local school



義工服務及慈善活動

Voluntary Services and Charity Activities

本署同事本着惠澤社群的精神,公餘積極參與各類義工服務及慈善活動。年內,本署義工隊共參與逾40項義務工作,總服務時數逾1.200小時。

In the spirit of serving the community, DSD colleagues are keen to take part in various volunteer services and charity activities in their spare time. During the year, the DSD Volunteer Team participated in more than 40 volunteer activities, clocking over 1,200 service hours in total.

照顧長者 ● 表達關懷

Loving and Caring for the Elderly

In 2017, the DSD Volunteer Team expressed their care for the elderly by launching new activity "Lovely Trip with the Elderly". The volunteers developed empathy and learnt about mutual appreciation and tolerance through personal experience in working and communicating with the elderly. We hope the volunteers can bring these precious values into their everyday lives. "Lovely Trip with the Elderly" was a 9-month series comprising about 20 volunteer services. The "elderly" training aimed at designing interest classes and home visit programmes that are suitable for the aged. The helpers and the elderly built mutual trust and friendship during the activities and many volunteers brought their children along for the meaningful cause.



「歷耆者」模擬高齡衣體驗活動 "Elderly" training volunteers putting on simulation garments to get a taste of old age



「愛・與耆義同行」長者探訪 "Lovely Trip with the Elderly" home visit to the elderly



擴闊青少年視野 • 啟發兒童潛能

Widening Youth Horizons and Helping Children Unleash Potentials

年內,本署參與由扶貧委員會籌劃的跨界別職志師友計劃一「友•導向」2017。計劃目的是社區推動師友文化,促進青年人向上流動的能力,從而減低跨代貧窮。本署師友隊為屯門新會商會中學約20位同學安排7次活動,透過分享師輩自身的工作及人生經驗,啟發和指導同學,讓他們拓闊視野,規劃未來。

During the year, DSD joined "Life Buddies" 2017, a cross-sectoral mentoring scheme launched by the Commission on Poverty, aiming to promote a mentoring culture in the community to facilitate youth's upward mobility and reduce intergenerational poverty. The DSD mentoring team organised seven activities for about 20 students from San Wui Commercial Society Secondary School in Tuen Mun, inspiring and guiding them through sharing the mentors' work and life experience. Such interaction enhanced young people's exposure and helped them develop a vision for their future.



政務司司長張建宗先生(第二排左四)、本署副署長麥嘉為先生(第二排右三)、師友團隊和新會商會中學學生於起航禮合照 Mr. Matthew CHEUNG Kin-chung, Chief Secretary for Administration (fourth left, second row), Mr. MAK Ka-wai, Deputy Director of Drainage Services (third right, second row), mentoring team and students from San Wui Commercial Society Secondary School at the launching ceremony



渠務署師友隊和新會商會中學的同學參觀小蠔灣污水處理廠 Mentoring team and students from San Wui Commercial Society Secondary School visiting Siu Ho Wan Sewage Treatment Works

2017年7月5日,本署再與「友•導向」師友計劃合辦「渠務署職場體驗」活動,為10位分別來自觀塘和大埔區的中四及中五學生安排一天的工作體驗日,旨在協助年青人探索事業興趣,規劃未來升學及就業。

活動當天,本署助理署長簡炎輝先生致歡迎 辭及介紹本署主要工作。同學其後獲安排參 觀本署防洪設施,並協助師友的「職務」, 體驗職場實況。 On 5 July 2017, DSD co-organised the second "DSD Job Tasting Programme" with the "Life Buddies" Mentoring Scheme to offer a one-day practical work experience at the Department for ten Form 4 and Form 5 students from Kwun Tong and Tai Po District respectively. The activity sought to help young people explore their career interest so that they can better plan for their further education and career.

Mr. KAN Yim-fai, Assistant Director/Operations & Maintenance, delivered a welcome speech and gave an overview of DSD's major works. A tour was then arranged for the students to visit our flood prevention facilities, where they assisted their mentors in conducting their "job duties" to gain work experience in a real life work setting.



本署助理署長簡炎輝先生(中)和參與「渠務署職場體驗」活動的同學合照 Group photo of Mr. KAN Yim-fai, DSD Assistant Director/Operations & Maintenance (centre), with students participating in the "DSD Job Tasting Programme"



同學在師友帶領下參觀本署防洪設施 Students visiting DSD flood prevention facilities under the guidance of their mentors



2017年6月,本署義工隊與香港耀能協會合辦「愛・耀能」快樂無窮生日會。透過集體活動、分組遊戲及手工製作,讓一群有發展障礙的4至11歲小童發揮潛能,訓練專注及溝通能力。同年12月,義工隊再次聯同星球大戰(Star Wars)兵團參與該會舉辦的「Star Wars兵團襲地球一聖誕狂歡派對」,與6至10歲的小童一同遊玩;義工更派發禮物,讓小童感受關愛和節日氣氛。過程中,透過與小童互動,義工隊進一步認識兒童發展障礙。

In June 2017, the DSD Volunteer Team co-organised a "Love and Ignite Talent" birthday party with the Spastics Association of Hong Kong (SAHK) for a group of children aged 4 to 11 with development disorders. Group activities, games and handicraft trainings were introduced for them to exhibit their potential and to bolster their concentration and communication. In December 2017, the DSD Volunteer Team joined SAHK's "Star Wars Corps Invasion Christmas Party" with a Star Wars unit again. It was a fun-packed day for a group of children aged 6 to 10, with games and presents for all to celebrate the festive season and its spirit of love and care. Through interacting with the kids, our volunteers have gained a better understanding of children with development disorders.





本署義工及一隊星球大戰兵團與小童進行集體遊戲, 歡度聖誕

DSD volunteers, the Star Wars unit and kids enjoying group games at the Christmas party



捐血救人 • 燃點生機 Giving Blood to Save Lives

2018年3月,本署職員康樂會與義工隊合辦「愛·希望」渠務署捐血日,為香港紅十字會血庫集得53包血液,除了打破歷年「渠務署捐血日」的捐血人數記錄外,更重要是可協助有需要人士延續生命,為逾百家庭帶來希望。

In March 2018, the DSD Staff Club and Volunteer Team co-organised the "Love and Hope" DSD blood donation day. The event brought in 53 bags of blood to the blood bank of the Hong Kong Red Cross, setting a new record for the number of blood donors on DSD blood donation day and more importantly, helping save lives and bringing hope to over a hundred families.

「愛•希望」渠務署捐血日2018 "Love and Hope" DSD blood donation day 2018



實踐社會責任 • 關懷社區

Fulfilling Social Responsibility and Showing Care and Concern for the Community

本署今年獲列入「同心展關懷」嘉許名單, 以表揚本署去年大力推動機構履行社會 責任、建設共融社會的工作。本署義工隊 未來會繼續與社會服務機構合作,舉辦更 多元化的義工活動,致力關愛社群,貢獻 社會。 DSD was included in the awardee list of Caring Organisation this year in recognition of our dedicated efforts in the past year in promoting the fulfilment of corporate social responsibility and building an inclusive society. In the future, DSD Volunteer Team will continue to work with social service groups to roll out a wide range of volunteer activities to care for and make contributions to our society.



