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渠務署可持續發展報告 2023 - 24 DSD Sustainability Report 2023-24

2023至24年度可持續發展報告以「韌性 防洪 迎未來 | 為主題, 以突顯我們在瞬 息萬變的氣候變化挑戰之下,堅定致力 提升香港防洪能力的目標。同時,渠務 署亦會同時發表2023至24年度環境、社 會及管治報告,展現我們對可持續發展 的承諾。

The 2023-24 Sustainability Report, themed "Flood Resilience, Embracing the Future", reaffirms our steadfast commitment to enhancing Hong Kong's flood prevention capabilities in the face of rapidly changing climate challenges. Concurrently, we will publish the 2023-24 Environmental, Social, and Governance Report, showcasing our commitment to sustainable development.

### 多管齊下 強化防洪韌性

### A Multi-Pronged Approach: Strengthening Flood Resilience

渠務署已積極採取全面的方針,強化 防洪韌性。現時有18項主要雨水排放系 統改善工程,應對不同的地理、市區 環境等因素造成的水浸風險。我們亦了 解要建立韌性防洪城市,必須具備前瞻 性的規劃,因此,本署於2022年展開 一項[應對海平面上升和極端降雨的防 洪管理策略規劃研究」,評估氣候變化 至世紀末對本港雨水排放系統的影響, 以作出超前部署,應對更嚴峻的氣候 挑戰。

汲取2023年特大暴雨的經驗,為減緩個 別位置的水浸風險, 渠務署已完成超過 120項小型工程,亦貫徹「超前準備、加 強預警、果斷應急、迅速復原 | 策略, 增加緊急應變隊伍的數目及機動性,在 最短時間作出部署及應變,讓社會盡快 復常,強化城市的韌性防洪能力。

渠務署相信與時並進能有效提升防洪 能力,我們亦繼續探索融合先進技術, 提高防洪工作的效益,包括試行人工 智能的水浸監測系統、應用地下管道 檢測機械人、清淤機械人等,實踐智慧 防洪。

### 藍綠建設 締造官居城市

#### Blue-Green Infrastructure: Creating a Liveable City

渠務署致力推動可再生能源科技的發 展,使其更廣泛地應用於現有和全新的 設施上,以減少碳排放,保護環境及達 至可持續發展。以元朗淨水設施為例, 為全港首間應用好氫顆粒污泥技術的污 水處理廠,能減低廠房的用電需求。除

The DSD actively promotes the adoption of renewable energy technologies across both existing and new facilities to reduce carbon emissions and protect the environment. For example, Yuen Long Effluent Polishing Plant is the first in Hong Kong to implement Aerobic Granular Sludge technology, significantly lowering electricity consumption. We have also installed solar panels at our facilities and

The DSD has adopted a comprehensive approach to strengthen

flood resilience. Currently, we are undertaking 18 major improvement

projects for stormwater drainage systems, each particularly designed

to address specific flooding risks influenced by geographic and

urban factors. Recognising the need for forward-thinking to build a

flood-resilient city, we initiated "Strategic Planning Study on Flood

Management against Sea Level Rise and Extreme Rainfall – Feasibility

Study" in 2022 to develop flood management strategies. This study

assessed the impact of climate change on Hong Kong's stormwater

drainage systems through the end of the century, enabling us to

Drawing lessons from past heavy rain events, we have completed over

120 minor drainage improvement works to mitigate localised flooding

risks. Adhering to our core principles of "Advanced Emergency

Preparedness, Enhanced Early Warning, Decisive Emergency Response

and Speedy Recovery", we have increased the number and mobility

of our emergency response teams for swift deployment and effective

The DSD recognises that embracing technological advancements

is vital for enhancing food prevention capacity. We continue to

explore innovative solutions to enhance flood management efficiency,

including piloting artificial intelligence flood detection and monitoring

systems and developing robotic tools for inspecting underground

prepare for increasingly severe climate challenges.

recovery to bolster urban flood resilience.

pipelines and desilting.

了在淨水設施安裝太陽能板,工程團隊 亦以厭氧消化技術產生生物氣,再轉化 為電能和熱能供廠房使用,達至能源中 和。

另外,渠務署亦同時將[藍綠排水建 設 | 、「河畔城市 | 、「一地多用 | 等可持 續發展的理念付諸實踐,融入各項渠務 工程中。觀塘污水泵房優化工程項目包 括將泵房天台改建成園景平台,創造出 約1.1公頃的公共休憩用地,已於2023 年供市民使用。「活化翠屏河 | 工程除了 提升河道的排洪能力,亦活化了這條擁 有逾50年歷史的河道,成為觀塘區的新 地標,豐富市民的生活體驗。搬遷沙田 污水處理廠往岩洞工程把現時沙田污水 處理廠遷移至城門河對岸女婆山內開挖 的岩洞,以開拓土地資源作長遠發展用 途,配合本港的土地需求。我們會繼續 建設多元化、多功能的渠務設施,提升 市民生活質素。

utilised anaerobic digestion technology to generate biogas, converted into electrical and thermal energy for facility use, achieving energy neutrality.

Moreover, we are dedicated to integrating sustainable development concepts such as "Blue-Green Drainage Infrastructure", "Rivers in the City", and "Single Site, Multiple Use" into drainage projects. The Enhancement Works for Kwun Tong Sewage Pumping Station include transforming the roof into a landscaped platform, creating approximately 1.1 hectare of public recreational space for community use in 2023. The "Revitalisation of Tsui Ping River" initiative enhances flood capacity and revitalises this over-50-year-old concrete channel into a new landmark in Kwun Tong, enriching residents' experiences. Additionally, relocating the Sha Tin Sewage Treatment Works to caverns within Nui Po Shan will unlock valuable land resources, paving the way for sustainable long-term development for the community. We remain committed to building diverse and multifunctional drainage facilities that enhance the quality of life for residents.

### 眾志成城 奠立韌性防洪基石

#### Collective Strength: Building the Cornerstones of Flood Resilience

展望未來,渠務署會繼續強化香港防洪 韌性,減低各區的水浸風險及令社會在 暴風雨後盡快回復正常運作,同時亦竭 力提升污水處理服務並為建造更可持續 發展和更宜居的環境奠立基石,好讓市 民能享受更美好的生活。

我再次向在各自崗位上積極、熱誠工作 的同事們致以衷心的感謝。渠務署的成 績有賴於大家的共同努力和信念。展望 未來,我們將繼續與社會各界展開全方 位的互動與合作, 亦與公用事業和其他 機構緊密交流,包括舉辦持份者會議 等, 互相交流經驗和意見, 為廣大市民 提供更優質的服務,也為香港的可持續 發展作出貢獻。

Looking ahead, the DSD will continue to enhance Hong Kong's flood resilience, reduce flood risks across various districts, and ensure that society can swiftly return to normal operations after storms. At the same time, we will strive to provide world-class sewage treatment services and lay a solid foundation for building a more sustainable and liveable environment so that the public can enjoy a better quality of life.

I would like to once again express my heartfelt gratitude to all my colleagues who work actively and passionately in their respective positions. The achievements of the DSD are owed to everyone's collective effort and conviction. Looking into the future, we will continue to engage in comprehensive interaction and cooperation with all sectors of society. We will maintain close communication with public utilities and institutions, including organising stakeholder meetings. By exchanging respective experiences and opinions, we aim to provide even better services to the public, and contribute our efforts to Hong Kong's sustainable development.

莫永昌 渠務署署長 2025年5月

MOK Wing-cheong, Ringo Director of Drainage Services May 2025

# 關於本報告 ABOUT THE REPORT

### 報告簡介

Report Profile

香港特別行政區政府(「香港特區」或 「政府」) 渠務署(「本署」) 欣然發表題 為「韌性防洪迎未來 | 的2023-24年度 可持續發展報告(「本報告」),提供過 去一年在環境、社會及管治(ESG)方面的 方針、進展及表現的資料。 通過本報告, 本署旨在以透明、負責和一致的方式披露 可持續發展工作,並與持份者就對本署 有重大影響的可持續發展議題溝通,讓 持份者更深入了解本署在處理這些議題 方面的工作、願景及期望。

本報告以英文、繁體中文及簡體中文編 製,並以印刷版本、網頁版本及PDF版 本形式發布。

### 報告節圍及邊界

Reporting Scope and Boundary

本報告闡述渠務署1於2023年4月1日至 2024年3月31日期間(「報告期」)<sup>2</sup>的ESG 方針及表現。

除註明外,報告中的環境、社會及管 治資料涵蓋渠務署辦事處及轄下設施 以及渠務署主要工程顧問及承辦商的運 作3。本署致力在本報告提供準確數據及 資料,惟部分數據及資料由相關機構提 供,非我們直接控制。

可在以下網址取得本署過往的可持續發 展報告: https://www.dsd.gov.hk/TC/ Files/publication/DSD-SR2022-23 Full\_Report.pdf

The Drainage Services Department ("DSD") of the Government of the Hong Kong Special Administrative Region ("HKSAR" or the "Government") is pleased to present our annual Sustainability Report 2023-24 ("this Report"), titled "Flood Resilience, Embracing the Future", providing information about our environmental, social, and governance (ESG)-related approach, progress and performance during the past year. Through this Report, the DSD aims to disclose our efforts on sustainability development in a transparent, accountable and consistent manner, and to engage with our stakeholders on sustainability topics material to the Department and to provide them with a deeper understanding of the Department's work, vision and expectations to address them.

This Report is composed in English, traditional Chinese, and simplified Chinese, and published online with web based HTML and PDF, as well as in printed form.

This Report outlines the DSD's ESG approach and performance<sup>1</sup> for the period from 1 April 2023, to 31 March 2024 (the "reporting period")<sup>2</sup>.

Unless otherwise indicated, the environmental, social and governance data in the Report covers the DSD offices and facilities as well as the operation of major project consultants and contractors<sup>3</sup>. The DSD is dedicated to providing accurate data and information in this Report, certain data and information are provided by relevant organisations and thus beyond our direct control.

Our previous Sustainability Report can be accessed on: https://www. dsd.gov.hk/EN/Files/publication/DSD-SR2022-23\_Full\_Report.pdf

### 報告指引

#### Reporting Guidelines

本報告依照全球報告倡議組織可持續發 展報告標準編製而成, 並由獨立核證機 構核實本報告的準確度、可靠性及公信 力,以確保報告內容符合有關指引規 定。獨立核實聲明已載列於本報告中的 驗證聲明4。本報告英文版已使用全球報 告倡議組織內容索引一基礎審閱,確保 索引的呈列方式與全球報告倡議組織標 準要求一致,而且索引的內容闡述清晰 以便供持份者參閱。全球報告倡議組織 內容索引已載列於本報告中的附錄四: 全球報告倡議組織內容索引。

本署亦參考氣候相關財務披露工作小組 (TCFD)及國際財務報告準則(IFRS) S2 的建議,披露氣候相關資料。有關本署 就TCFD要求的資料披露,請參閱附錄 三: 渠務署對氣候相關財務披露工作小 組的回應。

This Report has been prepared in accordance with the GRI Sustainability Reporting Standards and has been independently verified for the accuracy, reliability, and credibility by an independent verification agency to ensure its contents comply with the relevant guidelines. The independent verification statement can be found in the Assurance Statement<sup>4</sup> in this Report. The English version of this Report has been reviewed using the GRI Content Index - Essentials Service, which ensures that the index is presented in a manner consistent with the GRI Standards' requirements, and the content of the index is clearly presented and accessible to the stakeholders. The GRI Content Index can be found in Appendix IV: GRI Content Index in this Report.

We also take reference from the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD) and the International Financial Reporting Standards (IFRS) S2 for our climate-related disclosures. Our disclosure of TCFD requirements can be found in Appendix III: DSD's Response to Task Force on Climate-Related Financial Disclosures (TCFD).

### 實質性評估

### Materiality Assessment

本署今年委託獨立顧問按照《GRI 3:實 質性議題2021》進行實質性評估。實質性 評估的目的在於找出對本署及持份者而言 最重要和重大的經濟、環境及社會議題, 並將其列為優先議題,在本報告中針對匯 報這些已確定的議題,詳細説明本署目前 在管理每一個議題方面的表現,從而有效 回應各持份者的不同需求。

# 鴻訓

### Acknowledgements

本署衷心感謝持份者對本報告的貢獻,包 括持份者提供的時間、知識及見解。本署 亦感謝員工、合作夥伴及其他分享本署可 持續發展願景的持份者。

This year, the Department commissioned an independent consultant to conduct a materiality assessment aligned with GRI 3: Material Topics 2021. The objective of the materiality assessment was to identify the economic, environmental, and social topics most significant and material to the Department and its stakeholders to prioritise. This Report will focus on reporting these identified topics, detailing our current performance in managing each one, thereby effectively addressing the diverse needs of our various stakeholders.

We sincerely appreciate our stakeholders for their contributions to this Report, including their time, knowledge and insights. We also thank our employees, partners and other stakeholders who share our sustainability vision.

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### 入 聯絡我們

Contact Us

我們歡迎閣下就本報告的內容、報告方式及本 署的可持續發展表現提供寶貴意見。您的意見 不僅有助我們提升報告質素和加強資料披露的 相關性,同時亦是本署持續進步的基石。請填 妥本報告末端的回應表格,並以電郵、傳真或 郵遞方式交回本署。 We value your comments and suggestions on the content of this Report, the reporting approach, and the sustainability performance of the Department. Your opinions not only help us improve the quality of this Report and enhance the relevance of our disclosures but also serve as the foundation for our continuous improvement. Please kindly complete and return the feedback form appended to this Report to us by email, fax or mail.

### 持份者參與及實質性評估

Stakeholder Engagement and Materiality Assessment

本署定期收集外部和內部持份者的回應,以了 解對渠務署有重大影響的ESG議題及本署可持 續發展措施的影響。此過程可讓本署評估目前 ESG策略的成效,識別風險及機會,以及提升 整體ESG表現。 We gather feedback from both external and internal stakeholders on a regular basis on ESG issues material to the DSD and the impacts of our sustainability initiatives. This process allows us to assess the effectiveness of our current ESG strategy, identify risks and opportunities, and enhance our overall ESG performance.

### 識別主要持份者

Identification of Key Stakeholders

本署重視與主要持份者群組保持積極和開放 溝通,建立合作關係和創造長期價值。我們 會了解主要持份者群組的優先順序、期望及看 法讓本署能夠識別風險及機會,管理重大ESG 事宜,以及作出決定。為確保順利實施可持續 發展方針,渠務署的工作必須以廣大市民和持 份者的需要為基礎。

本署邀請主要持份者參與每年的實質性評估,從而深入了解主要持份者對本署未來可持續發展的期望及所關注的事項。本署通過回顧過往實質性評估中所確認的持份者,以及AA1000的持份者參與標準(2015)及GRI標準,從依賴程度、責任、壓力、影響程度及多元觀點識別等因素識別主要的持份者。本署已確認

The Department places great importance on maintaining active engagement and open communication with key stakeholder groups to building collaborative relationships and creating long-term value. Understanding their priorities, expectations and perceptions allows us to identify risks and opportunities, manage material ESG issues and make informed decisions. To ensure the successful implementation of our sustainability strategies, the DSD's work must be grounded in the needs of both the general public and stakeholders.

The Department actively engages stakeholders in our annual materiality assessment, which allows us to gain a strong understanding of their expectations regarding the Department's future sustainability developments and their concerns. By reviewing stakeholders identified in previous materiality assessments and referring to the AA1000 Stakeholder Engagement Standard (2015) and GRI Standard, we have identified key stakeholders based on factors such as dependency, responsibility, tension, degree of influence and diversity of



十個對營運有重要影響或本署明顯受其影響的主要外部和 內部持份者群組,並致力以有效包容的方式與主要外部和 內部持份者群組溝通。

本署通過多方面的恆常溝通渠道,包括調查、焦點小組、 訪談、刊物、網站、社交媒體及面對面會議,定期與持份 者溝通,務求與持份者保持緊密聯繫。

自2012-13年度起,可持續發展報告成為渠務署的重要溝通工具,協助持份者了解渠務署的可持續發展政策及表現。為使報告內容能更適切回應持份者所關注的事項,在編寫報告的過程中,本署積極與不同的持份者群組溝通,以深入了解持份者群組對渠務署可持續發展措施的期望。持份者分享的觀點對於決定本報告中包含的實質性主題及邊界起着關鍵作用。

perspectives. We have identified ten key external and internal stakeholder groups that significantly impact our operations, or are notably affected by them, and we are committed to engaging them in an effective and inclusive manner.

We regularly engage with these stakeholders through a wide range of ongoing communication channels, including surveys, focus groups, interviews, publications, websites, social media and face-to-face meetings to ensure close connection with stakeholders.

To help stakeholders understand our sustainability policies and performance, the DSD has utilised its sustainability report as an important communication tool since 2012-13. To better address stakeholders' key concerns, we actively engage various stakeholder groups to gain insights into their expectations regarding our sustainable development initiatives during the report compilation process. The perspectives shared by stakeholders play a crucial role in identifying the material topics and boundaries included in this Report.

### 實質性評估流程 **Materiality Assessment Process**

渠務署已完成2024年度的實質性評估,了解持份者對可能 影響持份者及渠務署的首要實質性議題的關注及利益,以 便本署優先處理。為維持透明度及公正性,本署聘用了獨 立的第三方顧問進行分析評估。於2024年10月至11月期 間,本署激請高級管理層及員工、承辦商/顧問等主要持 份者對進行訪談及調查。問卷共收到773份回覆,其中125 份來自本署員工,另外648份則來自學術組織、顧問、公 眾、環保組織、立法會議員、傳媒、社福機構、其他政府 部門及供應商等。

In 2024, the DSD conducted its annual materiality, focusing on understanding stakeholders' concerns and interests regarding the top material issues that could affect them and the DSD, for DSD to prioritise and address. To maintain transparency and impartiality, an independent third-party consultant conducted the analysis. The DSD invited key stakeholders from October to November 2024, including senior management and staff, and contractors/consultants to conduct interviews and surveys. The questionnaire received 773 responses, comprising 125 responses from our people and a further 648 responses from academia, consultants, the general public, environmental organisations, legislative council members, media representatives, NGOs, other government departments, and suppliers.

To ensure the thoroughness and credibility of our findings, we followed the internationally recommended three-step process of Identification, Prioritisation, and Validation in identifying the material topics for 2023-24 and the direction for future development.

#### 1. 識別

檢視和納入過往持份者參與活動時所關注的FSG議 題。

為確保結果的完整性及可信度,本署遵循國際建議的三個

步驟:即識別、訂立優先次序及驗證,以識別2023-24年

度的實質性議題及未來可持續發展的方向。

- 進行同業基準比較並研究國際及產業趨勢,參考國 際報告標準(包括《SASB可持續發展會計準則》被 露議題)。
- 對香港的內外持份者推行問券調查及訪談。
- 通過評估議題潛在及實際影響識別23個實質性議 題。

#### 1. Identification

- · Reviewed and incorporated ESG issues from previous stakeholder engagement exercises.
- · Conducted peer benchmarking and research on international and industry trends, referencing international reporting standards, including the Sustainability Accounting Standards Board Standards disclosure topics.
- Conducted questionnaire surveys and interviews with external and internal stakeholders in Hong Kong.
- Identified 23 material issues by evaluating the potential and actual impacts of the material issues.

#### 2. 訂立優先次序

- 從兩個主要角度評估持份者意見:對持份者的重要 性,著重於特定FSG議題如何因渠務署的營運而對 經濟、環境及社會產牛重大影響; 以及對渠務署可 持續發展的重要性,考慮與渠務署營運相關的新興 風險及機遇。
- 渠務署根據收集到的不同觀點,制定重要性矩陣 強調本署應對的最重要ESG議題。

#### 3. 驗證

 將實質性議題的優先次序清單呈交高級管理層討論 和確定。

本署诱過訪談及問卷調查了解各持份者組別的意見及關注 點,識別潛在的可持續發展風險及機遇,對問卷調查進行 定量分析,最後對相關風險及機遇進行排序從而識別實質 性議題。此外,除了為預備本報告期間所舉行的持份者參 與活動,本署於日常營運中亦與持份者恆常溝涌和交流, 有關詳情請參閱本報告中的第六章-持份者參與《

#### 2. Prioritisation

- · Stakeholder feedback was evaluated from two key perspectives: Importance to Stakeholders, focusing on how select ESG issues significantly impact the economy, environment, and society as a result of DSD operations; and Importance to DSD's Sustainable Development, which considers emerging risks and opportunities related to DSD's operations.
- We developed a materiality matrix highlighting the most critical ESG topics for the DSD to address based on the diverse perspectives gathered.

#### 3. Validation

· The prioritised list of material issues was presented to the DSD's senior management for discussion and validation.

Through these interviews and questionnaire surveys, the Department sought to understand the perspectives and concerns of different stakeholder groups, identify potential sustainability risks and opportunities, and conduct quantitative analysis of the questionnaire data. The identified risks and opportunities were then prioritised to identify material topics. In addition to launching stakeholder engagement activities during the preparation of this Report, the Department maintains close communication with all stakeholders in the course of its daily operations. For details, please refer to Chapter 6 - Stakeholder Engagement in this Report.

### 渠務署2023-24實質性矩陣 DSD 2023-24 Materiality Matrix



Importance to the DSD's Sustainable Development (Risks and Opportunities)

環境 Environment 2 遵守環境法規 Environmental Compliance 2 能源管理

Energy Managemen

3 廢物處理

4 氣味管理 Odour Contro

社會 Social 10 員工培訓及發展 Employee Training and Education 職業安全及健康

Occupational Safety and Health

內部溝通渠道 Internal Communication Channel

管治 Governance 15 反貪污 Anti-corruntion

16 遵守社會、經濟方面的法規 Socio-economic Compliance

Grievance Mechanism (B) 保持公共資金和資產管理的 透明度

7 投訴機制

21 採購政策 Transparency on Public Funds and Procurement policy Assets Management

5 水資源及污水管理 Water Resources and Effluent Management

6 氣體排放

Air Emission 7 減緩及適應氣候變化 Climate Change Mitigation and Adaptation

18 僱傭政策及員工比例 (例如男女比例及年齡分佈) Employment Policy and Employee Ratio

(e.g. gender and age distribution) 個 僱員關係

Employee Relations

19 服務質素標準 Service Quality Standards

20 經濟績效(如排污費數字、項目 開支及維修費用) Economic performance (e.g. sewage charge figures, project expenses and maintenance cost)

(如本地供應商採購的支出) (e.g. spending on local suppliers) 就2024年而言,渠務署識別的五大實質性議題分 別為「職業安全及健康」、「水資源及排放水管理」、 「氣味管理」、「服務質量標準」及「防止貪污」。實質 性評估的結果讓本署能夠分析各項可持續發展議題 對持份者及對渠務署可持續發展的影響程度,從而 確立報告範圍及邊界。

鑑於渠務工程固有的風險,「職業安全及健康」為 渠務署極為關注的議題。外部持份者已就潛在危險 (如窒息或嚴重受傷)表達關注。這些潛在危險可導 致營運中斷, 甚至在社區內引致人員傷亡。 為回 應這些關注,渠務署致力根據包括《職業安全及健 康條例》在內的法規實施穩健的安全措施及協定。 此承諾包括全面的安全管理系統,強制要求所有員 工、工程顧問、承辦商遵守既定的安全政策。

對渠務署來說,「水資源及排放水管理 | 日益重 要,本署后自香港的雨水排放及污水處理的責任, 尤其在面對氣候變化挑戰的關鍵時期,有效的管理 方法對降低與水資源短缺及污染相關的風險有舉足 輕重的作用。

渠務署的評估顯示各持份者組別同樣高度關注本署 的環保表現,主要的環保議題包括「廢物處理」、 「氣味管理」、「水資源及排放水管理」、「遵守環境 法規一,以及「減緩及適應氣候變化」。本署除了於 本報告披露相關資訊,同時在日常運作中優先與持 份者保持開放的溝通渠道,以及時回應持份者關注 的議題。

For 2024, the top five material topics identified by the DSD are "occupational safety and health", "water resources and effluent management", "odour control", "service quality standards", and "anti-corruption". The results of the materiality assessment enable us to analyse the impact of each sustainability topic on our stakeholders and the DSD's sustainable development objectives, thereby establishing the reporting scope and boundaries.

"Occupational safety and health" is a critical concern for the DSD due to the inherent risks associated with drainage works. External stakeholders have expressed concerns regarding potential hazards such as asphyxiation or serious injury, which could lead to operational disruptions or even loss of life within the community. In response to these concerns, the DSD is committed to implementing robust safety measures and protocols in accordance with regulations, including the Occupational Safety and Health Ordinance. This commitment includes a comprehensive safety management system that mandates all employees, project consultants, and contractors adhere to established safety policies.

The "management of water resources and effluents" is increasingly vital for the DSD, particularly given its responsibility for stormwater drainage and sewage treatment in Hong Kong. Effective management practices are essential to mitigate risks associated with water scarcity and pollution, especially in light of climate change challenges.

Our assessment indicates that all stakeholder groups are highly concerned about the DSD's environmental performance. Key environmental issues include "waste treatment", "odour management", "water resources and effluent management", "environmental compliance", and "climate change mitigation and adaptation". In addition to disclosing relevant information in this Report, the DSD prioritises maintaining open lines of communication with stakeholders during daily operations to ensure timely responses to their concerns.

由持份者作答的實質性評估識別了23個重大議題 與去年保持一致。該等議題涵蓋社會責任及人權保 障、員工福利及發展、環保、營運效率四個關鍵 領域。

The stakeholder-driven materiality assessment identifies 23 material topics, consistent with the previous year. These topics encompass four key areas including social responsibility and human rights protection, staff welfare and development, environmental protection, and operational efficiency.

8 使用可再生能源

9. 綠色設計及建築

供應鏈管理

23 技術發展及應用

application

Supply chain management

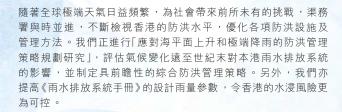
Technology development and

Use of Renewable Energy

Green Design and Construction

年度主題及 環境、社會及 管治(ESG) 大事回顧

THEME OF THE YEAR AND ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) HIGHLIGHTS



現時有11項主要雨水排放系統改善工程正處施工階段,以及7項 計劃中的主要雨水排放系統改善工程(合共18項工程),以提升各 區防洪能力。經歷2023年特大暴雨後,我們已針對性於2024年雨 季前在有關地區完成超過120項小型改善工程。同時我們貫徹「超 前準備、加強預警、果斷應急、迅速復原 | 的四大策略並積極在 防洪工作中應用創新科技,提升效率。確保城市有足夠韌性應對 突如其來的極端天氣,包括暴雨和颱風,讓社區能夠迅速復常, 亦推動香港整體可持續發展。













With the rising frequency of extreme weather globally, the DSD is actively reviewing Hong Kong's flood prevention standards and optimising flood prevention facilities and management practices. Currently, the DSD is conducting the "Strategic Planning Study on Flood Management against Sea Level Rise and Extreme Rainfall" to evaluate the impact of climate change on Hong Kong's stormwater drainage systems till the end of the century and to develop a forward-looking intergrated flood management strategy. Additionally, the design rainfall parameters in the Stormwater Drainage Manual have been updated to better manage flooding risks in Hong Kong.

With an aim of bolstering flood prevention capabilities across various districts, the DSD currently has 11 major stormwater drainage improvement works under construction, as well as seven planned major stormwater drainage improvement works (18 projects in total). In response to the exceptionally severe rainstorm in 2023, over 120 minor improvement works in related districts were completed before rainy season in 2024. Moreover, we implemented the strategies of "Advanced Emergency Preparedness,

Enhanced Early Warning, Decisive Emergency Response and Speedy Recovery", while applying innovative technologies in flood prevention efforts to enhance efficiency. This ensures that Hong Kong remains resilient against sudden extreme weather events, allowing for swift community recovery and driving Hong Kong's sustainable development.













### 長遠規劃 守護未來

Long-term Vision for a Resilient Future

為建立韌性防洪城市,渠務署正透過多管齊下的策略加強防洪能力,包括為全港制定綜合防洪管理策略,融合不同的雨水排放系統改善工程、應變及管理措施等,亦會考慮各措施的成本效益,以制訂全港性防洪策略,應對長遠可能出現的挑戰及減低水浸風險。我們期望這一系列策略,能創建一個更美好、安全、宜居的城市,為下一代面臨的挑戰及減極大震戰襲下堅實基礎,貫徹可持續發展的理念。

To cultivate a flood-resilient city, the DSD employs a multi-pronged approach to strengthen flood prevention capabilities. This includes formulating a territory-wide integrated flood management approach that incorporates various drainage improvement works, emergency response measures and management practices. Cost-effectiveness of each measure will also be considered to formulate a comprehensive territory-wide flood management strategy, addressing long-term challenges and reducing the risk of flooding. We anticipate that this series of strategies will foster a better, safer, and more liveable city, establishing a solid foundation for the next generation to confront future challenges while upholding the values of sustainable development.

### 持續優化防洪系統

Optimise Flood Prevention System

渠務署於2022年展開了「應對海平面上 升和極端降雨的防洪管理策略規劃研究」,目的是評估氣候變化至世紀末對 本港雨水排放系統的影響,並制訂全港 性防洪管理策略,以應對長遠可能出現 的挑戰。 The DSD has commenced a "Strategic Planning Study on Flood Management Against Sea Level Rise and Extreme Rainfall" in 2022. The study purpose is to assess the impact of climate change on Hong Kong's stormwater drainage systems till the end of the century and formulate territory-wide flood management strategies, addressing long-term challenges.

渠務署會參考世界各地先進城市的成功 例子,採用綜合的防洪管理策略,融合 不同的雨水排放系統工程、藍綠排水建 設、管理及應變措施等,按不同地區設 定相應方案,亦會考慮不同措施的成本 效益,充分善用財政資源。

經歷2023年的特大暴雨後,渠務署已檢視了天文台自1884年起至2023年過去超過140年所錄得的雨量數據。經分析後,我們上調設計雨量參數,並於2024年3月更新了「雨水排放系統手冊」。

Taking cases from advanced cities worldwide as references, the DSD implements integrated flood management strategies that incorporates various drainage system projects, blue-green drainage infrastructure, management practices and emergency response measures. Tailored solutions will be developed according to different regions, and the cost-effectiveness of various measures will also be considered to make full use of financial resources.

Followed by the exceptionally severe rainstorm in 2023, the DSD has reviewed the rainfall collected from 1884 to 2023 by Hong Kong Observatory. After analysing, the design rainfall parameter was increased and we have updated the Stormwater Drainage Manual in March 2024.

### 十八項大型改善工程 分批完成

Phased Approach to Eighteen Major Improvement Works

現時全港共有18項大型的雨水排放系統改善生程,分別為11項已經展開的工程及7項即將展開的工程。當中包括興建防洪壩、改善雨水渠排放系統及增建地下蓄洪池等,以提升各區排洪能力。

Currently, there are 18 major stormwater drainage system improvement works across Hong Kong, consisting of 11 projects that are already underway and 7 that are set to commence soon. These projects include the construction of barrage, enhancements to the stormwater drainage system, and the addition of underground stormwater storage tanks, all aimed at improving drainage capacity in various districts.



# 年度大事

### 進行中的11項主要防洪工程

### 11 Major Flood Prevention Projects Under Construction

### 擬議7項雨水排放系統改善計劃

Proposed 7 Drainage Improvement Works Projects

### 北區雨水排放系統改善工程(第1期)

Drainage Improvement Works at North District – (Phase 1)

預計2028年完成

Scheduled for completion in 2028



沙頭角地下雨水蓄洪池及雨水泵房構想圖 Photomontage of Sha Tau Kok Underground Stormwater Storage Tank and Stormwater Pumping Station

#### 元朗防洪壩計劃及元朗市明渠 改善工程(市區中心段)

Yuen Long Barrage Scheme and Improvement of Yuen Long Town Nullah (Town Centre Section)

預計2030年完成 Scheduled for completion in 2030



元朗防洪壩計劃的構想圖 Illustration of the Yuen Long Barrage Scheme

#### 尖沙咀雨水排放系統改善工程 Drainage Improvement Works in Tsim Sha Tsui

預計2027年完成 Scheduled for completion in 2027



蓄洪池完成後原址重置的花園構想圖 Illustration of in-situ reprovisioned garden after completion of the stormwater storage tank

元朗區雨水排放系統改善工程(第2階段) Drainage Improvement Works at Yuen Long - Stage 2

#### 觀塘雨水排放系統改善工程(第1期) Drainage Improvement Works in Kwun Tong – (Phase 1)

預計2028年完成 Scheduled for completion in 2028



蓄洪池完成後原址重置的遊樂場構想圖 Illustration of in-situ reprovisioned playground after completion of the stormwater storage tank

#### 活化翠屏河 Revitalisation of Tsui Ping River

預計2024年底全面開放

Full opening expected by the end of 2024



港島南部雨水排放系統 改善計劃(第2A及2B部份) Drainage Improvement in Southern Hong Kong Island – Package 2A and 2B



兩項全港性修復地下雨水渠工程 Two Territory-wide Rehabilitation of Underground Stormwater Drains Projects



九龍城雨水排放系統改善工程 **Drainage Improvement Works** 

重置及優化後的亞皆老街遊樂場構思圖 Illustration of Argyle Street Playground after Reprovision and Enhancement

#### 旺角雨水排放系統改善工程-第1期 Drainage Improvement Works in Mong Kok — Phase 1

預計2029年完成 Scheduled for completion in 2029



重置及優化部分石硤尾公園構思圖 Illustration of Reprovision and Enhancement of Part of Shek Kip Mei Park

#### 觀塘雨水排放系統改善工程-第2期 **Drainage Improvement Works** in Kwun Tong — Phase 2 預計2029年完成

Scheduled for completion in 2029



重置及優化部分觀塘海濱花園構思圖 Illustration of Reprovision and Enhancement of Part of Kwun Tong Promenade

港島東區雨水排放系統改善工程-第1期 **Drainage Improvement Works** in Eastern District - Phase 1

#### 大埔雨水排放系統改善工程-第1期 Drainage Improvement Works in Tai Po - Phase 1

預計2029年完成 Scheduled for completion in 2029



重置及優化部分大埔舊墟遊樂場構思圖 Illustration of Reprovision and Enhancement of Part of Tai Po Old Market Playground

#### 沙田及西貢雨水排放系統改善工程-第1期 Drainage Improvement Works in Sha Tin and Sai Kung — Phase 1

預計2029年完成 Scheduled for completion in 2029



重置及優化部分沙田公園構思圖 Illustration of Reprovision and Enhancement of Part of Sha Tin Park

#### 黃大仙雨水排放系統改善工程 Drainage Improvement Works in Wong Tai Sin

預計2029年完成 Scheduled for completion in 2029



重置及優化部分摩士公園構思圖 Illustration of Reprovision and Enhancement of Part of Morse Park

另外,2023年特大暴雨後,我們已即 時在發生水浸的地區進行一系列跟進工 作,包括超過120項小型改善工程(例 如:加建新排水管道、止回閥、集水 溝、入水口等、優化排水沙井及沙井井 蓋等),並已於2024年雨季前完成。

Additionally, after the exceptionally severe rainstorm in 2023, we have implemented a series of follow-up measures immediately in the areas affected by flooding, including over 120 minor improvement works (e.g. installation of new drainage pipes, non-return flap valves, gullies, inlet works as well as upgrading drainage manholes and manhole covers). These works are completed before the rainy season in 2024.

### 「超前準備、加強預警、果斷應急、迅速復原 |

"Advanced Emergency Preparedness, Enhanced Early Warning, Decisive Emergency Response and Speedy Recovery"

除了各類改善工程項目外,我們誘過多 管齊下的策略,增加應變能力,提升城 市防洪韌性。就此,我們貫徹「超前準 備、加強預警、果斷應急、迅速復原」。 In addition to various improvement works, we have adopted a multi-pronged approach to strengthen the city's flood resilience by enhancing our emergency response capabilities. In this regard, we implemented the strategies of "Advanced Emergency Preparedness, Enhanced Early Warning, Decisive Emergency Response and Speedy Recovery"

每當天文台發出紅色或黑色暴雨警告信 號的預警、新界北部水浸特別報告 八號烈風或暴風信號或以上熱帶氣旋警 告, 渠務署隨即啟動緊急事故控制中 心, 指揮駐守應急運作基地的緊急應變 隊伍往現場處理水浸事故。緊急應變隊 伍數目已由約70隊大幅增加至超過160 隊。為增加隊伍的機動性,渠務署進一 步利用轄下設施遍佈全港的優勢,於這 些設施加設應急運作基地,令基地數目 由禍往13個增至超禍30個,支援緊急應 變隊伍的行動工作,以便更迅速趕至水 浸現場。藉以上策略,我們期望以最短 時間作出部署及應變,讓社會可以盡快 回復正常運作,提升城市的防洪韌性。

Whenever the Hong Kong Observatory issues a Red or Black Rainstorm Warning Signal, a Special Announcement on Flooding in the northern New Territories, or the Tropical Cyclone Warning Signal No. 8 or above, the DSD will instantly activate the Emergency Control Centre, which commands emergency response teams stationed at emergency support stations to handle flooding incidents on-site. The number of emergency response teams has significantly increased from approximately 70 to over 160. To enhance their mobility, the DSD has capitalised on its widespread facilities across Hong Kong by establishing additional emergency support stations at these facilities, increasing the total from 13 to over 30, facilitating emergency response teams to reach flooding sites more swiftly. Through these strategies, we aim to deploy and respond in the shortest possible time, enabling the society to resume normal operations as soon as possible and enhancing the city's flood resilience.