本署獲加入「同心展關懷」嘉許名單 DSD listed as the Caring Organisation Awardee





年內,我們還參與和舉辦其他義工服務及慈 善籌款活動,包括:

- 公益行善「折」食日、公益愛牙日及公益 金便服日等活動,為公益金會員機構籌募 經費,提供有關服務;
- 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;
- 海岸清潔活動,為保育珍貴大自然盡一分力;以及
- •「愛•回書」書籍及影碟回收活動,鼓勵 同事分享舊書籍及影碟,透過善用資源減 少浪費,改善環境。

We also participated in and hosted other volunteer services and fundraising charity activities during the year, including:

- "Skip Lunch Day", "Love Teeth Day" and "Dress Casual Day" to raise funds for services delivered by member agencies of the Community Chest;
- Fundraising activities of various charity groups to help the disadvantaged, such as World Vision's "Skip-A-Meal" and "Oxfam Rice Event" by Oxfam Hong Kong;
- "Coastal Cleanup" to help preserve the precious nature; and
- "Books and Video Discs Exchange" to encourage staff to share used books and video discs to make good use of resources and reduce waste so as to improve the environment.









核實聲明 Verification Statement

範圍及目的

Scope of and Objective

香港品質保證局獲渠務署委託對其2017-2018年可持續發展報告(以下簡稱「報告」)的內容進行獨立驗證。核實範圍包括對渠務署在報告期內(即2017年4月1日至2018年3月31日)的可持續發展表現數據和資料進行核對。

此核實聲明的目的是對報告所記載之內容 提供合理保證。報告根據全球報告倡議組織 《可持續發展報告標準》(GRI 標準)核心選項 的要求編製。報告陳述了渠務署對可持續發 展的承諾,努力和表現。 Hong Kong Quality Assurance Agency ("HKQAA") was commissioned by Drainage Services Department ("DSD") to undertake an independent verification for its Sustainability Report 2017-2018 ("the Report"). The scope of this verification covers the sustainability performance data and information associating with DSD for the reporting period of 1st April 2017 to 31st March 2018, as defined in the Report.

The aim of this verification is to provide a reasonable assurance on the reliability of the report contents. The Report has been prepared in accordance with the Core Option of the Global Reporting Initiative Sustainability Reporting Standards ("GRI Standards"). The Report states DSD's commitments, efforts and progress of performance towards sustainability.

保證程度和核實方法

Level of Assurance and Methodology

香港品質保證局的核實程序是為獲取合理的 保證意見和結論而制定。核實的範圍是基於 GRI《可持續發展報告標準》的「核心」選項 而釐訂。

核實過程包括驗證渠務署的可持續發展表現 數據收集、計算和滙報的系統和程序,檢閱 有關文件資料,與負責編制報告內容的代表 面談,選取具有代表性的數據和資料進行查 核。相關原始數據和支持證據亦於核實過程 中經過詳細審閱。 HKQAA's verification procedure was designed for devising opinions and conclusions to obtain a reasonable level of assurance. The extent of this verification process undertaken covered the criteria set in the GRI Standards: Core Option, GRI Standards.

The verification process included verifying the systems and processes implemented for collecting, collating and reporting the sustainability performance data, reviewing relevant documentation, interviewing responsible personnel with accountability for preparing the reporting contents and verifying selected representative sample of data and information. Raw data and supporting evidence of the selected samples were also thoroughly examined during the verification process.









獨立性

Independence

渠務署負責收集和準備所有於報告內陳述的 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 證局的核實過程是完全獨立於渠務署。 DSD was responsible for the collection and preparation of the information presented. HKQAA did not involve in calculating and compiling the reporting data, or content development of the Report. Our verification activities were entirely independent from DSD.

結論

Conclusion

基於是次的核實結果,香港品質保證局對報告作出合理保證並總結:

- 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:
- 報告平衡地、具比較性、清晰地和及時 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。

總括而言,報告如實地載述了渠務署的可 持續發展承諾、方針和表現,並且清晰地 披露與其可持續發展情況和重要性相稱的 表現。 Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained reasonable assurance and is in the opinion that:

- The material topics and its sustainability performance specified in the GRI Standards have been adequately addressed in the Report;
- The Report illustrates the sustainability performance of DSD's material topics in a balanced, comparable, clear and timely manner; and
- The data and information disclosed in the Report are reliable and complete.

In conclusion, the Report reflects truthfully the sustainability commitments, policies and performance of DSD and discloses transparently the sustainability performance of the department that is commensurate with its sustainability context and materiality.

香港品質保證局

譚玉秀

譚玉秀 企業業務總監 2018年12月

Signed on behalf of Hong Kong Quality Assurance Agency

Joune

Jorine Tam
Director, Corporate Business
December 2018



■ 附錄——完成目標

Appendix 1 - Meeting the Targets

本附錄匯報了本署年內環保事務、社會事務和常規服務目標及其綜合的表現。展望2018-19年度,我們會繼續訂立目標,以監察及確保本署工作及服務質素,實踐對各持份者及香港的可持續發展承諾。

This appendix summarised the objectives and their overall performance of our department's environmental, social and routine services during the year. Looking ahead to the year 2018-19, we will continue to set targets to monitor and ensure the quality of our work and services so as to demonstrate the commitment to sustainability to our stakeholders and Hong Kong.

環保事務

On Environmental Issues

2017-18年度環保	呆事務目	標
Environmental	Targets	2017-18

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年度開始,在3年內採用3項新穎的低污 染或預防污染技術

Starting from 2016-17, adopt 3 new clean technologies or pollution prevention measures within a 3-year period

進度良好。已採用2項新技術,包括在小蠔灣污水處理廠的太陽 能發電場應用光伏電池板技術及電掣房內空調系統的節能設計。

The progress was promising. Two new technologies have been adopted, including the application of photovoltaic cell technology in the solar farm of Siu Ho Wan STW and the energy-saving design of the air-conditioning system in the electrical control room.

展開3項關於低污染技術的研發項目 Conduct 3 R&D items for clean technologies 達標。已展開3項研發項目,包括以脱氧核醣核酸技術追蹤大腸 桿菌來源、應用冷熱電三聯供系統提升生物氣產電量及以低耗能 厭氧氨氧化技術處理脱水污泥濾液。

Target met. Three research and development projects have been commissioned, including tracking the source of *E. coli* with DNA, enhancing the power generation of biogas with the application of thermoelectric trigeneration system, and treating dehydrated sludge filtrate with low-energy anaerobic ammoxidation technology.

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

達致完全符合法定環境影響評估程序

Achieve fully compliance with the statutory EIA process

每年至少與社區組織/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

再造水和回用雨水的使用量達到每日1,500立方米 Use 1,500 cubic metres of reclaimed water or harvested water per day

進行1次新的碳審計和6次監察碳審計

Conduct 1 new carbon audit and 6 surveillance carbon audits

達標。

Target met.

達標。我們舉辨了超過6次會議、論壇及社區活動。

Target met. More than 6 meetings / forums / community activities were conducted.

未能達標。年內平均每日使用1,465立方米再造水和回用雨水。

Target not met. During the year, we used an average of 1,465 cubic metres of reclaimed water or harvested water per day.

達標。我們共完成了1次新的碳審計和進行了6次監察碳審計。

Target met. We conducted 1 new carbon audit and 6 surveillance carbon audits.