### 開發及應用創新科技

### Development and Application of Innovative Technologies

渠務署積極應用創新技術於渠務工作, 其中包括研發及擴展智慧渠務及水文資 訊系統和採用遙控清淤機器人。數年前 渠務署已加強水文資訊系統的應用,研 發手機應用程式,實時監察地區的雨 量、各主要河道或水道的水位及在不同 地點的潮位,近年亦增加了遠程裝置的 數量,並計劃試行監察沙井內水位和街 道的水浸情況。除此之外,渠務署引入 河道及渠道清淤機械人和管網檢測機械 人,協助維修保養工作,以提升雨水排 放系統保養及維修工作的效率和安全。

The DSD actively employs innovative technologies in its drainage operations, including the development and expansion of smart drainage and Hydrometric Information System (HIS), as well as the use of desilting robots. Several years ago, the DSD enhanced the application of HIS by developing a mobile application that allows for real-time monitoring of rainfall, water levels in major rivers and channels, and tidal levels at various locations. In recent years, the number of remote monitoring devices has also increased, with plans to pilot monitoring water levels in manholes and flooding conditions on streets. Additionally, the DSD has introduced the use of desilting robots and pipeline inspection robots to assist in maintenance works for river channels and drains to strengthen the efficiency and safety of drainage system maintenance works.

「不倒翁」球形地下管道 檢測機械人 Tumbler Inspection Ball (TIB) Robot





Wireless Remotecontrolled Desilting

渠務署將秉持創新思維,不斷求進 踐可持續發展的理念,務求全面提升城 市的防洪韌性,令市民擁有安全、優質 的生活環境。

The DSD will continue to uphold an innovative mindset and strive for continuous improvement, putting the principles of sustainable development into practice. Our goal is to comprehensively enhance the Hong Kong's flood resilience, ensuring that the public enjoys a safe and high-quality living environment.

# 環境、社會及 管治(ESG)大事回顧

## Environmental, Social and Governance (ESG) Highlights

渠務署通過多項措施展示署方對環境 社會及管治(ESG)與可持續發展的承諾。

為了提供更多優質的公共空間,渠務署 善用土地資源,積極落實「一地多用」的 政策倡議,騰出渠務設施空間作休憩用 地。渠務署亦致力推動發展新科技,特 別應用在環境、工地安全、綠化等範 疇,並屢獲殊榮,得到業界肯定。另 外,署方亦會舉辦及參與不同的公眾活 動,讓公眾了解可持續發展的理念在工 程項目中的實踐。

The DSD has demonstrated its commitment to environmental, social and governance (ESG) and sustainable development through various initiatives. To provide more quality public spaces, the DSD allocates land resources efficiently and has implemented the initiative of "single site, multiple use" by providing the Department's drainage facilities for use as open space. The DSD also actively promotes the development of new technologies, with a strong focus in the areas of environment, site safety and greening, which has led to the Department winning awards and recognition. In addition, the Department organises and participates in a wide range of public activities to enhancing public awareness of the implementation of sustainable development in its

珍惜資源 共建可持續城市 Valuing Our Resources for a Sustainable City

### 茶果嶺海濱公園及翠屏海濱啟用

Opening of Cha Kwo Ling Promenade and Tsui Ping Seaside



位於觀塘偉業街的茶果嶺海濱公園及毗 鄰的翠屏海濱於2023年第三季正式啟 用,貫涌觀塘與茶果嶺海濱。為配合觀 塘區的未來發展,渠務署進行觀塘污水 泵房優化工程,興建一個容量達16,000 立方米(相等於6.4個奧林匹克標準游泳 池)的地底污水調節設施,以提升處理 污水的效能。另外,署方亦於泵房上 蓋建造園景平台,提升居民的居住環 境, 連同毗鄰的海濱空間, 組成佔地約 1.8公頃的茶果嶺海濱公園。遊樂設施 以「好玩自然 | 為設計概念, 分為5大區 域,提供15個遊樂體驗和超過60組遊 樂設施,亦設有涼亭、園景區、草坪 等,讓市民進行多元化的休閒活動。公 園亦考慮到傷健共融的設計,設有無障 礙設施和嬰幼兒空間等。

The Cha Kwo Ling Promenade on Wai Yip Street, Kwun Tong, and the adjacent Tsui Ping Seaside were officially opened in the third quarter of 2023, connecting the waterfront of Cha Kwo Ling and Kwun Tong. To cater for the future development of the Kwun Tong area, the DSD implemented enhancement works for the Kwun Tong Sewage Pumping Station (KTSPS). An underground balancing facility with a storage capacity of 16,000 cubic metres (equivalent to 6.4 Olympicsized swimming pools) was constructed to enhance the effectiveness of sewage treatment. In addition, the Department developed the roof floor of the KTSPS into a landscaped deck to improve the living environment of the residents. Joining with the adjacent waterfront area, the roof floor will form the 1.8-hectare Cha Kwo Ling Promenade. With the theme of "Playful Nature", the park is divided into five zones. providing 15 play experiences and more than 60 play facilities, as well as pavilion, landscaped areas and lawns for the public to engage in a wide range of leisure activities. The park also considers disability inclusion design by providing barrier-free facilities and spaces for infants and young children.

### 大角咀海輝道遊樂空間啟用 Opening of Hoi Fai Road Playable Space



渠務署將大角咀櫻桃街箱形雨水渠的旱季截流器上蓋優化為公共空間,長約85米的海輝道海濱延伸部分,增加了海濱的暢達性,餘下部分則建成海輝道遊樂空間,相關設施分別於2023年底及2024年第一季開放予公眾使用。

遊樂空間佔地約800平方米,設有兒童遊樂和健身設施,包括戶外管鐘、彈床、親子鞦韆、搖搖板、健身單車和訓練器,為市民提供玩樂空間和欣賞海濱景致的地方。部分設施採用共融和寵物友善設計,亦設有涼亭和綠化地區,木椅均以工務部門收集的移除樹木加工而成的再生木製成。

The DSD has enhanced the rooftop of the dry weather flow interceptor at the Cherry Street box culvert in Tai Kok Tsui as a public open area. An approximately 85-metre-long extension of the Hoi Fai Road Promenade facilitated the accessibility to the harbourfront. The remaining part has been developed into the Hoi Fai Road Playable Space, with facilities opened to the public in late 2023 and early 2024.

The Playable Space covers an area of approximately 800 square metres and equipped with children's play and fitness facilities, including outdoor chimes, a trampoline, parent-child swings, a seesaw, an exercise bike and training equipment, providing a recreational area with seaside view for public enjoyment. Inclusive and pet-friendly designs are adopted for some of the facilities. Additionally, pavilions and landscaped areas are available, with wooden benches made of recycled wood processed from yard waste collected by the works departments.

### 土瓜灣渠務署設施優化為公共空間

Transforming Drainage Facilities into Public Spaces in To Kwa Wan



土瓜灣海濱原為土瓜灣基本污水處理廠海旁的緊急車輛及維修通道,經改建成為連接毗鄰海心公園的海濱長廊,長約140米,佔地約1,200平方米。場內設有高12米的渠務署「下水水」巨型壁畫、特色休憩座位等,並展出土瓜灣海濱長廊公共藝術作品設計比賽及過往渠蓋設計比賽的得獎作品。

To Kwa Wan Promenade, which has been converted from an emergency vehicular and maintenance access of the To Kwa Wan Preliminary Treatment Works on the waterfront, connects the adjacent Hoi Sham Park. The promenade spans about 140 metres and covers an area of about 1,200 square metres. It features a 12 metres-tall mural of the DSD mascot named "Drainy", and unique seating areas. The awardwinning designs of the Design Competition for the Public Art at To Kwa Wan Promenade and previous manhole cover design competitions are also on display.

### 黃竹坑涌尾明渠公共休憩空間

Staunton Creek Nullah Public Open Space



渠務署改善香港仔黃竹坑涌尾明渠上游 部分圍封的維修誦道,並開放予市民使 用。開放空間長約15米,寬約6米,以 河水流入海洋為設計主題,配合園境美 化及香港仔漁港特色、以及[下水水]的 擺設,將原本以功能為主的維修通道打 造成一個有地區和渠務署特色的空間。

The DSD had made improvements to the maintenance access road in the upstream section of the nullah that was previously cordoned off and opened up the access road for public use. The newly open space is approximately 15 metres long and about 6 metres wide. Based on the design theme of river water flowing into the ocean, complemented by landscaping, characteristics of Aberdeen Fish Market, and "Drainy" decorations, the original functional maintenance access road has been transformed into an open space with local and DSD's characteristics.

### 推動科技應用 實踐可持續發展

Promoting the Application of Technology for Sustainable Development

### 日內万國際發明展2023囊括十二個獎項

DSD Achieves Twelve Awards at the Geneva International Exhibition of Inventions 2023

渠務署於「日內瓦國際發明展2023 | 囊 括十二個獎項, 包括七項銀獎和五項銅 獎,成績令人鼓舞。[日內瓦國際發明 展]是全球規模最大的創新展覽之一, 吸引了來自超過40個國家或地區參與, 國際專業評審團從超過1,000件參展作 品中選出優秀的創新發明。

展覽期間,本署代表與來自世界各地的 參觀者切磋交流,讓他們了解本署的新 技術以及科研成果。

The DSD made a significant impact at the Geneva International Exhibition of Inventions 2023, winning twelve awards, including seven Silver Medals and five Bronze Medals. This achievement is truly commendable. Recognised as one of the world's largest exhibitions dedicated solely to inventions, this event attracted participants from 40 countries and regions. An esteemed international panel evaluated over 1.000 inventions.

During the exhibition, representatives of the Department communicated with visitors from all over the world, allowing them to understand the DSD's new technologies and scientific research results.

### 十項銀獎

Seven Silver Medals

#### 「好醒耙|

2022年,渠務署首次在櫻桃街箱形幹渠 清淤工程中採用智能清淤機「好醒耙」 工人無需進入受潮汐影響的箱形雨水 渠,加上其簡便的設計,大大提高了工 作安全性和效率。「好醒耙 | 設計簡單, 因此可廣泛應用於不同尺寸的箱形雨水 渠, 並能有效清除淤泥。[好醒耙]連 接著安裝於沙井的滑輪系統,並以電動 鋼纜讓其在渠內移動,將淤泥推向沙井 口,以便地面的挖泥機將淤泥清除。

在[好醒耙]的協助下,工作人員無需進 入箱形雨水渠,避免了密閉空間清淤作 業的安全風險。簡單的機械操作和創新 的監控系統,減少了清淤操作和監督的 人力,大大節省成本。清淤工程可在潮 汐環境下進行,無需要截斷箱形雨水渠 內的水流, 並只需要較小的作業空間。

#### "Smart Scrapper"

In 2022, the DSD first adopted "Smart Scrapper" for the desilting works at Cherry Street Box Culvert. The use of "Smart Scrapper" does not require workers to enter into the box culvert with tidal water flow and hence significantly improve work safety and efficiency for the works. The design of smart scrapper is simple and effective. It includes a compound pulley system with winch between manholes for driving the scrapper along the box culvert, thereby pushing the silt towards the desilting manhole for subsequent removal.

With the assistance of "Smart Scrapper", workers do not need to enter the box culverts, which avoids the safety risks of desilting operation in submerged space of the box culvert. The manpower in both desilting operation and supervision could be reduced due to its simple mechanical operation and innovative monitoring system. Desilting works could be carried out in tidal environment and require relatively small working space.

### 「創先河 |: 用於箱型暗渠和河道的智能 遙控清淤機械人

The Innobros - Smart Remote-controlled Desilting Robots for Box **Culverts and River Channels** 



為了確保渠道暢誦並降低水浸風險,渠 務署近年來研發並引進多款遙控清淤機 械人,以提高清淤工作的安全性和效 率。其中,「創先河 | 系列是本署首款研 發的遙控清淤機械人。該系列目前由四 台大小不一的機械人組成, 配備閉路電 視和照明設備,方便定位淤泥及雜物。 前置式鏟斗使其能有效清除沉積在渠道 底部的各種雜物。由於機動性強,機械 人特別適合在大雨渦後進行緊急清淤和 箱型暗渠的定期清淤工作。此外,「創 先河]系列機械人能在水下作業,不受 潮汐和天氣影響,能夠全年進行清淤工 程,讓清淤工作更加靈活高效。

To ensure the clearance of drainage channels and reduce the risk of flooding, the DSD has recently introduced various types of remotecontrolled desilting robots to enhance the safety and efficiency of desilting operations. Among them, the "Innobros" series is the first type of desilting robots developed by the DSD, which comprise four robots of different sizes currently. Equipped with closed-circuit television and lighting devices, these robots can effectively locate silt and debris. Their front-mounted buckets enable them to scoop up materials from the bottom of drainage channels efficiently. Owing to their high mobility, they are particularly suitable for emergency desilting after heavy rains and regular desilting of box culverts. In addition, the "Innobros" series can operate underwater, unaffected by tides and weather, allowing for flexible and efficient desilting throughout the year.

#### 智能污泥消毒除味溶膠

一種針對污水處理設施持續性氣味控制 挑戰而研發的先進智能膠體溶液。該創 新系統結合強效消毒劑和專門的除味化 合物,能根據特定環境觸發條件(包括 溫度變化、酸鹼值變化和鹽濃度變化) 智能轉化為微凝膠結構。微凝膠的形成 確保活性物質在污泥基質中最佳分佈和 附著,提供快速初始作用和持續釋放效 果。這種雙重作用機制有效控制微生物 擴散和相關異味,而智能釋放技術則保 持長期處理效果,顯著降低再處理頻率 和整體運營成本。

#### 經濟節能膜生物反應器

一種突破性的低碳污水處理技術,通過 創新利用活性污泥工藝革新了傳統膜生 物反應器系統。該系統的獨特之處在 於形成生物層,作為固液分離的「次級 膜」,無需使用昂貴的傳統膜材料。這 種自形成的動態膜系統採用較大孔徑設 計,顯著減少膜污染和相關維護需求。 該技術在保持卓越處理效率和出水品質 的同時,實現運營成本和能耗的大幅降 低。

#### Disinfectant-Dosing LiquidGel for Odour Control in Sewage Sludge

An advanced smart colloidal solution engineered to address the persistent challenges of odour control in sewage treatment facilities. This innovative system combines powerful disinfecting agents with specialised deodorising compounds, which transform into micro-gel structures in response to specific environmental triggers including temperature fluctuations, pH variations, and changes in salt concentration. The micro-gel formation ensures optimal distribution and adherence throughout the sludge matrix, providing both rapid initial action and sustained release of active compounds. This dualaction mechanism effectively controls microbial proliferation and associated malodours, while the smart-release technology maintains treatment efficacy over extended periods, significantly reducing the frequency of reapplication and overall operational costs.

#### Economic Energy Efficient Membrane Bioreactor (3E-MBR)

A groundbreaking low-carbon sewage treatment technology that revolutionizes conventional membrane bioreactor systems through the innovative utilisation of activated sludge process. The system's unique feature lies in its biological layer formation, which functions as a "secondary membrane" for effective solid-liquid separation, eliminating the need for expensive conventional membrane materials. This self-forming dynamic membrane system incorporates larger pore sizes than traditional membranes, significantly reducing membrane fouling and associated maintenance requirements. The technology achieves substantial reductions in operational costs and energy consumption while maintaining superior treatment efficiency and effluent quality

### 低耗能電除味系統

一種創新的電污泥預處理系統,專門針對污泥處理過程中主要氣味來源一硫化氫排放。這項先進技術克服了傳統處理方法對這種高毒性和腐蝕性硫化氫的局限性,避免了昂貴的化學品添加和高能耗硫化氫處理過程。該系統運用精密的電化學原理從源頭預防氣味形成,採用緊湊模組化設計,便於安裝和維護。其無化學品操作不僅提高了安全性,還顯著降低了操作複雜度和環境影響。

#### 自動纜索驅動沉澱池斜板清潔機器人

#### Low Energy Electrical Odour Control (LEEO)

An innovative electrochemical pretreatment system specifically designed to target hydrogen sulphide emissions, which constitute the primary source of offensive odours in sewage sludge processing. This advanced technology addresses the limitations of conventional treatment methods for this highly toxic and corrosive compound, which typically involve expensive chemical dosing and energy-intensive processes. The LEEO system employs sophisticated electrochemical principles to prevent odour formation at its source, featuring a compact and modular design that facilitates easy installation and maintenance. Its chemical-free operation not only enhances safety but also significantly reduces operational complexity and environmental impact.

#### Autonomous Cable-Driven Lamellar Plate Cleaning Robot

A sophisticated automated maintenance solution designed for efficient cleaning of sedimentation settler lamellar plates in water treatment facilities. The system employs an innovative cable-suspended mechanism that enables precise navigation and cleaning operations through dual cleaning technologies: mechanical contact scrubbing and high-pressure water jet cleaning. Extensively field-tested across diverse treatment facilities, this robotic solution significantly enhances maintenance efficiency while eliminating human exposure to hazardous environments. The system's intelligent control algorithms ensure thorough cleaning coverage and consistent performance, while its robust design guarantees reliable operation under challenging conditions.

# 用於有效污水管線健康狀況監測的智能時間反演技術

Smart time-reversal technology for effective health monitoring of sewerage lines



由Mohamed S. Ghidaoui講座教授領 導的科大研究團隊透過分析實時監測數 據以評估在深水灣和竹篙灣泵喉的健康 狀況。該研究亦應用了主動瞬態檢測方 法,診斷於竹篙灣、春坎角道和春坎角 海灘的泵喉,並發現洩漏、氣穴、閥井 淹沒及水泵過度振動等問題。該研究總 結出連續瞬態測量為有效的泵喉診斷技 術。 The HKUST research team, led by Chair Prof. Mohamed S. Ghidaoui, conducted a study where real time monitoring data was analyzed to assess the health condition of the rising mains at Deep Water Bay and Penny bay. The study also included the application of active transient-based method to diagnose the rising mains at Penny Bay, Chung Hom Kok Road, and Chung Hong Kok Beach. The defects that have been identified during the study includes leakages, flooded valve chamber, excessively vibrating pumps and air pockets. The study concluded that continuous transient measurement of rising mains is effective for condition assessment.

### **万項銅獎**

Five Bronze Medals

人工智能水位預報系統

Early Rainfall Notification with Artificial Intelligence Analysis (eRAIN)



渠務署於敬業街明渠進行「活化翠屏河」 工程。工程進行期間如遇上降雨有機會 今河道水位迅速 上升, 威脅前線人員安 全。渠務署採用eRAIN人工智能系統分 析降雨預報數據,預測翠屏河水位,並 在預測到水位將會高過安全門檻時,即 時通知相關人員以預先疏散,藉以確保 前線人員工作安全。

The DSD was implementing the "Revitalisation of Tsui Ping River (TPR)" project. During construction, rainstorms could cause flash flood which threatens the safety of the frontline staff. The DSD initiated "eRAIN" to adopt a statistical approach with Artificial Intelligence to analyse forecast rainfall data quantitatively and qualitatively for predicting the water levels of TPR. When the predicted river water levels exceeded the pre-set safety threshold, immediate warnings were disseminated to the stakeholders for early evacuation, thereby ensuring the safety of the frontline staff during construction.

#### 促進施工協作之區塊鏈平台

建築工程涉及多方持份者協作,而此平 台旨在提升協作效率為目標。區塊鏈數 據作為單一真實數據來源,促進不同持 份者之間更高效的工作流程協作。基於 這些數據,平台配備儀表板和統計數 據,用於監控不同項目的績效。此區塊 鏈平台旨在提供一種更好及更安全的方 式,永久儲存施工數據和文件,並通過 尖端區塊鏈技術提升工作流程效率。此 外,中央區塊鏈平台會用於開發施工工 作流程及數字化,制定標準化系統包和 通用數據標準,並創造一個能夠監控跨 項目績效的公共平台,有效促進施工協 作和管理。

#### 「智察得」先導計劃

#### Blockchain Platform for Construction Collaboration

Construction projects involve collaboration among multiple stakeholders, and this platform addresses the challenge of improving workflow efficiency. Blockchain data, being the single source of truth, allows better workflow collaboration between different stakeholders. Based on this data, dashboards and statistics are created for performance monitoring across different projects. The purpose of this blockchain project is to propose a better more secure way to permanently store construction data and documents, hence improving workflow efficiency by using cutting-edge blockchain technology. In addition, the centralized blockchain platform is used to digitalize and develop construction workflows; establish a standard system package and common data standard for construction projects; and create a common platform to monitor cross-project performance, enabling efficient collaboration and management.

#### "Smart Sewerage Monitoring System" Pilot Scheme



「智察得」先導計劃旨在減低污水從沙井 溢出的風險。我們在選定的污水沙井安 裝智能水位感測器,實時監察沙井內的 水位。當污水渠道被阻塞導致沙井水位 上升至警戒線時,感測器便會通過窄頻 物聯網傳輸技術即時發出警示,啟動三 合一清渠車處理及排查。它除了具備高 壓水流清理管道外,同時具備吸抽功能 清除管道內的淤塞物,內置於高壓噴嘴 的鏡頭能於洗渠的同時勘測渠內情況。

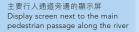
The "Smart Sewerage Monitoring System" pilot scheme aims to minimise the risk of sewage overflow from manhole. We have installed wireless sensors at selected manholes for real-time sewage level monitoring. When sewer is blocked and sewage inside the manhole rise to an alert level, the level monitoring sensor will send out alerts through the NB-IOT data transmission and trigger the operation of the three-in-one sewer clearance and investigation plant. It is equipped with high pressure water jetting nozzle for pipe clearance, suction hose for extraction of materials from manholes and sewers, as well as nozzle camera for pipe inspection.

### 智能河道防洪預警及信息顯示系統

城門河毗連沙田海及叶露港,河道水位 易受風暴潮、季候風及天文大潮影響, 河濱的單車徑和行人路或會出現水浸情 況。有見及此,渠務署設立防洪智慧系 統,在城門河四個主要行人通道旁邊安 裝了顯示屏或智能桿,及沿城門河多個 地方設置二維碼,向市民提供天氣和水 位資訊。

#### Innovative Smart Flood Warning and Information Display System for River Channels of New Towns

Shing Mun River connects to Sha Tin Hoi and Tolo Harbour. Water level of the river may be affected by storm surges, monsoons and astronomical tides. The cycle tracks and pedestrian walkway along the river may be occasionally flooded. In view of this, the DSD has set up a Smart Flood Alert System, comprising display screens and smart poles, next to the four main pedestrian passages near Shing Mun River, and set up QR codes at various places along Shing Mun River to provide weather and water level information to the public.





主要行人通道旁邊的智能桿 Smart pole next to the main pedestrian passage along the river

利用低功率廣域網路物聯網感應器及遠 距離無線攝影機作防洪監察的智慧渠務 系統

Smart Drainage System for Flood Monitoring using LPWAN IoT sensors and LoRaCam



這系統全天候運作,在颱風季節發揮 關鍵作用,持續追蹤河流、海岸和 渠道的實時水位及流量變化,有助及 早偵測水浸風險。這系統採用物聯網 (IoT)感測器,在政府物聯通(GWIN)平 台上運行,充分發揮長距離廣域網路 (LoRaWAN)技術的優勢,包括廣泛覆 蓋、低功耗、低成本、易於安裝和維修 方便等特點。

This system, which operates around the clock and plays a significant role during typhoon season, continuously tracks real-time variations in water levels and flows across rivers, shores, and channels, facilitating early detection of potential flooding risks. The system utilises Internet of Things (IoT) sensors and operates on the Government Wide IoT Network (GWIN), leveraging the advantages of Long Range Wide Area Network (LoRaWAN) technology, including wide coverage, low power consumption, low costs, easy installation and maintenance.

#### 推廣可持續發展 積極宣傳 Actively Promoting Sustainable Development

### 職安健創新及科技博覽 OSH Innovation & Technology Expo

在2024年3月7日至8日,首屆「職安健 創新及科技博覽」於香港灣仔會議展覽 中心舉行。渠務署的展覽攤位以資訊 板、短片及展品的方式,向公眾展示本 署如何利用創新科技提升渠務工作的職 安健水準,包括無線遙控清淤機械人及 原位內搪喉管復修法。本署的攤位亦展 示多款清淤機械人的模型,讓公眾瞭解 其靈活設計。此外,我們展區內播放多 段短片,向公眾介紹各創新發明。

From 7 to 8 March 2024, the first "OSH Innovation & Technology Expo" was held at the Hong Kong Convention and Exhibition Centre in Wan Chai. The DSD's exhibition booth showcased how the Department utilises innovative technology to enhance occupational safety and health standards in drainage works, including wireless remotecontrolled desilting robots and Cured-In-Place-Pipe (CIPP) methods. The booth also displayed models of various desilting robots to help the public understand their operations. In addition, short videos were played in the booth to introduce various innovative inventions to the public.



時任副署長徐仕基先生(右四), 助理署長劉勝昌先生(右五) Group photo of Mr Peter CHUI Si-kay, the then Deputy Director (fourth right), Mr Edwin LAU Shina-cheona, Assistant Director (fifth right) and DSD colleagues

### 國際環保博覽2023

### Eco Expo Asia 2023

2023年10月26至29日, 渠務署參與於 亞洲國際博覽館舉行的國際環保博覽 2023。是次博覽以「綠色躍動: 創建零 碳未來」為主題,重點展示有助全球脱 碳減排的創新科技。本署在展覽向公眾 介紹「元朗淨水設施」工程項目的特點 並安排同事現場為參觀者講解。參觀者 可透過觀看展板、短片等宣傳工具,了 解本署有關全球脱碳減排的創新科技應 用以及各項節能措施、可再生能源及綠 建設計。

From 26 to 29 October 2023, the DSD participated in the "Eco Expo Asia 2023" at the AsiaWorld-Expo. The theme of the Expo is "Taking the Leap towards Carbon Neutrality", focusing on presenting the technological innovations that will help to decarbonise the world. The Department showcased the features of the Yuen Long Effluent Polishing Plant project to the public at the exhibition, with staff onsite to provide explanations to visitors. Attenders could learn about the innovative technologies applied by the Department for global decarbonisation and emission reduction, as well as various energysaving initiatives, renewable energy technologies, and green building designs through viewing display panels, videos, and other promotional tools.



渠務署展區 The DSD's Exhibit

# 獎頂及殊榮 Awards and Honours

項殊榮,其中包括:

渠務署可持續發展報告2021-22榮獲多 The DSD Sustainability Report 2021-22 received a number of awards, including

香港ESG報告大獎(HERA) 2024 2024 Hong Kong ESG Reporting Awards (HERA)

> 最佳非上市公司 可持續發展報告獎

Best Sustainability Report for Non-listed Company

香港管理專業協會 The Hong Kong Management Association

最佳環境、社會及管治資料 披露獎(政府)

Best Environmental, Social and Governance Reporting Award (Government)

美國傳媒專業聯盟 League of American **Communications Professionals LLC** 

铂金獎

Platinum Award

首100名全球最佳報告 Top 100 of Global Annual Report

首80名亞太區最佳報告 Top 80 Reports Asia-Pacific Region

首50名最佳中文年報 Top 50 Chinese Annual Reports

技術成就獎

Technical Achievement Award

TVB《環境、社會及管治大獎》 **TVB ESG Awards 2024** 

ESG最佳表現大獎 (非上市) Best in ESG Practices (Non-listing companies)

ESG最佳報告大獎(非上市) Best in ESG Report (Non-listing companies) **Galaxy Awards** 2023

銀獎

(年報-網上可持續發展報告)

Silver Award

(Online Sustainability Reports -Annual Report)



### 2023年5月 May 2023

「元朗淨水設施 |工程項目榮獲香港工程師學會環境分部 「2022/2023年度環境論文獎 | 冠軍獎項

The Yuen Long Effluent Polishing Plant Project was awarded the Champion of 2022/2023 Environmental Paper Award of the Hong Kong Institution of Engineer, **Environmental Division** 

「元朗淨水設施 | 工程項目撰寫論文 「元 朗淨水設施一邁向高度可持續發展及達 至能源中和之旅程」榮獲香港工程師學 會環境分部「2022/2023年度環境論文 獎 | 冠軍獎項, 肯定及表揚工程項目在 環境保護、推廣可持續發展、廣泛應用 可再生能源、減少碳排放上有傑出的表

工程項目積極引入可持續發展的設計概 念,盡力減低廠房的能源消耗,積極 開拓各種可再生能源,致力實現能源中 和,以應對氣候變化。「元朗淨水設施」 是全港首間應用[好氢顆粒污泥技術|作 為生物處理的污水處理設施, 耗電量比 傳統生物處理技術低。此外,工程項 目會於建築物屋頂建造超過5,000塊太 陽能板(裝機容量超過2.5兆瓦),利用 太陽能發電供廠房使用; 在污水處理過 程中產生的污泥,亦會在厭氫過程中產 生生物氣再轉化為電能和熱能供廠房使 用, 並接收其他污水處理廠的污泥進行 厭氧消化以提升生物氣的產量,當中產 生的電力,足夠提供廠房的整體用電需 求,達至能源中和。「元朗淨水設施」亦 採用綠色建築設計,建築物採用玻璃外 牆及導光管,盡量採用自然光作照明, 減少用電, 並引入大量綠化元素, 設置 共享設施如河畔步道、觀景台和教育走 廊供公眾使用,推廣可持續發展。

The paper titled "Yuen Long Effluent Polishing Plant - A Journey Towards High Sustainability and Achieving Energy Neutrality" under "Yuen Long Effluent Polishing Plant" (YLEPP) project has been awarded the champion prize of "2022/2023 Environmental Paper Award" of the Hong Kong Institution of Engineer (HKIE). This recognition commends for the project's outstanding performance in environmental protection, promotion of sustainable development, extensive application of renewable energy and reduction of carbon emissions.

In combating climate change, the design of YLEPP had actively incorporated various sustainable features, taking multiple measures to minimise energy consumption of the treatment plants and maximise the use of renewable energy, striving towards energy neutrality. YLEPP is the first sewage treatment plant in Hong Kong to adopt the advanced technology of aerobic granular sludge (AGS) for biological treatment, thus, requiring less energy demand than traditional activated sludge biological treatment process. In addition, more than 5,000 PV panels (installed capacity of over 2.5MW) will be installed on most of the building roofs of YLEPP to generate electricity to support the daily operation. Furthermore, the biogas generated from the anaerobic digestion process of sewage sludge will be harvested and turned into electricity and heat to support the daily operation of YLEPP. Undigested sludge from other sewage treatment plants will be imported to generate additional biogas and electricity to fulfil the power consumption demand of YLEPP, achieving energy neutrality. YLEPP has also incorporated extensive greening features and provision of public co-use facilities for use by the local community, including riverside promenade, viewing deck and education corridor to promote sustainability.



### 2023年11月 November 2023

### 「環保建築大獎2023 |中榮獲四獎項

### Received Four Awards in the Green Building Awards 2023

渠務署於2023年11月3日舉行的「環保建築大獎2023」頒獎典禮獲頒四獎項,以表揚積極投入可持續發展之相關項目,透過跨越傳統界限的創新思維,為香港締造優質綠建環境,帶動社會實現美好生活。獎項名單及獲獎項目如下:

The DSD received four awards in the "Green Building Awards 2023" Presentation Ceremony held on 3 November 2023, in recognition of the building-related projects and organisations which go beyond the conventional practice, stretch the boundaries of sustainability, and accelerate Hong Kong's development into a city that provides well-being for all. Titles of the awards and the winning projects are listed as follows:

「觀塘污水泵房優化工程」榮獲新建建築(已落成項目一公用)大獎及聯合國可持續發展目標特別嘉獎 Enhancement Works for Kwun Tong Sewage Pumping Station – NEW BUILDINGS CATEGORY (Completed Projects – Institutional): Grand Award and Special Citation on United Nations Sustainable Development Goals



The DSD's project, "Enhancement Works for Kwun Tong Sewage Pumping Station", has won the "Green Building Awards 2023" NEW BUILDINGS CATEGORY (Completed Projects - Institutional) Grand Award and Special Citation on United Nations Sustainable Development Goals. This project has constructed an iconic landscaped deck (the Deck) covers the sewage facilities and underground balancing tank. The Deck has been transformed into an open space of about 11,000 square metres and was opened to the public in August 2023. To achieve sustainable design, three large skylights were installed on the Deck to allow natural daylight to enter the interior of the plant house and save electricity consumption. To enhance energy efficiency and carbon reduction, solar panels were also installed on the Deck to save about 80kwh per day, which equals to 56kg of CO2 emission. The Deck was designed to be a public-oriented environment with the integration of public social spaces and entertaining zones suitable for all ages, as well as barrier-free access and inclusive play facilities for 能力和年齡使用者的遊戲設施,亦栽種了多種本土和外來植物,以營造出四季不同的景致,與翠屏河一帶的綠化連成一條生態走廊。這突破性的項目展示了將「鄰避效應」基建設施融入社區,實現雙贏的局面。透過一地多用的設計,達到改善污水輸送系統的同時,亦為社區多提供一個寶貴的公共空間。

users with different abilities and ages. Both native and exotic species were planted on the Deck to harmonise with the neighbourhood greening and create a continuous ecological corridor along Tsui Ping River area. Species were also chosen for their seasonal aesthetic effects, suitability to the theme of the play space, and hardiness in the waterfront condition. This pioneer project demonstrated blending "Not-In-My-Backyard" (NIMBY) infrastructure into the community and thereby achieving a win-win situation. Taking the opportunity for "single site, multiple use", the project strengthened the resilience and robustness of the sewage conveyance system while providing a valuable public space for the community to enjoy.

「元朗淨水設施」榮獲新建建築(興建及/或設計中項目-公用) 優異獎
Yuen Long Effluent Polishing Plant – NEW BUILDINGS CATEGORY (Projects Under Construction and/or Design – Institutional): Merit Award



"Yuen Long Effluent Polishing Plant" has won the "Green Building Awards 2023" NEW BUILDINGS CATEGORY (Projects Under Construction and/or Design - Institutional): Merit Award. This project will incorporate various energy-saving technologies and measures, along with the utilisation of renewable energy systems such as combined heat and power units and PV panels. These initiatives aim to offset the overall power consumption of the plant and achieve energy neutrality. In consideration of the extensive wetlands surrounding the Yuen Long Effluent Polishing Plant, a unique design concept known as the "Stepping Green" scheme will be implemented. This scheme involves incorporating green planes to cover the machinery and equipment, along with integrating solar panels with concrete flat roofs to seamlessly blend the facility with the surrounding green vegetation. Furthermore, the Yuen Long Effluent Polishing Plant will feature a roof garden, bird hide, and a promenade to provide public recreational spaces. These amenities will offer opportunities for the community to engage in eco-learning through firsthand experiences.

YEAR

### 「於長沙灣污水泵房的渠務署辦公大樓」榮獲新建建築(興建及/或設計中項目-公用)優異獎

The Drainage Services Department (DSD) Office Building at Cheung Sha Wan Sewage Pumping Station – NEW BUILDINGS CATEGORY (Projects Under Construction and/or Design – Institutional): Merit Award



渠務署正於長沙灣污水泵房興建中的渠 務署辦公大樓,而新大樓的建造工程 榮獲環保建築大獎2023新建建築(興建 及/或設計中項目-公用)優異獎。大 樓的設計和建造以可持續發展和生態友 善為重點,從外牆設計以至能源管理都 融入了創新和可持續的功能。大樓採用 具散熱和防眩光功能的外牆,能有效減 低大樓的總熱傳送及對附近環境眩光影 響。大樓亦採納多項環保節能設施,包 括高效空調系統,太陽能電池板提供再 生能源及採用設有互動式能源控制的建 築管理系統以優化能源使用,從而達至 減少用電。除此之外,在設計上還融入 了自然採光、通風和室內植物等,以 改善室內空氣品質及減少污染物。大樓 還加入助於減低城市熱島效應的綠色屋 頂,以減少對附近環境的影響並使我們 的新總部更融入社區。

The DSD Office Building currently under construction at Cheung Sha Wan Sewage Pumping Station was awarded a merit in "Green Building Award 2023" NEW BUILDINGS CATEGORY (Projects Under Construction and/or Design - Institutional). The building is designed and built with a focus on sustainability and eco-friendliness, incorporating innovative and sustainable features from the facade design to energy management. The building adopts facade with heat dissipation and anti-glare functions to effectively reduce the total heat transfer into the building and the glare impact on the nearby environment. The building also adopts a number of environmentally friendly features and the use of energy-efficient features including high-efficiency air conditioning systems, renewable energy power generation by solar panels and building management system with interactive energy dashboard that optimises energy use and reduces the reliance on the grid power. In addition, the design also incorporates natural lighting, ventilation and indoor planning to improve indoor air quality and reduce pollutants. The building is also blended with green roofs to help lower the urban heat island effect which reduces the impact on the nearby environment and integrates our new headquarters into the community.

### 「建造業議會可持續建築大獎」中榮獲金獎和銀獎

Won Gold and Silver Award in the CIC Sustainable Construction Award

建造業議會舉辦名為「建造業議會可持續建築大獎」的頒獎活動,旨在表揚在推動香港「可持續發展」(即兼顧環境、社會、經濟三者的發展模式)方面卓有建樹的機構和從業員,從而宣揚「可持續建築」(即兼顧環境、社會、經濟三者的建築模式)理念。

The "CIC Sustainable Construction Award" organised by the Construction Industry Council (CIC) aims to commend contributions made among organisations and practitioners in promoting "Sustainable Development "(i.e. a development model harmonises environmental protection, social inclusion and economic growth) in Hong Kong and promote the "Sustainable Construction" (i.e. a construction model balances environmental protection, social inclusion and economic growth) concept.

#### 元朗淨水設施工程項目榮獲金獎

Yuen Long Effluent Polishing Plant (YLEPP) - Gold Award

2023年11月20日,渠務署憑著「元朗淨水設施」工程項目榮獲建造業議會頒發金獎。工程團隊竭力採取多項環保措施,減少傳統能源的消耗量之餘,還增加再生能源(例如太陽能、生物氣)的發電量,務求元朗淨水設施日後能達到「能源中和」的目標(即產電量足以抵消用電量)。

On 20 November 2023, the DSD was awarded Gold Award in the "CIC Sustainable Construction Award" for Yuen Long Effluent Polishing Plant. The project team strives to adopt a number of environmental protection measures to reduce the consumption of traditional energy and increase the power generation of renewable energy (such as solar energy and biogas), so that the Yuen Long Effluent Polishing Plant can achieve the goal of "energy neutrality" in the future (i.e. the electricity generation is enough to offset the electricity consumption).



署理渠務署署長徐仕基先生(左四)·署理渠務署副署 長蔡榮興先生(右四)及污水工程部總工程師葉達明先 生(右三)代表渠務署接受發展局常任秘書長(工務)劉 俊傑先生(右五)代表建造業議會頒發[2023年可持續 建築大獎]的金獎

Mr Peter CHUI Si-kay, the Acting Director of Drainage Services (fourth left), Mr Brian CHOI Wing-hing, the Acting Deputy Director of Drainage Services (fourth right), and Mr YIP Tat-ming, Chief Engineer/Sewerage Projects Division (third right), receiving Gold Award from "CIC Sustainable Construction Award 2023" issued by Mr Ricky LAU Chun-kit, Permanent Secretary for Development (Works) (fifth right)

### 長洲污水處理廠改善工程項目榮獲銀獎

The Upgrading of Cheung Chau Sewage Treatment Works - Silver Award



二),助理署長李偉文先生(左三 及顧問工程部總工程師黎應強先 生(左一)代表渠務署接受建造業 議會頒發「2023年可持續建築大 獎 | 的銀獎 Mr Peter CHUI Si-kay, the Acting Director of Drainage Services (second left), Mr Raymond LEE Wai-man, Assistant Director/ Sewage Services (third left) and Mr LAI Ying-keung, Chief Engineer/Consultants Management (first left), receiving Silver Award from "CIC Sustainable Construction Award 2023"

同時,本署亦憑著長洲污水處理廠改善工程項目榮獲建造業議會頒發銀獎。工程團隊除了盡量保留原有廠房設施以減少工程項目的碳排放量,還在施工時採用GGBS混凝土(即一種環保建築物料)以及在廠房安裝多項節能減排設施(例如雨水收集系統、太陽能板系統)。

總括而言,建造業議會今次向本署頒發 上述兩個獎項,足證本署在落實[可持續建築]理念方面的工作備受肯定。 In the meantime, the upgrading of Cheung Chau Sewage Treatment Works project of the DSD has also been awarded Silver Award. Apart from maintaining the existing facilities in the new design as far as practicable to minimise carbon emission, the project team also adopts GGBS concrete (i.e. an environmental-friendly construction material) during construction and proposes installing energy-saving facilities in the upgraded plant (such as rainwater collection system and solar panel system, etc.).

To conclude, the two awards received from CIC recognised the DSD's continuous effort in fulfilling the "Sustainable Construction" concept.

# 「Autodesk香港建築信息模擬設計大獎2023」中榮獲設計大獎和榮譽獎

Received both the Award Winner and Honourable Mention in the Autodesk Hong Kong BIM Awards 2023

歐特克遠東有限公司舉辦名為 「Autodesk香港建築信息模擬設計大獎 2023」的獎項活動,旨在鼓勵和表彰在 AEC行業(Architecture, Engineering, and Construction Industry)中以BIM技 術為基礎進行創新和卓越工作的個人和 團隊。 Autodesk Far East Limited organised an award programme called "Autodesk Hong Kong BIM Awards 2023" to encourage and recognise individuals and teams in the AEC (Architecture, Engineering, and Construction) industry who have demonstrated innovation and excellence in their work based on BIM technology.

#### 「秀雅道蓄洪計劃|榮獲設計大獎

Sau Nga Road Stormwater Storage Scheme - Award Winner

渠務署轄下的「秀雅道蓄洪計劃」項目,獲Autodesk頒發香港建築信息模擬設計大獎2023。該項目應用了「建築信息模擬」技術,模擬建築流程、施工方案及工程項目維護,以進一步提升工程質量,加強工地運作及縮短現場施工需要的時間,從而提升安全及減低施工風險。此外,渠務署透過「建築信息模擬」技術建立虛擬系統,促進市民與渠務KOL「下水水」的互動,從而收集市民實責建議。

The DSD's project, "Sau Nga Road Stormwater Storage Scheme", has won the Award Winner in the "Autodesk Hong Kong BIM Awards 2023". With the aim of further improving the quality of work, the project adopted Building Information Modelling (BIM) in 4D master programme stimulation, method statement stimulation, and maintenance stimulation for the construction of stormwater storage scheme. Through the implementation of BIM, the logistic aspects of the project were strengthened, and the on-site construction duration was shortened, resulting in improved safety and reduced construction risks. Additionally, the DSD's pioneering efforts in BIM-based interactive virtual reality public engagement was exemplified by the recreation of "Drainy", the DSD's key opinion leader (KOL), as the avatar, facilitating meaningful audience engagement and valuable feedback collection.



#### 「元朗淨水設施」工程項目榮獲設計榮譽獎

Yuen Long Effluent Polishing Plant - Honourable Mention

同時,本署亦憑著「元朗淨水設施」工程項目獲得Autodesk頒發的香港建築信息模擬設計榮譽獎。透過「建築信息模擬」技術,加強了各持份者之間的合作與溝通,全面提升工地的監察、管理和安全質量。設計師、工程師、施工團隊以及渠務署等各方能夠在同一個「建築信息模擬」模型上協同作業,提高了溝通效率,減少了信息傳遞中的錯誤和誤解。這種協作方式為項目的成功協調和合作奠定了堅實基礎。

Meanwhile, the "Yuen Long Effluent Polishing Plant" has received the Honourable Mention at the "Autodesk Hong Kong BIM Awards 2023". The utilisation of BIM technology has enhanced collaboration and communication among stakeholders in the project, leading to improved site supervision, management, and safety. Designers, engineers, construction teams, and the project team of the DSD can collaborate on the same BIM model, resulting in more efficient communication and reduced errors and misunderstandings. This collaborative approach has established a solid foundation for successful coordination and cooperation throughout the project.



獲此獎項,證明部門多年來於建築信息模擬上的應用以及工程項目團隊的努力,獲得業界的肯定及認同。渠務署會繼續致力運用「建築信息模擬」技術,以推動行業邁向更高效和可持續發展。

The awards recognised the project team's efforts and the DSD's long-term commitment to BIM applications on projects. Carrying on the endeavour in BIM application, the DSD will continue to drive the industry's transformation and help shape the industry towards a more efficient and sustainable era.

### 「香港綠色企業大獎2023」榮獲十三獎項

### Received 13 Awards in the Hong Kong Green Awards 2023

渠務署於2023年11月30日舉行的「香港 綠色企業大獎2023」頒獎典禮獲頒十三 獎項,以肯定部門在持份者參與、環 境、健康及安全管理,及綠色管理的 持續優秀表現。獎項名單及獲獎項目如 下. The DSD received 13 awards in the "Hong Kong Green Awards 2023" presentation ceremony held on 30 November 2023 in recognition of the continued outstanding performance achieved in stakeholder engagement, environmental, health and safety management, and green management. Titles of the awards and the winning projects are listed as follows:

#### 大獎

#### Grand Award

#### 創新倡議獎(大型企業)-持份者參與

Innovation Initiative Award (Large Corporation) - Stakeholder Engagement

活化佐敦谷明渠

Revitalisation Works of Jordan Valley Nullah

#### 金獎

#### Gold Award

#### 超卓環保安全健康獎(大型企業)

Environmental, Health and Safety Award (Large Corporation)

2. 活化翠屏河

Revitalisation of Tsui Ping River

#### 銀獎

3.

#### Silver Award

#### 優越環保管理獎(項目管理)(大型企業)

Green Management Award - Project Management (Large Corporation)

- 石湖墟淨水設施-主體工程第一階段-污水處理設施的土木工程
- Shek Wu Hui Effluent Polishing Plant Main Works Stage 1 Civil Works for Sewage Treatment Facilities
- 石湖墟淨水設施-主體工程第一階段-污泥處理設施及132kV主變電站的土木工程
- 4. Shek Wu Hui Effluent Polishing Plant Main Works Stage 1 Civil Works for Sludge Treatment Facilities and 132kV Primary Substation
  - 職石灣污水處理廠 、相關海底排放管及貝澳污水收集系統建造工程
- Construction of San Shek Wan Sewage Treatment Works, Associated Submarine Outfall and Pui O Sewerage Works

#### 銅獎

#### Bronze Award

#### 超卓環保安全健康獎(大型企業)

Environmental, Health and Safety Award (Large Corporation)

離島污水收集系統第2階段-長洲污水處理及排放改善工程

6. Outlying Islands Sewerage Stage 2 – Upgrading of Cheung Chau Sewage Treatment and Disposal Facilities



础石灣污水處理廠、相關海底排放管及貝澳污水收集系統建造工程 7. Construction of San Shek Wan Sewage Treatment Works, Associated Submarine Outfall and Pui O Sewerage Works

#### 優越環保管理獎(項目管理)(大型企業)

Green Management Award - Project Management (Large Corporation)

- 尖沙咀雨水排放系統改善工程 8. Drainage Improvement Works in Tsim Sha Tsui
- 屯門污水幹渠修復工程 9. Rehabilitation of Trunk Sewers in Tuen Mun

### 優異獎

Merit Award

#### 優越環保管理獎(項目管理)(大型企業)

Green Management Award - Project Management (Large Corporation)

-	10.	北區雨水排放系統改善工程-第一階段 Drainage Improvement Works at North District – Phase 1
	11.	秀雅道蓄洪計劃 Sau Nga Road Stormwater Storage Scheme
	12.	活化佐敦谷明渠 Revitalisation Works of Jordan Valley Nullah
	13.	離島污水收集系統第2階段一長洲污水處理及排放改善工程 Outlying Islands Sewerage Stage 2 – Upgrading of Cheung Chau Sewage Treatment and Disposal Facilities



署理渠務署署長徐仕基先生(右一)及署理 渠務署副署長蔡榮興先生(左一)就「活化 佐敦谷明渠」獲頒「創新倡議獎(大型企業) - 持份者參與]大獎 Mr Peter CHUI Si-kay, the Acting Director of Drainage Services (first right) and Mr Brian CHOI Wing-hing, the Acting Deputy Director of Drainage Services (first left) received the "Innovation Initiative Award (Large Corporation) -Stakeholder Engagement" presented to the "Revitalisation Works of Jordan

Valley Nullah"

### 2023年12月

December 2023

### 2023-24年度檢測認證人力發展嘉許計劃(金獎)

Testing and Certification Manpower Development Corporate Award (Gold) 2023-24

由創新科技署全力支持、香港檢測和認 證局主辦的[2023-24年度檢測認證人力 發展嘉許計劃」於2023年12月4日舉行頒 獎典禮, 渠務署化驗室服務分部沙田中 央化驗室及污水處理服務科行動組實驗 室榮獲「2023-24年度檢測認證人力發展 機構獎(金獎)|。

香港檢測和認證局自2021年起,每兩 年一屆舉辦「檢測認證人力發展嘉許計 劃 | , 鼓勵檢測認證機構投入人才培 訓, 並表揚努力不懈、持續進修, 致力 提升服務水平的從業員。本署連續兩屆 均獲得獎項,成績令人鼓舞。

Organised by the Hong Kong Council for Testing and Certification (HKCTC) with full support from the Innovation and Technology Commission, the award ceremony of the "Testing and Certification Manpower Development Award Scheme 2023-24" was held on 4 December 2023. Sha Tin Central Laboratory in the Laboratory Services Sub-division and Operation Section Laboratory in Sewage Services Branch of the DSD won the "Testing and Certification Manpower Development Corporate Award (Gold Award)".

HKCTC has launched the biennial "Testing and Certification Manpower Development Award Scheme" since 2021, with a view to encouraging testing and certification (T&C) bodies to invest in talent training and development, while commending those T&C practitioners who strive for continuous learning and contribute to service quality improvement. The DSD yields encouraging results by being awarded for the second consecutive time.



YEAR

### 2024年3月 March 2023

### 榮獲「2023年度華夏建設科學技術獎(一等獎)」

China Award for Science and Technology in Construction 2023 (First Prize)

渠務署非常榮幸與中山大學、香港科技大學以及其他合作夥伴共同榮獲「2023年度華夏建設科學技術獎」,該獎項由中國住房和城鄉建設部頒發。渠務署與中山大學的江峰教授合作,共同開發了污水中硫化物生成的預測和控制技術。這些技術已成功應用於香港,包括淨化海港計劃的深層污水隧道,在識別硫化氫的來源和因素方面發揮了重要作用。此次榮譽是對我們創新工作的認可,我的們將不斷努力,為公眾提供更高品質的污水處理服務。

We are delighted that the DSD, together with Sun Yat-sen University, the Hong Kong University of Science and Technology (HKUST), and other esteemed partners, has been honoured with the First Prize in the "China Award for Science and Technology in Construction 2023", presented by The Ministry of Housing and Urban-Rural Development of China. The DSD has collaborated with Professor Feng Jiang from Sun Yat-sen University to develop technologies for predicting and controlling sulfide generation in sewerage systems. These cuttingedge technologies have been successfully implemented in Hong Kong, including their application in the deep sewage tunnels of the Harbour Area Treatment Scheme, effectively identifying the sources and factors contributing to hydrogen sulfide generation. This prestigious recognition reflects the innovative efforts of our collaboration. We remain committed to our continuous endeavours to provide the public with superior-quality sewage treatment services.



獲獎團隊合照·渠務署代表劉達光博士 (中)和蔡敏儀女士(左二)與中山大學江 峰教授(右二)·香港科技大學陳光浩教授 (左一)·華南節範大學孫建良博士(右一) Group photo of Winning Team, the DSD's representatives Dr Frankie LAU Tat-kwong (Middle) and Ms Doris CHOY Man-yee (second left), Prof JIANG Feng from Sun Yat-sen University (second right), Prof CHEN Guanghao from HKUST (first left) and Dr SUN Jianliang from South China Normal University (first right)

### 「香港工程師學會大獎2024」的全會員組發明類優異證書

"The HKIE Grand Award 2024" Invention Merit (All Member Group)

渠務署研發的「好好夾」(GenAl Object Oriented Debris Grab – GOOD Grab)智慧型河道清理系統,成功將生成式人工智能技術應用於下水道管理,有效解決了傳統自動抓取設備無法分辨垃圾與生物的局限。

這套創新系統採用視覺語言模型,使機械臂能準確識別及清理垃圾,同時避免誤傷生物,大大提升了河道清理的安全性和效能。「好好夾」於2023年4月在新界東北香園圍的缸窰河投入服務,並在2023年9月的超強黑雨及連串颱風期間,展現出優秀的抗逆力,成功防止河道堵塞及水浸。

「好好夾」的卓越表現獲得業界認可,榮 獲「香港工程師學會大獎2024」的全會員 組發明類優異證書。這項技術突破為香 港的河道管理開創新里程,展現了智能 科技在環境保護方面的重要應用。 The GenAl Object Oriented Debris (GOOD) Grab intelligent river cleaning system developed by the DSD successfully applies generative artificial intelligence technology to sewer management, effectively addressing the limitations of traditional automatic grabbing equipment that cannot distinguish between debris and living organisms.

This innovative system utilises a visual language model, enabling the robotic arm to accurately identify and remove debris while avoiding harm to aquatic life, significantly enhancing the safety and effectiveness of river cleaning operations. GOOD Grab was put into service in April 2023 at the Kong Yiu Channel in the North East New Territories, and it demonstrated remarkable resilience during the extreme rainstorms and a series of typhoons in September 2023, successfully preventing river blockages and flooding.

The outstanding performance of GOOD Grab has garnered industry recognition, receiving the Invention Merit (All Member Group) at "The HKIE Grand Awards 2024". This technological breakthrough marks a new milestone in river management in Hong Kong, showcasing the important application of smart technology in environmental protection.



渠務署署長莫永昌先生(右五)與 渠務署得獎者及工程團隊與香港 工程師學會會長合照 Group photo of Mr Ringo MOK Wing-cheong, the Director of Drainage Services (fifth right), the awarded team and the President of the Hong Kong Institution of Engineers (HKIE)

# 研究及發展 Research and Development

### 「渠務署研究與發展論壇2023 | 圓滿結束

Drainage Services Department Research and Development Forum (DSD R&D Forum) 2023 successfully concluded

「渠務署研究及發展論壇2023」於2023年 11月14日在香港會議展覽中心舉行。本 年度的主題為[渠務新思維:探索雨水 及污水管理新智慧 |。

今年論壇現場參與人數錄得破紀錄的 600多人,座無虛席。線上論壇成功吸 引了內地及國外參與者,與會者包括政 府人員、學術界和業界的朋友及其他相 關持份者。

論壇的開幕由中央人民政府駐香港特別 行政區聯絡辦公室教育科技部副部長葉 水球先生、發展局常任秘書長(工務) 劉俊傑先生、環境及生態局常任秘書長 (環境)謝小華女十、署理渠務署署長徐 什基先生及署理渠務署副署長蔡榮興先 生主持。

署理渠務署署長徐仕基先生致歡迎辭時 表示, 冀盼诱猧舉辦狺論增能推動政府 部門、學術界和業界同心協力研究與發 展,加強香港可持續的雨水排放和污水 處理服務。

在上午的論壇,香港科技大學勞敏慈教 授、香港城市大學袁志國教授和香港大 學李曉岩教授分享了污水處理技術的新 發展與研究。香港理工大學容啟亮教 授,香港理工大學 都 育明博十和香港科 技大學招捷達教授分享了智能檢查與監 控協助維修保養的新技術。

"DSD R&D Forum 2023" was held on 14 November 2023 at the Hong Kong Convention and Exhibition Centre (HKCEC). This year's theme was "Thinking Outside the Pipes: Exploring Alternative Approaches to Stormwater and Wastewater Management".

This year's forum experienced an exceptional turnout, with over 600 attendees filling the venue to capacity. Additionally, the forum garnered the online participation of Mainland and international attendees through webinar. Participants encompassed government officials, esteemed members of academia and industry, as well as other relevant stakeholders.

The opening of the forum was officiated by Mr YE Shuigiu, the Deputy Director-General of the Department of Educational, Scientific and Technological Affairs of the Liaison Office of the Central People's Government in the Hong Kong Special Administrative Region (LOCPG), Mr Ricky LAU, the Permanent Secretary for Development (Works), Miss Janice TSE, the Permanent Secretary for Environment and Ecology (Environment), Mr Peter CHUI Si-kay, Acting Director of Drainage Services and Mr Brian CHOI Wing-hing, Acting Deputy Director of Drainage Services.

In his welcome speech, Mr Peter CHUI Si-kay expressed his vision for the forum to serve as a platform for collaboration among government departments, academia, and the industry, driving advancements in research and development for enhanced stormwater and wastewater management.

During the morning session, esteemed speakers including Prof Irene LO, JP of HKUST, Prof YUAN Zhiquo of The City University of Hong Kong (CityU), and Prof LI Xiaoyan of The University of Hong Kong (HKU) shared insights on novel technologies in wastewater management. Additionally, Prof YUNG Kai-leung, BBS and Dr TANG Yuk-ming of The Hong Kong Polytechnic University (PolyU), and Prof Mohamed Salah GHIDAOUI of HKUST presented on intelligent inspection and monitoring systems.

在下午的論壇,香港科技大學曾超華 教授分享了雨水牛物滯留系统的先導研 究。香港中文大學劉雲輝教授和香港大 學羅平副教授分享了人工智慧技術的應 用與發展。香港大學焦赳赳教授分享了 地下水人工補注的潛在應用。香港生產 力促進局伍凱先生分享了可持續污水處 理的最佳實踐。

渠務署會繼續與各持份者交流意見、研 究和發展各種創新的智能科技,試驗和 應用先進的技術,以促進香港的可持續 發展。

In the afternoon session, Prof TSANG Dan of HKUST discussed a pilot study on bioretention systems for stormwater harvesting, while Prof LIU Yunhui of The Chinese University of Hong Kong (CUHK) and Dr LOU Ping of HKU shared advancements in AI technologies for inspection and their innovative vision for AI in the sewage treatment industry. Prof Jimmy JIAO of HKU addressed the potential applications of Managed Aguifer Recharge, and Mr WU Kai of Hong Kong Productivity Council (HKPC) provided insights into various eco-friendly practices for wastewater management.

The DSD remains committed to fostering continuous engagement with diverse stakeholders, conducting research and development in various smart technologies, and implementing rigorous testing and application of advanced solutions. These efforts are aimed at advancing the sustainable development of Hong Kong.



中聯辦教育科技部副部長葉水球先生(前排左八)、發展局常任秘書長(工務)劉俊傑先生(前排左七)、環境及生態局常 任秘書長(環境)謝小華女士(前排右七)、署理渠務署署長徐仕基先生(前排右六)、環境保護署署長徐浩光博士(前排左 五)、署理渠務署副署長蔡榮興先生(前排左六)與一眾主禮嘉賓和講者合照

Group photo of Mr YE Shuigiu (front row, eighth left), the Deputy Director-General of the Department of Educational, Scientific and Technological Affairs of the Liaison Office of the Central People's Government in the Hong Kong Special Administrative Region (LOCPG); Mr Ricky LAU (front row, seventh left), the Permanent Secretary for Development (Works); Miss Janice TSE (front row, seventh right), the Permanent Secretary for Environment and Ecology (Environment); Mr Peter CHUI Si-kay (front row, sixth right), Acting Director of Drainage Services; Dr Samuel CHUI (front row, fifth left), Director of Environmental Protection; Mr Brian CHOI Wing-hing (front row, sixth left), Acting Deputy Director of Drainage Services and other officiating guests and speakers



# 管治架構

### Governance Structure

### 管理團隊

渠務署高級管理層負責制定和評估可持 續發展策略及目標, 並作出重大決策和 監督部門日常運作,確保服務符合對可 持續發展的承諾。

#### Senior Management

The Department's senior management team plays a pivotal role in shaping and assessing our sustainability strategies and targets. Their responsibilities extend beyond decision-making as they oversee the daily operations of the Department, ensuring that our initiatives align with our commitment to sustainability.



#### 黎瑋筠女士

Assistant Director/ Electrical and Mechanical

助理署長/設計拓展

渠務署副署長

莫永昌先生 Mr Ringo MOK Wing-cheong Ms Sylvia LAO Kam-fung Mr

主任秘書

劉錦鳳女士 李偉文先生 助理署長/污水處理服務

劉勝昌先生 Mr Edwin LAU Shing-cheong 助理署長/操作維修 Assistant Director/ Operations and Maintenance

最後更新日期:2024年11月

### 組織架構

### Organisational Structure

渠務署設有四個分科,包括設計拓展 科、操作維修科、機電工程科及污水處 理服務科,下設18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,以及技術支援組,分別負 責行政、會計及技術支援工作。截至 2024年3月31日,編製共有2.052個常額 職位。

The Department consists of four branches, including Projects and Development Branch, Operations and Maintenance Branch, Electrical and Mechanical Branch, and Sewage Services Branch. Under these branches, there are 18 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 31 March 2024, we have a permanent staff establishment of 2,052.



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

污水工程部

排水工程部 Drainage Projects Division

工程管理部 Project Management Divisio

岩洞工程部 Cavern Projects Division



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

操作維修科 Operations and Maintenance Branch

香港及離鳥渠務部 Hong Kong and Islands Division

九龍及新界南渠務部 Mainland South Divisio

新界北渠務部

土地排水部 Land Drainage Division

策劃及復修部

Planning & Rehabilitation Division 廠房及土木維修部 Building and Civil Maintenance Division



助理署長/機電工程 Electrical and Mechanica

機電工程科

污水處理部 1

污水處理部 2

機電工程部 Electrical and Mechanical Projects Divisio

> 岩洞工程(機電組) Cavern Projects (E&M) Team

> > 特別職務部 Special Duty Division



助理署長 / 污水處理服務

污水處理服務科 Sewage Services Branch

淨化海港計劃部 Harbour Area Treatment Scheme Division

> 系統管理部 System Management Division

顧問工程管理部

Consultants Management Division



Departmental Administration Division

機密檔案室 Confidential Registry

> 翻譯組 Translation

員工關係及福利組 General Registry -Staff Relations and Welfare

總務室

招聘及編制事務室 Appointment and Establishment Registry

General Registry 總務部 -

> 人事事務室 Personnel Registre

(3) 

財務及物料供應部 Finance and Supplies Section

> 部門會計組 Departmental

物料供應組 Supplies Unit



合約顧問組 Contract Advisory Unit 環境保護組

總部組

Headquarters Unit

資訊科技管理組

Information Technology

Management Unit

Environmental Unit

Quality Assurance 安全顧問組 Safety Advisory Unit

> 技術秘書 1 Technical Secretary

Landscape Unit

品質管理

公共關係組 Public Relations Unit 訓練組

Training Unit 建築資訊模型 支援組

Building Information Modelling Support Team

四位助理署長各領導一個分科,以提供 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 Assistant Directors leads a branch to provide 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

負責執行基本工程項目,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。

Responsible for implementing capital works projects, including the design and construction of drains, flood control and relief works, sewerage network and sewage treatment facilities.



操作維修科 Operation and Maintenance Branch

負責操作、維修及規劃全港的雨水排放及污水收集系統、執行《土地排水條例》, 以及管理人工排水道。

Responsible for operating, maintaining, and planning drainage and sewerage systems across the territory, enforcing the Land Drainage Ordinance and managing engineered drainage channels.



負責污水處理及防洪設施的運作、保養維修、研究和發展, 以及為部門的污水處理及防洪項目提供機電設施的設計和安裝工程。

Responsible for the operation, maintenance and research and development of sewage treatment and flood prevention facilities, as well as providing electrical and mechanical design and installation works in sewage treatment and flood protection projects of the Department.



負責推展鄉村公共污水收集系統、雨水排放改善工程、污水處理及收集系統和工程、 如淨化海港計劃,以及徵收污水處理服務費。

Responsible for facilitating village public sewerage, stormwater system enhancement projects and sewage treatment and collection systems and projects, such as the Harbour Area Treatment Scheme (HATS), and collecting sewage services charges.

# 可持續發展管理 Sustainability Management

渠務署擁有全面的可持續發展管理架 們在高級管理層的領導下積極探討相關 議題,監督工作並提出建議。本署採用 合滴的國際標準和管理系統, 並诱禍多 個渠道與持份者溝通,以持續改善管理 模式和提升可持續發展表現。

The DSD's integrated sustainability management structure ensures we holistically address a diverse array of sustainability aspects. Under the leadership and guidance of our senior management team, we proactively review and oversee key sustainability initiatives and provide appropriate recommendations where necessary. Dedicated to enhancing management practices and achieving sustainability excellence, the Department adopts suitable international standards and management systems and fosters open communication with our stakeholders through establishing multiple communication channels.

### 管理架構

Management Structure

本署設立三個專責委員會及兩個工作小 組,包括:

The Department has established three committees and two working groups, including:



環保管理委員會 Green Management Committee

由副署長領導,負責檢討環境管理政 策、制定環保工作的方針和目標 監察環保計劃和措施的成效。委員會協 助達成目標,並定期向高級管理層匯報 進度。

報告期內,委員會共召開兩次會議,以 深入討論節能、減排、減廢及綠化等議 題,並檢視環保工作的進度。

Led 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 measures. The Committee assists in target achieving and reports regularly to the senior management.

During the reporting period, the Committee held two meetings to have in-depth discussions on topics including energy conservation, emission reduction, waste reduction and greening, as well as to review the progress of environmental initiatives.



### 安全督導委員會

### Safety Steering Group

由副署長領導,負責監察和提升本署作 業的職業安全與健康。為預防與工作相 關的意外,委員會訂立安全標準及指 引、制定改善程序及措施, 並檢視其執 行情況和成效。

報告期內,委員會共召開兩次會議, 檢討本署轄下建築工地及員工的安全表 現,以及實施多項改善措施,致力推廣 職業安全與健康。

Led by the Deputy Director, the Group is responsible for overseeing and promoting occupational safety and health within the Department. To prevent work-related accidents, the Group sets safety standards and guidelines, formulates improvement procedures and measures, and reviews their implementation and effectiveness.

During the reporting period, the Group held two meetings to review the safety performance of the Department's construction sites and employees, and to implement various enhancement measures, striving to promote occupational safety and health.



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

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

報告期內,委員會共召開五次會議。本 署合共完成九個多元化的研究項目,議 題涵蓋用於污水處理設施的混凝土防腐 蝕塗層、污水幹渠修復效能研究、使用 人工智能作管道狀況視頻分析、生物污 水處理廠微生物群落數據庫、原污水及 **處理後的污水和雨水排放中的微塑料研** 究以及超聲波污泥預處理設施等。

Led by the Deputy Director, the Committee is responsible for conducting research to support development plans of the DSD. The Committee consists of two teams, which coordinate research projects in civil engineering and electrical and mechanical engineering respectively.

During the reporting period, the Committee held five meetings. The Department completed a total of nine research projects on diversified topics, covering Concrete Corrosion Protective Coatings for Sewage Treatment Facilities, Study on Rehabilitated Trunk Sewer Performance, Video Analytics of Pipeline Conditions using Artificial Intelligence, Database on the Microbial Community in Biological Sewage Treatment Works, Study of Microplastics in Raw Sewage, Treated Effluent and Stormwater Discharge, and Ultrasonic Sludge Pre-treatment Facilities,



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

由副署長領導,工作小組就編製該年度 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準 則、訂定持份者參與活動計劃及確認實 質性議題等。

Led by the Deputy Director, the Taskforce provides comments and makes decisions related to the preparation of our annual sustainability report, including selecting the international standards to be adopted for reporting, defining stakeholder engagement plans, and identifying material topics.



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

由助理署長/機電工程領導,小組成員 诱過識別排放源頭、訂立基準評估表現 實施改善措施及分享專業知識等方法。 以改善本署在能源及排放方面的表現。

報告期內,小組共召開兩次會議,討論 節能措施及目標、可再生能源應用等議 題。

Led by the Assistant Director/Electrical and Mechanical, members of the Team identify emission sources, benchmark performance, implement improvement measures and exchange professional knowledge to help improve the Department's energy and emission performance.

During the reporting period, the Team held two meetings to discuss various topics, including energy saving measures and targets, and the application of renewable energy.

### 綜合管理體系

自2002年起,渠務署逐步建立和實施 符合國際標準的綜合管理體系, 涵蓋 品質、環境和職業健康與安全等多個 節疇。本署一百貫徹「策劃-執行-檢 杳一行動 | 的核心管理原則, 並持續強 化體系。

現時,本署已在轄下所有設施實施 ISO 9001:2015品質管理體系、ISO 14001:2015環境管理體系,以及ISO 45001:2018 職業健康與安全管理體 系。本署通過採用這些管理體系鞏固服 務承諾,提升服務品質,更盡可能對環 境的影響減至最低,保障員工的健康與 安全。

本署對可持續發展孜孜以求,把實踐延 伸至資產管理,以降低營運成本,同 時維持效率。2019年,本署轄下的污 水處理廠、污水泵房和雨水泵房已通過 ISO 55001資產管理體系認證審核,成 為首批獲得該認證的政府部門之一。截 至2024年3月,除九所由[設計、建造 及營運 | 合約營運或正進行提升工程的 污水處理廠和污水泵房外,本署轄下所 有污水處理廠、污水泵房和雨水泵房已. 納入ISO 55001資產管理體系。

本署將繼續努力不懈, 積極應對各種 挑戰,推動可持續發展,為香港市民 提供優質的污水處理及雨水排放服務 為社會創造更可持續發展和更具適應力 的未來。

#### Integrated Management System

Since 2002, the Department has been dedicated to developing and consolidating an integrated management system in line with international standards that addresses key aspects of quality. environment, and occupational health and safety. At the heart of our approach lies the "Plan-Do-Check-Act" management principle, which we have steadfastly followed to continuously enhance our systems.

Currently, we have implemented three comprehensive management systems across all facilities of the DSD. These include the ISO 9001:2015 Quality Management System, the ISO 14001:2015 Environmental Management System, and the ISO 45001:2018 Occupational Health and Safety Management System. By adopting these management systems, we have strengthened our commitment to not only improving service quality but also minimising our environmental impact and safeguarding the health and safety of our employees.

Our dedication to sustainability extends to our asset management practices, where we strive to reduce operational costs while maintaining efficiency. In 2019, all DSD-owned sewage treatment works (STWs), sewage pumping stations (SPSs), and stormwater pumping stations successfully passed the certification audit for the ISO 55001 Asset Management System, positioning us among the first government departments to achieve this accreditation. As at March 2024, all DSD-owned sewage treatment works, sewage pumping stations and stormwater pumping stations have been integrated into the ISO 55001 Asset Management System, except for nine STWs and SPSs currently operating under "Design, Build and Operate" contracts or undergoing upgrades.

Looking ahead, we remain committed to addressing various challenges and promoting sustainable development, all while providing highquality sewage treatment and stormwater drainage services to the citizens of Hong Kong. Through our ongoing efforts, we aim to create a more sustainable and resilient future for our community.



責

# 2023-24年度防洪概要

### Overview of Flood Prevention in 2023-24

為應對暴雨、風暴潮等極端天氣情況所帶來的水浸挑戰,渠務署致力提升香港的雨水排放系統的排洪能力。香港於2023年錄得總降雨量約2,774毫米,較1991至2020年約2,431毫米的正常降雨量多約14%。於報告期間,香港天文台共發出2次黑色暴雨警告、5次紅色暴雨警告及23次黃色暴雨警告。

Standing up to the challenges from flooding brought by extreme weather conditions, such as rainstorms and storm surges, the DSD is devoted to strengthening the stormwater drainage capacity of Hong Kong. In 2023, the annual total rainfall was approximately 2,774 millimetres, about 14 percent above the normal value of 2,431 millimetres recorded between 1991 and 2020. During the reporting period, there were 2 Black Rainstorm Warnings, 5 Red Rainstorm Warnings and 23 Amber Rainstorm Warnings issued by the Hong Kong Observatory (HKO).

### 2023年4月至2024年3月天氣概況

Weather Overview from April 2023 to March 2024



渠務署參照過往經驗,不斷強化應對極端天氣的能力。於雨季或颱風前,本署加強預防措施,巡查和清理主要排水道及進水口,以確保沒有障礙物阻塞渠道而導致水浸發生。對於一些易受海水倒灌影響而出現水浸的沿岸低窪地區(包括大澳及鯉魚門等),本署聯合其他政府部門實施預防措施,包括安裝可拆卸式擋水板和止回閥等,預防潮水位上升所帶來的危害。

因此,政府亦已於沿岸低窪地區設立風 暴潮預警系統,當天文台發出風暴潮預 警,本署會立即採取相應預防措施,減 緩因潮水位上升而帶來的水浸影響。 Building on its past experiences, the DSD has continuously scaled up its resilience against extreme weather. In preparation for heavy rain and typhoons, the DSD has stepped up precautionary measures through conducting inspections and clearing major drainage channels and inlets to ensure no blockage. For low-lying coastal areas including Tai O and Lei Yue Mun, which are vulnerable to flooding due to tidal backflow, the Department collaborates with other government departments to implement prevention measures. These measures include the installation of demountable flood barriers and non-return flap valves to protect against high tide level.

Therefore, the Government has developed storm surge alert, which is an early warning system for low-lying coastal areas. Once storm surge alerts are issued by the Hong Kong Observatory, the DSD will activate prevention measures promptly to mitigate the impact of flooding caused by high tide level.

為有效應對緊急事故及水浸情況,本署已設立「緊急事故及暴風雨應變組織」24小時無間斷運作。在暴雨期間或八號烈風或暴風信號生效前,「緊急事故控制中心」便會啟動,負責發布有關水浸的信息,並與其他政府部門的緊急應變單位進行協調,安排應變小隊處理水浸個案及前往易受水浸影響的位置檢查渠道及進行疏通工作,以減低暴雨和颱風所帶來的水浸影響。

面對越趨頻繁的極端天氣情況,提升防 洪能力為本署的首要工作。為此,本署 已參考了國際標準來制定防洪標準,並 按已制訂的標準來檢視各區的雨水排放 整體計劃,設計及建造雨水排放系統, 確保雨水排放系統能配合最新發展、土 地規劃及氣候變化等因素,致力提升本 港防洪工作的水平。 To effectively tackle emergencies and flooding incidents, the DSD has set up the Emergency and Storm Damage Organisation (ESDO), operating 24 hours daily. During heavy rainstorms or prior to the issue of the Tropical Cyclone Warning Signal No. 8, the Emergency Control Centre(ECC) is activated, which is responsible for disseminating relevant information and coordinating with emergency organisations of other government departments. Response teams are deployed to address flooding incidents and to inspect and clear drains in areas prone to flooding, reducing the impact of heavy rain and typhoons.