Environmental Targets 2017-18	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	達標。共建造了4,150平方米綠化天台和675平方米垂直綠化。

成果

Build 4,000 square metres of green roof and 150 square metres of vertical greening

建棕。共建每丁4,150平万木蘇化大台和675平万木垂直蘇化。 Target met. We built 4,150 square metres of green roof and 675 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

2017-18年度環保事務目標

達標。種植了2,000棵樹及105,000叢灌木。 Target met. We planted 2,000 trees and 105,000 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

達致完全遵守環保法例

Achieve full compliance under environmental legislation

未能達標。年內有1項測定超越了《水污染管制條例》牌照的排放標準及1項承建商被檢控個案。

Target not 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2016-17年度減少0.5%的用紙量	達標。較2016-17年度用紙量減少了0.5%。
Reduce paper consumption by 0.5% compared to 2016-17	Target met. Paper consumption was reduced 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%	達標。我們共節省了210萬度電。 Target met. We saved 2.10 million kilowatt hours in 2017-18.

Save energy of 1.6 million kilowatt-hours which is equivalent to 0.64% energy consumption of the base level in 2006-07

進度良好。2017-18年度電動車的行車里數為整體車輛的12.4%

由2016-17年度起的3年內,將電動車佔所有車輛的 行車里數度由6%提高至12%

The progress was promising. In 2017-18, 12.4% of total mileage of work transport was covered by electric vehicles.

Double the mileage percentage of electric vehicles to all vehicles from the current 6% to 12% in 3 years starting from 2016-17

環保事務目標 2018-19

Environmental Targets 2018-19

發展智能科技、優化運作、引入創新技術以提升成效和效率、減少環境影響及符合公眾的合理期望

Developing smart technologies, optimizing operations, introducing innovative measures to enhance effectiveness and efficiency, minimize environmental impacts and meet public expectations

由2016-17年度開始,在3年內採納3項新的可持續發展技術

Adopt 3 new sustainable technologies within a 3-year period starting from 2016-17

展開3項研發優化運作及創新技術的項目

Conduct 3 R&D items for optimization and innovation technologies

藉提高能源效益、使用可再生能源、減少二氧化碳及污染物排放、發展水資源管理及再造水重用,作為可持續發展技術和 氣候變化的緩減、適應及應變措施

Integrating sustainability measures and climate change mitigation, adaptation and resilience considerations through improving energy efficiency, utilizing renewable energy, reducing carbon and pollution emissions, and achieving water economy, water reclamation and reuse

由2016-17年度起的3年內,將電動車佔所有車輛的行車里數度由6%提高至12%

Double the mileage percentage of electric vehicles to all vehicles from 6% to 12% in 3 years starting from 2016/17

進行1次新的碳審計和6次監察碳審計

Conduct 1 new and 6 surveillance carbon audits

從優化運作和使用再生能源中節省60萬度電

Further save 0.6MkWh from process optimization and use of renewable energy

再造水和回用雨水的使用量達到平均每日1,500立方米

Use 1,500 m³/day of reclaimed water or harvested water

用紙量達至零增長,保持在2017-18的水平

To achieve zero growth of paper usage from 2017/18 level

引入藍綠建設、增加綠化、維護自然生態及促進社區的健康、可居住性及生物多樣性

Developing blue-green infrastructure, maximizing greening, conserving ecosystems and enhancing community health, livability and biodiversity

建造3,000平方米綠化天台和150平方米垂直綠化

Build 3,000 m² green roof and 150 m² vertical greening

種植2,000棵樹及60,000叢灌木

Plant 2.000 trees and 60.000 shrubs

每年至少與社區組織/環保團體/學者會面6次,研討可持續發展和生物多樣性事務

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

在工程項目和日常運作中全面遵守有關的環保的法例和規定

Meeting all statutory and regulatory requirements on environmental performance in our projects and operations

完全符合法定環境影響評估程序

Fully comply with the statutory EIA process

完全符合環保法例要求

Fully comply with environmental legislations





社會事務

On Social Issues

2017-18年度社會事務目標 Social Targets 2017-18 成果 Achievement 2018-19年度社會事務目標 Social Targets 2018-19

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

達標。

報告期內每年每1,000 名員工有2.8 宗 工傷意外。

Target met. 2.8 occupational injuries per 1,000 staff per year were reported in the reporting period.

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

達標。

報告期內每100,000工時有0.08宗職 業工傷意外。

Target Met. 0.08 reportable accident per 100,000 man-hours worked was reported in the reporting period.

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 occupational safety and health awareness of professional, technical and site supervisory staff, consultants and contractors with in-house briefing

最少舉辦2次署內職安健工作坊

Organise at least two in-house workshops on safety and health

達標。

共舉辦了2次署內職安健工作坊。

Target met. Two in-house workshops on safety and health were organized.

最少舉辦2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 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27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10項合資格維修定期工程中,則有7項(70%)參加了該計劃。

Target met. All of the 27 eligible new works contracts participated in CCSAS while out of the ten eligible maintenance term contracts, seven (70%) of them participated in the Scheme.

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)

常規服務

Our Routine Services

服務 Service	承諾 Pledge	2017-18年度 工作目標 Performance Achievement Target 2017-18	成果 Achievement	2018-19年 度工作目標 Performance Achievement Target 2018-19
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 99% 99.84% Respond within the same day for complaints received before 1 pm		99.84%	維持2017-18 年度工作目標 Targets in
	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%	99.95%	2017-18 will be maintained
	市民對清理工作的滿意程度 ¹ Customers satisfy with the clearing work ¹	95%	99.19%	
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%	99.65%	
回應關於污水處理服務帳項 的書面查詢	於2個工作天內作出初步回應 Initial respond within 2 working days	100%	100%	
Response to written enquiries on sewage services accounts	於一個月內詳細回覆 98% 1 Full reply within a month		100%	
回應投訴 Response to complaints	於10天內回應 Respond within ten calendar days	98%	99.06%	
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	ord		
在需要挖掘道路的渠務工程工地張貼告示,説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%	99.47%	

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.



附錄二一主要統計數據"



Appendix 2 - Key Statistics and Data*





環境工作表現

Environmental Performance

能源使用量

Energy Consumption

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
渠務署 By DSD (302-1)						
電力 ¹ Electricity ¹	千兆焦耳 (百萬千瓦時) GJ (Million kWh)	892,800 (248)	950,400 (264)	990,000 (275)	1,062,000 (295)	1,137,600 (316)
汽油 Gasoline						
徵用車隊 Pool cars	千兆焦耳(公升) GJ (Litre)	877.48 (26,724)	893.14 (27,048)	824.63 (24,974)	627.22 (18,995)	599.47 (18,155)
部門車隊 AM cars	千兆焦耳(公升) GJ (Litre)	4103.66 (124,278)	3,799.28 (115,060)	3,496.85 (105,901)	3,173.12 (96,097)	3421.53 (103,615)
沼氣 ² Biogas ²	百萬立方米 million m³	9	10	10	7	9
生物氣體所產生的電力 Electricity generated from biogas	百萬度電 Million kWh	27	28	32	21	27
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	0.24	0.26	0.27	0.29	0.31
渠務署的承建商 By DSD's co	ntractors (302-2)					
電力 Electricity	千兆焦耳 (百萬千瓦時) GJ (Million kWh)	137,952 (38.32)	23,328 (6.48)	97,798 (27.17)	56,616 (15.73)	16,480 (4.58)
汽油 Gasoline	千兆焦耳(公升) GJ (Litre)	13,153 (398,325)	10,438 (316,101)	6,834 (187,239)	4,473 (135,461)	4,525 (137,045)
柴油 Diesel	千兆焦耳(公升) GJ (Litre)	94,698 (2,594,463)	27,451 (752,080)	42,601 (1,167,162)	12,525 (343,571)	16,566 (454,411)

¹ 總耗電量包括税務大樓、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(包活污水處理廠、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).



² 由污水處理廠產生。

Generated from sewage treatment works.

[&]quot;由於計算時四捨五入,數字可能不等於實際數據。 Data may not equal to actual figures due to rounding of numbers in calculation.



溫室氣體排放量³

Greenhouse Gas (GHG) Emissions³

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
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 ₂ e	173,103	184,265	187,611	191,492	221,473
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 ₂ e	63.07	63.83	65.90	44.83	42.85
部門車隊 AM cars	二氧化碳, 以公噸計算 Tonnes CO ₂ e	336.53	271.54	249.93	226.79	244.53
渠務署的承建商 By DSD's co	ntractors (305-3)					
購買電力(範圍3) Electricity purchased (Scope 3)	二氧化碳, 以公噸計算 Tonnes CO ₂ e	26,824	4,536	19,016	11,009	19,019
燃燒燃料(範圍3) ⁴ Fuel consumption (Scope 3) ⁴	二氧化碳, 以公噸計算 Tonnes CO ₂ e	7,865	2,824	3,561	1,218	1,511

耗水量 Water Consumption

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
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 m³	1,709,925	2,085,560	2,050,936	2,433,500	2,191,991
污水處理廠的再造水每日生 產量 Daily reclaimed water produced at STWs	立方米 m³	1,151	1,565	1,512	1,332	1,340
再造水佔用水量百分比 Percentage of water reclaimed (303-3)	%	0.07	0.08	0.07	0.05	0.05

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》。

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



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)。

污水處理 Sewage Treatment

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
經處理的污水量 Volume of sewage treated (306-1)	百萬立方米 Million m³	1,021	1,011	1,007	1,015	1,007
從污水移除的生化需氧量 Biochemical oxygen demand (BOD) removed from sewage		109,579	115,681	124,569	151,406	146,159
從污水移除的懸浮固體(SS)量 Suspended solids (SS) removed from sewage		169,792	207,738	242,933	277,232	223,165
從污水移除的氮量 Nitrogen removed from sewage	公噸 Tonnes	6,067	6,820	6,551	6,683	7,106
從污水移除脱水污泥量 Dewatered sludge removed from sewage		298,093	355,220	392,396	410,526	386,137
從污水移除隔濾物量 Screenings removed from sewage		13,663	15,817	15,172	14,823	14,970
從污水移除砂礫量 Grits removed from sewage		4,903	5,429	6,631	6,513	4,996

廢物管理 Waste Management (306-2)

建築及拆卸廢料 Construction	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
運往堆填區的建築及拆卸廢物 ⁵ C&D waste disposed of to landfills ⁵	103 公斤 103 kg	6,093	6,420	6,998	5,801	2,273
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	103 公斤 103 kg	584,018	238,662	235,735	170,162	155,469
可循環再造廢料收集量 Recycla	ble waste collec	ted				
廢紙 ⁶ Waste paper ⁶	公斤 kg	13,284	28,918	19,360	20,587	15,954
鋁罐 ⁷ Aluminium cans ⁷	公斤 kg	14.76	30.70	19.73	29.51	32.23
膠樽 ⁷ Plastic bottles ⁷	公斤 kg	27.78	43.70	20.71	18.76	22.72

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	2013-14	2014-15	2015-16	2016-17	2017-18
渠務署 By DSD				•		
紙張總用量 Total paper consumption	令 Reams	10,520	10,012	9,608	9,285	9,231
A4紙張用量 A4 paper	令 Reams	10,080	9,452	9,357	8,992	8,854
A3紙張用量 A3 paper	令 Reams	440	470	251	293	377
購買含再造成份(舊纖維)的 A4/A3紙張 Purchased A4/A3 paper with recycled content	令 (佔購入紙張的 百分率) Reams (% of total paper purchased)	10,520 (100%)	10,012 (100%)	9,608 (100%)	9,285 (100%)	9,231 (100%)
每名員工紙張用量 (以職員編制計算) Paper consumed per staff (By establishment)	令 Reams	5.6	5.3	5.0	4.8	4.8
渠務署的承建商 By DSD's co	ontractors					
鋼筋 Rebar	公噸 Tonnes			7,165	10,643	13,325
鋼 Steel	公噸 Tonnes			3,171	3,402	5,042
磚塊 Bricks	立方米 m³			30	5,817	1,993
水泥 Cement	公噸 Tonnes	\b-' \-	99 m/ LE	2,406	2,248	3,500
沙漿 Cement mortar	立方米 m³		關數據 st available	263	640	1,946
混凝土 Concrete	立方米 m³	Figures not available		50,616	73,175	74,651
沙 Sand	公噸 Tonnes			12,586	24,117	23,111
石料 Stones	公噸 Tonnes			9,617	31,898	26,775
辦公室用紙 Office paper	公噸 Tonnes			27	40	74

綠化 Greening

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
總種植樹木數量 Trees Planted	數目 No.	2,169	570	2,300	10,000	1,300
增設的綠化天臺面積 Area of Green Roof Added	平方米 m²	4,902	6,051	4,015	4,200	4,150

社會工作表現

Social Performance

員工

Staff









	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
職員編制 Staff establishment (102-7)	人數 No.	1,862	1,883	1,914	1,937	1,940
首長級人員 Directorate	人數 No.	18	18	18	18	18
專業人員 Professional	人數 No.	292	306	310	310	307
技術人員及工地督導人員 Technical & Site Supervisory	人數 No.	827	838	865	884	888
一般職系人員 General & Common Grades	人數 No.	526	524	526	531	533
第一標準薪級人員 Model Scale I	人數 No.	199	197	195	194	194
培訓 Training						
培訓課程 [®] Training courses [®]	數量 No.	584	624	654	674	638
受訓員工 Trainees	人數 No.	6,574	7,159	8,019	9,042	8,033
員工培訓時數 (以員工實際人數計算) Training hours received (based on the staff strength)	小時 Hours	54,517	57,600	58,520	57,737	60,524
員工平均培訓時數 Average Training Hours per Staff	小時 Hours	31.6	31.8	33.0	33.4	35
培訓總開支(只包括本地培訓) ⁸ Total expenditure on training (includes local training only) ⁸	港元 HK\$	3,856,237	4,201,000	3,585,011	3,046,283	2,929,551
受傷 Injury (403-2)						
渠務署員工受傷個案 ⁹ Staff injury cases ⁹	數量 No.	10	11	13	7	5
員工因工傷放取病假 No. of sick leave for officers injured on duty	日數 Days	603.0	914.5	870.5	800.5	305.5 ¹⁰

⁸ 包括內部和外界座談會/工作坊/培訓課程/參觀,以及由公務員培訓處舉辦的培訓班和員工發起的外部課程。 It includes internal and external seminars/ workshops/ training courses/ visits and training courses held by CSTDI and staff-initiated external courses.



⁹ 員工受傷個案是指在僱員補償條例下接獲導致死亡或喪失工作能力超過3天的工傷個案。 The definition of staff injury cases is the reported cases of occupational injuries, under Employee's Compensation Ordinance, resulting in death or incapacity for work over 3 days.

¹⁰ 數字包括在2016-17年度批出,但在2017-18年度實現的病假日數。 The number includes sick leave days granted in 2016-17 but enjoyed in 2017-18.