Enhancing our flood prevention capacity is essential in the face of more frequent extreme weather events. To achieve this, the DSD has established flood protection standards with reference to international standards. We review the Drainage Master Plans (DMP) of different districts according to established standards, and design and construct stormwater drainage systems to ensure that the systems are adapting to the latest developments in land planning and addressing the challenges posed by climate change, striving to enhance the level of flood prevention work in Hong Kong.



緊急事故控制中心 Emergency Control Centre

緊急應變隊伍車隊 A convoy of Emergency Response Team

### 香港整體防洪策略

### Overall Flood Prevention Strategy of Hong Kong

城市化令地面徑流增加及洪泛平原減少,加上極端天氣情況越趨頻繁,導致低窪或沿海地區的水浸風險不斷增加。本署因應不同地區的情況制訂「防洪三招」,以應付不同地區的水浸問題。措施包括截流、蓄洪、疏浚,可有效減低因暴雨帶來的水浸風險。

Urbanisation has led to increased surface runoff and a decrease in flood plains. Coupled with the increasingly frequent extreme weather events, this poses an increasing risk of flooding in low-lying and coastal areas. To address these challenges, we have developed "three-pronged flood prevention strategy" to tackle flooding threats in various locations, taking into account the specific conditions of different districts. This strategy includes stormwater interception, flood storage, and drainage improvements, effectively mitigating the risk of flooding arising from torrential rain.

### 防洪三招



#### 截流

- 建造雨水排放隧道,以截取上游雨水地面徑流,直接排出大海或下游河道
- 可避免在下游地區進行大規模排水 改善工程,對交通及公眾的影響減 到最低
- 四條雨水排放隧道分別位於啟德、 港島西、荔枝角及荃灣,總長約21 公里

#### 蓄洪

- 設置蓄洪池,收集及暫存暴雨期間的雨水,以減輕暴雨對下游地區雨水排放系統造成的壓力及舒緩相關的水浸風險
- 蓄洪計劃(非強排模式)位處於集水區的中游位置,於暴雨期間將上游地區的雨水截流並引導至蓄洪池作暫時貯存,此舉有助減輕下游雨水排放系統的負擔。待暴雨過後,有序地將蓄洪池收集到的雨水排放至下游的雨水排放系統,達致「錯峰」效果,避免下游出現水浸情況

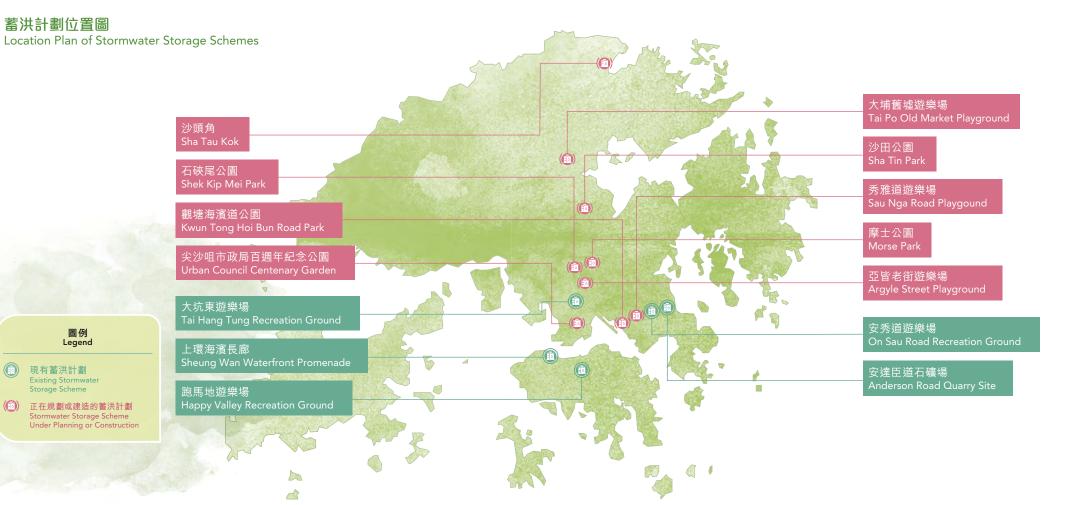
#### Interception

- Construction of drainage tunnels to intercept surface runoff from upstream catchment for direct discharge to the sea or downstream rivers
- Large-scale drainage improvement works in downstream urban areas can be avoided to reduce impacts on traffic and the public
- Four drainage tunnels are located in Kai Tak, Western Hong Kong Island, Lai Chi Kok and Tsuen Wan respectively, with a total length of about 21 kilometres

#### Flood Storage

- Construction of stormwater storage tanks aims to collect and temporarily store stormwater, alleviating the pressure on downstream drainage systems during heavy rain and reducing the risk of flooding
- Stormwater storage schemes (non-forced discharge mode) are located at the midstream locations of the respective catchment areas. During heavy rainstorms, stormwater from upstream areas will be intercepted into the storage tanks for temporary storage. This approach helps to alleviate the burden on downstream drainage systems. Once the heavy rain has subsided, the stormwater collected in these storage tanks will be gradually discharged into the downstream stormwater drainage systems. This controlled discharge creates a "peak-shaving" effect, effectively preventing flooding in downstream regions

### 蓄洪計劃位置圖



蓄洪計劃(強排模式)位於相關集水 區的下游位置,鄰近海港/河道, 於暴雨期間先將雨水截流並引導至 蓄洪池,再配合強力水泵把雨水直 接排放出大海/河道

圖例

Legend

現有蓄洪計劃

Storage Scheme

**Existing Stormwater** 

- 位於大坑東、上環、跑馬地、安秀 道及安達臣道的五個蓄洪計劃全面 投入運作。本署亦已計劃和展開多 個蓄洪計劃,以緩解各區的水浸風 險
- Stormwater storage schemes (forced discharge mode) are situated at the downstream locations of the respective catchment areas and near the harbour/rivers. During heavy rainstorms, the stormwater will be intercepted to the underground stormwater storage tanks and further discharged into the habour/rivers directly by high-capacity stormwater pumps
- Five stormwater storage schemes are now in operation at Tai Hang Tung, Sheung Wan, Happy Valley, On Sau Road and Anderson Road. The DSD has initiated planning and construction for additional stormwater storage schemes aimed at alleviating flood risks of different districts

#### 疏浚

- 實施河道治理工程從而拉直、擴闊 和挖深河道,以及擴大或建造新的 地下排水渠
- 目前為止,已完成逾100公里河道 治理工程,另提升超過90公里排水 渠

#### **Drainage Improvement**

- River training works are implemented to straighten, widen and deepen rivers and to broaden or construct new underground drains
- So far, more than 100 kilometres of river training works have been completed. Over 90 kilometres of drains have been upgraded

#### 持續改善水浸黑點

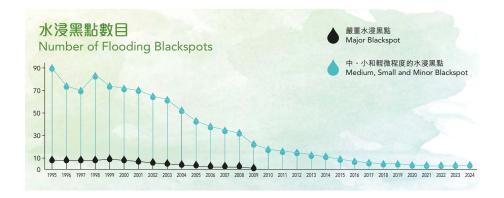
#### Close Monitoring of Flooding Blackspots

截至2024年3月,本署成功消除了共 127個水浸黑點。目前,在餘下的四個 水浸黑點中,南區薄扶林村的排水改 善工程已於2020年8月展開,尖沙咀漆 咸道南的雨水排放系統改善工程亦已 於2022年8月展開。此外,大埔林村谷 盆地的進一步改善工程,部分計劃於 2024年8月展開。其餘下部份以及元朗 新田石湖圍的改善工程正進行規劃和設 計中。我們預期未來能消除所有水浸黑 點,減低水浸對市民的影響。 As at March 2024, the DSD has successfully removed 127 flooding blackspots. For the remaining four blackspots, drainage improvement works at Pok Fu Lam Village, Southern District, commenced in August 2020 and that at Chatham Road South, Tsim Sha Tsui commenced in August 2022. Additionally, part of the further drainage improvement works at Lam Tsuen Valley are planned to commence in August 2024. The remaining drainage improvement works at Lam Tsuen Valley and the further drainage improvement works at Shek Wu Wai are under planning and design. We anticipate that all flooding blackspots will be eliminated to mitigate the flooding impact on the public.

#### 水浸黑點位置圖

Location Plan of Flooding Blackspots





#### 較高風險的沿岸低窪或當風住宅地區

Coastal Low-lying or Windy Residential Areas with Higher Risks

參考過往記錄,沿岸低窪地區在颱風吹襲時會因風暴潮引起的海平面上升而出現海水淹浸式倒灌。此外,颱風期間海浪衝擊岸邊時,有機會導致海浪湧過海堤而引發水浸。因此,政府已識別出26個較高風險的沿岸低窪和當風住宅地區,並已採取一系列應對措施以盡量減低水浸風險。

為提升高風險地區的應變能力,政府已 於上述地區設立風暴潮預警系統。在預 警發出後,本署或相關部門將立即調動 人員前往現場展開應對工作,包括放置 水泵、安裝可拆卸式擋水板、放置沙包 等,以防止大量海水湧入地面,對當區 住宅和居民造成影響。 According to the past records, the coastal low-lying areas may experience seawater backflow due to storm surge caused by rising sea level during typhoons. Additionally, waves crashing against the shores may surpass the coping level of seawall, resulting in flooding during typhoons. In response to these challenges, the Government has identified 26 coastal low-lying or windy residential areas that are at higher risks. A comprehensive set of measures has been implemented to mitigate flooding risks as far as possible.

The Government has established an Early Alert System at storm surge locations to enhance preparedness in mentioned areas. When an alert is issued, the DSD and relevant departments mobilise personnel to execute contingency measures on-site. These measures include deploying pumping equipment, installing demountable flood barriers, and placing sandbags to prevent significant seawater pouring in and impacting local residential areas and residents.



在大澳安裝可拆卸式擋水板 Installation of demountable flood barriers at Tai O

#### 26個較高風險的沿岸低窪或當風住宅地區位置圖

Location Plan of 26 Coastal Low-lying or Windy Residential Areas with Higher Risk



#### 排水設施的運作及維修保養

Operation and Maintenance of Drainage Facilities

渠務署肩負管理全港雨水排放系統的重任,系統覆蓋了超過2,400公里的地下雨水渠、377公里的人工河道、21公里的雨水排放隧道,以及五個地下蓄洪池。為確保渠道暢通,我們持續進行定期檢查和維護工作。

於報告期間,我們已檢查逾2,340公里的雨水渠及河道。另外,我們亦會定期檢視各項設施的功能和結構,以及在雨季前後清理淤塞物,以維持穩健暢通的雨水排放系統。

The DSD plays a vital role in managing the stormwater drainage system in Hong Kong, which includes over 2,400 kilometres of underground stormwater drains, 377 kilometres of engineered channels, 21 kilometres of drainage tunnels and 5 underground stormwater storage tanks. To ensure the clearance of drainage, we are dedicated to conducting regular inspections and maintenance.

During the reporting period, we inspected more than 2,340 kilometres of drains and river channels. We also conduct regular functional and structural reviews for our drainage assets. To further enhance our preparedness, we proactively clear blockages before and after the rainy season to ensure clearance of stormwater drainage systems.

#### 主動巡查和「及時清渠」

#### Proactive Inspection and Just-in-time Clearance

- ▶ 大雨來臨前,調配人手巡查全港約220個容易淤塞地點
- Before the onset of a rainstorm, the DSD will allocate manpower to carry out inspections at about 220 locations territory-wide which are susceptible to blockage
- 如發現淤塞的情況,即時派員安排 清理渠道入水口
- Immediate action is taken to clear blocked drainage inlets



清理渠道 Drainage clearance

#### 鄉村防洪計劃

#### Village Flood Protection Schemes

由於香港部分村落位於低窪地區,在暴雨期間雨水未能藉地心吸力有效地排出主雨水排放系統。有見及此,本署實施鄉村防洪計劃,為低窪鄉村興建防洪基堤、建造雨水泵房和蓄洪池,以便在暴雨期間將雨水暫存及其後抽走,從而減低水浸對村落的影響。

目前,現正運作的鄉村防洪計劃共有27個,一共為38個低窪鄉村提供防洪保護。

In low-lying areas of Hong Kong, some villages face challenges with surface runoff that cannot be drained by gravity during heavy rainstorms. To tackle this issue, the DSD has implemented the Village Flood Protection Schemes. These initiatives involve constructing embankments around low-lying villages, along with building stormwater pumping stations and storage ponds to temporarily store rainwater during heavy rain and lessen the impact of floods.

Currently, 27 Village Flood Protection Schemes are actively safeguarding 38 low-lying villages from flooding.



洲頭村蓄洪池 Chau Tau Tsuen Polder

責

#### 雨水排放整體計劃檢討研究

Drainage Master Plan Review Studies

為解決各區水浸問題及確保雨水排放 系統符合防洪標準,本署由1994年至 2010年間完成了11項雨水排放整體計劃 研究及雨水排放系統研究,分階段檢視 港九新界的雨水排放系統,提出短期及 長期改善措施。

From 1994 to 2010, the Department completed Drainage Master Plan (DMP) studies and drainage studies for 11 study areas, evaluating Hong Kong's drainage systems in stages, in order to identify short and long-term improvement measures to mitigate the impact of flooding across various districts.

本署自2008年起開始陸續檢視各區的雨 水排放整體計劃,分別為12個研究地區 進行雨水排放整體計劃檢討研究,以適 應持續的十地發展、各地區十地用涂的 改變以及氣候變化帶來的挑戰

Since 2008, we have conducted DMP Review Studies for 12 areas successively, so as to allow us to adapt to ongoing land developments, changes in land use of various areas, and the challenges posed by climate change.



#### 研究進展情況

The progress of the studies

研究地區	研究進展	研究地區	研究進展
Study Areas	Status	Study Areas	Status
1. 元朗及北區	已於 2011 年完成	7. 香港島北	已於 2019 年完成
Yuen Long and North District		Northern Hong Kong Island	Completed in 2019
2. 跑馬地	Completed in 2011	8. 淺水灣及大潭	已於 2020 年完成
Happy Valley		Repulse Bay and Tai Tam	Completed in 2020
3. 西九龍	已於 2015 年完成	9. 大嶼山及離島	已於 2021 年完成
West Kowloon		Lantau and Outlying Islands	Completed in 2021
4. 東九龍	1 I I I I I I I I I I I I I I I I I I I	10. 屯門、荃灣及葵青	已於 2022 年完成
East Kowloon		Tuen Mun, Tsuen Wan and Kwai Tsing	Completed in 2022
5. 大埔	已於 2017 年完成	11. 香港島南	進行中,預計於 2024 年底完成
Tai Po		Southern Hong Kong Island	In progress, anticipated to be completed in end 202
6. 沙田及西貢	Completed in 2017	12. 將軍澳	進行中,預計於 2024 年底完成
Sha Tin and Sai Kung		Tseung Kwan O	In progress, anticipated to be completed in end 202

#### 規劃、設計和建造新排水設施 Planning, Design and Construction of New Drainage Facilities

#### 活化翠屏河

Revitalisation of Tsui Ping River

為實踐[河畔城市 | 的理念, 「活化翠屏 河 | 工程旨在通過融合環境、生態及園 景美化等改善工程,將擁有逾50年歷 史、長約一公里的敬業街明渠活化成具 活力的翠屏河。翠屏河位於觀塘區中 心,毗鄰民居及繁盛的觀塘商貿區,加 上河道的水景特質,具備成為市區珍貴 河畔公共空間的極佳條件。渠務署藉著 工程不僅增加了翠屏河的排水量,還在 河道兩旁加建行人通道,以及連接兩邊 河岸的行人天橋和觀景平台,改善了河 道與周邊的連繫,創造一個以河道為中 心的公共休憩空間,讓大家可以放鬆心 情,享受河道景色。

此外,渠務署於翠屏河的下游位置設置 智能水閘。這道水閘可隨著潮汐漲退而 升降, 適當調節水位, 以形成蓄水區 穩定翠屏河的水體。當河水向下流,智 能水閘亦會營告瀑布效果。同時,翠屏 河的運作會與天文台的天氣預報系統連 結。在正常天氣下(包括輕微降雨),智 能水閘的升降會配合潮汐水位而調節。 但當出現惡劣天氣或河道上游水位較高 時,智能水閘會先行降低至平臥河床位 置,讓河道發揮最佳的排水能力。

涌渦活化:這條重要的河道,渠務署不僅 提升了區內的防洪能力,還為市民締造 了一個更具活力的城市環境。翠屏河將 成為觀塘區的新地標,融合大自然與城 市生活,豐富市民的生活體驗

Embracing the vision of "Rivers in the City", the "Revitalisation of Tsui Pina River" project seeks to revitalise the historic Kina Yip Street Nullah - a history of over 50 years and approximately one kilometre long - into a vibrant and urban Tsui Ping River, with a blend of environmental, ecological, and landscaping upgrading works. Nestled in the heart of Kwun Tong District, Tsui Ping River is surrounded by bustling residential and commercial areas. Its inherent riverine characteristics makes it a precious riverside public space in the urban areas. The DSD is not only strengthening the drainage capacity but also improving connectivity within the district by providing riverside walkways, cross-river footbridges and landscaped decks. This initiative aims to create valuable public riverside spaces where the community can relax and enjoy.

Moreover, the DSD installed a smart water gate in the downstream areas. This water gate will automatically adjust to tidal changes, to create a water storage area through regulating the water level and manifesting the water body characteristics of Tsui Ping River. When the river water plunges down, a waterfall effect will be created. Additionally, it is linked to the Hong Kong Observatory's weather forecasting system. Under normal weather conditions (including light rain), the smart water gate adjusts its height in accordance with tidal levels. During adverse weather conditions or when water level upstream of the river is high, it will lower itself to a horizontal position on the riverbed, allowing the river to achieve optimal drainage capability.

By revitalising this essential river, we are not just improving flood resilience within the district, but also fostering a more vibrant urban environment for everyone to enjoy. The Tsui Ping River project is set to become a new landmark in Kwun Tong, blending nature with urban life and enriching the community's quality of life.

#### 日前進度 **Current Progress**

工程於2020年7月展開,並已於2024 年9月大致完成。其中,翠屏海濱已 提早於2023年8月啟用,而整項設施 預計2024年底全面開放予公眾使用。 工程預算費用約13.4億元。

Works commenced in July 2020 and have been largely completed in September 2024. The commission of Tsui Ping Seaside was advanced to August 2023, while the remaining works are scheduled for completion by the end of 2024. The estimated project cost is about \$1.34 billion.



#### 尖沙咀雨水排放系統改善工程

Drainage Improvement Works in Tsim Sha Tsui

渠務署正積極優化尖沙咀的雨水排放系 統,以應對長遠的水浸風險和氣候變化 所帶來的挑戰。工程位於市政局百週年 紀念花園,當中包括建造一個容量達 20,300立方米的地下雨水蓄洪池及泵速 每秒達八立方米的泵房,亦沿漆咸道 南、加連威老道、加連威老廣場及金馬 倫道設置長約700米、直徑介乎600毫米 至1.800毫米的雨水渠。

The DSD is actively enhancing drainage systems in Tsim Sha Tsui to tackle long-term flood risks and adapt to the challenges posed by climate change. This project includes an underground stormwater storage tank with a capacity of 20,300 cubic metres and a pumping station capable of handling eight cubic metres per second, all located at the Urban Council Centenary Garden (UCCG). To further improve the area's drainage capacity, approximately 700 metres of stormwater drains will be installed along Chatham Road South, Granville Road, Granville Square, and Cameron Road, with diameters ranging from 600 millimetres to 1.800 millimetres.

地下雨水蓄洪池採用創新的雙層設計, 地盡其用,下層用作蓄洪,上層則設置 機電設施,從而騰出寶貴的城市空間作 其他用涂。擬建雨水蓄洪池及泵房亦包 含智能設計元素,配備水位感應器,提 供實時數據,配合香港天文台的氣象數 據,有效監控運作,提高成本效益。

此外,工程加入綠化設計原則,選用環 保建築物料, 並設置水資源回收系統, 將已處理的雨水用作灌溉等用途,以促 進可持續發展。

The innovative two-storey design of the underground stormwater storage tank maximises land use by dedicating the lower level for stormwater storage while housing electrical and mechanical facilities on the upper level, thereby freeing up valuable urban space for other purposes. In addition to its impressive capacity, the proposed stormwater storage tank and pumping station will feature intelligent design elements. Equipped with water level sensors, these systems will provide real-time data, together with meteorological data from the Hong Kong Observatory, to effectively monitor operations and enhance cost efficiency.

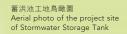
Moreover, the project incorporates green design principles and sustainable building materials. A water resource collection system will be installed to capture and treat rainwater for reuse in irrigation and other applications, promoting sustainable development.

#### 目前進度 **Current Progress**

工程已於2022年8月展開,並預計於 2027年完成。工程預算費用約9.53億 元。

The works commenced in August 2022 and the project is set for completion in 2027. The estimated project cost is about \$953 million.





#### 觀塘雨水排放系統改善工程-第1期

Drainage Improvement Works in Kwun Tong - Phase 1

渠務署正在秀雅道遊樂場建造一個容量約64,000立方米的地下雨水蓄洪池。在暴雨期間,上游的雨水會被截流並引導至蓄洪池暫時貯存,待洪峰過後才排放到下游,從而減低鄰近地方的排洪壓力。

The DSD is constructing an underground stormwater storage tank of about 64,000 cubic metres in volume at Sau Nga Road playground. During heavy rainfall, the rainwater upstream would be intercepted to the storage tank for temporary storage, and then be discharged downstream after the flood peak, thereby reducing the risk of flooding in the adjacent areas.

#### 目前進度 Current Progress

工程已於2022年9月展開,並預計於2028年完成。工程費用約9.4億元。

The works commenced in September 2022 and the project is set for completion in 2028. The project cost is about \$0.94 billion.

蓄洪池完成後原址重置的 遊樂場構想圖 Illustration of in-situ reprovisioned playground





秀雅道蓄洪計劃完工橫切面構想圖 Illustration of Sau Nga Road Stormwater Storage Scheme after completion of the stormwater storage tank

秀雅道蓄洪池工地鳥瞰圖 Aerial photo of the project site of Sau Nga Road Stormwater Storage Tank



#### 元朗防洪壩計劃及元朗市明渠改善工程(市區中心段)

Yuen Long Barrage Scheme and Improvement of Yuen Long Town Nullah (Town Centre Section)

渠務署於2011年完成「元朗區和北區雨水排放整體計劃檢討之可行性研究」、研究結果顯示元朗區的雨水排放系統未能達至現行的防洪標準。隨著氣候變化加劇,極端天氣事件(例如暴雨及風暴潮)日趨頻密,元朗的平坦地形亦增加其水浸風險。

為了應對這項挑戰,渠務署借鑒其他沿 岸城市的經驗,並考慮本地地理環境 天氣特性,制訂全新的防洪策略一防洪 屏障的研究。本署審視了元朗區。「與 課,並計劃制定改善和活化工程。 明防洪壩計劃」會在元朗明渠下游段 建防洪設施,以提高明渠的排洪能力。 此外,「元朗市明渠改善工程(市區中 以對、電量 以截流受污染的旱季流,有效減少臭兩 問題及對環境造成的影響。上述兩項 工程能為現有的傳統排洪渠道提供活化 機遇。 In 2011, the DSD completed the "Review of Drainage Master Plans in Yuen Long and North Districts – Feasibility Study (the DMP Review Study)", which revealed that the drainage system in Yuen Long District was falling short of current flood protection standards. With climate change intensifying and extreme weather events becoming more frequent, such as heavy rainstorms and storm surges, Yuen Long's relatively flat topography put it at a higher risk of flooding.

To tackle this challenge, the DSD developed an innovative flood protection strategy – Barrage Scheme, learning from the experience of other coastal cities and considering with the local geography and weather patterns. The Department reviewed the district's nullahs and has planned to formulate improvement and revitalisation works. Flood protection facilities will be constructed at the downstream section of Yuen Long Nullah under the Yuen Long Barrage Scheme, significantly enhancing its drainage capacity. Additionally, as part of the Improvement of Yuen Long Town Nullah (Town Centre Section) project, a Dry Weather Flow Interceptor (DWFI) System will be installed to capture polluted dry weather flow, effectively reducing odours and environmental nuisances. The completion of the two aforementioned works will bring opportunities to revitalise the existing concrete-lined Nullah.

#### 目前進度 Current Progress

工程已於2023年5月展開,並預計於2030年完成。「元朗防洪壩計劃」的工程預算費用約37.8億元,「元朗市明渠改善工程(市區中心段)」的工程預算費用則約8.6億元。

The works commenced in May 2023 and are scheduled for completion in 2030. The estimated project cost for Yuen Long Barrage Scheme is about \$3.78 billion and the estimated project cost for Improvement of Yuen Long Town Nullah (Town Centre Section) is about \$0.86 billion.



元朗防洪壩計劃鳥瞰圖 Aerial photo of the project site of Yuen Long Barrage Scheme

#### 北區雨水排放系統改善工程-第1期

Drainage Improvement Works at North District - Phase 1

渠務署將在崗下及沙頭角市興建一個容量約10,000立方米的地下雨水蓄洪池及雨水泵房。在暴雨期間截流雨水,蓄洪池能暫時貯存雨水,然後通過雨水泵房排放到沙頭角海。工程完成後,相關雨水排放系統的排洪能力將有所提升。

The DSD is planned to construct an underground stormwater storage tank and pumping station with a capacity of approximately 10,000 cubic metres in Kong Ha and Sha Tau Kok Town. During heavy rain, the tank will intercept and temporarily store rainwater, which will then be discharged into the sea at Sha Tau Kok through the pumping station. Upon the completion of the drainage improvement works, the capacity of the drainage system concerned will be upgraded.

#### 目前進度 Current Progress

工程已於2023年8月展開,並預計 於2028年完成。工程預算費用約9.5 億元。 The works commenced in August 2023 and are scheduled for completion in 2028. The estimated project cost is about \$0.95 billion.



沙頭角地下雨水蓄洪池及雨水泵房(構想圖) Sha Tau Kok Underground Stormwater Storage Tank and Stormwater Pumping Station (Photomontage)

#### 2023-24年度污水處理概要 Overview of Sewage Treatment in 2023 – 24

渠務署肩負為本港提供頂級污水處理服務的責任。為確保設施符合現行的環保目標,本署致力提升污水收集及處理水平,並利用先進技術及現代化設施,減少污染物排放。同時,本署定期進行保養維修工作,確保本港的污水處理系統有效運作。展望未來,本署會繼續擴大不處理設施的表現,以保護本港水質,促進香港可持續發展。

The DSD shoulders the responsibility of providing top-tier wastewater treatment services in Hong Kong. To ensure our facilities meet the existing environmental protection objectives, the Department is dedicated to sewage collection and treatment levels, as well as utilising advanced technologies and modern facilities to minimise the discharge of pollutants. Meanwhile, we conduct regular maintenance and repair works to ensure an effective wastewater treatment system for the territory. Looking ahead, we will carry on expanding the coverage of Hong Kong's sewerage system and uplifting the sewage treatment facilities, in an effort to protect local water quality and promote sustainable development in Hong Kong.

每日平均污水處理量 (千立方米) Average daily sewage treated (thousand cubic metres)

≈ 2,800



年度污水總處理量 (百萬立方米) Annual sewage treated (million cubic metres)

1,033.09

化學強化一級處理 Chemically Enhanced Primary Treatment (CEPT)

80.501%



二級處理 Secondary Treatment 19.099%

基本或一級或三級處理 Preliminary or Primary or Tertiary Treatment

0.401%



污水處理廠 Sewage Treatment Works

70



污水泵房 Sewage Pumping Station

269



污水收集網絡總長度 (公里) Total length of sewerage network (kilometres)

2,006



公共污水收集網絡(香港人口¹) The public sewerage network serves (of Hong Kong's population¹)

≈ 94%



年度污泥收集及處理(公噸) Annual sludge collected and treated (tonnes) **403,428** 

1以有缴付排污費的住宅水務帳戶計算

Calculation based on the number of domestic water bill accounts with sewage charges levied

#### 2023-24年度污水處理廠位置圖

Location Map of Sewage Treatment Works in 2023-24



# ■例 Legend ■ 基本污水處理廢 Preliminary Treatment Works ■ 級污水處理廢 Primary STW ■ 二級污水處理廢 Secondary STW ■ 三級污水處理廢 Tertiary STW ● 化學強化一級污水處理廠 Chemically Enhanced Primary STW

主要污水處理廳 Major Sewage Treatment Works (STW)			
沙田污水處理廠 Sha Tin STW	西貫污水 Sai Kur	《處理廠 ng STW	石湖墟污水處理廠 Shek Wu Hui STW
赤柱污水處理廠 Stanley STW	大埔污水 Tai Po		元朗污水處理廠 Yuen Long STW
	昂坪污水 Ngong P	k處理廠 ling STW	
昂船洲污水處理廠 Stonecutters Island STW			灣污水處理廠 Ho Wan STW
望后石污水處理廠 Pillar Point STW			圖污水處理廠 an Wai STW

#### 規劃、設計和建造新污水處理設施 Planning, Design and Construction of

Planning, Design and Construction of New Sewage Treatment Facilities

#### 淨化海港計劃(系統管理及優化工作)

Harbour Area Treatment Scheme (System Management and Enhancement Works)

淨化海港計劃是香港有史以來最龐大的環保基建項目,每日所收集及處理的污水量約佔全港每日處理的總污水量七成,是香港最主要的污水處理系統之一。淨化海港計劃由1994年起分兩期進行。整個建造工程歷時逾20載、總費用約為258億元。第一期及第二期甲設施已分別於2001年12月及2015年12月全面啟用。

The Harbour Area Treatment Scheme (HATS) is the largest environmental infrastructure project in Hong Kong's history, collecting and treating approximately 70% of the total daily sewage processed in the city, making it one of Hong Kong's major sewage treatment systems. Since its launch in 1994, HATS has been implemented in two phases over two decades, with a total investment of \$25.8 billion. HATS Stage 1 was fully commissioned in December 2001, followed by Stage 2A in December 2015.

#### 淨化海港計劃佈局圖

Layout plan of Harbour Area Treatment Scheme



渠務署一直致力維護該污水處理系統的 穩健性,有計劃地加強對該污水處理系統 統面對特殊情況時的適應能力,並將進 一步優化系統內的氣味控制措施,減少 對附近環境的影響,為市民提供符合經 濟效益,可靠及可持續的污水處理服 務。部門亦一直致力提升工業安全,使 污水設施的各樣檢修及維護工作在風險 可控情況下進行。 The DSD is committed to maintaining the continuous performance of the HATS, systematically enhancing the adaptability of the system to special circumstances, and to further optimise odour control measures within the system to minimise impacts on the surrounding environment. The goal is to provide citizens with cost-effective, reliable, and sustainable sewage treatment services. The Department is also dedicated to improving industrial safety, ensuring that all maintenance and repair work at sewage treatment facilities is conducted under controlled risk conditions.

# 3 主要職

#### 目前進度

#### **Current Progress**

淨化海港計劃系統管理的可行性研究 已於2020年5月展開,至今已完成。 本署將分階段作詳細研究。第一階段 有關位於海港旁的六所基本污水處理 廠的系統及設施優化的詳細研究,已 於2022年第二季展開,並計劃有序 進行相關的優化工程。而第二階段的 系統優化詳細研究,當中包括位於港 島沿岸其中四所基本污水處理廠及位 於昂船洲的污水處理設施,將最快於 2026年展開。

The feasibility study on HATS system management began in May 2020 and has since been completed. Detailed studies are now proceeding in phases. The first phase, which started in the second quarter of 2022, focuses on investigating enhancements to the system and facilities at six preliminary treatment works located along the harbour, with plans to orderly carry out the related enhancement works. The detailed study for the second phase, which includes four of the preliminary treatment works along the coastal areas of Hong Kong Island and the sewage treatment works at Stonecutters Island, is expected to commence in 2026 at the earliest.

#### 觀塘污水泵房優化工程

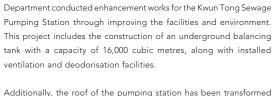
#### Enhancement Works for Kwun Tong Sewage Pumping Station

為配合東九龍區內發展,本署已在觀塘 污水泵房進行優化工程,致力改善污水 泵房的設施及環境。這項工程包括建造 一個容量達16,000立方米的地下污水調 節池, 並安裝誦風及氣味控制設施。

另外,泵房天台已改建成園景平台,創 造出約11,000平方米的公共休憩用地供 市民使用,不僅改善了泵房外觀,亦為 市民提供了一個康樂和休憩的好去處。

為實踐政府及海濱事務委員會推動的 「先駁通,再優化」理念,本署進一步修 復和美化一幅面積約7,000平方米的海 濱空間,作為茶果嶺海濱公園的其中-部分, 並已於2023年8月連同園景平台 開放給公眾使用,促進社區參與和提升 市民的整體生活質素。

啟用日期:2023年8月 Commissioning Date: August 2023



To enhance the local development of the East Kowloon district, the

Additionally, the roof of the pumping station has been transformed into a landscaped deck, creating approximately 11,000 square metres of open space for public enjoyment. This change not only improves the visual appeal of the facility but also provides a welcoming area for relaxation and recreation.

In line with the "incremental approach" promoted by the Government and the Harbourfront Commission, we have also beautified an additional waterfront area of about 7,000 square metres as part of the Cha Kwo Ling Promenade. Open to the public since August 2023, this promenade, along with the landscaped deck, offers a new destination for residents and visitors, fostering community engagement and enhancing the overall quality of life.



觀塘污水泵房上蓋的園景平台 The landscaped deck built atop the roof of the Kwun Tona Sewage Pumping Station

#### 搬遷沙田污水處理廠往岩洞工程

#### Relocation of Sha Tin Sewage Treatment Works to Caverns

為應付本港日漸增加的土地需求, 政府 積極開發岩洞,以開拓土地資源作長遠 發展用途。為支持政府的發展方針,本 署現進行搬遷工程,把沙田污水處理廠 遷移至城門河對岸女婆山內開挖的岩洞。

這項工程將騰出沙田污水處理廠現址約 28公頃的土地,用作有利民生的用途, 以改善區內生活環境。未來的沙田污水 處理廠有岩洞作為天然屏障, 能更有效 加強氣味管理,減低對附近居民的影 響。新沙田岩洞污水處理廠落成後,每 日污水處理量約為340,000立方米,預 計會成為香港同類設施中規模最大的。

搬遷工程現正分階段進行,涉及工地開 拓和連接隧道建造工程、主體岩洞建造 及上游污水收集系統工程、建築物建造 及安裝岩洞通風系統、設於岩洞內的污 水處理設施裝置工程,以及停止現有沙 田污水處理廠運作和進行拆卸工程。預 計整個工程需時約13年完成。

To cope with Hong Kong's increasing demand for land, the Government is proactively developing caverns to expand land resources. In support of the Government's development plan, the DSD is carrying out relocation works to move Sha Tin Sewage Treatment Works to the excavated caverns in Nui Po Shan across Shing Mun River.

The project will vacate the 28-hectare site of the existing Sha Tin Sewage Treatment Works for other uses that are beneficial to the public and the living environment. The caverns serve as natural barriers for the future Sewage Treatment Works, thus reinforcing odour control to lessen the impact on nearby residents. After the completion of the new Sha Tin Sewage Treatment Works in caverns, it is anticipated to be the largest of its kind in Hong Kong, with an estimated daily treatment capacity of about 340,000 cubic metres.

The relocation project is being implemented in stages, involving site formation and access tunnel construction, main caverns construction and upstream sewerage works, buildings construction and installation of cavern ventilation system, installation of sewage treatment facilities inside caverns, as well as decommission and demolition of the existing Sha Tin Sewage Treatment Works. The entire project is expected to take about 13 years to complete.

#### 目前進度

#### **Current Progress**

第一階段涉及工地開拓及連接隧道 建诰工程已於2019年2月展開,並於 2022年4月完工。緊接的第二階段亦 已於2021年7月展開,集中主體岩洞 建诰及上游污水收集系統工程。

第三階段工程建锆建築物及岩洞涌風 系統工程,則已於2023年8月展開 我們正就餘下工程進行詳細設計,主 要包括設於岩洞內的污水處理設施裝 置工程、停止現有沙田污水處理廠的 運作和進行拆卸。

Stage 1 Works, which involved site preparation and access tunnel construction, commenced in February 2019 and was completed in April 2022. Stage 2 Works commenced in July 2021, focusing on the construction of main caverns and upstream sewerage works.

Currently, Stage 3 Works commenced in August 2023, which includes construction of buildings and cavern ventilation system. At the same time, design work for the remaining components, including the main installation of sewage treatment facilities within the caverns and the decommissioning of the existing Sha Tin Sewage Treatment Works is progressing.