2017-18年度職員編制

Staff Breakdown in 2017-18

	單位 Unit	以實際人數計算 By Strength
員工人數 No. of Staff (102-8)	人數 No.	1,716
以職位分類 By Post		
首長級人員 Directorate	%	0.99
專業人員 Professional	%	16.67
技術人員及工地督導人員 Technical & Site Supervisory	%	50.29
一般職系人員 General & Common Grades	%	25.58
第一標準薪級人員 Model Scale I	%	6.47
以僱用類型分類 By Employm	ent Type ((102-8)
全職 Full-time	%	100
兼職 Part-time	%	0
以僱用合約分類 By Employm	ent Contr	act (102-8)
永久合約(男性) Permanent (Male)	%	82.3
永久合約(女性) Permanent (Female)	%	17.7

	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	%	10.8
30-39 歲 Age 30-39	%	22.0
40-49 歲 Age 40-49	%	25.4
50-59 歲 Age 50-59	%	39.5
60 歲或以上 Age 60 or above	%	2.3
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	%	82.3
女性 Female	%	17.7

2017-18年度高級管理人員編制

Senior Management Breakdown in 2017-18

	<u> </u>	\
	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 歳 Age 20-29	%	0
30-39 歳 Age 30-39	%	0
40-49 歲 Age 40-49	%	0
50-59 歲 Age 50-59	%	83.3
60 歲或以上 Age 60 or above	%	16.7

單位 Unit	以實際人數計算 By Strength
%	100
%	0
%	100
%	0
	% %



2017-18年度員工培訓時數11

Training Hours Breakdown in 2017-18¹¹

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	17	1,752	103
專業人員 Professional Grade Staff	286	25,411	89
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	1,413	33,361	24

2017-18年度員工流失量12

Staff Turnover in 2017-18¹²

	單位 Unit	男性 Male	女性 Female
20-29歲 Age 20-29	人數 No.	1	2
30-39歲 Age 30-39	人數 No.	1	0
40-49歲 Age 40-49	人數 No.	1	1
50-59歲 Age 50-59	人數 No.	10	8
60歲或以上 Age 60 or above	人數 No.	64	6

2017-18年度新入職員工¹³

New Employee Hires in 2017-18¹³

	單位 Unit	男性 Male	女性 Female
新入職員工 No. of New Employee Hires	人數 No.	93	22
以年齡分類 By Age			
20-29歲 Age 20-29	人數 No.	50	17
30-39歲 Age 30-39	人數 No.	27	3
40-49歲 Age 40-49	人數 No.	12	1
50-59歲 Age 50-59	人數 No.	4	1
60歲或以上 Age 60 or above	人數 No.	0	0

¹¹ 培訓方面沒有特定的性別要求,因此我們不按性別細分相關數據。



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

¹² 員工流失率數字不包括在部門間轉職的一般職系人員。

 $The \ staff \ turn over \ figures \ exclude \ those \ General/Common \ Grades' \ staff \ on \ inter-department \ transfer.$

¹³ 以上數字包括於2017年4月1日至2018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 2017 to 31 March 2018.

意外率 Accident Rate (403-2)

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
死亡數目 Number of fatalities						
總死亡數目 No. of fatalities	數量 No.	2	0	1	0	1
由渠務署員工負責的建築及維修工程 Construction and maintenance works carried out directly by DSD's staff	數量 No.	0	0	0	0	0
由承辦商負責的建築及維修工程 Construction and maintenance works undertaken by DSD's contractors	數量 No.	2 (男性Male)	0	1 (男性Male)	0	1 (男性Male)
每10萬工時發生的致命意外率 Fatal acc	ident rate per	100,000 man-	-hours			
由渠務署員工負責的建築及維修工程 ¹⁴ Construction and maintenance works carried out directly by DSD's staff ¹⁴	-	0	0	0	0	0
由承辦商負責的建築及維修工程 ¹⁴ Construction and maintenance works undertaken by DSD's contractors ¹⁴	-	0.012	0	0.011	0	0.01
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 ¹⁴ Construction and maintenance works carried out directly by DSD's staff ¹⁴	數量 No.	10	11	13	7	5
由承辦商負責的建築及維修工程 ¹⁴ Construction and maintenance works undertaken by DSD's contractors ¹⁴	數量 No.	36	18	14	8	15
每10萬工時發生的非致命意外率 Non-fa	atal accident ra	te per 100,00	0 man-hours			
由渠務署員工負責的建築及維修工程 ¹⁴ Construction and maintenance works carried out directly by DSD's staff ¹⁴	-	0.15	0.17	0.20	0.10	0.08
由承辦商負責的建築及維修工程 ¹⁴ Construction and maintenance works undertaken by DSD's contractors ¹⁴	-	0.21	0.13	0.16	0.11	0.22

社區工作及慈善捐款

Community Work and Charitable Contributions (203-2)

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
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	800	1,000	1,200	1,115	1,795
已完成的義工服務數目 Number of voluntary projects completed	數目 No.	21	25	27	20	41
員工募捐 Employee fundraising	千港元 HK\$ thousands	67	73	65	53	49

¹⁴ 我們目前不按性別細分相關數據。 We currently do not collect these figures by gender.



經濟工作表現

Economic Performance





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。

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	2013-14	2014-15	2015-16	2016-17	2017-18
個人薪酬 Personal 經常開支 Emoluments	百萬元 \$M	793.5	839.8	882.3	917.2	916.9	
Recurrent Expenditure		百萬元 \$M	1,178.9	1,286.5	1,487.8	1,646.9	1,692.8
非經營帳目開支 Capital Account		百萬元 \$M	28.6	22.6	23.3	30.1	37.2
總額 Total		百萬元 \$M	2,001.0	2,148.9	2,393.4	2,594.2	2,646.9

基本工程的項目開支

Capital Works Project Expenditure

· <u>·····</u>						
•	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
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	12,311	12,975	13,983	14,445	26,876
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	78,749	80,483	72,402	70,093	73,175
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	17	18	18	24
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.	87	81	73	69	66

¹⁵ 包括強積金及公務員公積金。



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



污水處理服務經營帳目

Sewage Services Operating Accounts

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18 ¹⁶
排污費收入 Sewage Charge Revenue	百萬元 \$M	875	955	1,047	1,161	1,296
工商業污水附加費收入 Trade Effluent Surcharge Revenue	百萬元 \$M	222	227	222	232	244
其他收入 Other Revenues	百萬元 \$M	44	45	48	46	46
總收入 Overall Revenue	百萬元 \$M	1,141	1,227	1,317	1,438	1,586
開支(不包括折舊) Expenditure (excluding depreciation)	百萬元 \$M	(1,593)	(1,759)	(2,149)	(2,340)	(2,334)
折舊 Depreciation	百萬元 \$M	(851)	(840)	(1,043)	(1,518)	(1,546)
總開支 Overall Expenditure	百萬元 \$M	(2,444)	(2,599)	(3,192)	(3,858)	(3,880)
(虧損 Deficit)	百萬元 \$M	(1,303)	(1,372)	(1,875)	(2,420)	(2,294)

污水處理服務成本回收率17

Sewage Services Operating Cost Recovery Rate¹⁷

	單位 Unit	2015-16	2016-17	2017-18
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	1,269	1,393	1,540
排污費及工商業污水附加費開支(不包括折舊) ¹⁸ Expenditure (excluding depreciation) of Sewage Charge and Trade Effluent Surcharge ¹⁸	百萬元 \$M	2,101	2,296	2,289
收回經營成本比率 Operating Cost Recovery Rate	%	60.4	60.7	67.3

污水處理服務的使用量和付款統計數字

Sewage Service Charge Consumption and Payment Statistics

	2013-14	2014-15	2015-16	2016-17	2017-18
自來水用户數目(以千計) Number of water accounts (in thousand)	2,860	2,881	2,907	2,955	2,989
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)	2,640	2,663	2,689	2,735	2,765
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)	23	24	25	27	28

^{16 2017-18}年度數字只屬暫時性,有待污水處理服務帳目委員會確認。

¹⁸ 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.



The 2017-18 figures are provisional and subject to endorsement by the Sewage Services Accounts Committee.

¹⁷ 本表的收入及開支總額均不包括「其他雜項服務」。

[&]quot;Miscellaneous services" are excluded from the revenues and expenditure in this table.

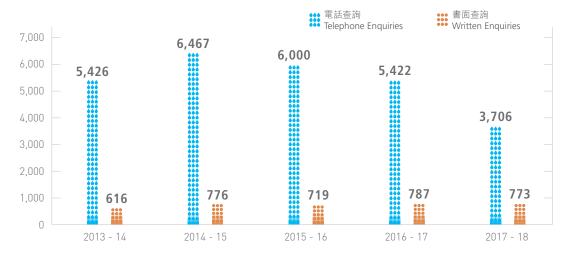
常規服務

Routine Services



過去5年接到的顧客查詢數目

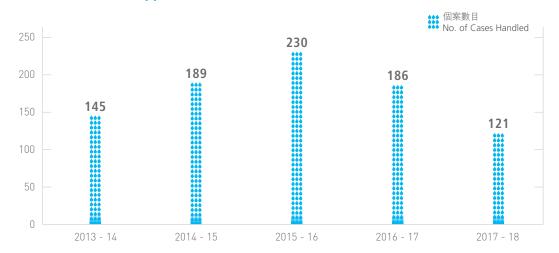
Number of Enquiries Received for the Past Five Years





過去5年所處理有關行業重新分類的申請

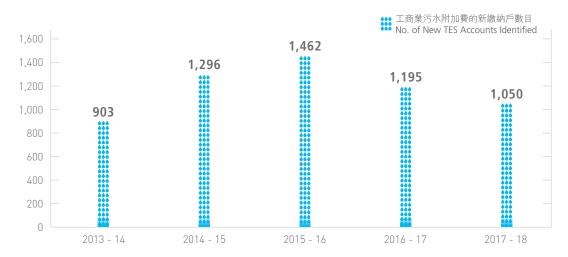
Business Reclassification Applications Handled for the Past Five Years





過去5年所發現工商業污水附加費的新繳納戶數目

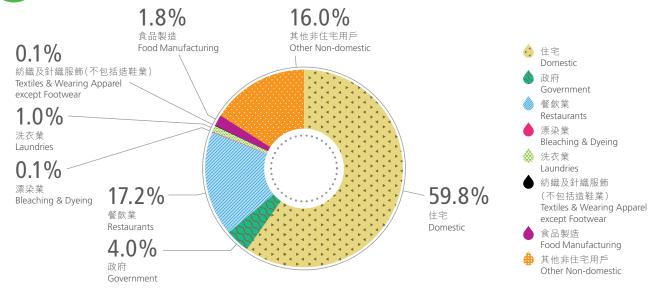
Number of New TES Accounts Identified for the Past Five Years





2017-18年度污水排放用戶用水量(561百萬立方米) - 用戶情況

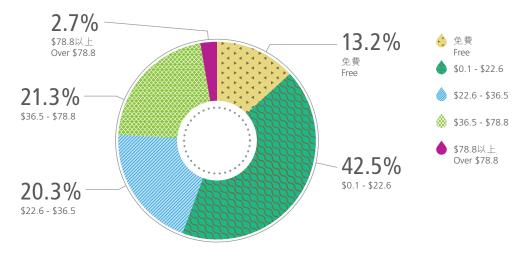
Water consumption of Sewered Accounts (561 Million m³) - Customers Pattern in 2017-18





住宅用戶 - 2017-18年度排污費收費情況(港元/月)

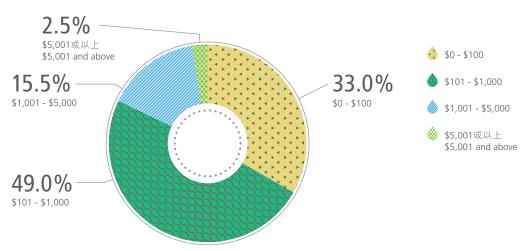
Domestic Accounts - Sewage Charge Payment Pattern in 2017-18 (HK\$/month)





工商業污水附加費用戶 - 2017-18年度工商業污水附加費收費情況(港元/月)

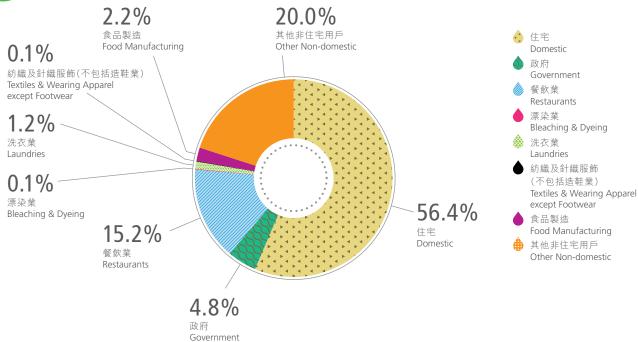
TES Accounts - TES Payment Pattern in 2017-18 (HK\$/month)





排污費(1,296百萬港元) - 2017-18年度用戶種類收費情況

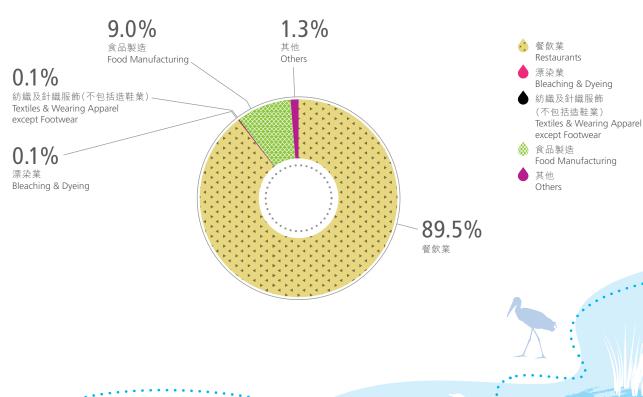
Sewage Charge (\$1,296 M) - Revenue Pattern by Type in 2017-18





工商業污水附加費(244百萬港元) - 2017-18年度用戶種類收費情況

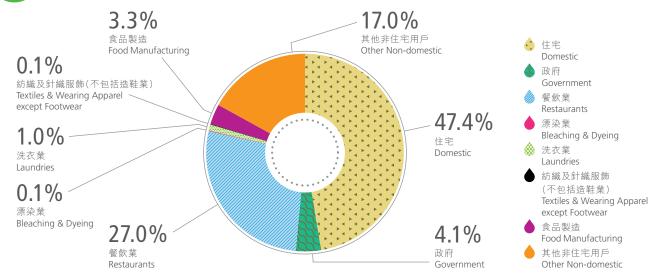
Trade Effluent Surcharge (\$244 M) - Revenue Pattern by Type in 2017-18