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# 1 主要

#### 亓朗淨水設施

#### Yuen Long Effluent Polishing Plant

現有的元朗污水處理廠為元朗市中心、 元朗工業邨及錦田一帶提供二級污水處 理服務,設計處理量為每日70,000立方 米。為配合該區的人口增長及未來的發 , 本署會進行原址重建, 現有 的元朗污水處理廠將改建為「元朗淨水 設施 | 。元朗污水處理廠的處理量會分 階段提升至每日150,000立方米, 並將 污水處理技術由二級污水處理級別提升 至最高水平的三級污水處理。廠房也會 採用先進技術以節省能源,並積極開拓 及應用各種的可再生能源,提升環保表 現。另外,元朗淨水設施亦會引入大量 綠化元素,美化廠房外觀,並設有河畔 步道、觀景台及教育走廊等公眾共享設 施,供公眾使用,推廣可持續發展。

The existing Yuen Long Sewage Treatment Works provides secondary sewage treatment services to Yuen Long Town, Yuen Long Industrial Estate and Kam Tin areas with a treatment capacity of 70,000 cubic metres per day. To cope with the population growth and further development plans of the district, in-situ redevelopment will take place to convert the existing Yuen Long STW to Yuen Long Effluent Polishing Plant. The treatment capacity of Yuen Long STW will be upgraded in stages to 150,000 cubic metres per day, while the sewage treatment level will also be lifted from secondary treatment to the highest tertiary treatment level. Also, the plant will adopt advanced technologies to save energy, as well as will actively explore and utilise different types of renewable energy to elevate environmental performance. Moreover, Yuen Long Effluent Polishing Plant includes substantial greening features to beautify the plant's appearance, and public co-use facilities such as riverside promenade, viewing deck and education corridor for public use, so as to promote sustainable development.

#### 目前進度 **Current Progress**

第一階段建造工程已於2020年11月展 開,並預計於2027年完成,預算費用 約69億元。第一階段工程完成後,污 水處理量將由現時每日70,000立方米 增加至每日100,000立方米。

The construction of Stage 1 Works commenced in November 2020 and is expected to be completed by 2027, with an estimated cost of approximately \$6.9 billion. After completion of Stage 1 Works, the treatment capacity will increase from 70,000 cubic metres to 100,000 cubic metres per day.





#### 石湖塘淨水設施

#### Shek Wu Hui Effluent Polishing Plant

為配合地區發展的需要及市民對持續改 善環境的期望,本署計劃將現時已運作 超過30年的石湖墟污水處理廠改建為石 湖墟淨水設施。該工程將逐步提升設施 至三級污水處理水平,並分階段提高污 水處理量,由每日93,000立方米增加至 每日190,000立方米,以確保廠房的排 放水符合更嚴格的環境標準,保護后海 灣的牛熊環境。

未來本署還計劃利用景觀設施和河畔步 道,進一步改善廠房外觀,加強其作為 水資源保護教育場所的作用, 並將該設 施變為一個多功能計區設施。

To meet the demands of district development and public expectations for ongoing environmental improvement, the DSD is planning to transform the existing Shek Wu Hui Sewage Treatment Works, which has been operated for over 30 years, into the Shek Wu Hui Effluent Polishing Plant. This project will involve gradually upgrading the facility to achieve tertiary treatment level and expanding its sewage treatment capacity from 93,000 cubic metres per day to 190,000 cubic metres per day in phases. This upgrade is essential for ensuring that effluent discharge meets more rigorous environmental standards, thereby protecting the ecological environment of Deep Bay.

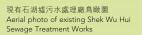
In addition to these upgrades, the DSD is planning to enhance the plant's appearance with landscaping features and a riverside promenade, transforming the facility into a multi-purpose community asset that serves as an educational site for water resource conservation and converts to a multi-purpose community facility.

#### 日前進度

#### **Current Progress**

石湖墟淨水設施的前期工程將一組 20,000立方米容量的傳統二級污水處 理設施提升為40,000立方米容量的薄 膜生物反應器,工程在2015年年中展 開,並自2019年12月起投入運作。 目前,主體建造工程正分三個階段進 行,第一階段已在2019年第三季展 開,最終階段則預計在2034年完成。 前期工程(包括勘測及設計)預算費用 約5億元,而主體工程預計費用約132 億元。

The advance works for the Shek Wu Hui Effluent Polishing Plant aim to upgrade a group of conventional secondary sewage treatment facilities with a capacity of 20,000 cubic metres to a more efficient membrane bioreactor with a capacity of 40,000 cubic metres. The works commenced in mid-2015 and have been operational since December 2019. Currently, the main construction is being carried out in three phases, with the first phase starting in the third quarter of 2019 and the final phase scheduled for completion in 2034. The estimated cost for the advance works, including investigation and design, is about \$0.5 billion, while the main works are projected to cost approximately \$13.2 billion.







石湖墟淨水設施構想圖 Photomontage of the Shek Wu Hui Effluent Polishing Plant

# 1 主要

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#### 沙頭角污水處理廠第一期擴建工程

#### Expansion of Sha Tau Kok Sewage Treatment Works Phase 1

隨着地區發展及未來人口增長,本署預料沙頭角各區域的污水量將在短期內增加,包括沙頭角墟、鹽寮下、菜園角及沙頭角村。因此,本署計劃在現址建沙頭角污水處理廠,令該廠的污水處理量由每日約1,660立方米,增加至每日約5,000立方米,以應付增加的污水量。工程包括建造一條長約1.7公里、直徑450毫米的海底排放管道,以及與建新的污水管以取代現有的污水泵房及加壓污水管。

作為渠務署首個「建造業2.0」先導項目,工程團隊採用多項創新技術,例如場外建造、智能基建、建築信息模擬技術及組裝合成,以提升工程效率、提高項目質素及加強安全管理,切合「創新、專業化、年青化」的方向。

With district development and future population growth, an increase in the sewage volume of various areas in Sha Tau Kok, including Sha Tau Kok Town, Yim Liu Ha, Tsoi Yuen Kok and Sha Tau Kok Chuen is expected in the short term. As such, the DSD has planned to redevelop Sha Tau Kok Sewage Treatment Works on its existing site to increase its sewage treatment capacity from about 1,660 cubic metres per day to about 5,000 cubic metres per day to cope with the surging sewage volume. The project includes the construction of a submarine outfall which is approximately 1.7 kilometres in length and 450 millimetres in diameter, and the replacement of the existing sewage pumping station and rising mains with new gravity sewers.

Being the first "Construction 2.0" pilot project of the DSD, our engineering team will adopt multiple innovative technologies, such as off-site construction, smart infrastructure, Building Information Modelling and Modular Integrated Construction. These measures aim to improve construction efficiency, project quality and safety management in line with the direction of "innovation, professionalisation and revitalisation".

#### 目前進度 Current Progress

工程已在2018年11月展開,預計在2025年完成。整項工程預算費用約20.4億元。承建商需要建造臨時污水處理設施,以維持在工程期間的污水處理工作。

Construction works commenced in November 2018, with completion expected in 2025. The estimated project cost is about \$2.04 billion. To maintain sewage treatment in the service area during construction, the contractor is required to build temporary sewage treatment facilities.



現時沙頭角污水處理廠鳥瞰圖 Aerial photo of existing Sha Tau Kok Sewage Treatment Works



#### 長洲污水處理及排放改善工程

#### Upgrading of Cheung Chau Sewage Treatment and Disposal Facilities

現有長洲污水處理廠已運作超過30年, 大部分設施已達到設計年限。同時,為 配合將來逐步擴展鄉村污水收集系統至 長洲未接駁污水渠地區,本署現正進行 長洲污水處理廠改善工程,增建污水處 理設施,把污水處理能力由每日4,000 立方米增至每日9,800立方米,並且將 污水處理水平由一級提升至二級。 The existing Cheung Chau Sewage Treatment Works have been in operation for over 30 years, and most of its facilities have reached their designed lifespan. With the aim of extending the existing sewerage network to more areas in Cheung Chau that are not connected to the sewage network, the DSD is carrying out improvement works of Cheung Chau STW by constructing additional treatment facilities to increase its sewage treatment capacity from 4,000 cubic metres per day to 9,800 cubic metres per day, as well as upgrading its sewage treatment level from primary to secondary.

#### 目前進度 Current Progress

建造工程在2020年11月展開,預計 2026年完成。整項工程預算費用約 26.1億元。 Construction works commenced in November 2020, with completion expected in 2026. The estimated project cost is about \$2.61 billion.



現時長洲污水處理廠鳥瞰圖 Aerial photo of existing Cheung

Chau Sewage Treatment Works

長洲污水處理廠工程完工構想圖 Photomontage of the Completed Cheung Chau Sewage Treatment Works

#### 建造旱季截流設施

#### Construction of Dry Weather Flow Interceptors (DWFIs)

受污染的旱流流入雨水排放系統,不僅會影響附近水域水質,還會產生難聞的氣味。為免異味對周邊環境及居民造成負面影響,本署已在新油麻地避風塘海濱建造地底旱季截流器,以堵截大角咀櫻桃街箱形雨水渠內受污染的旱流,並分流至昂船洲污水處理廠進行妥善處理及排放。

Polluted dry weather flow entering the stormwater drainage system not only deteriorates the water quality of nearby water bodies but also creates unpleasant odours. To mitigate these issues and improve the surrounding environment for residents, the DSD has constructed an underground Dry Weather Flow Interceptor (DWFI) at the shore of New Yau Ma Tei Typhoon Shelter. This facility intercepts polluted dry weather flow from the Cherry Street box culvert and diverts it to the Stonecutters Island Sewage Treatment Works for proper treatment before discharge.

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另一方面,本署已在九龍西及荃灣各建 诰四個旱季截流器, 並改建位於九龍西 的39個現有旱季截流器,以減低氣味問 題和避免對水質造成重大影響。另外, 本署正在荃灣及葵涌的鄉郊地區興建八 個旱季截流器,以有效堵截從區內沒有 鋪設污水渠地點排放的污水。

Besides, the DSD has constructed four DWFIs each in Kowloon West and Tsuen Wan, while also modifying 39 existing DWFIs in Kowloon West, in order to significantly reduce unpleasant odour and mitigate adverse impacts on local water bodies. Additionally, the DSD is currently building eight new DWFIs in the rural areas of Tsuen Wan and Kwai Chung to effectively intercept effluent from unsewered regions.

#### 目前進度 **Current Progress**

渠務署分別在大角叫、九龍西、荃灣 以及葵涌完成旱季截流器建造工程。 其中,大角叫櫻桃街箱形雨水渠旱季 截流器建造工程於2017年12月展開, 並已於2022年10月完工,整項工程開 支約6.6億元。第一期的九龍西部及 荃灣污水系統改善工程包括於荃灣和 九龍西部建造及改建旱季截流器已於 2017年9月展開,並已於2022年1月完 工,工程開支約1.4億元。而第二期 的污水系統改善工程包括在荃灣及葵 涌的鄉郊地區建造八個旱季截流器亦 已於2020年7月展開,並於2023年12 月完工, 整項工程開支約1億元。

The DSD has successfully completed the construction of DWFIs at Tai Kok Tsui, Kowloon West, Tsuen Wan, and Kwai Chung. The DWFI at the Cherry Street box culvert in Tai Kok Tsui was constructed in December 2017, and completed in October 2022, with a total project cost of about \$660 million. Phase 1 of the West Kowloon and Tsuen Wan sewerage upgrading works, which included the construction and modification of DWFIs in these areas, commenced in September 2017 and was completed in January 2022, costing approximately \$0.14 billion. In addition, Phase 2 of the sewerage upgrading works, involving the construction of eight new DWFIs in the rural areas of Tsuen Wan and Kwai Chung, which commenced in July 2020 and is completed in December 2023, with an estimated cost of around \$0.1 billion.



海輝道遊樂空間設於櫻桃街箱形 雨水渠旱季截流器上蓋 Hoi Fai Road Playable Space set up at the rooftop of the dry weather flow interceptor at Cherry Street box culvert

櫻桃街箱形雨水渠的 旱季截流器 Dry weather flow interceptor at Cherry Street box culvert



#### **礀石灣污水處理廠、相關海底排放管及貝澳污水收集系統建造工程**

Construction of San Shek Wan Sewage Treatment Works, Associated Submarine Outfall and Pui O Sewerage Works

為應對南大嶼山日後的人口增長,本 署現正於職石灣建造一座二級污水處理 廠,有關設計可以處理每日5,800立方 米的污水。工程亦包括建造兩條長達 1.4公里的海底排放管道到貝澳灣,在 貝澳建造一所污水泵房及污水幹渠系 統,以及羅屋村的鄉村污水收集系統。

To accommodate the anticipated population growth in South Lantau, sewage treatment works in San Shek Wan are under construction, which are designed for secondary sewage treatment with a peak capacity of 5,800 cubic metres per day. The project also includes the construction of 1.4 kilometres of twin submarine outfall pipes to discharge treated effluent into Pui O Wan, along with a sewage pumping station and trunk sewerage system for the Pui O area, as well as a village sewerage system for Lo Uk Tsuen.

#### 目前進度 **Current Progress**

建造工程於2021年3月展開,預期將 於2026年完工,整項工程預算費用約 8.4億元。

Construction works are commenced in March 2021 and expected to be completed in 2026, with an estimated project cost of approximately \$0.84 billion.



職石灣污水處理廠工程完 工構想圖 Photomontage of the Completed San Shek Wan Sewage Treatment Works

#### 完善鄉村基建公共污水收集系統

Improvement of Village Sewerage

香港目前仍有一些鄉村並未接駁至公共 污水渠。為此,本署持續擴展「鄉村污 水收集系統計劃 | , 於全港多區的鄉村 建诰公共污水收集系統, 收集和處理該 區的污水,改善鄉郊地區的環境衛生及 水質。

截至2024年3月,我們已為約280條鄉 村鋪設了公共污水渠。目前,大約有50 條鄉村下進行相關工程。

Some villages in Hong Kong are currently not connected to the public sewage system. In response, the Department has expanded the Village Sewerage Programme to construct public sewage systems in various villages across the territory, in order to collect and treat wastewater from these rural areas and subsequently improve environmental hygiene and water quality in these regions.

As at March 2024, we have laid public sewerage for about 280 villages. At present, the works for around 50 villages are underway.

# き要

#### 管理排水及污水收集網絡

#### Managing Drainage and Sewerage Networks

渠務署現時管理的渠道約4,800公里。 其中,地下渠管平均已使用了30年,當中逾2,400公里的渠管更使用了30年或以上,不少已出現老化及損耗跡象。渠管如出現嚴重損耗,可能會導致結構損壞,或會引致土壤流失甚至路陷。這不但妨礙渠管正常運作,亦會影響交通、環境及公眾安全。

為免渠管損耗而對環境及公眾安全造成 威脅,本署正進行以風險為本的全港性 復修老化雨水渠及污水渠工程計劃, 渠管進行維修保養,分階段勘查及修復 高風險的渠管。通過借助先進技術,加 強地下管道網絡的保養,同時提高工程 的成本效益,確保公共安全的同時,為 本港的雨水排放及污水收集網絡締造可 持續發展的未來。 The DSD manages approximately 4,800 kilometres of drainage system across Hong Kong. Among them, the underground pipes have been in use for an average of 30 years, with over 2,400 kilometres of pipes have been used for 30 years or more. Many of these pipes show signs of aging and wear. Seriously deteriorated pipes may lead to structural damage, soil erosion, and even road subsidence, affecting normal operation of the pipelines and bringing adverse impacts on traffic, environment, and public safety.

To prevent potential threats to the environment and public safety caused by deteriorated pipes, the Department is implementing a territory-wide risk-based rehabilitation programme for ageing stormwater drains and sewers, in which surveys and rehabilitation of high-risk underground pipes are being conducted in phases. By leveraging advanced technologies, we aim to strengthen the maintenance of the underground pipe network and improve the cost-effectiveness of our works, ensuring public safety and creating a sustainable future for Hong Kong's drainage and sewerage systems.

測污水中的營養物質、微量金屬元素含量和生化需氧量水平。沙田中央化驗室在1999年獲頒發「香港實驗所認可計劃」 (HOKLAS)證書,確認測試環境樣本(即水和廢水的樣本)的資格,並在2017年成為香港首間獲得利用自動化生化需氧量分析儀測試認可資格的化驗室。2020年9月,沙田中央化驗室成功過渡品質系統,符合最新的ISO/IEC 17025:2017檢測和校準實驗室的香港認可處通用要求。

目前,沙田中央化驗室獲認可進行多達 32項測試項目。於2022年至2023年期 間,化驗室完成了超過232,000項分析 工作。主要污水處理廠排放水的水質結 果可瀏覽本署網頁及政府資料一線通網 站,供公眾參閱。 Accredited under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) since 1999, it became the first laboratory in Hong Kong to receive HOKLAS accreditation for BOD tests using an automatic BOD analyser in 2017. In September 2020, the Sha Tin Central Laboratory successfully transitioned its quality system to comply with the latest ISO/IEC 17025:2017 standards – "General requirements for the competence of testing and calibration laboratories" through the Hong Kong Accreditation Service (HKAS).

The Sha Tin Central Laboratory currently holds accreditation to perform up to 32 different types of tests. In the 2022-2023 period, the laboratory completed over 232,000 analyses. The results for the effluent quality from major sewage treatment works are available on the DSD website and the data.gov.hk portal for public reference.



沙田中央化驗室 Sha Tin Central Laboratory

#### 本年度復修雨水渠及污水渠總長度(公里)

The total length of stormwater drains and sewers rehabilitated this year (kilometres)

54
Approximately



#### 專業化驗分析服務

#### Professional Laboratory Services

本署定期抽取污水樣本送往轄下化驗室 檢驗,以確保污水處理服務符合相關法 定要求。本署化驗室採用化驗室信息管 理系統和商業智能軟件進行化驗工作, 確保排放水的水質符合環境保護署訂明 的排放標準。

沙田中央化驗室體現了本署對高效、準確的污水檢測的承諾。化驗室配備全自動化的儀器,能快速而準確地全方位檢

The Department regularly collects and delivers sewage samples for laboratory testing to ensure compliance with statutory requirements for sewage treatment. To facilitate this process, the DSD's laboratories utilise a Laboratory Information Management System (LIMS) and business intelligence software, which help monitor effluent quality and ensure it meets the discharge standards set by the Environmental Protection Department.

The Sha Tin Central Laboratory exemplifies the DSD's commitment to efficient and accurate sewage testing. Equipped with automatic analysers, the laboratory conducts rapid tests on nutrients, trace metal elements, and biochemical oxygen demand (BOD) levels in sewage.

請用手機掃描二維碼查看主要污水處理 廠的排放水水質:

Please scan the QR Code to check the effluent quality of major Sewage Treatment Works:

中文版



English version



責

Utilising Sewage Surveillance Programme for Combating the COVID-19 Epidemic and Advancement

於2020年,渠務署與環境保護署聯同 香港大學的跨學科團隊,成功研發了全 港性污水監測計劃以應對2019冠狀病毒 病疫情。自此,渠務署和環保署無間斷 保持緊密合作,按照頻繁的日程,進行 了廣泛工作,包括實地考察污水沙井、 安排臨時交通措施、採樣及準時送遞樣 本、污水檢測、分析檢測結果、決定 下一日的採樣地點和抗疫行動、評估疫 情傳播情況等。於2022年第五波疫情爆 發期間,政府根據污水監測調查結果共 實施了306次相關的圍封強檢行動,成 功找出了超過26.700宗初步陽性檢測個 案,有效協助截斷病毒傳播鏈。2022 年底, 隨着疫情趨緩, 香港亦開始分階 段通關。2023年2月,香港落實恢復全 面通關和與國際的免檢疫往還,而污水 監測措施亦因應疫情放緩及風險逐漸下 行而作出適當調整;同年3月開始,120 個污水監測定點的污水樣本抽取和檢測 頻率更新為每週一次。到4月,污水監 測計劃交由衛生署統籌負責,並主導與 渠務署及環保署繼續執行相關措施。渠 務署跟衞生署緊密合作,仍然在各區進 行污水採樣工作。

本署現正探索其他採集污水樣本的新技術,以提升成本效益。事實上,污水監測方法亦可能適用於監測其他傳染病,如流感、小兒麻痺病毒和猴痘病毒等。本署會與其他部門緊密合作,善用污水驗監測擴展至其他服務,例如探討污水驗毒和監測抗微生物耐藥性的可行性。

In 2020, the DSD and the Environmental Protection Department (EPD), in collaboration with a cross-disciplinary team from the University of Hong Kong, successfully launched the Territory-wide Sewage Surveillance Programme to combat the COVID-19 epidemic. Since then, the DSD and EPD have maintained close collaboration, conducting extensive work on a frequent schedule, including site surveys of sewage manholes, traffic management, sample collection and delivery, sewage testing, and analysis of results to assess the spread of the virus. During the fifth wave of the epidemic in 2022, the Government conducted 306 "restriction-testing declaration" operations based on sewage surveillance findings, identifying over 26,700 preliminary positive cases to help break the transmission chain. As the epidemic declined towards the end of 2022, Hong Kong began gradually resuming travel. By early February 2023, normal international travel resumed without mandatory guarantine tests. Consequently, sewage surveillance measures were adjusted; starting in March 2023, sampling and testing frequencies were updated to once a week at 120 stationary monitoring sites. In April 2023, the Department of Health (DH) took over overall planning for the Sewage Surveillance Programme, with the DSD and EPD continuing to collaborate on sewage sampling across various districts.

Currently, the DSD is exploring new methodologies for collecting sewage samples to enhance cost-effectiveness. In fact, the sewage surveillance method may also be applicable for adaptation to monitor other infectious diseases such as influenza, polio, and monkeypox. The DSD aims to work closely with other departments to expand sewage surveillance applications to include drug detection and antimicrobial resistance monitoring.

The Sewage Surveillance Programme has proved to be an effective tool in combating COVID-19 epidemic, facilitating the assessment of virus spread and its variants within the community. It provided crucial data during the peak of the epidemic, yielding significant social and economic benefits. This programme has garnered recognition from both local and international experts, receiving multiple awards, including the Hong Kong Special Administrative Region Chief Executive's Commendation, the Excellence in Partnership Award from the Civil Service Outstanding Service Award Scheme, both the Grand Award and Merit Award from the Hong Kong Institution of Engineers(HKIE), Gold Medal at the "International Exhibition of Inventions Geneva 2024" and the Gold Award of the "2024 International Water Association Project Innovation Awards" under the category of "Performance Improvement and Operational Solutions".



#### 污水處理服務收費概要

Overview of Sewage Services Charges

政府每年均會撥出資源,以確保本港污水得到妥善處理。根據「污染者自付」原則,本署繼續推行污水處理服務收費計劃。此計劃由兩部分組成:排污費及工商業污水附加費。所有接駁至公共污水收集系統的處所,其用戶均須繳付排污費。而工商業污水附加費方面,現時共有27類特定行業需要繳付附加費。

Every year, the Government allocates resources to ensure effective sewage treatment in Hong Kong. In line with the "Polluter Pays" principle, the DSD continues to implement the Sewage Services Charging Scheme. This scheme comprises two components: the Sewage Charge (SC) and the Trade Effluent Surcharge (TES). All users connected to public sewers are required to pay the SC. As for TES, currently 27 identified trades are required to pay this surcharge.

#### 帳單及用水量統計數字

Billing and Water Consumption Statistics

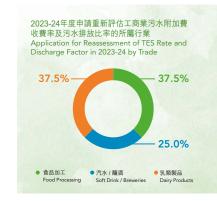


本年內,全港約有323萬個自來水戶,其中約300萬個 用戶須繳付排污費。在非住宅用戶中,約有35,000個用 戶須繳付工商業污水附加費。圖中所示為工商業污水附 加費繳納戶所屬行業的分布情況。

In the reporting year, among approximately 3.23 million water utility users in Hong Kong, around 3 million are required to pay the SC. Among non-domestic users, about 35,000 are subject to the TES. The distribution of trades liable for the TES is illustrated on the left.

#### 重新評估工商業污水附加費收費率及污水排放比率

Reassessment of the TES Rate and Discharge Factor



非住宅用戶若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污水排放比率。獲重新評估後釐定的新附加費收費率或新排放比率有效期為三年。

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.

#### 客戶查詢

#### **Customer Enquiries**



渠務署秉承「以客為本」的信念,致力為香港市民提供優質服務。除設立24小時熱線外,本署亦在不同服務範疇訂立服務承諾,以確保及時回應市民的查詢。於報告年度內,本署共接獲2,584宗有關污水處理服務收費的電話或書面查詢,而所有書面查詢均在一個月內作正式回覆。

Adhering to our value of "customer focus", the DSD is committed to delivering high-quality services to the citizens of Hong Kong. In addition to establishing a 24-hour hotline, the DSD has implemented performance pledges across various service areas to ensure timely responses to public inquiries. In the reporting year, the Department received a total of 2,584 telephone and written inquiries regarding sewage service charges, with all written inquiries formally addressed within a month.



### 藍綠排水建設 Blue-Green Drainage Infrastructure

「藍綠排水建設」旨在以「順應自然,彈 性適應 | 的方式模擬大自然水循環,減 低排洪設施的負荷之餘, 並為市民提供 優美和官居的環境。「藍|代表水體, 「綠」則代表綠化景觀。以往雨水排放 系統主要以排放為主,現時渠務署在規 劃及設計雨水排放系統時會考慮加入滲 诱、蓄洪、淨化及回用元素,致力在有 效排水的同時,亦採集和善用雨水,加 入綠化景觀,以促進市區綠化,提升生 物多樣性和美化生活環境,為市民提供 更多優質公共空間。

基於「藍綠排水建設 | 的原則,本署引入 「河畔城市 | 概念,通過活化水體和增加 綠化景觀, 積極改善河道內及兩旁的生 態環境,提高生物多樣性,加強河道與 社區的聯繫。

Community Inclusive Designs

除了更新排水設施以配合社會發展外,

本署亦重視河道及渠務設施與社區的聯

繫。在開展渠務和河道活化工程同時,

在項目加入綠化、休閒設施,為社區 提供更多公共空間,同時增加其社會價

值,為市民締造美麗舒適的居住環境。

社區共融設計

spaces, elevate social value, and foster a beautiful and comfortable living environment for citizens.

本署正推行重建元朗污水處理廠的工 程,以應付區內不斷增加的人口及未來 發展的需要。重建後的元朗淨水設施將 採用創新的污水處理技術,並加入綠 色建築設計及社區共融元素。設施落成 後,可望搖身一變成為元朗的地標公共 休憩設施,設置河濱長廊、天台花園及 觀鳥屋等設施可供公眾享用。另外,重 建項目也考慮到公眾教育的重要性。新 污水處理設施將設有一條貫穿主要污水 處理工序的教育走廊,讓公眾能夠深入 through the main sewage treatment processes, allowing the public 了解污水處理,提高公眾保護水資源的 to gain a deeper understanding of sewage treatment and raise 意識,從而促進可持續發展。 public awareness of water resource protection, thereby promoting sustainable development.

The "Blue-Green Drainage Infrastructure" concept aims to emulate the natural water cycle through a "nature-based and flexible adaptation" approach, in order to alleviate the pressure on drainage facilities and provide the public with a beautiful and liveable environment. Under this framework, "blue" signifies water bodies, while "green" represents green landscaping. Previous drainage system primarily focused on discharge, however, the DSD now incorporates elements of infiltration, flood storage, purification and reuse during the planning and design of drainage facilities. This approach can enhance rainwater drainage capacity and capture and utilise rainwater, integrating it into green landscapes to promote urban landscape, enhance biodiversity, and beautify the living environment, thereby offering citizens more quality public spaces.

Based on the principles of "Blue-Green Drainage Infrastructure", the Department introduced the concept of "Rivers in the City" to revitalise. By revitalising water bodies and expanding green landscapes, we aim to improve the ecological environment within and alongside the river channels, increase biodiversity, and strengthen the connection between rivers and communities.



The Department is currently implementing the Yuen Long STW reconstruction project to meet the growing population and future development needs in the district. The redeveloped Yuen Long Effluent Polishing Plant will adopt innovative sewage treatment technologies and incorporate green building design and community inclusion elements. Upon completion, it is expected to transform into a landmark public leisure facility in Yuen Long, featuring amenities including a riverside promenade, roof garden and bird hide for public enjoyment. In addition, the redevelopment project takes into consideration the importance of public education. The new sewage treatment facility will have an educational corridor running



河濱長廊構想圖 Photomontage of riverside promenade

天台花園及觀鳥屋構想圖 Photomontage of roof garden and bird hide



#### 美化設施

#### Beautification of Facilities

本署持續改善及優化現有廠房及設施, 透過擴大綠化範圍、改善附近生態環 境、以及提升生物多樣性等措施,令設 施融入社區與周邊環境,為市民創造更 舒適的公共空間。其中,本署在元朗新 田洲頭村蓄洪池淮行的綠化和浮式太陽 能板系統工程,旨在改善環境,為不同 物種提供合適的棲息地,同時能產生可 再生能源,具備多重效益。

Committed efforts by the DSD have been taken to enhance and optimise our existing facilities by expanding green spaces, improving the surrounding ecological environment, and promoting biodiversity. These measures help to integrate our facilities with the community and the surrounding environment, and to create more comfortable public spaces for the citizens. One of the projects that highlights these efforts is the landscape works and floating photovoltaic systems project at the Yuen Long San Tin Chau Tau Tsuen Polder, which aimed to enhance the environment, provide suitable habitats for diverse species, and generate renewable energy.



元朗新田洲頭村蓄洪池 Yuen Long San Tin Chau

# 3

## 特色渠蓋

#### Thematic Manhole Covers

渠務署管理總長度超過4,800公里的渠務系統,這個龐大的渠務網絡肩負防洪和排污的使命,為了提升市民對渠務系統的興趣,本署特意設計了多個特色渠蓋,加入地區元素,突顯香港文化,為市民和遊客增添打卡好去處。

The DSD manages an extensive drainage system spanning over 4,800 kilometres, with a mission focused on flood prevention and sewage services. To enhance public engagement for the drainage infrastructure, the DSD has installed a series of thematic manhole covers that incorporate local cultural elements, showcasing the rich heritage of Hong Kong. This initiative not only aims to beautify our communities but also provides check-in spots for both residents and tourists.





以大埔林村許願樹、蝴蝶谷寵 物公園、梧桐寨為主題的特色 渠蓋

Thematic manhole covers featuring the Lam Tsuen Wishing Tree, Butterfly Valley Pet Garden, and Ng Tung Chai



#### 水資源管理 Water Resources Management

水資源為珍貴的地球資源,本署在日常 營運及各項建造工程中,優先考慮有效 的水資源管理。本署致力實施各種優化 用水效益的措施,包括對水資源和污水 的收集、處理和回用等。 The Department highly values water as a precious natural resource and prioritises effective water management in our daily operations and construction projects. We are dedicated to implementing measures that optimise water efficiency, including the harvesting, treatment, and reusing of water and wastewater.

#### 水資源採集與回用系統 Water Harvesting System

在規劃水資源採集與回用系統時,我們透過可持續水資源管理的設計與措施,包括多孔透水路面、雨水花園、雨水 收集系統和蓄洪池等,有效收集及回收水資源。現時本署的跑馬地地下蓄洪計劃、九龍城一號及二號污水泵房及荔枝 角雨水排放隧道已設有水資源採集及回用系統。

同時,為了充分利用雨水資源,我們將雨水暫存在蓄洪池,並計劃使用緣化天台及滲透地磚,將收集到的雨水回收並用於灌溉和沖廁,以減少水資源浪費及體現[藍綠排水建設]的理念。

The DSD adopts sustainable water-saving designs and measures in planning water collection and reuse systems. We have introduced designs such as porous pavements, rain gardens, rainwater harvesting systems, and stormwater storage tanks. At present, the Department's facilities which are equipped with water harvesting systems include the Happy Valley Underground Stormwater Storage Scheme (HVUSSS), Kowloon City No. 1 and No. 2 Sewage Pumping Stations (SPSs) and Lai Chi Kok Drainage Tunnel.

To maximise the utilisation of rainwater resources, we temporarily store rainwater in the storage tank, as well as plan to adopt green roofs and permeable paving blocks to collect rainwater for irrigation and toilet flushing. This approach helps reduce water waste and truly embraces the concept of "Blue-Green Drainage Infrastructure".



跑馬地地下蓄洪計劃水資源採集及回用系統示意圖 Schematics of the water harvesting system under Happy Valley Underground Stormwater Storage Scheme

## **S**

#### 污水再造與回用

#### Water Reclamation and Reuse

為了維持供水穩定及支持香港的可持續發展,政府自2008年起推行「全面水資源管理策略」,不斷推廣節約用水及開拓新水源。渠務署響應該策略,積極在轄下設施實行污水再造與回用,將處理及淨化後的污水變成可循環再用的再造水,以供日常運作使用。此外,我們期望社會各界更廣泛使用再造水,以節約和保護水資源,從而減輕對環境的負面影響。

The "Total Water Management Strategy", implemented by the Government in 2008, has set out to ensure water security and promote Hong Kong's sustainable development, laying emphasis on promoting water conservation and exploiting new water resources. In support of this strategy, the DSD actively implements water reclamation and reuse at our facilities, effectively recycling treated and purified effluent for daily operations. We also promote the broader use of reclaimed water across various sectors to conserve and protect water resources, thereby minimising the environmental impact.

本署現時已於六間污水處理廠設置再造水及再用水生產設施,分別為香園圍污水處理廠、昂坪污水處理廠、望后石污水處理廠、新圍污水處理廠、沙田污水處理廠及大埔污水處理廠。於報告期內,我們平均每日可生產接近2,000立方米非飲用用途的再造水及再用水。

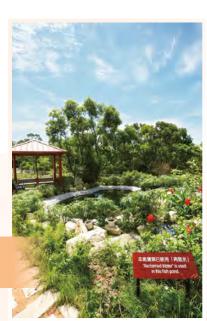
At present, the Department has six sewage treatment works (STWs) equipped with water reclamation and reuse facilities, including Heung Yuen Wai STW, Ngong Ping STW, Pillar Point STW, San Wai STW, Sha Tin STW and Tai Po STW. During the reporting period, we produced nearly 2,000 cubic metres of reclaimed and recycled water per day on average for non-potable purposes.

#### 昂坪污水處理廠

#### Ngong Ping Sewage Treatment Works

昂坪污水處理廠在2006年開始運作,是香港首間生產再 造水的三級污水處理廠。污水經過該處理廠處理後,能 夠變成安全無味的再造水,用於昂坪地區的公廁和纜車 站作沖廁用途。部分再造水也用於廠內的觀賞魚池,以 及作廠房內的灌溉用途。

In operation since 2006, Ngong Ping STW has stood as Hong Kong's first tertiary STW equipped with a water reclamation facility. The reclaimed water produced by this STW is safe and odourless, which is used for toilet flushing at Ngong Ping public toilets and Ngong Ping Cable Car Terminal toilets. Some of the reclaimed water is also used for rearing ornamental fish in fishbonds and irrication within the facility.



昂坪污水處理廠魚池 Ngong Ping Sewage Treatment Works Fishpond

#### 沙田污水處理廠

#### Sha Tin Sewage Treatment Works

沙田污水處理廠再造水設施在2011年年初啟用。該設施生產的再造水經過二級處理和紫外光消毒淨化後,再利用逆滲透技術進行淨化,以供清洗廠房、灌溉園林、沖廁以及稀釋化學品等廣泛非飲用用途。於報告期內,沙田污水處理廠再造水設施平均每天可生產270立方米的再造水。

自2021年起,渠務署在沙田再造水資訊中心首次試行以經過二級處理和紫外光消毒的排放水為冷卻介質的污水冷式空調系統,減少傳統水冷式空調系統對淡水的需求。與再造水相比,使用經處理的污水已證實更具成本效益,亦更能節省能源。

The reclaimed water facility at Sha Tin Sewage Treatment Works commenced operation in early 2011. Reclaimed water produced by this facility undergoes secondary treatment, ultraviolet disinfection, and reverse osmosis-based purification. The reclaimed water is served for various non-potable purposes such as plant cleaning, irrigation, toilet flushing as well as chemical dilution. During the reporting period, the facility was competent to generate 270 cubic metres of reclaimed water per day on average.

Since 2021, the DSD has been piloting an effluent-cooled air conditioning (A/C) system at the Sha Tin Water Reclamation Information Centre, which was implemented in Hong Kong for the first time. This system utilises secondary treated and ultraviolet-disinfected effluent as the cooling medium, significantly reducing the demand for fresh water typically required by conventional water-cooled A/C systems. Compared to reclaimed water, using treated effluent proves to be more cost-effective and energy-efficient.



沙田再造水資訊中心 Sha Tin Water Reclamation Information Centre

排放水水冷式空調系統 Effluent Cooling Air Conditioning System



# 3

#### 減緩與適應氣候變化

#### Climate Change Mitigation and Adaption

面對全球暖化問題,本署積極推動部門協作,並加強與其他城市、地區、國家交流。本署為政府跨部門「氣候變化及碳中和督導委員會」及「氣候變化基建工作小組」的成員,聯同政府各政策局和部門實施減碳政策,應對極端天氣所帶來的挑戰。

除了與政府各部門合作,我們亦借鑒國際應對氣候變化的最佳做法及措施。本署代表香港特區政府加入「C40城市氣候領導聯盟」旗下的「連結三角洲城市」,與其他三角洲城市一同交流防洪技術。另外,渠務署也加入「粵港環保及應對氣候變化合作小組」,定期交流和分享有效的防洪技術。這項合作讓本署了解各地應對氣候變化及防洪的最新技術。

集務署的「雨水排放系統手冊」為防洪工程提供設計標準,參考「聯合國政府間氣候變化專門委員會」(IPCC)第六次評估報告和政府部門對本地最新氣候變化的相關研究,於2022年8月更新了手冊中與氣候變化相關的設計標準,不斷提升對氣候變化的應對能力。2024年3月,因應2023年9月的極端暴雨,渠務署也更新了手冊內的設計雨量參數,分析超過140年的雨量數據,包括2023年9月的極端大雨,相應更新不同「重遇期」的設計雨量參數。

In response to global warming, the DSD actively promotes collaboration and enhances communication with other cities, regions, and countries. As a member of the Government's inter-departmental "Steering Committee on Climate Change and Carbon Neutrality" and the "Climate Change Working Group on Infrastructure", we collaborate with various government bureaus and departments to implement decarbonisation policies to help address the challenges posed by extreme weather.