排污費及工商業污水附加費(1,540百萬港元) - 2017-18年度用戶種類收費情況

Sewage Charge and Trade Effluent Surcharge (\$1,540 M) - Revenue Pattern by Type in 2017-18



其他主要數據 Other Key Statistics

	單位 Unit	2013-14	2014-15	2015-16	2016-17	2017-18
防洪 Flood Prevention						
水浸黑點總數 Total Number of Flooding Blackspots	數目 No.	11	10	8	7	6
污水處理 Sewage Treatment						
公共污水收集網絡覆蓋(佔人口百份率) ¹⁹ Coverage of public sewerage (population percentage) ¹⁹	-	93.4%	93.4%	93.5%	93.5%	93.5%
污水收集網絡總長度 Total length of sewerage network	公里 km	1,695	1,710	1,727	1,755	1,770
污水處理設施總數 Total no. of sewage treatment facilities	數目 No.	293	297	300	304	314
污水總處理量 Volume of Sewage Treated		1,021	1,011	1,007	1,015	1,007
基本處理 By Preliminary Treatment		303	228	138	45	58
一級處理 By Primary Treatment	百萬立方米	5	5	5	5	5
化學強化一級處理 By Chemically Enhanced Primary Treatment (CEPT)	日禹立刀小 Million m ³	541	606	690	779	757
二級處理 By Secondary Treatment		72	172	174	186	187
三級處理 By Tertiary Treatment		0.15	0.14	0.14	0.17	0.17
處理污水時使用電力而引起的温室氣體排放系數 Emission factor of GHG emissions due to electricity used for processing sewage	-	0.166	0.161	0.190	0.203	0.219

¹⁹ 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.







附錄三 — 全球報告倡議組織

內容索引



Appendix 3 - GRI Content Index

本報告通過GRI標準的「實質性議題審核」,確認本報告按要求標示一般披露102-40至102-49的位置。

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the Report.



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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 101: 基礎 20 GRI 101: Foundat					
GRI 102: 一般披露 2016 GRI 102: General Disclosures 2016	組織概況 O	rganisational Profile			
	102-1	機構名稱 Name of the organisation	關於本報告 About this Report	-	(p.132-133)
	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.48-67	(p.132-133)
	102-3	機構總部的位置 Location of headquarters	香港灣仔税務大樓 43樓 Hong Kong, 43/F Revenue Tower, Wanchai	-	(p.132-133)
	102-4	營運地點 Location of operations	只限香港 Hong Kong only	-	(p.132-133)
	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.132-133)
	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.132-133)
	102-7	機構的規模 Scale of the organisation	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.147-148	(p.132-133)
	102-8	有關僱員及其他員工的資料 Information on employees and other workers	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.143-146	(p.132-133)
	102-9	供應鏈 Supply chain	持份者參與活動 Stakeholder Engagement Activities	p.118-121	(p.132-133)

可持續發展	一般披露		参照/直接解釋/省略資料的原因	頁數	外部認證
報告標準 GRI Standards	General Disclosures		Reference/Direct Answer/Reasons for Omissions	Page No.	External Assurance
	102-10	機構與其供應鏈方面的重大 改變 Significant changes to the organization and its supply chain	沒有顯著改變 No significant changes	-	(p.132-133)
	102-11	謹慎方針或原則 Precautionary Principle or approach	管治方針 Governance Approach	p.42-45	(p.132-133)
	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.32-35 p.127-131	(p.132-133)
	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.132-133)
	策略 Strate	ду			
	102-14	最高決策者的聲明 Statement from Senior decision-maker	署長序言 Director's Statement	p.3-5	(p.132-133)
	操守與誠信	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.38	(p.132-133)
	管治 Gover	nance			
	102-18	管治結構 Governance structure	管治方針 Governance Approach	p.39-41	(p.132-133)
	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.42-43	(p.132-133)
	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.132-133)

可持續發展 報告標準 GRI Standards	一般披露 General Disclosures		参照/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
	與業務有關.	人士溝通聯繫 Stakeholder E	ingagement		
	102-40	持份群體清單 List of stakeholder groups	管治方針 Governance Approach	p.46-47	✓ (p.132-133)
	102-41	集體談判協議 Collective bargaining agreements	沒有 Nil	-	(p.132-133)
	102-42	界定及挑選持份者 ldentifying and selecting stakeholders	關於本報告 About this Report	p.9	(p.132-133)
	102-43	引入持份者參與的方針 Approach to stakeholder engagement	管治方針 Governance Approach	p.46-47	(p.132-133)
	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.46-47	(p.132-133)
	匯報實務 Re	porting 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.132-133)
	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.132-133)
	102-47	重要議題清單 List of material topics	關於本報告 About this Report	p.9	(p.132-133)
	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.132-133)
	102-49	匯報上的改變 Changes in reporting	沒有顯著改變 No significant change	-	(p.132-133)
	102-50	匯報期 Reporting period	關於本報告 About this Report	p.8	(p.132-133)
	102-51	上一份報告的日期 Date of most recent report	2017年12月 December 2017	-	(p.132-133)
	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.132-133)





可持續發展 報告標準 GRI Standards	一般披露 General Disclosures		参照/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
	102-53	查詢報告的聯絡點 Contact point for questions regarding the report	回應表格 Feedback Form	p.161-164	(p.132-133)
	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.132-133)
	102-55	全球報告倡議組織(GRI)內容索引 GRI content index	附錄三 - 全球報告倡議組織內容索引 Appendix 3 - GRI Content Index	p.153-161	(p.132-133)
	102-56	外部認證 External assurance	關於本報告 About this Report 核實聲明 Verification Statement	p.8 p.132-133	(p.132-133)

可持續發展 報告標準 GRI Standards	特定議題標準 Topic-specific Standards		参照/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 Econo	mic						
	經濟績效 Ed	onomic Performance						
GRI 103: 管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.147-148	(p.132-133)			
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	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.147-148	(p.132-133)			
	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.44-45 p.74	(p.132-133)			
	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.118-121	(p.132-133)			



可持續發展 報告標準 GRI Standards	特定議題標準 Topic-specific Standards		参照/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. 附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	_ p.146	(p.132-133)
	採購實務 Pr	ocurement 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.132-133)
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.132-133)
	環境 Enviro	nmental			
	物料 Materi	ials			
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.78-81	(p.132-133)
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 附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.78-81 p.142	(p.132-133)
	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.43-45 p.74-77	(p.132-133)
GRI 302: 能源 2016 GRI 302: Energy 2016	302-1	組織內部的能源消耗量 Energy consumption within the organization	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.139	(p.132-133)

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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
	302-2	組織外部的能源消耗量 Energy consumption outside of the organization	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.139	(p.132-133)
	302-3	能源強度 Energy intensity	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.139	(p.132-133)
	302-4	減少能源的消耗 Reduction of energy consumption	環境管理 Environmental Management 附錄一 - 完成目標 Appendix 1 - Meeting the Targets	p.80 p.135-136	(p.132-133)
	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.42-45 p.70-72	(p.132-133)
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	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.140	(p.132-133)
	303-3	水資源回收及再利用 Water recycled and reused	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.140	(p.132-133)
	生物多樣性	Biodiversity			
GRI 103: 管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		活化河道 上善若水 River Revitalisation for the Good of Water	p.10-22	(p.132-133)
GRI 304: 生物多樣性 2016 GRI 304: Biodiversity 2016	304-1	組織所擁有、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	活化河道 上善若水 River Revitalisation for the Good of Water 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.10-22	(p.132-133)
	排放物 Emis	ssions			
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.42-45 p.74-77	(p.132-133)