Beyond our collaboration with government departments, we also draw on international best practices for climate change mitigation. The Department represents the Government of Hong Kong Special Administrative Region in the "C40 Cities Climate Leadership Group under the Connecting Delta Cities initiative", where we exchange flood prevention technologies with other delta cities. Additionally, we have joined the "Hong Kong-Guangdong Joint Working Group on Environmental Protection and Combating Climate Change", facilitating regular exchanges of effective flood prevention strategies and techniques. This collaboration keeps us informed about the latest climate change mitigation measures and flood prevention technologies adopted by other cities.

The DSD's Stormwater Drainage Manual (SDM) provides design standards for flood prevention projects, referencing the "Intergovernmental Panel on Climate Change" (IPCC)'s Sixth Assessment Report and relevant studies on latest local climate change conducted by government departments. SDM is updated design standards related to climate change in August 2022, continually enhancing our capacity to respond effectively. In March 2024, we updated the SDM's rainfall design parameters in response to the heavy rain in September 2023 by analysing over 140 years of rainfall data, including extreme rainfall events in September 2023, ensuring that our design parameters reflect current conditions for various return periods.

#### 能源使用 Energy Use

渠務署致力推進可再生能源的應用及技術研發,以逐步減少對化石燃料的依賴。政府已於2019年制訂「綠色能源目標」,並期望於2020-21年至2024-25年間進一步提高政府整體能源表現6%。為達到這個目標,本署制定階段性目標,預計於2024-25年度或之前,有序地推展可再生能源項目及節能措施。通過這些措施,本署不僅減少對化石燃料的依賴,也為實現可持續發展的長遠目標奠定了穩固的基礎。

With the goal of gradually phasing out fossil fuels, the DSD is committed to promoting the efficient use of renewable energy (RE) and advancing relevant technological research. In alignment with the Government's "Green Energy Target" established in 2019, which aims to enhance overall energy performance by 6% from 2020-21 to 2024-25, the Department has set phased targets to achieve this objective. It is expected to implement renewable energy projects and energy-saving measures by or before 2024-25. Through these initiatives, we are dedicated to creating a sustainable future while reducing our reliance on fossil fuels.

#### 採用可再生能源 Harnessing Renewable Energy

目前渠務署轄下的設施已陸續安裝可再 生能源系統,為設施提供電能和熱能。 近年本署轄下設施的可再生能源系統平 均每年能生產約2,700萬度電,佔本署 每年約8%的能源需求。 Renewable energy systems have been progressively installed in the DSD facilities to provide electricity and heat energy for internal consumption. In recent years, the RE installations in the Department's facilities have generated energy equivalent to about 27 million kilowatthours of electricity per year on average, accounting for about 8% of our annual energy demand.



渠務署平均每年的可再生能源產量

Average annual RE output of the DSD in recent years

**≈27,000,000** 

度電 kilowatt-hours 9:

可滿足超過

Sufficiency in meeting annual electricity demand of over

8,100

個三人家庭的一年電力需求 1 three-person households 1



減少超過

Reduction of over

18,900 公噸

二氧化碳排放量<sup>2</sup> f carbon dioxide (CO<sub>2</sub>) emission a

- 1 香港三人家庭用電量平均每年約3,300度電計算。 Calculated based on the average annual three-person household electricity consumption of about 3,300 kilowatt-hours in Hong Kong.
- 2 根據全港性預設值(0.70公斤二氧化碳當量/度電)計算。 Calculated based on a territory-wide default value (0.70 kilogram CO,e/kilowatt-hours).

於2017-18年度至2023-24年度,本署 共獲得7.11億撥款以推進36個不同類型 的可再生能源項目。現今部分系統已經 落成啟用,其餘系統亦會在未來數年啟 用。預料所有系統落成後每年可為本署 額外生產超過2.090萬度電的可再生能 From 2017-18 to 2023-24, the Department received funding totalling \$711 million for implementing 36 RE projects of various types. Some of them have been commissioned, while the rest are scheduled for completion in the coming years. These projects, upon full completion. will be able to generate additional renewable energy equivalent to more than 20.9 million kilowatt-hours of electricity per annum.

Photovoltaic (PV) panels harvest solar energy to generate electricity. As

#### 太陽能

#### Solar Energy

太陽能光伏板能擷取太陽能,從而提供 電力。截至2024年3月底,本署轄下有 42個設施已安裝太陽能光伏板,涵蓋18 間污水處理廠,20間泵房和4個蓄洪設 施。所有設施的總發電裝機容量為2.8 **兆瓦。** 

at the end of March 2024, PV panels have been installed at 42 DSD's facilities, including 18 STWs, 20 pumping stations and 4 stormwater storage facilities. The total installed generation capacity of the DSD's PV systems is about 2.8 megawatts.

於報告期內,本署所有太陽能光伏系統 的總發電量約為135萬度電。其中,本 署轄下的小蠔灣污水處理廠的太陽能發 電場為目前政府擁有最大規模的太陽能 發電系統,每年發電量可達約110萬度 雷。

During the reporting period, the Department's PV systems generated about 1.35 million kilowatt-hours of electricity in total. In particular, the solar system at Siu Ho Wan Sewage Treatment Works, which is the largest government solar power installation, can generate up to 1.1 million kilowatt-hours of electricity annually.

未來,我們計劃在更多轄下設施設置各 類太陽能發電系統,如傳統硬板、柔韌 薄膜、柔韌單晶硅和可踏式太陽能光伏 板等。

In the future, we put on trial to install various types of PV systems in more facilities, including traditional rigid panels, flexible thin-film panels, flexible monocrystalline panels, and steppable PV panels.

另外,我們亦試行在不同水體設置浮式 太陽能發電系統的可行性。其中,我們 於新田、蝦尾新村及洲頭村蓄洪池的小 規模浮式太陽能發電系統已率先啟用。 系統的總發電容量約為100千瓦,並預 計每年可提供約114.000度電。本署於 2024年開始將新田蓄洪池太陽能發電系 統的規模擴大至350千瓦,以進一步提 高可再生能源的發電量。

We are also actively exploring the feasibility of deploying floating PV systems in different water bodies. Notably, small-scale pilot floating PV systems have been launched in Polders of San Tin, Ha Mei San Tsuen and Chau Tau Tsuen, with a total generation capacity of about 100 kilowatts and expected to supply about 114,000 kilowatt-hours of electricity annually. In 2024, we have expanded the PV system in San Tin polder to 350 kilowatts to ramp up renewable energy generation.

預計於2024-25年度,在更多太陽能項 目落成啟用後,本署所有太陽能光伏系 統的總發電裝機容量將達4兆瓦。

展望未來,本署計劃在多個新建設或擴 建的主要污水處理廠安裝較具規模的太 陽能發電系統,包括元朗淨水設施、石 湖墟淨水設施、元朗南淨水設施、洪水 橋淨水設施等。預計在上述所有太陽能 項目落成啟用後,本署所有太陽能光伏 系統的總發電裝機容量預計將超過10兆 万.。

With the completion and commissioning of additional PV projects by 2024-25, the total installed generation capacity of the Department's PV systems is expected to be 4 megawatts.

Looking ahead, the Department plans to install larger-scale PV systems in newly built or upgrading STWs such as Yuen Long Effluent Polishing Plant, Shek Wu Hui Effluent Polishing Plant, Yuen Long South Effluent Polishing Plant and Hung Shui Kiu Effluent Polishing Plant. Upon completion of all these PV projects, the total installed generation capacity of the Department's PV systems is expected to exceed 10 megawatts.





設於新田雨水泵房的可踏式 太陽能發電系統 Steppable Photovoltaic System at San Tin Stormwater Pumping Station

設於新田雨水泵房的太陽能樹 Solar Tree at San Tin Stormwater Pumping Station







設於西北九龍基本污水處理廠的柔韌單晶硅 太陽能發電系統

Flexible Monocrystalline Photovoltaic System at North West Kowloon Preliminary Treatment Works



#### 水力發電

Hydroelectric Power

另外,本署亦推動水力發電系統。昂船 洲污水處理廠設有兩台水力渦輪發電系 統,這些渦輪機依靠排放水的流動液壓 能量,生產電力供廠內設施使用,並減 少碳足跡。

兩台水力渦輪發電系統的發電功率分別 為47和48千瓦,每年總共可生產高達24 萬度電。同時,第三組水力渦輪發電系 統預計於2025年上半年竣工,為廠房提 供更多電力。未來,本署會繼續探索更 多發展水力發電的機遇。 The Department is making significant strides in the development of hydroelectric power systems. Stonecutters Island STW is currently equipped with two hydro-turbine generating systems. These turbines harness the hydraulic energy from the flow of effluent to generate electricity for use within the facility, thereby reducing our carbon footprint.

The two hydro-turbine generating systems have installed generation capacities of 47 and 48 kilowatts, respectively, producing a total of up to 240,000 kilowatt-hours of electricity annually. Furthermore, a third hydro-turbine generating system is expected to be completed by the first half of 2025, providing more electricity to the facility. Moving forward, the Department will continue to explore additional opportunities for installing hydro-turbine generating systems.



昂船洲污水處理廠的水力渦輪 發電系統 Hydro-turbine generating system at Stonecutters Island Sewage Treatment Works

#### 生物氣

#### Biogas

施。

報告期內,本署轄下污水處理廠由生物氣所產生的可再生能源相等於約2,090萬度電。另外,本署在沙田污水處理廠 增設一組約1,400千瓦的電熱聯供發電系統,以增加使用生物氣。自發電系統於2024年第一季開始運作,本署的電熱聯供及微型渦輪總發電裝機容量達到6.8 兆瓦。展望未來,本署會在新建設或擴建的主要污水處理廠安裝電熱聯供發電系統,包括元朗淨水設施、石湖墟淨水設施、元朗南淨水設施及洪水橋淨水設 During the sewage treatment process, the sludge generated undergoes anaerobic digestion and biodegradation, releasing biogas that can be used to produce thermal and electrical energy. To effectively utilise biogas, the Department has installed a total of eight biogas-fuelled combined heat and power (CHP) generators, two micro-turbines and one waste heat recovery power generation system at its STWs to generate electricity and heat for internal use. The recovered waste heat from CHP generators is not only used to heat circulating water to maintain the temperature required for sludge digestion process, but can also be used as an absorption refrigeration system for cooling.

During the reporting period, the total renewable energy generated by biogas in the Department's STWs amounted to about 20.9 million kilowatt-hours of electricity. To enhance the utilisation of biogas, the Department installed an additional 1.4-megawatt CHP generator system at Sha Tin STW, which was in operation since the first quarter of 2024. This addition brings our total installed generation capacity of CHP generators and gas turbines systems to 6.8 megawatts. Looking ahead, the Department is planning to install additional CHP generating systems in major new or upgrading STWs including Yuen Long Effluent Polishing Plant, Shek Wu Hui Effluent Polishing Plant, Yuen Long South Effluent Polishing Plant and Hung Shui Kiu Effluent Polishing Plant.

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除了利用生物氣發電外,本署還通過利用生物氣產生的熱能,盡量提升能源效率。2023年中,本署在大埔污水處理廠設置一組餘熱回收發電系統,收集電熱聯供發電機的餘熱,以生產電力,確保充分利用可再生能源。除了在大埔污水處理廠,本署正為沙田污水處理廠設置同類型的發電系統,進一步加強本署在可再生能源方面的能力。

In addition to generating electricity from biogas, we are maximising energy efficiency by harnessing the heat produced from biogas. At Tai Po STW, we installed a power generating system in mid-2023 that captures waste heat from our CHP generators to produce additional electricity, so as to fully harness renewable energy. In addition to Tai Po STW, we are planning to implement a similar power generation system at Sha Tin STW, further enhancing our renewable energy capabilities.

沙田污水處理廠的電熱聯供發電機 CHP generator at Sha Tin STW



為充分利用沙田污水處理廠現有的污泥 消化設施,本署正從其他污水處理廠引 入化學強化一級處理的污泥,與廚餘一 同進行共厭氧消化,以產生額外的生物 氣,進一步生產更多可再生能源供廠房 運作之用。 To maximise the use of existing sludge digestion facilities at Sha Tin STW, we are introducing chemically enhanced primary treatment (CEPT) sludge from other treatment works, in order to produce extra biogas and further provide more renewable energy for plant operations.



大埔污水處理廠內的廚餘、污泥 共厭氧消化設施 Food Waste and Sewage Sludge Anaerobic Co-Digestion Facility at Tai Po STW

#### 「<mark>廚餘、污泥共厭氧消化」計劃</mark> "Food Waste/Sewage Sludge Anaerobic Co-digestion" Project

本署與環保署就「廚餘、污泥共厭氧消化」計劃展開緊密合作。2019年,本署與環保署在大埔污水處理廠推行第一與環保署在大埔污水處理廠推行第一劃。這項計劃旨在增加生物氣產量,同時器力。為是對於水處理廠的能力。本署將環保署軍人方水處理廠的能力。本署將環保署軍人方水處理廠的能力。本署將環保署軍人成電能和熱能,供污水處理廠日常轉運化成電能和熱能,供污水處理廠日常轉運化成電能和熱能,供污水處理廠日常轉運的。該計劃每日可處理達50公噸商等經解處理廚餘的壓力,並為每年產生約95萬度電的可再生能源。

The Department has been closely collaborating with the Environmental Protection Department (EPD) on the "Food Waste/Sewage Sludge Anaerobic Co-digestion" project. In 2019, we implemented the first "Food Waste/Sewage Sludge Anaerobic Co-digestion" Trial Scheme with the EPD at Tai Po STW. This initiative aims to increase biogas production, reduce digestate volume, and lower carbon emissions, while also enhancing Hong Kong's capacity to handle food waste. We combine commercial and industrial food waste collected by the EPD with sewage sludge for anaerobic digestion. The biogas generated during this process is converted into electricity and heat for daily operational use within the STW. The scheme can handle up to 50 tonnes of food waste daily, alleviating pressure on food waste management and generating approximately 0.95 million kilowatt-hours of renewable energy each year.

#### 節約能源措施

#### Measures for Saving Energy

本署致力優化各項設施運作期間的能源 管理,實施多項節能措施,持續優化污 水處理及防洪設施,以提升能源效益和 減低整體的碳足跡。這些措施包括: The Department places strong emphasis on energy management during the operational processes of various facilities. We have implemented numerous energy-saving measures and continuously improved sewage treatment and flood prevention facilities, thereby enhancing energy efficiency and minimising our overall carbon footprint. These measures include:



優化污水處理廠及污水泵房的 操作流程

Optimising operating procedures of STWs and SPSs



將舊式廠房設備更換為能源效益較高的廠房設備, 包括更換鼓風機、照明系統、水泵及隔篩等

Replacing outdated plant equipment with more energy-efficient devices, including replacing air blowers, lighting systems, pumps and screens



境管理

#### 2023年內部碳審計(以公噸二氧化碳當量計算)

Internal Carbon Audit in 2023 (in tonnes of CO<sub>2</sub> equivalent)

為制定有效的減碳措施,本署正分階段為轄下設施進行內部碳審計,當中包括進行科學分析及評估,以辨別各設施的主要排放源。報告期間,本署已為位於昂船洲、沙田、大埔、石湖墟、望后石、小蠔灣及赤柱的七間污水處理廠進行內部碳審計。本署的目標是擴展內部碳審計的覆蓋範圍,以尋求並採取適當的節能減排措施,例如降低機器耗能,提升運作效率和利用可再生能源。

To develop effective measures for carbon reduction, the Department is conducting internal carbon audit for our facilities in phases. This process involves scientific analysis and assessment to identify major emission sources at each site. During the reporting period, we conducted internal carbon audits for seven of our STWs at Stonecutters Island, Sha Tin, Tai Po, Shek Wu Hui, Pillar Point, Siu Ho Wan and Stanley. Our goal is to expand the coverage of internal carbon audits to more facilities, enabling us to identify and adopt appropriate energy-saving and emission reduction measures, such as reducing equipment energy consumption, increasing operational efficiency, and adopting renewable energy.

	範圍一碳排放量 Scope 1 Carbon Emissions	範圍二碳排放量 Scope 2 Carbon Emissions	總碳排放量 Total Carbon Emissions
昂船洲污水處理廠 Stonecutters Island STW	-2	35,033	35,031
沙田污水處理廠 Sha Tin STW	2,347	16,826	19,173
大埔污水處理廠 Tai Po STW	1,161	6,033	7,194
石湖墟污水處理廠 Shek Wu Hui STW	918	8,143	9,061
望后石污水處理廠 Pillar Point STW	-9	5,425	5,416
小蠔灣污水處理廠 Siu Ho Wan STW	-9	1,826	1,817
赤柱污水處理廠 Stanley STW	79	1,621	1,700

範圍1 Scope 1	經直接使用燃料而產生的直接排放+除氮過程中釋放的氧化氮+製冷劑排放+污泥消化池中的甲烷釋放-因植樹/太陽能移除的碳排放(以公噸二氧化碳當量計算) Direct emissions generated from direct combustion of fuels + $N_2$ O emissions through nitrogen removal + Refrigerant emissions + Methane release from sludge digester – GHG removals by planting trees/applying solar power (in tonnes of $CO_2$ equivalent)
範圍2	經使用電力及煤氣而產生的間接排放
Scope 2	Indirect emissions generated from the use of electricity and Towngas

# 綠色辦公室

#### Green Office

渠務署實踐綠色營運的概念,致力創造 「綠色辦公室」環境。本署的方針著重源 頭減廢、節約能源、綠色採購,以及培 養可持續發展的文化,從而提高員工的 環保意識,並鼓勵整個部門培養綠色思 The DSD prioritises green operations by striving to create a "green office" environment. Our approach focuses on waste reduction at the source, energy conservation, green procurement, and fostering a sustainable culture. Through these initiatives, we aim to enhance our staff's awareness of environmentally friendly practices and encourage a green mindset throughout the organisation.

#### 源頭減廢

#### Reducing Waste at Source

為履行「綠色辦公室」的原則,本署已實施多項源頭減廢的措施。本署鼓勵員工在舉辦會議及公務活動時自備可重用的餐具,以配合政府盡量減少使用即棄膠餐具的倡議。在減少用紙方面,本署推行「無紙化辦公室」及「無紙會議」文化,向同事發出節約用紙指引,提醒同事使用雙面印刷和重用單面紙及信封,並鼓勵同事多使用手提電腦及平板電腦等電子設備匯報和討論。

另外,本署在辦公室內設有多個回收 點,回收廢品,包括塑膠和金屬容器、 打印機碳粉盒、充電電池及廢紙。本署 也會定期巡查辦公室,提醒員工進行回 收。

報告期間,本署共舉行了127次無紙會議,以電子方式傳閱的會議文件共有 1,430份。另外,本署自2017年年中開始使用電子傳真,目前使用的電子傳真 號碼共有152個。

自2018年起,渠務署所有行政部門均 改用電子傳真的方式收發文件。由於採 取了這些節約用紙的措施,渠務署每 年的用紙量均無超出分配的限額。報告 期間,本署總用紙量為9,735令\*,較 2013-14年度少約7.5%。 To bring the "Green Office" principle into practice, the Department has adopted various measures to reduce waste at the source. In alignment with the Government's initiative to minimise the use of disposable plastic tableware, we encourage staff to bring their own reusable tableware for meetings and official events. We promote a "paperless office" and "paperless meetings" culture to minimise paper usage, providing guidelines on paper-saving practices that remind colleagues to print double-sided and reuse single-sided paper and envelopes. We recommend using electronic devices like laptops and tablets for presentations and discussions.

Additionally, we have established collection points in our offices for the recycling of used items, including plastic, metal containers, toner cartridges, rechargeable batteries and wastepaper. Regular office inspections are also carried out to foster recycling efforts among employees.

During the reporting period, we held a total of 127 paperless meetings and circulated 1,430 meeting documents electronically. Moreover, the Department has adopted e-fax since mid-2017 and now uses 152 e-fax numbers in total.

Since 2018, all administrative divisions under the DSD have transitioned to e-fax for incoming and outgoing documents. This shift to paper-saving measure has ensured that the Department's annual paper consumption has not exceeded the allocated quota. During the reporting period, the total paper consumption was 9,735 reams\*, reflecting a reduction of approximately 7.5% compared to the 2013-14.

\* 撇除用於新合約/工程項目的招標/報價程序的用紙量。

This figure excludes paper used for tendering and quotation processes related to new contracts or projects.







#### 節約能源 **Energy Saving**

渠務署通過各種節能措施向員工推廣節 約能源。為配合政府在2017年公布的 《香港氣候行動藍圖2030+》,本署致力 提升綠色建築的品質和減少政府設施的 耗電量,主要措施包括將空調的溫度設 定在攝氏25.5度,盡量減少非必要的照 明,以及使用計時器以確保在辦公時間 後關閉辦公室設備。

The DSD has taken significant steps to promote energy conservation among staff through a variety of energy-saving measures. In support of the recommendations outlined in the Government's 2017 "Hong Kong's Climate Action Plan 2030+", the Department is committed to enhancing the quality of green buildings and reducing electricity consumption in government facilities. Key initiatives include setting air conditioner temperatures to 25.5°C, minimising non-essential lighting, and using timers to ensure office equipment is turned off after working hours.

#### 支持[地球一小時]熄燈行動

Supporting "Earth Hour"

能減排的決心。2024年3月23日,本署 與其他政府部門一同響應世界自然基金 會舉辦的「地球一小時」活動,由晚上8 時30分開始,關掉辦公室及設施的非必 良好氛圍。

In a strong demonstration of our commitment to environmental stewardship, the DSD actively participates in various green initiatives. On 23 March 2024, the Department joined other government departments in supporting "Earth Hour", organised by the World Wide Fund for Nature (WWF), From 8:30pm, we turned off nonessential lights and electrical appliances in our offices and facilities for one hour, creating a favourable "green office" atmosphere.

#### 綠色採購

Green Procurement

渠務署配合政府的綠色採購政策, 在採 購過程中考慮環保元素。本署已採納環 保署的環保採購產品清單,在報告期間 採購節能電器(如電腦、電風扇、影印 機及打印機),及環保辦公室消耗品(如 再造紙及充電池)。另外,本署亦鼓勵 員工涌勤時使用電動車,以推廣低碳生 活模式。

In line with the Government's green procurement policy, the DSD integrates environmental considerations into its procurement process. We have adopted the EPD list of Green Procurement Items, procuring energy-efficient appliances such as computers, electric fans, photocopiers, printers, and eco-friendly office supplies like recycled paper and rechargeable batteries during the reporting period. Additionally, we encourage staff to commute by electric vehicles to promote low-carbon living.

#### 培養可持續文化 Fostering a Sustainable Culture

為了在部門內培養可持續文化和提升全 體員工的環保意識,由熱心同事組成的 「綠色先鋒」會向環保管理委員會反映意 見,亦會組織多項綠色活動(如海岸清 潔活動及綠色耕種比賽),鼓勵同事參 與環保活動,並實踐綠色生活。

To cultivate a sustainable culture within the Department and enhance environmental awareness among all employees, we have established a group known as the "Green Champions". This team actively engages with the Green Management Committee to propose initiatives and organise various green activities, such as coastal clean-ups and green farming competitions. These efforts encourage participation in environmental protection and help instil a green lifestyle among colleagues.

#### 魯班服務月2024 - 建造業海岸清潔日

Lo Pan Service Month 2024 - Construction Industry Shoreline Clean-up Day



2024年5月18日,渠務署義工隊在馬鞍山渡頭灣沙灘參與 「建造業海岸清潔日」,為社區環保出一分力,反映本署對

DSD volunteers participated in the "Construction Industry Shoreline Clean-up Day" on 18 May 2024, at To Tau Wan Beach in Ma On Shan, reflecting our commitment to protecting nature and contributing positively to our environment

#### 5 關愛員工 CARING FOR OUR STAFF

渠務署秉持以人為本的理念,視員工為最珍貴的資產,致力營造良好的工作環境,讓他們提升自我及發展專業。

考慮到員工的職業發展,本署透過各種培訓課程,讓 員工收穫知識與技能,同時推動個人成長,完善的職 安健管治體系及制度保障員工在安全的工作環境下工作。

另外,本署亦關注員工的身心健康,經常組織不同康樂活動,涵蓋運動、文化及手工藝製作等,鼓勵大家建立健康快樂的生活方式。這些活動不僅讓員工得以放鬆身心,還能增進同事之間的交流,提升團隊凝聚力。我們非常重視與員工的溝通,積極聆聽員工需求,以締造舒適、互相支持及正向的工作環境。在渠務署,我們不只建立事業,更着力於建設一個溫馨的社群,使每個人能茁壯成長,盡展潛力。

The DSD has always adhered to a people-centred philosophy, believing that our employees are our most invaluable asset, and we are committed to creating a positive work environment that nurtures their growth and professional development.

To support this vision, we prioritise the career development of our employees through a wide array of training courses designed to impart knowledge and skills while facilitating personal growth. Our robust occupational safety and health governance system also ensures that employees work in a safe environment.











## 員工培訓與發展

#### Staff Training and Development

為了提升員工的專業水平和技能,本署提供多樣化的學術活動,包括內部培訓課程、研討會、工作坊和交流會,令員工了解業界趨勢和進展。另外,本署許多活動都可在網上進行,以便員工根據個人的學習需要調整學習進程。於報告期內,我們合共舉辦489個培訓課程,員工人均培訓時數為35小時。

To enhance the professional knowledge and skills of our employees, the Department offers a wide range of training opportunities, including in-house training courses, seminars, workshops and exchange sessions. These activities ensure that our employees keep abreast of the latest industry trends and developments. Additionally, many of our activities are available on online platforms, allowing employees to tailor their learning journey according to their individual needs. During the reporting period, we successfully organised a total of 489 training courses, with an average of 35 training hours per capita.

#### 內部培訓課程

Internal Training Courses

本署持續為管理層及員工提供各項內部培訓課程,以促進員工對本署政策、日常營運及最新發展的理解,於報告期內,本署舉辦的培訓課程涵蓋一系列主題,包括污水處理技術及「河畔城市」概念。

The Department offers ongoing internal training courses for both management and staff. These courses are designed to foster understanding of departmental policies, daily operations, and the latest developments. During the reporting period, our training programmes covered a range of topics, including sewage treatment technologies and the "Rivers in the City" concept.

#### 入職課程

Induction Course

為了幫助新入職的員工盡快融入本署的工作環境,並了解各部門的運作和服務承諾,我們為新入職的員工安排入職培訓課程。於報告期內,本署舉辦五次入職課程,歡迎超過375名新同事加入本署。

The Department organises induction course for hires to help them settle in quickly and familiarise with departmental operations and performance pledges. During the reporting period, we conducted five induction courses, welcoming over 357 new staff members into the Department.





#### 安全與健康 Safety and Health

渠務署將員工的職業安全和健康置於首位,確保員工擁有一個安全可靠的工作場所。我們建立並實施全面的安全管理系統,融合法規、培訓、監督,亦持續優化系統,為所有員工創造更安全的工作環境。

在法律和法規方面,本署嚴格遵守職業安全及健康(職安健)相關的法律和法規,如香港的《職業安全及健康條例》。所有員工、工程顧問和承建商均需嚴格遵守相關的法律和法規,致力減少職安健風險:在培訓方面,本署亦舉辦各項職安健相關的課程及活動,提高員工對健康與安全問題的意識。

The DSD prioritises occupational safety and health to ensure a safe and reliable workplace for our employees. The Department has established a comprehensive safety management system that integrates compliance safety regulations and standards, training and supervision, while continuously optimising the system to create a safer working environment for all employees.

In terms of legal compliance, we strictly adhere to occupational safety and health (OSH) regulations, such as the "Occupational Safety and Health Ordinance" of Hong Kong. All employees, project consultants and contractors are required to strictly comply with relevant laws and regulations to minimise OSH risks. On the training front, we organise various OSH-related courses and activities to foster employee awareness on health and safety issues.

#### 職安健管理

**OSH Management** 

渠務署已建立完善的職安健管治體系 並制定安全管理的相關制度,以加強管 理職安健風險。本署的職安健管治體系 由安全督導委員會、機電工程科安全管 理委員會、污水處理廠安全管理委員會 及百屬員工隊安全管理委員會組成,當 中成員來自不同職級與職系的員工。該 委員會負責識別重大職安健風險, 並制 定預防措施以應對相關風險。本署鼓勵 員工能多參與、諮詢及交流有關職安健 的事宜,確保現行的職安健政策能有效 應對已識別的風險。本署亦歡迎不同崗 位的員工主動反映任何與安全相關的問 題,從而讓我們能夠及時了解相關風險 並加強管理, 並會保障相關員工不會受 到任何處分。

The DSD has formulated a robust OSH governance system, along with related safety management policies, to enhance the management of OSH risks. Our OSH governance system comprises the Safety Steering Group, the Electrical and Mechanical Branch Safety Management Committee, the Sewage Treatment Works Safety Management Committee and the Direct Labour Force Safety Management Committee, which is composed of members from different disciplines and grades. They are responsible for identifying significant OSH risks and developing appropriate preventive measures. The Department encourages active employee participation, consultation, and communication on OSH matters, ensuring that existing OSH policies effectively address identified risks. Employees in all positions are encouraged to report safety issues, allowing us to understand related risks and strengthen response in a timely manner. We also ensure that employees who raise safety concerns are protected from any disciplinary actions.

本署秉承「預防為主」的原則,對潛在的安全隱患進行評估,並採取一系列預防措施,以管理和控制安全風險。在工程規劃及設計的初期,本署會聘請合資格的專業人士對工程期間可能發生的安全及健康風險進行詳細評估。在工程開展後,我們會根據風險評估結果和建議制定適當的控制措施。在工程期間,我們亦會定期進行現場巡查,以檢查和確保正確執行安全措施。透過多方面的管理,本署力求將安全風險減至最低。

假如施工中不幸發生安全事故,本署政策確保相關人員有權立即離開他們認為對生命或健康構成威脅的工作環境,而無需擔心會受到任何紀律處分。同時,相關人員需按照既定程序及時準確地報告事故,以協助本署採取適當的措施與告事故而處理。我們會仔細分析事故原因,制定改善措施以杜絕同類事故再次發生。

The Department firmly upholds the principle of "prevention first", implementing a series of precautionary measures to manage and control safety risks after assessing potential safety hazards. During the initial stages of project planning and design, qualified professionals are engaged to conduct detailed assessments of potential safety and health risks that may arise during the construction. Once a project is underway, we develop appropriate control measures based on the findings and recommendations of the risk assessment. Regular site inspections are carried out throughout the project to monitor and ensure the effective implementation of safety measures. The Department is committed to minimising safety risks through comprehensive management strategies.

In the unfortunate event of a safety incident during construction, our policy ensures that personnel involved have the right to immediately evacuate any work situation they perceive as a threat to their lives or health, without concern of disciplinary action. Meanwhile, the personnel concerned are required to report the incident promptly and accurately in accordance with established procedures to assist us in investigation and resolution efforts. We will conduct a thorough analysis of the causes of the incident and formulate improvement actions to prevent any recurrence of similar incidents.

#### 渠務署的工傷及嚴重工傷事故¹數據2023-2024

Data of the DSD work-related injuries and high-consequence work-related injuries<sup>1</sup> in 2023-2024

渠務署員工 The DSD's staff	工傷事故(包括滑倒、絆倒或在同一高度 跌倒) Work-related injuries (including slip, trip or fall on the same level)	宗數 No. of cases	6
		比率(每1,000名員工) Rate (per 1,000 staff)	3.1
	當中嚴重工傷事故 <sup>1</sup> High-consequence work-related injuries <sup>1</sup>	宗數 No. of cases	0
		比率(每1,000名員工) Rate (per 1,000 staff)	0
	工傷事故(包括滑倒、絆倒或在同一高度 跌倒、從高處墮下)	宗數 No. of cases	16
由承辦商負責的建築 及維修工程 Construction and maintenance works undertaken by the DSD contractors	Work-related injuries (including slip, trip or fall on the same level, fall of person from height)	比率(每100,000工時) Rate (per 100,000 man-hours)	0.12
	當中嚴重工傷事故¹ High-consequence work-related injuries¹	宗數 No. of cases	7
		比率(每100,000工時) Rate (per 100,000 man-hours)	0.05

嚴重工傷事故指職業傷害而導致死亡、或導致工作者無法、難以於六個月內恢復至受傷前健康狀態的傷害。報告期內發生的嚴 重工傷事故主要由物理性的潛在安全危害引致。

#### 職安健培訓

#### Occupational Safety and Health Training

渠務署透過職業安全與健康培訓,向員工傳達職業安全知識和技能,持續提升員工的職安健意識,讓員工在發生任何事故時能夠保障自身安全及健康。於報告期內,本署已舉辦22類職安健培訓活動。我們為員工提供的職安健培訓包括:

The DSD raises employee OSH awareness by imparting knowledge and skills through ongoing training. This enables employees to safeguard their safety and health in the event of any incidents. During the reporting period, we organised 22 types of OSH training, including:

項目 Item	課程名稱 Course Title	受訓人數 Number of Participants
1	用電安全 Training Course on Electrical Safety	119
2	叉式起重車新手操作員課程 Training Course for New Operators of Fork-lift Truck	11
3	船上貨物處理基礎安全訓練課程 Shipboard Cargo Handling Basic Training Course	17
4	密閉空間核准工人安全訓練覆證課程 Safety Training Revalidation Course for Certified Workers of Confined Spaces Operation	90
5	密閉空間核准工人及合資格人士安全訓練覆證課程 Safety Training Revalidation Course for Certified Workers and Competent Persons of Confined Spaces Operation	131
6	密閉空間核准工人安全訓練課程 Safety Training Course for Certified Workers of Confined Spaces Operation	58
7	密閉空間核准工人及合資格人士安全訓練課程 Safety Training Course for Certified Workers & Competent Persons of Confined Spaces Operation	161
8	安全施工程序 Safe Working Cycle	5
9	安全使用流動式鋁質通架 Safe Use of Mobile Aluminum Towers	5
10	安全使用磨輪 Safe Use of Abrasive Wheels	18
11	化學品安全處理 Safe Handling of Chemicals	23
12	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	10
13	氣體焊接安全訓練重新甄審資格課程 Gas Welding Safety Training Revalidation Course	23

High-consequence work-related injury refers to a work-related injury that results in fatality or an injury where the worker cannot, does not, or is not expected to recover fully to pre-injury health status within six months. High-consequence work-related injuries recorded during the reporting period were mainly resulted from physical safety hazards.



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受訓人數 課程名稱 Number of Item Course Title **Participants** 氣體焊接安全訓練課程 14 20 Gas Welding Safety Training Course 龍門式起重機重新甄審資格證明課程連測試 15 7 Gantry Crane Certification Training and Test (Revalidation) 龍門式起重機資格證明課程連測試 16 21 Gantry Crane Certification Training and Test 如何避免在工作中被狗隻咬傷 17 22 Dog Bite Safety 密閉空間合資格人士之從事渠務署工程安全訓練課程 18 Confined Space Safety Training Course for Competent Persons Engaged in the DSD's 223 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 the DSD's 282 顯示屏幕設備評估合格證書課程 20 2 Certificate of Competence in Display Screen Equipment Assessment 強制性基本安全訓練課程(建築工程)[建造業平安卡課程] 21 31 Mandatory Basic Safety Training Course (Construction Work) [Green Card Training Coursel 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] 22 385 Mandatory Basic Safety Training Revalidation Course (Construction Work) [Green Card Training Revalidation Course]

#### 職安健活動

**OSH** Activities

渠務署舉辦各種與職安健相關的活動, 以持續提升職安健管理和培養員工的安 全文化。活動包括探訪及與前線同事交 流的分享會,讓我們就現行安全措施收 集寶貴意見,以持續優化相關措施。此 外,根據發展局的建築地盤安全手冊的 指引,本署所有工程的工地安全委員會 亦會每月舉辦一次會議。

The DSD organises a variety of OSH related activities to continuously improve OSH management and foster a culture of safety among staff. These activities include site visits and sharing sessions with frontline staff, allowing us to gather valuable insights on current safety measures for ongoing improvement. Additionally, site safety committees at all of our construction projects hold monthly meetings in line with the Development Bureau's Construction Site Safety Manual.