可持續發展 報告標準 GRI Standards	特定議題標準 Topic-specific Standards		参照/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 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 附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.76-77 p.140	(p.132-133)
	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 附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.76-77 p.140	(p.132-133)
	305-3	其他間接溫室氣體排放 (範疇3) Other indirect (Scope 3) GHG emissions	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.140	(p.132-133)
	305-5	減少溫室氣體的排放量 Reduction of GHG emissions	環境管理 Environmental Management	p.74-77	√ (p.132-133)
	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.65	(p.132-133)
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	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.141	(p.132-133)
	306-2	按類別及處置方法劃分的廢物 Waste by type and disposal method	附錄二 - 主要統計數據 Appendix 2 - Key Statistics and Data	p.141	(p.132-133)
	306-3	嚴重洩漏 Significant spills	年內,渠務署發生了39宗污水溢漏個案,總漏量約為13,000,000立方米(少於我們每年污水處理量的1.29%)。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 39 significant sewage spills were reported and the total volume of sewage spill was about 13,000,000 cubic metres.(smaller than 1.29 per cent of our annual sewage treated). Corrective actions were taken immediately without causing any significant environmental impacts.	_	(p.132-133)
	環境法規遵	盾 Environmental Complian	ce		
GRI 103: 管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		附錄一 - 完成目標 Appendix 1 - Meeting the Targets	p.135	(p.132-133)



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可持續發展 報告標準 GRI Standards	報告標準 Topic-specific		参照/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 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2017-18年度,並沒有該類別的違規情況。 No non-compliance with environmental laws and regulations in 2017-18.	-	(p.132-133)		
	社會 Social						
	職業健康及	安全 Occupational Health a	nd Safety				
GRI 103: 管理方針 2016	103-1 103-2		關愛員工 Care for Our Staff	p.90-91	(p.132-133)		
GRI 103: Management Approach 2016	103-3	持份者參與活動 Stakeholder Engagement Activities	p.118-119				
GRI 403: 職業健康及安全 2016 GRI 403: Occupational Health and Safety 2016	403-2	工傷類別和工傷頻率、職業病、損失工作日及缺勤率,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.132-133)		
	社會經濟法	規遵循 Socioeconomic Com	pliance				
GRI 103: 管理方針 2016 GRI 103: Management Approach 2016	103-1 103-2 103-3		附錄一 - 完成目標 Appendix 1 - Meeting the Targets	p.137	(p.132-133)		
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2017-18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 2017-18.	-	(p.132-133)		







渠務署可持續發展報告2017-18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2017-18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?	4. 您認為我們	的報告在以下	哪一方面提供的	的資料最有用?
	□ 經濟	□ 經濟			
	□ 社會	□ 社會			
	□ 環境	□ 環境			
	□ 管治	□ 管治			
	□ 其他,請註明 	□ 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	睪多於一項)			
	□ 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.	你很	芷何獲取渠務署可持續發展報告的資訊?	8.	其他建議或意見:			
		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					
9.	₩₹	屬於下列哪個組別?	10	你會否希望於將來收取我們的的報告/資訊?			
9.			10.				
		政府部門		□ 不會			
		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					
		學生					
		公眾人士					
		其他,請註明					
)\[\(\text{ID} \text{ID} \text{ID} \text{ID} \text{ID} \text{ID} \text{ID} \qu					
4.4	## F	日後你想獲得我們發表的報告/資訊,請提供你的聯絡資料					
11.		7:					
		豊名稱:					
	電車	·					
	聯系	8電話:					
	請從	請從以下途徑交回已填妥的表格給渠務署:					
	電垂	🛚 : enquiry@dsd.gov.hk					
	傳真	[: 3103 0033					
	郵名	序地址:香港灣仔告士打道 5 號税務大樓 43 樓					

多謝您的寶貴意見!

個人資料收集聲明

1. 收集資料的目的

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

2. 資料轉交的類別

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

3. 查閱個人資料

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

4. 查詢

有關查詢申請表內所收集的個人資料,包括查閱或改正,請聯絡本署社區關係經理(電話:25947140 地址:香港灣仔告士打道5號税務大樓43樓渠務署社區關係組)。









Feedback on DSD Sustainability Report 2017-18



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 2017-18 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?	4. Which aspec	ct of the rep	ort did vou fin	d most useful				
	□ Economic	☐ Economic	•						
	□ Social		•						
			ontol						
	☐ Environmental	☐ Environm							
	Governance	☐ Governance☐ Other(s), please specify							
	☐ Other(s), please specify	□ Other(s),	please specify						
5.	Which aspect(s) of the report would you like to have mor	e 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?	8.	Other suggestions or opinions:				
	☐ DSD website						
	☐ DSD activities						
	☐ Family & friends						
	☐ Media						
	□ Schools						
	☐ Other(s), please specify						
9.	Which of the following best describes you?	10.	Would you like to receive our reports / information				
	☐ Government Department		in the future?				
	☐ Consultant / Contractor / Supplier / Construction Industry		☐ Yes				
	☐ Non-governmental Organisation		□ No				
	☐ Academic Sector						
	☐ Green Group						
	☐ Media						
	☐ Staff of DSD						
	☐ Students						
	☐ General Public						
	☐ Other, please specify						
11.	If you would like to receive future reports / information f	rom u	s, please provide your contacts:				
	Name :						
	Name of Organization :						
	Email:		<u></u>				
	Telephone Number :						
	Please return the completed questionnaire to DSD by the follow	wing m	nethods:				
	mail: enquiry@dsd.gov.hk						
	Fax: 3103 0033						
	Mailing address: 43/F, Revenue Tower, 5 Gloucester Road, W	Van Cł	nai, Hong Kong				

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.

Thank you.

2. Classes of Transferees

The personal data you provide by means of this form may be disclosed to other government bureaux and departments and other organizations for the purposes mentioned in paragraph 1 above.

3. Access to Personal Data

You have a right of access and correction with respect to personal data as provided in sections 18 and 22 and Principle 6 of Schedule 1 of the Personal Data (Privacy) Ordinance. Your right of access includes the right to obtain a copy of your personal data provided in this form subject to payment of a fee.

4. Enquiries

For enquiries concerning the personal data collected by means of this form, including the making of access and corrections, please contact our Community Relations Officer (Tel: 2594 7140/ Address: Public Relations Unit, Drainage Services Department 43/F, Revenue Tower, 5 Gloucester Road, Wanchai, Hong Kong)



本報告的完整版及所有附頁可於以下網址下載:

The full version of the report with appendices can be downloaded at the following link:

http://www.dsd.gov.hk/TC/Publicity_and_Publications/Publicity/DSD_Sustainability_Report/index.html (繁體中文版) http://www.dsd.gov.hk/SC/Publicity_and_Publications/Publicity/DSD_Sustainability_Report/index.html (简体中文版) http://www.dsd.gov.hk/EN/Publicity_and_Publications/Publicity/DSD_Sustainability_Report/index.html (English Version)

服務查詢 Service Enquiries

渠務熱線 Drainage Hotline: 2300 1110

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

一般查詢 General Enquiries: 2877 0660 電郵地址 Email Address: enquiry@dsd.gov.hk

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