本署明白員工的身心健康對工作表現至 關重要,我們已簽署衛生署旗下的《精 神健康職場約章》。渠務署自2020年亦 成為「精神健康友善機構」, 诱禍舉辦壓 力管理工作坊向員工傳授應對壓力的技 巧和方法,讓員工能在工作中更好地緩 解壓力。本署在實踐關懷精神方面已連 續多年得到「同心展關懷」標誌的認可, 包括自2021/22年度起獲得「五年+同心 展關懷」標誌,彰顯我們在支援員工心 理健康方面得到業界認可。

Recognising the critical importance of physical and mental well-being for employee performance, the DSD is a signatory to the Department of Health's "Mental Health Workplace Charter". Since 2020, the DSD has also become a "Mental Health Friendly Organisation," conducting stress management workshops to deliver employees techniques and methods for coping with stress, enabling them to better alleviate pressure at work. The Department has received recognition for its caring spirit by continuously obtaining the "Caring Organisation" logo for several years, including the "5 Years Plus Caring Organisation" logo since the 2021/22, highlighting our industry recognition in supporting employees' mental health.





於報告期內,本署舉辦及參與的職安健活動包括: During the reporting period, OSH campaigns we initiated and participated in include:



項工程項目參與發展局及 建结業議會主辦的 第30屆公德地盤嘉許計劃

works projects joined the 30th Considerate Contractors Site Award Scheme organised by the Development Bureau and the Construction Industry Council



項工程項目參與 本署舉辦的2023年 工地安全及整潔獎勵計劃

works projects joined the Department's Construction Sites Safety and Housekeeping Award Scheme 2023



個為本署員工、 顧問公司駐工地人員及 承建商代表舉辦的安全講座

safety talks were organised for our colleagues, resident site staff of consultants and representatives of contractors

# 員工康樂活動

#### Staff Recreational Activities

渠務署注重鼓勵員工在工作與生活之間 取得平衡,為促進員工身心健康,本署 舉辦多項康樂活動,讓員工得到放鬆 實現工作和個人生活之間的良好平衡。 此舉不僅與員工建立更緊密的聯繫,同 時亦增強員工對本署的歸屬感。

Encouraging work-life balance is one of the key priorities for the DSD. To promote the physical and mental well-being of our staff, we organise recreational activities that allow employees to relax and achieve a better work-life balance. These initiatives not only strengthen employee ties but also foster a sense of belonging within the Department.

#### 親善探訪

Goodwill Visits

與員工保持良好的溝通是人才管理的關 鍵。本署管理層一直致力建立有效溝通 的渠道,積極推行親善探訪計劃,為前 線員工提供一個與管理層直接交流的平 台。本署署長、副署長及其他首長級人 員每年均會到訪前線員工的工作場所, 以面對面形式了解員工的需要及訴求。

Maintaining effective communication with employees is essential for talent management. The Department's management is committed to establishing effective communication channels and actively promotes a Goodwill Visits programme, providing frontline staff with a platform for direct interaction with management. Each year, Director and Deputy Director of Drainage Services, as well as other directorate officers visit the workplaces of frontline staff to understand their needs and concerns through face-to-face communication.



署長莫永昌先生(前排左三)到訪小蠔灣 污水處理廠

Mr Ringo MOK Wing-cheong, the Director of Drainage Services (front row, third left), made Goodwill Visit to Siu Ho Wan Sewage Treatment Works

副署長李康年先生(前排中)到訪淨化海 港計劃部和財務及物料供應部位於西區 裁判法院的辦公室

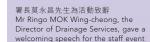
Mr Robin LEE Hong-nin, the Deputy Director of Drainage Services (front row, middle), made Goodwill Visit to Harbour Area Treatment Scheme Division and the Finance and Supplies Section at Western Magistracy

#### 職員康樂會周年晚宴暨聖誕聯歡會

DSD Staff Club Annual Dinner cum Christmas Party

部門職員康樂會於2023年12月舉辦周 年晚宴暨聖誕聯歡會,出席的嘉賓包括 發展局局長甯漢豪女士、發展局副局長 林智文先生、發展局常任秘書長(工務) 劉俊傑先生,以及環境及生態局副局長 黃淑嫻女士。活動包括各類精彩節目 如署長莫永昌先生的一場特別的獨白演 出、熱鬧的問答遊戲,加上令人興奮的 抽獎環節,聯歡會上洋溢一片歡樂的節 慶氣氛。

The DSD Staff Club held its Annual Dinner cum Christmas Party in December 2023, featuring notable guests including Ms Bernadette LINN Hon-ho, Secretary for Development; Mr David LAM Chi-man, Under Secretary for Development; Mr Ricky LAU Chun-kit, Permanent Secretary for Development (Works); and Miss Diane WONG Shuk-han, Under Secretary for Environment and Ecology. The event featured various entertainment programmes, such as a special monologue performance by Mr Ringo MOK Wing-cheong, Director of Drainage Services, a lively guiz game, and an exciting lucky draw session, all contributing to a festive atmosphere for the staff.





發展局局長甯漢豪女士(右二)、發展局副局長林 智文先生(左二)、發展局常任秘書長(工務)劉俊 傑先生(右一),以及環境及生態局副局長黃淑嫻 女士(左一)應邀與本署員工一同參與聯歡會 Ms Bernadette LINN Hon-ho, the Secretary for Development (second right), Mr David LAM Chi-man, the Under Secretary for Development (second left), Mr Ricky LAU Chun-kit, the Permanent Secretary for Development (Works) (first right) and Miss Diane WONG Shuk-han, the Under Secretary for Environment and Ecology (first left) were invited to join the staff

#### 慶祝農曆新年

Celebration of Lunar New Year

2024年2月7日適逢年廿八,渠務署舉辦首屆「龍年揮春創作午聚」,活動於午膳時段以視像形式在八個辦公地點同時舉行。同事們發揮無限創意寫出賀年揮春,為辦公室增添了濃厚的新年氣氛。署長莫永昌先生贊助禮券贈送給寫出「最有創意揮春」的同事,感謝全體員工踴躍參與活動。

The DSD held its inaugural "Dragon Year Creative Fai Chun Reunion Lunch" on 7 February 2024, coinciding with the 28th day of the last lunar month. This event took place simultaneously across eight office locations via Zoom during lunchtime. Colleagues showcased their creativity by writing Fai Chun, adding to the festive atmosphere in the offices. Mr Ringo MOK Wing-cheong, Director of Drainage Services, sponsored gift vouchers for those who created the "Most Creative Fai Chun", in recognition and appreciation of the enthusiastic participation of all staff.



署長莫永昌先生(前排左四)、時任副署長徐仕基先生(前排左五)、時任助理署長蔡榮興先生(前排左三)、助理署長劉勝昌先生(前排左元)和一眾參加活動的同事合照 Group photo of Mr Ringo MOK Wing-cheong, Director of Drainage Services (front row, forth left), Mr Peter CHUI Si-kay, the then Deputy Director of Drainage Services (front row, fifth left), Mr Brian CHOI Wing-hing, the then Assistant Director/Projects and Development (front row, third left), Mr Edwin LAU Shing-cheong, Assistant Director/Operations and Maintenance (front row, sixth left) and colleagues who participated the activity



#### 活動及興趣班

#### Activities and Interest Classes

本署舉辦多元化的康樂活動及興趣班, 以便員工在工餘時好好享受生活的樂 趣。於報告期內,我們舉辦一系列活 動,包括紅酒入門工作坊、拉胚陶瓷體 驗班,以及手捏陶瓷班等,透過各項活 動緩解員工的工作壓力,鞏固士氣,煥 發他們對工作的熱情。

The Department organises recreational activities and interest classes for our staff to enjoy life outside of work. During the reporting period, we arranged a variety of activities, including introductory red wine workshop, wheel-throwing ceramic experience class, and hand-building ceramic experience class etc. These initiatives not only helped relieve work-related pressures but also boosted morale and renewed their enthusiasm for work.



紅酒入門工作坊 Red Wine Introductory Workshop





拉坯陶瓷體驗班 Wheel-Throwing Ceramic Experience Class





手捏陶瓷體驗班 Hand-Building Ceramic



#### 體育活動

#### **Sports Events**

為了努力維護同事們的健康,我們定期 舉辦和參與各類體育活動,以鼓勵同事 鍛煉身體,維持良好的生活習慣和培養 團隊精神。於報告期內,職員康樂會 為員工舉辦頌缽瑜伽班,以及一系列球 類運動及跑步比賽。活動不僅為員工提 供一個有趣的減壓方式,亦增強同事之 間的情誼,加強整體工作熱情及協作精 To maintain the health of our colleagues, we regularly organise and participate in various sports events, encouraging them to stay active, embrace a healthy lifestyle, and foster team spirit. During the reporting period, the DSD Staff Club arranged activities such as a singing bowl yoga class, along with a wide range of ball games and running races. These activities provided a fun way to relieve stress, while also strengthened camaraderie among staff and enhanced their overall enthusiasm for work and collaboration.



頌缽瑜伽體驗班 Singing Bowl Yoga Experience Class









愛跑·青衣島2023 Lifewire Run 2023







發展局水運會2024 Development Bureau Swimming Gala 2024

#### 持份者參與 **STAKEHOLDER ENGAGEMENT**





渠務署致力加強與社區、行業及各地相關機構的關係,以不斷提 升署方在污水處理及防洪的工作表現。我們始終秉持開放包容的 態度,收集並接納持份者意見,從而在社會各界建立長期的合作 關係。我們透過不同渠道,讓持份者發表意見,確保內部和外部 溝通順暢,由此可見我們對有效溝通的承諾。

於報告期內,我們舉辦了一系列活動及展覽,旨在加深公眾對我 們服務的了解以及對可持續發展的貢獻。另外,我們實行健全的 職業安全與健康措施確保工作伙伴的福祉,加強彼此間的緊密聯 繫。

面貢獻, 亦與公眾建立良好關係。我們對持份者參與及社區服務 的雙重重視,突顯出我們致力建立社區及業界網路,讓渠務工作 更準確到位,讓市民真正受惠。

此外,我們積極鼓勵員工參與義工服務和慈善活動,對社會作正

Strengthening relationships with community, industry, and global counterparts is the core mission of the DSD to enhance our work in sewage treatment and flood prevention. We have consistently embraced an open and inclusive approach to gather and incorporate stakeholder feedback, thereby fostering long-term, cooperative relationships across various sectors of society. Our commitment to effective communication is evident through multiple stakeholder engagement channels, ensuring that both internal and external communications run smoothly.

During the reporting period, we organised a range of events and exhibitions aimed at enhancing public understanding of our services and our dedication to sustainable development. In addition, implementing robust occupational safety and health measures ensures our working partners' well-being and reinforces our close ties with them.

Furthermore, we actively encourage our staff to engage in voluntary services and charitable activities, which not only contribute positively to society but also help maintain strong relationships with the public. This dual focus on stakeholder engagement and community service underscores our commitment to building networks within the community and industry, allowing our drainage services to be more effective and benefiting the citizens.





於報告期內,我們透過多種溝通渠道與 持份者溝通。這些渠道概述如下:

During the reporting period, we engaged with our stakeholders through a variety of communication channels. These channels are outlined below:



#### 持份者 **Stakeholders**







#### 溝通 Communication

- 公務員建議書計劃 Staff Suggestions Scheme
- 部門各協商委員會和討論小組 Consultative committees and discussion groups across the DSD
- 渠務署誦訊-渠務之聲 DSD Newsletter - Channel
- 公開研討會 Public seminars
- 投標活動 Tender activities
- 工地考察 Site visits
- 經驗分享會 Experience sharing sessions
- 工地安全及整潔獎勵計劃 Construction Sites Safety and Housekeeping Award Scheme
- 立法會會議 Legislative Council meetings
- 區議會會議 District Council meetings

#### 持份者 **Stakeholders**

#### 溝涌 Communication

- 研討會 Seminars
- 到訪渠務署總部或設施 Visits to the DSD headquarters or our facilities

- 服務滿意度調查 Customer satisfaction surveys
- 問卷調查 Questionnaire surveys
- 渠務署設施導賞 DSD facilities guided tours
- 工程簡介會 Project briefing sessions
- 科技展覽 Technology exhibitions
- 教育課程 Educational programmes

#### • 環保團體會議

Meetings with environmental groups

河道考察 Site visits to river channels

# Other Government

#### • 跨部門會議

Inter-departmental meetings

• 跨部門義工活動 Inter-departmental volunteer activities

#### • 電視節目

TV Programmes

- 訪問 Interviews
- 簡報會 Briefings

#### 公眾參與 Public Engagement

渠務署致力促進與公眾有效溝通, 並提 升市民對我們工作的了解。我們不斷尋 求創新的方法向公眾傳遞資訊,同時徵 求社區的寶貴意見。例如,我們舉辦科 技展覽、工程導覽和教育課程等公開活 動,讓公眾得知我們的最新計劃。這些 活動不僅促進了公眾的參與,同時亦使 渠務署的設施與周邊社區融為一體,達 致互惠互利。報告期內,本署舉辦超過 410場次活動,接待超過12,000人次。

The DSD is dedicated to fostering effective communication with the public and enhancing their understanding of our work. We continually seek innovative methods to deliver information to the public while actively soliciting valuable feedback from the community. For example, we organise public events such as technology exhibitions, engineering tours, and educational programmes to keep the public informed about our latest initiatives. These activities not only promote public participation but also integrate the DSD's facilities with the surrounding communities, resulting in mutually beneficial outcomes. During the reporting period, the Department organised over 410 events, welcoming more than 12,000 participants.

#### 工程項目公眾參與 Public Engagement for the DSD Projects

#### 搬遷沙田污水廠往岩洞

Relocation of Sha Tin Sewage Treatment Works to Caverns

在「搬遷沙田污水廠往岩洞」工程上,項 目團隊採取多元化的宣傳推廣,包括透 過項目網頁、社交媒體專頁、工程單張<br/> 及季度簡訊適時發布最新動態,務求令 公眾充分掌握工程進度及內容。此外, 我們在梅子林路附近設立社區聯絡中 心,向市民介紹工程的環保建築、可持 續發展理念及創新科技。此舉旨在加強 社區聯絡中心與社區之間的聯繫,讓居 民對工程有所了解,增加交流。其次, 本署已將社區聯絡中心的會議室免費開 放予各社區團體預約作為活動場地,以 促進資訊交流及服務當地社區需要。

項目團隊一直主動與沙田鄉事委員會及 沙田區議會合作。團隊在收集當地居民 的意見後,及時作出回應,以減少工程 期間造成的任何滋擾。此外,團隊已舉 辦工程簡介會,親身向鄰近學校、屋苑 及機構代表講解爆破工程的安排,旨在 減少公眾對爆破工程的疑慮。

Regarding the project "Relocation of Sha Tin STWs to Caverns", our project team has been adopting diversified promotional initiatives, including timely updates via the project website, social media pages, project leaflets, and quarterly newsletters, to ensure the public is fully informed of the latest development. Additionally, we established a Community Liaison Centre (CLC) near Mui Tsz Lam Road to introduce the concepts of green construction, sustainable development, and innovative technologies to the public. This initiative aims to strengthen ties between the CLC and the community, allowing residents to gain first-hand insights into the project. Moreover, the Department has made the CLC's meeting room available for free booking as an event venue for various groups, facilitating information exchange and serving the needs of the local community.

The project team has been actively collaborating with the Sha Tin Rural Committee and the Sha Tin District Council. After gathering feedback from local residents, the team provides timely responses to minimise any disruptions during construction. Additionally, the team has organised briefing sessions to explain the blasting arrangements to representatives from nearby schools, residential estates, and organisations, aiming to alleviate public concerns regarding the blasting operations.

於報告期內,項目團隊也舉辦和協辦不 同類型的社區活動,包括:

#### - 社區聯絡小組會議

工程團隊於2024年2月23日在社區 聯絡中心舉辦社區聯絡小組的第六 次會議,與會人士包括沙田區議會 代表、沙田區居民及其他相關持份 者。此次會議的主要目的是收集意 見, 並就工程推度及施工安排推行 溝涌。

#### \_ 社區聯絡中心遵當團

深入理解公眾需求的同時,渠務署 期望向公眾展示工程進展及所採用的 創新科技及環保措施,促進與市民 的緊密連結。我們於社區聯絡中心 安排多場導賞團,向社區持份者、 學生等分享最新工程資訊,並讓參 加者诱過沉浸式電腦虛擬環境體驗工 地情況,以及參與工地安全的互動 游戲。

During the reporting period, the project team also held and coorganised different types of community activities, including:

#### - Community Liaison Group Meeting

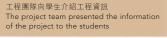
The project team held the sixth Community Liaison Group Meeting at the CLC on 23 February 2024, which was attended by representatives from the Sha Tin District Council, residents of Sha Tin District and other relevant stakeholders. The primary purpose of this meeting was to gather valuable feedback and discuss the project's progress and construction arrangements.

#### CLC Guided Tour

While striving to understand public needs, the DSD is committed to demonstrating project progress, innovative technologies, and eco-friendly measures to foster closer connections with citizens. We organised several guided tours at the CLC to share the latest project information with community stakeholders, students, and other interested stakeholders. The Computer Assisted Virtual Environment (CAVE) system provided participants with an immersive experience of the site environment and interactive games focused on-site safety.



cavern site environment to tour participants through CAVE





導賞團參加者以沉浸式電腦虛 擬環境體驗工地安全小遊戲 Participants engaged in games about site safety through

#### 梧桐河美化丁程: 社區定向及種植活動

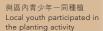
#### Ng Tung River Beautification Works: Orienteering and Planting Activity

於2024年1月6日及13日,渠務署舉辦 了[下水水奇兵 共建河畔城市|野外定 向及種植活動。這項活動旨在以另類方 式向公眾介紹可持續發展的理念。由大 學生擔任生態導賞員,而歷史學家及原 居民則分享梧桐河及雙魚河的歷史,突 顯人與河流的關係。參加者沿河堤種 植樹苗,象徵渠務署與當地社區攜手合 作,共同美化梧桐河畔,讓公眾有更美 好的環境。

The "Drainy Warriors: Rivers in the City" orienteering and planting activity, organised by the DSD, took place on 6 and 13 January 2024. This event aimed to vividly introduce sustainable development concepts to the public. University students served as ecological tour guides, while historians and indigenous residents shared insights into the history of the Ng Tung River and Sheung Yue River, highlighting the relationship between people and rivers. Participants engaged in planting seedlings along the river embankment, symbolising the collaborative effort between the DSD and the local community to enhance the beauty of the Ng Tung River for public enjoyment.



集務署舉行為期兩天的「下水水奇兵 Drainy Warriors: Rivers in the City" orienteering and planting activity





## 社區活動及展覽

#### Community Activities and Exhibitions

#### 「科學為民」服務巡禮

"Science in the Public Service" (SIPS)

「科學為民」服務巡禮是由政府部門及其 他機構合辦的活動,旨在突顯各部門的 科學工作及在公共服務中應用科技。為 配合本年度主題「科學向未來」,我們舉 辦了一連串的科學講座和實地考察,展 示渠務署如何利用創新科技提升營運效 率和服務質素。

在「科學為民」服務巡禮研討會上,渠 務署以智慧渠務系統為題,介紹新型水 位傳感器和水文資訊系統。這些技術在 監測和預防水浸方面擔當重要角色。此 外,我們亦安排導賞團讓公眾參觀渠務 設施,包括新田雨水泵房、元朗排水繞 道、赤柱污水處理廠及林村河。這些導 賞團讓公眾深入了解我們在活化河道及 污水處理等工作,促進可持續發展。

"Science in the Public Service" (SIPS) is a collaborative campaign organised by government bureaux, departments, and various organisations to highlight their scientific endeavours and the application of technology in public service delivery. Aligning with this year's theme, "Science Towards the Future", we conducted a series of science talks and site visits to demonstrate how the DSD utilises innovative technology to enhance operational efficiency and service quality.

At the SIPS seminar, the DSD themed on "Application of the Latest Technology in Smart Drainage Services", introducing new water level sensors and the Hydrometric Information System. These technologies play a crucial role in monitoring and preventing flooding. Additionally, we offered guided tours of our facilities to public, including the San Tin Stormwater Pumping Station, Yuen Long Bypass Floodway, Stanley Sewage Treatment Works, and Lam Tsuen River. These tours provided the public with insights into our river revitalisation and sewage treatment efforts, promoting sustainable development.





新田雨水泵房再生能源及元 朗排水繞道生態團 Renewable Energy at San Tin Stormwater Pumping Station and Yuen Long Bypass Floodway Eco Tour

#### 職安健創新及科技博覽

OSH Innovation & Technology Expo

在2024年3月7日至8日,首屆「職安健 創新及科技博覽」於香港灣仔會議展覽 中心舉行。渠務署的展覽攤位以資訊 板、短片及展品的方式,包括無線遙 控清淤機械人及原位內搪喉管復修法模 型,向公眾展示本署如何利用創新科技 提升渠務工作的職安健水準。 The first "OSH Innovation & Technology Expo" was successfully held at the Hong Kong Convention and Exhibition Centre on 7-8 March, 2024. The DSD's booth showcases to the public how the Department utilises innovative technology to enhance the occupational safety and health standards of drainage works through information boards, videos and notable displays of the remote-controlled desilting robots and the Cured-in-Place pipe lining method.

時任副署長徐仕基先生(右四)・助理署長 劉勝昌先生(右五)及本署同事們合照 Group photo of Mr Peter CHUI Si-kay, the then Deputy Director of Drainage Services (forth right), Mr Edwin LAU Shing-cheong, Assistant Director/ Operations and Maintenance (fifth right), and DSD colleagues





政務司司長陳國基先生(右一)和勞工及 福利局局長孫玉蘭先生(右二)參觀本署 難位並瞭解清淤機械人應用 Mr Eric CHAN Kwok-ki, the Chief Secretary for Administration (first right), and Mr Chris SUN Yuk-han, Secretary for Labour and Welfare (second right), visited the DSD's booth and learned about the application of desilting

#### 國際環保博覽2023

Eco Expo Asia 2023

於2023年10月26日至29日,渠務署在亞洲國際博覽館參與國際環保博覽2023,博覽主題為「綠色躍動:創建零碳未來」,重點展示有助全球脱碳減排的創新科技。渠務署於展覽中介紹元明淨水設施項目,並透過展品與部門代表現場講解,讓參觀者深入了解淨水設施項目。參觀者更可透過觀看展板及短片等,了解本署如何應用創新科技幫助脱碳減排,以及各項節能措施、可再生能源應用及綠建設計,從而了解渠務署對可持續發展的承諾。

The DSD participated in the "Eco Expo Asia 2023" at the Asia World-Expo from 26 to 29 October 2023, embracing the theme "Taking the Leap towards Carbon Neutrality". This event served as a platform for showcasing technological innovations aimed at global decarbonisation. At the expo, the DSD introduced the Yuen Long Effluent Polishing Plant (YLEPP) project, providing attendees with insights through exhibits and on-site explanations from departmental representatives. Attendees were invited to explore how these technological advancements contribute to decarbonisation efforts, with opportunities to interact with display boards and short videos that illustrated the Department's commitment to sustainability.



渠務署展區 The DSD's booth

#### 環保嘉年華2023

Green Carnival 2023

環保嘉年華2023於2023年1月15日在九龍灣建造業零碳天地圓滿舉行。渠務署以展示資訊板、影片與互動遊戲等向市民介紹渠務署過往在可再生能源發展方面所取得的成就,並闡述未來推動可再生能源解決方案的願景。

On 15 January 2023, the "Green Carnival 2023" was successfully held at the Kowloon Bay CIC-Zero Carbon Park. The DSD showcased information boards, videos, and interactive games at its booths, providing the public with an overview of the Department's achievements in renewable energy development over the years and outlining its vision for promoting renewable energy solutions in the future.



市民投入參與攤位中的互動遊戲 The public participated in interactive games at the booth

#### 2024年香港花卉展覽

#### The Hong Kong Flower Show 2024

2024年香港花卉展覽於2024年3月15日 至24日在維多利亞公園舉行,渠務署積 極參與展覽,憑展區[共享•共融]奪得 最具特色(園林景點)金獎。

展區以象徵水流的立體牆劃規劃出與市民共享的「前區一共享川流」,及為市民提供污水和雨水處理排放服務的「後區一夢遊花境」。公眾遊走於前區色彩斑爛的花海,及後區透過鏡面倒影出花海,感受「共享•共融」的訊息,讓市民共享美好生活的成果。

渠務署為配合35週年成立誌慶,特設 「時光走廊」,與市民回顧渠務署的過去,並展望未來,配合巨型下水水扭蛋機,為市民增添一點玩樂氣氛。 The "Hong Kong Flower Show 2024" was held at Victoria Park between 15 to 24 March 2024, where the DSD actively participated and garnered the Gold Award for Unique Feature (Landscape Display) for its exhibit "Sharing in Harmony".

The display featured three-dimensional walls designed in a river-like form, divided into two distinct areas. The front section, "Together • River", showcased a lush, flowering terrain that represented a leisure space for public enjoyment, while the rear section, "Blossom Dreams", with the reflection of flowers in mirrors symbolised the wastewater and stormwater drainage services enabling the sustainable development of Hong Kong. As visitors moved between these areas, they witnessed the theme of "Sharing in Harmony", celebrating the benefits of an improved quality of life.

Tying in with the 35th anniversary of the DSD, a "Time Corridor" was created to celebrate the Department's past, present, and future, complemented by a giant Drainy gacha machine and promoting a spirit of joy with the public.



渠務署展區一「共享 ● 共融」 The DSD's exhibit "Sharing in Harmony"





# 具教育意義的參觀活動

#### **Educational Visits**

為加強市民對渠務署運作的認識,渠務署定期為個人及團體舉辦導賞團參訪轄下設施。此外,渠務署亦經常到訪學校,向教師和學生推廣署方的工作及工程項目。

於報告期內, 昂船洲污水處理廠導賞團 已恢復舉行, 並新增啟德河及蝦尾新村 蓄洪池導賞團, 繼續讓大眾了解渠務署 在可持續發展所作出的努力。 To enhance public understanding of its operations, the DSD organises regular guided tours of its facilities for individuals and groups. Additionally, the Department conducts frequent school visits to promote its projects and initiatives among teachers and students.

During the reporting period, guided tours of the Stonecutters Island Sewage Treatment Works have resumed, and new tours have been introduced for the Kai Tak River and Ha Mei San Tsuen Polder, providing more opportunities for public engagement as we continue to foster awareness of the DSD's efforts in sustainable development.



荔枝角雨水排放隧道導賞團 Lai Chi Kok Drainage Tunnel Guided Tour



蝦尾新村蓄洪池導賞團 Ha Mei San Tsuen Polder Guided Tour



啟德河導賞團 Kai Tak River Guided Tour



昂坪污水處理廠 導賞團 Ngong Ping Sewage Treatment Works Guided Tour

## 供應商、顧問及承建商參與 Suppliers, Consultants and Contractors Engagement

渠務署致力與供應商、顧問及承建商等 伙伴建立穩健積極的關係,從而實現互 利互惠的目標。在渠務署的供應鏈中, 顧問和承建商以合約方式聘用,提供顧 問服務、執行建築工程及供應建築材

渠務署繼續推行[新工程合約]的合作模 式,提升工作伙伴的參與度,並有助提 升效率。與此同時,本署亦致力實施嚴 謹的職業安全與健康措施,保障員工及 工作伙伴的安全。渠務署亦定期組織工 作伙伴工作坊,與業界交流意見並討論 未來規劃,進一步加強關係,提高工作 項目的成效。

The DSD is dedicated to building strong and positive relationships with its partners, including suppliers, consultants and contractors, to achieve shared success. In the DSD's supply chain, consultants and contractors are engaged on a contractual basis to provide consultancy services, execute construction work, and supply construction materials.

The Department continues to implement the New Engineering Contract (NEC) model, a form of collaboration to encourage greater participation from working partners and enhance efficiency. In parallel, stringent occupational safety and health measures are in place to ensure the safety of both staff and working partners. The Department also periodically organises partnering workshops to exchange views and discuss future planning with working partners, further strengthening relationships and facilitating effective delivery of projects.

# 採用「新工程合約」

#### Launch of New Engineering Contracts (NEC)

相比傳統合約模式,「新工程合約|較著 重渠務署與工程顧問、承建商等工作伙 伴的共同管理與風險承擔。此合作框架 旨在建立更緊密的工作關係,使雙方加 強工程管理,提升工程效率,減低因工 程延誤而造成的風險和負面影響。

渠務署授出的[新工程合約 |涵蓋工程項 目、機電工程項目、維修工程及工程顧 問服務。截止目前為止,本署已完成92 份「新工程合約」。其中,跑馬地地下蓄 洪計劃的工程也採用了「新工程合約」模 式,最終提早了24個月完工,節省約1.1 億元工程費用,顯示了這模式的成效。

In contrast to the conventional contract model, the new NEC model places greater emphasis on joint management and risk-sharing between the Department and its working partners, such as engineering consultants and contractors. This collaborative framework aims to foster closer working relationships, enabling both parties to strengthen project management, enhance project efficiency, and mitigate the risks and adverse effects associated with project delays.

NECs awarded by the Department cover engineering projects, electrical and mechanical engineering projects, maintenance works and engineering consultancy services. To date, the Department has completed 92 NECs. Notably, works for the Happy Valley Underground Stormwater Storage Scheme, which adopted the NEC model, finished 24 months ahead of schedule and saved approximately \$110 million in project costs, showcasing the model's effectiveness.



本署由 2009 年至今共批出 的「新工程合約」數目 No. of NECs awarded by the Department since 2009



於報告期內共批出的 「新工程合約」數目 No. of NECs awarded during the reporting period

# 「新工程合約」里程碑

#### **NFC** Milestones

於2023年,渠務署獲英國新工程合約 用戶組織頒發兩項獎項,分別為「沙頭 角污水處理廠攜建工程 | 榮獲 | 年度合約 創新項目」大獎,以及「元朗淨水設施項 目」獲頒「年度水務工程項目」第二名。 這些成就不僅體現了渠務署誘渦「新工 程合約 | 促進合作關係的承諾,亦同時 彰顯了本署致力提供造福社會的優質服

In 2023, projects under the DSD received two awards from the NEC Users' Group of the United Kingdom. The Sha Tau Kok Sewage Treatment Works Expansion won the top prize in the "NEC Contract Innovation of the Year", while the Yuen Long Effluent Polishing Plant secured second place in the "NEC Water Contract of the Year" category. These accomplishments reflect the DSD's commitment to promoting collaborative partnerships through NEC and highlight its dedication to providing quality services that benefit society.

渠務署所獲的獎項及認可項目如下:

The list of the DSD's awards and recognised projects are:



年度合約創新項目 **NEC Contract Innovation** 沙頭角污水處理廠擴建工程 Sha Tau Kok Sewage Treatment Works Expansion



年度水務工程項目 **NEC Water Contract** of the Year 元朗淨水設施項目 Yuen Long Effluent Polishing Plant



渠務署及其工程項目獲頒共兩個 英國新工程合約用戶組織獎項 The DSD and its works projects took two awards under the NEC Users' Group of the United Kingdom

渠務署助理署長李偉文(右二)代表渠 務署接受「年度水務工程項目」第二名 Mr Raymond LEE Wai-man, the Assistant Director of Drainage Services (second right), receiving the first runner-up of the "NEC Water Contract of the Year" award on behalf of the DSD



# 伙伴工作坊 Partnering Workshop

渠務署持續舉辦合作伙伴工作坊,讓承 建商管理層與前線員工交流工程中的困 難和意見。這些工作坊旨在訂定共同目標,並在「新工程合約」模式下秉持團隊 合作精神,解決工程障礙,以改高管理 效率,提升品質控制,加快工程進度。 此外,工作坊亦促進了相互理解,鼓勵 制新和平衡觀點,從而促進了各方之間 的團隊合作和協調。

The DSD continues to organise partnering workshops that facilitate the exchange of challenges and insights between management and frontline staff from contractors. These workshops aim to establish joint goals and collaboratively address engineering obstacles in the spirit of teamwork under the NEC model. This approach enhances communication, fostering consensus on strategic planning to improve management efficiency, strengthen quality control, and expedite project progress. Additionally, these workshops promote mutual understanding, encouraging innovation and balancing perspectives, thereby promoting teamwork and coordination among all parties involved.

#### 推廣職業安全與健康

#### Promoting Occupational Safety and Health

渠務署推行多項工地安全改善措施及活動,包括經驗分享會、實地考察以及工地安全及整潔獎勵計劃,務求加強員工及伙伴的職業安全及健康意識,提升職安健的水平。

The DSD has implemented a variety of site safety enhancement measures and activities, including experience sharing sessions, site visits and the Construction Sites Safety and Housekeeping Award Scheme, with a view to nurturing a stronger awareness of occupational safety and health among our staff and working partners together with improving the level of occupational safety and health.

#### 經驗分享會及實地考察

#### **Experience Sharing Sessions and Site Visits**

於報告期內,渠務署舉辦了七次安全講座,重點討論如何避免公用設施損壞、安全使用機械及工具,以及推行安全智慧工地系統,以提高員工的安全意識,確保工地安全。講座邀請了機電工程署及電力公司的專家主講,超過300名渠務署員工、承建商和工程顧問出席。

During the reporting period, the DSD organised seven safety talks focused on avoiding damage to utilities, using of machinery and tools safely, and the implementation of Smart Site Safety Systems (4S) to enhance employees' safety awareness and ensure workplace safety. The safety talks were delivered by specialists from the Electrical and Mechanical Services Department and electricity companies, which saw participation from over 300 staff from the DSD, contractors and engineering consultants.

#### 工地安全及整潔獎勵計劃

#### Construction Sites Safety and Housekeeping Award Scheme

工地安全對保障員工和工作伙伴的安全至關重要。本署自2004年起每年舉辦「工地整潔獎勵計劃」,並於2018年改名為「工地安全及整潔獎勵計劃」,旨在建立優良的工地管理文化,並加強與工地主管、承建商和工程顧問的合作。我們積極表揚在安全和整潔管理方面表現突出的團隊,以鼓勵所有項目持份者優先考慮安全意識和職業道德。於2023年,共57支隊伍參與計劃,其中12隊獲頒「最佳工地安全及整潔獎」或「優異

Site safety is crucial for ensuring the safety of our staff and working partners. Since 2004, the Department has organised the "Construction Sites Housekeeping Award Scheme" annually, which was renamed as the "Construction Sites Safety and Housekeeping Award Scheme" in 2018. The goal of the scheme is to foster a culture of excellent site management and strengthen cooperation with site supervisors, contractors, and engineering consultants. We actively recognise teams that excel in safety and cleanliness management to encourage all project stakeholders to prioritise safety awareness and work ethics. In 2023, 57 teams participated in the scheme, with 12 teams receiving either the "Best Construction Sites Safety and Housekeeping Award" or the "Meritorious Award".

# 與議員聯繫

#### Liaison with Councillors

本著致力為市民提供優質的污水和雨水處理排放服務的承諾,渠務署開展一系列的工程項目和維修保養工作,以確保渠務設施運作正常。為確保服務能有效滿足區內居民的需要,我們與立法會議員和區議員保持緊密聯繫,包括回應書面查詢、組織實地考察和參加會議,更深入了解市民的需要和期望。

With a strong commitment to providing quality wastewater and stormwater drainage services to the community, the DSD undertakes a range of projects and maintenance works for supporting the normal operation drainage facilities. To ensure our services effectively address community needs, we maintain close communication with Legislative Council members and District Council members. This includes responding to written inquiries, organising site visits, and participating in meetings to better understand the public's needs and expectations.

# 環保團體參與

#### Green Groups Engagement

在處理建築工程的環境議題時,渠務署 積極與環保團體密切溝通,致力實現 持續發展目標。於報告期內,我們改 共四次會議,與長春社、創建香港 色力量、香港觀鳥會、嘉道理農場暨植 物園、世界自然基金會香港分會及思 政策研究所等本地環保團體溝通。會 及 內容包括提高河道生態價值、保 育現存 河流生境、活化水體、促進生物多樣性 及推廣親水文化,以解決渠務工程所面 對的環保議 In handling environmental issues related to construction projects, the DSD proactively maintains close communication with environmental groups and is committed to achieving sustainability goals. During the reporting period, we arranged four meetings to communicate with local green groups, including Conservancy Association, Designing Hong Kong, Green Power, Hong Kong Bird Watching Society, Kadoorie Farm and Botanic Garden, World Wide Fund for Nature Hong Kong and Civic Exchange. At these meetings, we discussed topics such as enhancing the ecological value of rivers, preserving habitats in existing rivers, revitalising water bodies, promoting biodiversity and fostering a water-friendly culture, so as to address environmental issues encountered in drainage projects.

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## 媒體參與 Media Engagement

渠務署一直與媒體保持緊密聯繫。诱過 多種渠道,如電視節目、專訪及簡報會 等,讓市民了解本署於防洪、污水處 理、應用新科技及有關工程項目方面的 工作。媒體的廣泛報導可讓市民更深入 了解本署的職責和面對的挑戰,從而建 立本署的專業形象和加強大眾對本署勇 於承擔的認同。

報告期內,本署就雨季前準備工作、特 色渠蓋、觀塘污水泵房優化工程和園景 平台等議題接受超過20次媒體訪問,包 括:香港電台、商業電台、無線新聞、 鳳凰衛視等。另外,本署亦回應了超過 70次傳媒杳詢。

The DSD has always maintained strong relationships with the media. Through various channels such as TV programmes, interviews and briefings, we help the public understand our efforts and achievements in flood prevention, sewage treatment, the application of new technologies, and the challenges associated with construction projects. Extensive media coverage allows the public to gain deeper insights into the Department's responsibilities and the challenges we face, fostering recognition of our professionalism and commitment to serving the community.

During the reporting period, the Department engaged in over 20 media interviews on a range of topics, including preparations for the rainy season, thematic manhole covers, Enhancement Works for Kwun Tong Sewage Pumping Station (KTSPS) and landscaped desk, etc. These interviews included appearances on Hong Kong Radio, Commercial Radio, TVB News, Phoenix Television, and more. Additionally, the Department responded to over 70 media inquiries.

#### 2023年4月27日

27 April 2023

香港電台電視節目《凝聚香港》就渠務署 雨季前準備工作訪問工程師黃海榮先生 及麥兆偉先生,講解緊急事故控制中心 的工作流程、直屬員工隊的主要工作, 以及介紹如何應用科技以監測和分析水 浸風險。

Engineers, Mr Keith WONG Hoi-wing and Mr Maxwell MAK Shiu-wai, shared the DSD's precautionary work for rainy season during the interview by the Radio Television Hong Kong (RTHK) TV Programme "Hong Kong United", to explain the workflow of the Emergency Control Centre (ECC), major duties of the Direct Labour Force (DLF), as well as introduced how to utilise technology for monitoring and analysing flood risks.



工程師黃海榮先生介紹緊急事 故控制中心的運作 Engineer, Mr Keith WONG Hoi-wing, introduced the operation of the Emergency Control Centre

#### 2023年5月4日

4 May 2023

熱線總監黎超良先生接受香港電台普通 話台節目《誰知公共設計?》專訪,講 解渠蓋上的花紋、英文字母和數字的意 思,讓工作人員識別渠道系統、渠務署 合約和承重級別等。

Hotline Superintendent, Mr Sammy LAI Chiu-leung, was interviewed by a radio programme of the RTHK mandarin channel, to explain the specific meanings of patterns, English letters, and numbers found on the manhole covers, allowing the DSD staff to identify the drainage system, DSD contract, and load-bearing capacity.



熱線總監黎超良先生接受香港電台普通話 台節目《誰知公共設計?》訪問,介紹渠 Hotline Superintendent, Mr Sammy LAI Chiu-leung, shared the history and trivia of manhole covers in a radio

programme of RTHK mandarin channel

#### 2023年5月30日 30 May 2023

鳳凰衛視電視節目《香港自然故事》就淨 化海港計劃訪問系統管理部顧問周國銘 先生及機電工程師梁亦嵐女士,分享工 程的挑戰及成果。

System Advisor, Mr Henry CHAU Kwok-ming and Electrical & Mechanical Engineer, Ms Ivy LEUNG Yick-laam gave an interview to Phoenix TV Programme "Hong Kong Nature Stories", to share the challenges and achievements of the Harbour Area Treatment Scheme (HATS).

系統管理部顧問周國銘先生與機電工 程師梁亦嵐女士接受鳳凰衛視訪問 介紹淨化海港計劃 System Advisor, Mr Henry CHAU Kwok-ming and Electrical & Mechanical Engineer, Ms Ivy LEUNG Yick-laam, introduced the Harbour Area Treatment Scheme during the interview by Phoenix TV



#### 2023年6月14日

#### 14 June 2023

熟線總監黎超良先生及工程師溫志堅先生,接受無綫電視新聞台節目《探古尋源》訪問,講述渠蓋歷史、設計變遷,及介紹設置於大澳、鯉魚門和啟德河的特色渠蓋。

Hotline Superintendent, Mr Sammy LAI Chiu-leung and Engineer, Mr Vincent WAN Chi-kin gave an interview to TVB News Channel Programme "HK Historical Sites" on the history of manhole cover, its design modification over the years, as well as introduce the thematic manhole covers installed at Tai O, Lei Yue Mun and Kai Tak River.



工程師溫志堅先生向記者介紹 設置特色渠蓋的目的 Engineer, Mr Vincent WAN Chi-kin, explained the purposes of the installation of thematic manhole covers to the reporter

#### 2023年7月6日 6 July 2023

政府新聞處專訪工程師封雪女士和何仲 恩女士,分別介紹遠程防洪裝置如何監 察有關排水設施的實時狀況,及講解清 淤機械人協助渠務設施的清淤工作。 The Information Services Department (ISD) interviewed Engineer, Ms Stephanie FENG Xue and Ms Joey HO Chung-yan, to introduce how the "Smart Drainage Monitoring Sensors" monitor the condition of the main rivers and drainage channels, and explain the robots in helping desilting in drainage facilities.

工程師何仲恩女士向記者講解 清淤機械人的運作 Engineer, Ms Joey HO Chung-yan introduced the operation of the desilting robots to the reporters



#### 2023年8月5日

#### 5 August 2023

高級工程師羅兆聰先生及工程師蔡詠詩 女士接受開電視節目《一線搜查》專訪, 介紹觀塘污水泵房優化工程和園景平台 的工程項目。為實踐「一地多用」的原 則,渠務署特意將泵房上蓋天台打造成 一個綠化園景平台,並開放予公眾作休 憩用途。 HOY TV programme "First Search" interviewed Senior Engineer, Mr Paul LAW Siu-chung, and Engineer, Ms Winsy CHOI Wing-sze, to introduce the project of Enhancement Works for Kwun Tong Sewage Pumping Station (KTSPS) and landscaped desk. In accordance with the principle of "single site, multiple use", the DSD specifically developed the roof floor of the KTSPS into a fully landscaped green area, which opened to the public for leisure purpose.



工程師蔡詠詩女士向節目主持介 紹觀塘污水泵房優化工程的工程 內容 Engineer, Ms Winsy CHOI Wingsze, introduced project details of Enhancement Works for the

KTSPS to the programme host

#### 2023年8月30日

#### 30 August 2023

工程師林子超先生及總工程監督劉鎮成 先生接受傳媒專訪,介紹[智察得]計劃 的特點及運作。計劃自2023年年初於深 水埗及太子一帶試行,在區內90個選定 的污水沙井安裝感測設備[檸檬查],並 實時監察及傳送沙井水位數據,以協助 渠務署更有效地安排污水渠道的預防性 維修保養工作,減低污水溢流的風險。 Engineer, Mr George LAM Tsz-chiu and Chief Technical Officer, Mr LAU Chun-shing, were interviewed by media, to introduce the features and operation of the "Smart Sewerage Monitoring System" (SSMS) Scheme. The scheme is to pilot the installation of sensors, namely "LeMonSwith", at 90 selected manholes in Sham Shui Po and Prince Edward areas starting from early 2023 for real-time sewage overflow monitoring. It helped the DSD optimising the deployment of resources for sewer maintenance in a preventive manner, results in minimising the overflow risk.

工程師林子超先生(左)和總工程監督 劉顗成先生(右)向記者介紹「智察得」 計劃的特點及運作 Engineer, Mr George LAM Tszchiu (left), and Chief Technical Officer, Mr LAU Chun-shing (right), introduced the features and operation of the "Smart Sewerage Monitoring System" Scheme to the reporters



#### 2023年9月7日及9月14日

#### 7 September and 14 September 2023

工程師梅志健先生分別於2023年9月7日 和9月14日接受無綫新聞及Now TV節目 《都會藍圖》專訪,介紹觀塘污水泵房優 化工程和園景平台的特色,向公眾展示 污水設施和休憩空間均能於社區共存。 TVB News and Now TV programme "Metropolitan Blueprint" interviewed Engineer, Mr John MUI Chi-kin, on the Enhancement Works for Kwun Tong Sewage Pumping Station (KTSPS) and the features of its landscaped deck on 7 and 14 September 2023 respectively, and showcased to the public that sewage and leisure facilities were able to coexist in the neighbourhood.



工程師梅志健先生接受無綫新聞專訪 Engineer, Mr John MUI Chi-kin, gave an interview to TVB News

#### 2023年9月26日

26 September 2023

無綫新聞就應對暴雨措施專訪總工程師石建騰先生和衰嘉慧女士。石先生講述2023年9月初香港出現特大暴雨引致多區水浸,主要成因是短時間內的高強度降雨大大超越雨水排放系統的排洪能力。袁女士解釋,水浸黑點是根據雨水排放系統的排洪能力、以往的水浸紀錄、接獲的水浸投訴及相關地點的防洪標準而編製。

Chief Engineers, Mr Kenneth SHEK Kin-tang and Ms Esther YUEN Ka-wai, were interviewed by TVB News to introduce the measures in coping with rainstorm. Mr SHEK said that the torrential rain occurred in Hong Kong in early September 2023 caused flooding in various districts. The flooding cases were mainly caused by extreme rainfall in a short period of time which had exceeded the design capacity of the drainage systems. Ms YUEN explained that the flooding blackspots list were produced based on drainage capacity, previous flooding records, complaints received and flood protection standards at the relevant location.



總工程師袁嘉慧女士講解水浸黑點的設立目的和檢視機制 Chief Engineer, Ms Esther YUEN Kawai, explained the purpose and review mechanism of flooding blackspots

#### 2023年10月5日

#### 5 October 2023

工程師楊家俊先生於傳媒簡報會上簡介本署應對熱帶氣旋小犬的措施,包括安排人手巡查全港多個容易受垃圾或枯葉等阻塞的位置,及應用清淤機械人進行清淤工作等。隨後,助理工程督察王卓恩先生向記者介紹部門通渠車的特色,並示範如何利用通渠車疏通渠道,減低水浸風險。

Engineer, Mr Henry YEUNG Ka-chun, introduced numerous measures for coping with Typhoon Koinu in media briefing, which include deploying staff to inspect various locations which are susceptible to blockage by litter or fallen leaves, and adopting robots to carry out desilting works. After that, Assistant Inspector of Works, Mr WONG Cheuk-yan, introduced to the reporters that the specifications of the Department's water jetting unit, and demonstrated the use of the water jetting unit to clean the drains so as to minimise flooding risk.

工程師楊家俊先生向記者講解渠 務署應對颱風小犬的措施 Senior Engineer, Mr Henry YEUNG Ka-chun, introduced the DSD's measures for coping with Typhoon Koinu to the reporters



#### 2023年11月17日

#### 17 November 2023

中國日報節目《Tech Asia》專訪高級工程師羅肇麟先生和張飛傑先生,介紹渠務署應用機械人進行清淤工作。工作人員可以遙距控制機械人進入箱型暗渠及河道進行清淤,使清淤工作不受潮汐影響,提高渠道清淤工作的安全性、彈性及效率。

Senior Engineers, Mr Alan LAW Shiu-lun and Mr CHEUNG Fei-kit, introduced the DSD's application of robots in desilting works during the interview by the China Daily's programme "Tech Asia". Operators can control the desilting robots remotely to enter box culverts and rivers to conduct desilting works, which would not be affected by tides, thereby increasing the flexibility and efficiency of the desilting works and improving the occupational safety of workers.



高級工程師張飛傑先生向記者 介紹清淤機械人的運作 Senior Engineer, Mr CHEUNG Fei-kit, introduced the operation of the desilting robots to the reporters

#### 2023年11月23日

#### 23 November 2023

香港電台電視節目《凝聚香港》就清淤機械人的應用訪問工程師封雪女士,介紹渠務署最新引入的遙控清淤機械人一「揮得滿」、「揮得巧」和「源揮跑」。另外,封女士亦概述渠務署如何應用科技以監測和分析水浸風險。

Engineer, Ms Stephanie FENG Xue, introduced the application of desilting robots during the interview with the RTHK TV Programme "Hong Kong United", presented the three latest wireless remote-controlled robots, i.e. Innobros series, that the DSD adopted recently. In addition, Ms FENG provided an overview of how the DSD utilised technology to monitor and analyse flood risks.



工程師封雪女士接受香港電台訪問 Engineer, Ms Stephanie FENG Xue, gave an interview to RTHK

#### 2023年11月28日

#### 28 November 2023

熟線總監黎超良先生及工程師凌浩賢 先生,分別接受大公報訪問講述渠蓋 歷史、設計變遷,並詳細介紹大澳特色 渠蓋的設計理念,以及設計特色渠蓋的 挑戰。 Hotline Superintendent, Mr Sammy LAI Chiu-leung and Engineer, Mr Peter LING Ho-yin, gave an interview to Ta Kung Pao respectively on the history of manhole cover, its design modification over the years, and also provided a detailed introduction on the design concepts behind the thematic manhole covers in Tai O, and the challenges of designing thematic manhole covers.

工程師湊浩賢先生接受大公報訪問,介紹大澳的特色渠蓋 Engineer, Mr Peter LING Ho-yin, introduced the thematic manhole covers in Tai O during the interview by Ta Kung Pao



#### 2023年12月15日

#### 15 December 2023

明報就渠務署的防洪策略、應對極端暴雨措施和雨水排放系統改善工程專訪本署署長莫永昌先生。訪問中,莫先生提到,渠務署總結2023年9月極端暴雨的經驗,從多方面着手加強防洪工作和應對極端暴雨措施,亦帶領記者參觀跑馬地地下蓄洪池,向記者講解蓄洪池的運作原理。

Ming Pao interviewed the Director of Drainage Services, Mr Ringo MOK Wing-cheong, on the DSD's flood prevention strategy, measures in coping with torrential rain, and drainage improvement works. During the interview, Mr MOK mentioned the lesson learnt from the experiences in coping with the torrential rain occurred in September 2023, the DSD has strengthened its flood prevention work as well as the measures in coping with torrential rain, also toured the reporters around the Happy Valley Underground Stormwater Storage Scheme, and introduced to the reporters the operation concept of the storage tank.



署長莫永昌先生(中)接受明報專訪,介紹渠務署的防洪策略、應對極端暴雨措施和雨水排放系統改善工程。旁為時任副署長徐仕基大生(右)和日中任助理署長蔡榮與先生(左)The Director of Drainage Services, Mr Ringo MOK Wing-cheong (middle), interviewed with Ming Pao on the DSD's flood prevention strategy, measures for coping with torrential rain, and drainage improvement works. Looking on are the then Deputy Director of Drainage Services, Mr Peter CHUI Si-kay (right), and the then Assistant Director/Projects & Development, Mr Brian CHOI Wing-hing (left)

#### 2023年12月29日 29 December 2023

香港電台電視節目《凝聚香港》就渠務署 觀塘污水泵房優化工程訪問本署工程師 梅志健先生。節目中,梅先生提及為了 響應政府倡議的「一地多用」政策,渠務 署在泵房上蓋天台建造綠化園景平台, 為市民提供更多休憩和活動空間。



Engineer, Mr John MUI Chi-kin, shared the DSD's enhancement works for Kwun Tong Sewage Pumping Station (KTSPS) during the interview with the RTHK TV Programme "Hong Kong United". In the programme, Mr MUI mentioned that the DSD developed the roof floor of the KTSPS into a landscaped deck to provide more recreational and activity space for the public for implementing the "single site, multiple use" initiative.

工程師梅志健先生向記者介紹渠務 署觀塘污水泵房優化工程 Engineer, Mr John MUI Chi-kin, introduced the Enhancement Works for KTSPS to the reporter

#### 2024年1月17日

#### 17 January 2024

本署署長莫永昌先生接受商業電台專訪,介紹渠務署應對極端暴雨措施和規劃中的雨水排放系統改善工程。莫先生於訪問中表示,渠務署會同步進行7項雨水排放系統改善工程的招標工作,盡力縮短工程設計、採購及施工時間,以盡快開展和完成改善工程,減低相關地區的水浸風險。

The Director of Drainage Services, Mr Ringo MOK Wing-cheong, introduced the DSD's measures in coping with torrential rain, and its drainage improvement works projects under planning during an interview with the Commercial Radio Hong Kong. During the interview, Mr MOK said that the DSD would adopt parallel tendering for the seven drainage improvement works to shorten the duration of engineering design, procurement and construction for commencing and completing the improvement works as soon as possible, so as to mitigate the flood risk of relevant districts.



署長莫永昌先生接受商業電台專訪 The Director of Drainage Services, Mr Ringo MOK Wing-cheong was interviewed by the Commercial Radio Hong Kong

#### 2024年1月30日 30 January 2024

鳳凰衛視新聞台就渠務署防洪策略及防 洪設施訪問工程師劉耀文先生。劉先生 講解香港的整體防洪策略,介紹港島西 雨水排放隧道和跑馬地地下蓄洪計劃的 背景及運作原理。另外,劉先生亦分享 了渠務署於氣候變化影響下為防洪設施 谁行維修保養工作的挑戰。 Engineer, Mr Alex LAU Yiu-man, introduced the DSD's flood prevention strategies and infrastructures during the interview by the Phoenix TV News. In the programme, Mr LAU explained the overall flood prevention strategies of Hong Kong, and introduced the project backgrounds and operation principles of the Hong Kong West Drainage Tunnel and the Happy Valley Underground Stormwater Storage Scheme. Apart from that, Mr LAU also shared the challenges encountered by the DSD in maintaining flood prevention facilities under the influence of climate change.



工程師劉耀文先生向鳳凰衛視記者介紹 港島西雨水排放隧道的運作 Engineer, Mr Alex LAU Yiu-man, introduced the operation of the Hong Kong West Drainage Tunnel to the Phoenix TV reporter

#### 2024年2月7日

#### 7 February 2024

工程師梅志健先生接受明報專訪,介紹 觀塘污水泵房優化工程。訪問中,梅先 生提及工程項目除了改善污水處理設施 的運作外,亦於設施中加入更多緣化概 念,以提升渠務工程的可持續性,從而 達到可持續發展的目標。 Engineer, Mr John MUI Chi-kin, gave an interview to Ming Pao, to introduce the Enhancement Works for Kwun Tong Sewage Pumping Station (KTSPS). During the interview, Mr MUI mentioned that in addition to improving the operation of sewage treatment facilities, the works also added more greening concept on facilities to enhance the sustainability of drainage projects, for achieving the goal of sustainable development.



工程師梅志健先生向記者介紹觀塘污水 泵房優化工程的工程內容 Engineer, Mr John MUI Chikin, introduced project details of Enhancement Works for KTSPS to the reporters

#### 2024年5月23日

#### 23 May 2024

本署於5月23日舉行年度傳媒簡報會,署長莫永昌先生表示本署會繼續推展防洪基建工程以減低水浸風險,亦會循「超前準備、加強預警、果斷應急、迅速復原」四大策略進行防洪工作,實踐「韌性防洪」。簡報會後,時任助理署長蔡榮興先生帶領傳媒參觀「秀雅道蓄洪計劃」的工地。

The DSD held its Annual Media Briefing on 23 May 2024, Mr Ringo MOK Wing-cheong, the Director of the Drainage Services, stated that the Department will continue to implement flood prevention infrastructure projects to reduce flooding risks, while at the same time carrying out flood prevention work in four aspects, including advance emergency preparedness, enhanced early warning, decisive emergency response, and speedy recovery, so as to put the concept of "Flood Resilience" into practice. After the briefing, Mr Brian CHOI Wing-hing, the then Assistant Director/Projects and Development, toured the media around the works site of the "Sau Nga Road Stormwater Storage Scheme".

署長莫永昌先生(中) · 時任助理署長/設計拓展 蔡榮興先生(左)及助理署長/操作維修劉勝昌先 生(右)向傳媒簡介本署應對雨季及風季的措施 The Director of Drainage Services, Mr Ringo MOK Wing-cheong (middle), the then Assistant Director/Projects and Development, Mr Brian CHOI Wing-hing (left), and the Assistant Director/Operations and Maintenance, Mr Edwin LAU Shing-cheong (right) briefed the media the Department's measures in coping with rainy and typhoon season



# 專業團體參與

#### Professional Organisations Engagement

本署深信,加強與專業團體的溝通交流 有助推動創新科研以及可持續發展的進 程。於報告期內,本署不僅積極參與各 種研究會議,亦與其他持份者和政府部 門分享本署工作,以及進行技術交流。

The DSD firmly believes that fostering close ties with professional organisations is beneficial to advancing innovation and sustainable development. During the reporting period, the Department not only continued to deeply engage in diverse research conferences but also recounted our work and carried out technical exhanges with other stakeholders and government departments.

#### 有關兩季前預防措施的持份者會議

#### Stakeholder Meeting on Pre-wet Season Precautionary Measures

渠務署於2024年2月29日舉行了一個有 關雨季前預防措施的持份者會議。參與 的持份者包括中華電力、香港電燈、中 華煤氣、港鐵和領展等公共事業機構。 多個政府部門,包括運輸及物流局、路 政署、建築署、屋宇署、土木工程拓展 署、機電工程署和民眾安全服務隊亦有 派員出席會議。

會議環繞三個主題,包括香港的防洪概 況、氣候變化的挑戰和增強抵禦極端天 氣事件的能力,以及雨季前的預防措施 與緊急準備實例, 為各與會者提供了一 個分享和交流的寶貴機會,藉此提升本 港各公共事業機構於防洪措施和實踐方 法的認識,以應對極端天氣事件的挑 戰。

The DSD held a stakeholder meeting on pre-wet season precautionary measures on 29 February, 2024. Participating stakeholders included public utilities and organisations such as CLP Power, Hong Kong Electric, Towngas, MTR and Link. Representatives from various government departments, including the Transport and Logistics Bureau, Highways Department, Architectural Services Department, Buildings Department, Civil Engineering and Development Department, Electrical and Mechanical Services Department and the Civil Aid Service, also attended the meeting.

The meeting focused on three main themes, including an overview of Hong Kong's flood prevention, climate change challenges and building resilience against extreme weather events, as well as prewet season precautionary measures and emergency preparedness with worked examples. This provided a valuable opportunity for participants to share and exchange ideas, thereby enhancing the knowledge of Hong Kong's public utilities and organisations on flood prevention measures and their implementation methods to cope with the challenges of extreme weather events.



**集務署與多個政府部門及公** 用事業/機構代表分享和交 The DSD shared and exchanged the ideas Precautionary Measures with the representatives of the various government departments and public utilities/organisations

#### 社交媒體 Social Media

為加強本署工作的公眾宣傳, 渠務署在 2021年推出部門吉祥物「下水水」以及 Facebook和Instagram專頁。我們會在 這些社交媒體平台發表有關「下水水」的 影片和貼文,向公眾講解渠務小知識和 最新資訊等。

To step up public promotion of our work, the DSD issued

its mascot called "Drainy" and its Facebook and Instagram pages in 2021. We would publish videos and posts featuring "Drainy" on these social media platforms with simple tips on drainage issues and the latest news from the DSD.



# 義工服務及慈善活動

#### Volunteer Service and Charity Activities

本署同事在投入工作之餘亦踴躍參與義 工活動。本署致力於服務弱勢群體,並 诵猧義工活動積極推廣渠務署的服務。 於報告期內,本署義工隊共參與53項義 工服務活動,總服務時數超過1.500小 In addition to their dedicated works, the DSD colleagues actively engaged in volunteer activities. The Department focuses on supporting underprivileged groups and actively promotes the DSD's services through volunteer activities. During the reporting period, the Department's Volunteer Team took part in a total of 53 volunteer service activities and contributed over 1,500 service hours.

#### 香港義丁獎2023

#### Hong Kong Volunteer Award 2023

民政及青年事務局與義務工作發展局合辦 香港義工獎,以嘉許為社會作出貢獻的 本地傑出義工。渠務署因積極推動員工 及合作伙伴(包括工程顧問、承建商等) 參與義工服務,榮獲「傑出非商業機構 獎 | 及「非商業機構獎(義工時數)優異獎 (500義工服務小時或以上)」。同時,八 位渠務署義工獲得「個人獎(義工時數)」。 The Home and Youth Affairs Bureau and the Agency for Volunteer Service jointly organise the "Hong Kong Volunteer Award" to recognise exceptional local volunteers for their contributions to the community. The DSD received the "Outstanding Non-Commercial Organisation Award" and "Non-Commercial Organisation Award (Volunteer Hours) Certificate of Appreciation (500 volunteer hours or above)" for promoting the involvement of its staff and working partners in volunteer services, including engineering consultants and contractors. Meanwhile, eight of our volunteers received "Individual Award (Volunteer Hours)".

# 傑出非商業機構獎 standing Non-Commercial Organization Aw

渠務署獲頒傑出非商業機構獎,由義工隊代表

The DSD received the "Outstanding Non-Commercial Organisation Award", with the Volunteer Team representative being present

#### 建造業義工獎勵計劃2023

#### Construction Industry Volunteer Award Scheme 2023

為表揚在義務工作方面貢獻良多的業界傑出義工及機構,建造業議會辦行「建造業義工嘉許禮2023」。渠務署義工隊在嘉許禮上榮獲四個評審嘉許獎項,包括「非凡建造業義工項目」銀獎及優異獎、「優秀社福機構協作」銅獎,以及「卓越建造業義工」優異獎。這些榮譽肯定了渠務署義工隊對社會的承諾及貢獻。

In acknowledgement of the remarkable contributions made by volunteers and organisations in the industry, the Construction Industry Council hosted the "Construction Industry Volunteer Awards Presentation Ceremony 2023". At the event, the DSD Volunteer Team received four commendation awards, including the Silver Award and Merit Award for "Excellence in Construction Industry Volunteering Project", the Bronze Award for "Excellence in Construction Industry Volunteering Collaboration", and a Merit Award for "Excellence in Construction Industry Volunteering". These accolades reflect our commitment and contributions to the community.



時任署長彭雅妮女士(右三)與 義工隊合照 Group photo of Ms Alice PANG (third right), the then Director of Drainage Services and the Volunteer Team



本署義工李澤祖先生積極在部門內推 展義工文化,因而獲頒「卓越建造業 義工」優異獎 The DSD volunteer Mr Joe LEE Chak-cho actively promoted a culture of volunteering within the Department, thus being awarded "Excellence in Construction Industry Volunteering" Merit Award

#### 2023年區議會選舉宣傳活動

#### 2023 District Council Election Promotion Activities

署長莫永昌先生帶領渠務署義工在美孚 及荔枝角區派發區議會宣傳單張,推廣 即將舉行的區議會選舉。市民反應熱 烈,表示支持區議會選舉,藉此改善社 區,共同建立關愛共融的社會。 Led by the Director of Drainage Services, Mr Ringo MOK Wingcheong, the DSD volunteers distributed District Council promotional leaflets in Mei Foo and Lai Chi Kok to promote the upcoming District Council elections. The public responded positively, expressing their support for the elections as a means to improve their communities and collaboratively build a caring and inclusive society.



義工在區議會選舉 宣傳活動的合照 Volunteers' group photo during the District Council election promotion activities

#### 愛 · 與孩同行: 小小丁程師

i-Connect: Little Engineer Workshop

在2023年4月至12月期間,渠務署義工 隊在不同社區舉行小小工程師STEM工 作坊, 為本地及非華裔的基層小朋友提 供多元學習機會。義工透過各種科學 實驗及遊戲,及參觀不同渠務設施, 向他們講解本署的工程項目及推廣建造 業,從而提升他們對建造業的認識。

The DSD Volunteer Team organised the "i-Connect: Little Engineer Workshop" from April to December 2023 for underprivileged local and non-Chinese children. Volunteers engaged the children with science experiments and games, and arranged visits to various drainage facilities to explain the Department's projects and promote the construction industry, enhancing their understanding of the sector.



為來自基層家庭的兒童舉辦小小 Little Engineer Workshops for children from underprivileged





Visit to Lai Chi Kok Drainage Tunnel and Siu Ho Wan Sewage Treatment Works and Solar Farm

#### 「愛·關懷」長者家居探訪

"i-Care" Elderly Home Visit

渠務署聯同土木工程拓展署、水務署及 路政署派出義工隊,一同定期探訪西環 邨的獨居長者,為他們送上關懷。隨 着義工越來越了解長者的需要,他們因 而安排各種具吸引力的活動計劃,包括 「飲茶」聚會、遊公園、粵曲欣賞、生 日慶祝活動等。

Volunteer teams from the DSD, the Civil Engineering and Development Department, the Water Supplies Department and the Highways Department, came together to conduct regular visits to elderly residents living alone in Sai Wan Estate, sharing love and care with them. As volunteers became more familiar with the needs of these elderly residents, they proposed a variety of engaging activities to enrich the programme. These activities included "yum cha" gatherings, park visits, Cantonese Opera parties, birthday celebrations, and more.



義工隊與長者出外 Volunteer team going for a walk with the elderly

義工每月探訪獨居長者,送上關懷 Volunteers paid monthly visit to the elderly living alone to share love and care



義工與長者一同「飲茶」和欣賞粵曲

Volunteers enjoyed "yam cha" and Cantonese Opera party with the elderly

# 持份

# STAKEHOLDER ENGAGEMENT

#### 愛·與耆義同行:「健腦Kit Set |

#### i-Connect: "Brain-training Kit Set"

渠務署義工隊持續推行「健腦Kit Set」計 劃,於2023年4月、7月及2024年1月舉 辦健腦工作坊,透過各種訓練及手工活 動,激發長者的認知能力,增強記憶 力,促進精神健康。此外,在 2023 年 10 月,渠務署義工隊特別安排長者到 戶外遊覽O-Park 1及東涌,為長者及他 們的照顧者舉辦愉快的戶外活動,留下 難忘的經歷。

The DSD Volunteer Team continued the "i-Connect: Brain-training Kit Set" programme, hosting brain training workshops in April and July 2023, as well as January 2024. These workshops incorporated various exercises and craft activities designed to stimulate cognitive abilities, enhance memory, and promote mental health among the elderly. Additionally, in October 2023, we arranged a special outdoor visit to O-Park 1 and Tung Chung, providing the elderly and their caregivers with enjoyable outings that fostered relaxation and a memorable experience.





義工在健腦工作坊通過特別設計的健腦遊戲、手工活 動、節慶慶祝活動及健體操,為有認知障礙的長者訓練 認知,同時送上關懷及支援

Volunteers conducted cognitive training for elderly individuals with cognitive impairments during the brain training workshops through specially designed brain training games, craft activities, festive celebrations, and physical exercises, all while expressing their care and support





遊覽O-Park 1及東涌讓長者及其家人能夠 放鬆身心,共同創造甜美回憶 The visit to O-Park 1 and Tung Chung allows elderly and their families to relax and create sweet memories together



#### 「愛·攝·笑」攝影義工隊

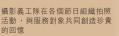
#### "Moment with Love" Volunteer Photographers Team

2023年,渠務署義工隊成立「愛.攝 笑 |攝影義工隊,並在聖誕節、農曆新 年、及可麗節(Holi Festival)期間組織 了一系列家庭拍照活動,旨在為長者、 有特殊需要的小朋友、基層及少數族裔 家庭留下珍貴回憶。攝影義工隊是由義 工發起的服務計劃,他們發現多個服務 目標群體在服務期間非常喜歡拍照。

In 2023, the DSD Volunteer Team established a volunteer photographers team "Moment with Love" and organised a series of family photo events during Christmas, Lunar New Year and Holi Festival. The goal was to create cherished memories for those in need, including the elderly, children with special needs, underprivileged families, and ethnic minority families. This initiative was inspired by volunteers who noticed that many service target groups enjoyed taking photos during their interactions.







The volunteer photographers team organised photo-taking activities in various festivals to create precious memories with the service users



#### 「照護食」復康影片拍攝

"CareFood" Rehabilitation Video Production

自2024年1月起,渠務署義工隊與香港防癌會及香港社會服務聯會合作,製作公眾教育影片《照護食一家居篇:吞嚥困難患者照顧者全面手冊》,提供有系統及可靠的資訊,協助吞嚥困難患者及其照顧者應對家居照顧的挑戰。

Since January 2024, the DSD Volunteer Team has collaborated with the Hong Kong Anti-Cancer Society and the Hong Kong Council of Social Service to produce a public education video titled "CareFood at Home: A Comprehensive Handbook for Patients with Swallowing Difficulties and Caregivers". The video aims to provide systematic and reliable information to help patients with swallowing difficulties and their caregivers navigate the challenges of home care.





義工為| 照護食]復康影片進行拍攝 Volunteers are filming the rehabilitation video for "CareFood"

#### 渠務署工程團隊義工服務

Voluntary Service by Project Teams

除渠務署義工隊外,本署各工程項目的義工隊一直秉持「關顧睦鄰」的理念和「新工程合約」的伙伴合作精神,積極舉辦切合附近多家社福機構需要的義工服務,以促進社區發展。

Apart from the DSD Volunteer Team, volunteer teams of the DSD's construction projects have always upheld the spirit of "caring for good neighbours" and the spirit of "partnering and cooperation in NEC", and have organised volunteer services tailored to the needs of various social welfare organisations nearby to promote community development.

#### 「蝦尾新村蓄洪池」工程義工隊

"Ha Mei San Tsuen Polder" Project Volunteer Team

To promote the concept of "River in the City" and inspire young people, the "Ha Mei San Tsuen Polder" project volunteer team organised four guided tours and STEM or art workshops from April to August 2023. These activities introduced local flood prevention facilities to underprivileged youth and children from both Tin Shui Wai and beyond, fostering community connections. The events provided engineering knowledge through STEM workshops while encouraging participants to express their artistic talents in the art workshops. The children's creations were exhibited in a community gallery at the MTR station, showcasing the concept of sustainable development from their perspectives to the public.

時任署長彰雅妮女士帶領小朋友參觀蝦尾 新村蓄洪池,了解太陽能板運作,並製作 太陽能板模型,增加STEM知識 Ms Alice PANG, the then Director of Drainage Services, led children to visit Ha Mei San Tsuen Polder where they learned about the operation of solar panels and created models of solar panels to enhance their STEM knowledge







兒童與家長參與STEM及藝術工作坊 Children and their families participated the STEM and Art Workshop

# 附錄一:完成目標

#### Appendix I: Meeting the Targets



#### 2023-24年度環保事務目標

**Environmental Targets 2023-24** 

#### 成果

Achievements

#### 發展智能科技、完善運作、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期望

Developing smart technologies, optimising operations, introducing innovative measures to enhance effectiveness and efficiency, minimising environmental impacts and meeting public expectations

展開三項研發完善運作及創新技術的項目 Conduct three Research and Development (R&D) items for optimisation and innovation technologies

達標。三個研發項目已經啟動,包括在西貢污水處理廠進行以硫酸鹽 環原-好氧-沉澱-厭氧工藝(SOSA)技術處理污泥的試驗、在公路實 地試驗多孔诱水路面系統,以及在膜生物反應器(MBR)中利用超細氣 泡擴散器探索低 α F標準氧轉移效率(α FSOTE), 旨在研究影響曝氣 效率的關鍵因素。

Target met. Three R&D projects have been commissioned, including trial of Sulphidogenic Oxic-Settling Anaerobic Process technologies for treatment of sewage sludge at Sai Kung Sewage Treatment Works, site trial of porous paving system on public roads, and explore low α FSOTE with ultra-fine bubble diffusers in Membrane Bioreactor (MBR) which aims at examining aeration efficiency.

#### 自2023-24年起,三年內進行三項嶄新的 可持續發展技術的試驗計劃

Conduct trials of three new sustainable technologies within a three-year period starting from 2023-24

達標。渠務署在沙田污水處理廠試驗於回流活性污泥泵中使用永磁馬 達、以「不倒翁 | 球形地下管道檢測機械人推行叶露港經處理排放水輸 送計劃隧道狀況調查(第一階段),並在旺角試行「智察得」先導計劃。 Target met. The DSD conducted pilot trial of permanent magnet motor for return activated sludge pump at Sha Tin Sewage Treatment Works, tumbler inspection ball for inspection of THEES tunnel (stage I) and pilot scheme of smart sewerage monitoring system in Mong Kok.

#### 每年至少六次與社區組織/環保團體/學 者會面,研討可持續發展事務

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

達標。我們與不同環保團體舉辦了共七次會面及實地考察。

Target met. We conducted seven meetings with various green groups.

#### 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減緩、滴應及應變措施

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

自2023-24年起的三年內,將電動車佔所 有車輛的行車里數比率保持不少於20% Maintain the mileage percentage of electric vehicles among all vehicles at no less than 20% for the next three years starting from 2023-24

達標。在2023-24年內,電動車佔所有車輛的行車里數比率為34.2%。 Target met. In 2023-24, total mileage of work transport contributed by electric vehicles was 34.2%.

2023-24年度環保事務目標 Environmental Targets 2023-24	成果 Achievements
進行七次內部碳審計 Conduct seven internal carbon audits	達標。我們已為七間主要污水處理廠進行了內部碳審計。 Target met. We conducted internal carbon audits at seven major STWs.
於2023-24年度完成六個節省能源項目以 達致相關省電(再生能源及完善運作) Complete six energy saving projects with relevant energy saving in 2023-24 (for renewable energy and optimisation)	達標。六個節省能源項目已成功投入服務,當中包括於不同渠務設施增設太陽能光伏系統。 Target met. Six projects were successfully commissioned, including the provision of Photovoltaic (PV) systems at various DSD facilities.
再造水和回用雨水的使用量達到平均每日 2,200立方米 Use an average of 2,200 cubic metres of reclaimed water and harvested water per day	94%達標。年內平均每日使用約2,070立方米再造水和回用雨水。 94% Target met. During the year, we used an average of 2,070 cubic metres of reclaimed water and harvested water per day.
標準化用紙量達至零增長,保持在 2020/21年度的水平 Achieve zero growth of normalised paper usage from 2020/21 level	達標。用紙量是9,735令。 Target met. 9,735 reams of paper were used.
	統及促進社區的健康、宜居性及生物多樣性 e, maximising greening, conserving ecosystems and enhancing
透過園境和綠化工程美化三個現有設施的 外觀 Enhance the external appearance of	達標。我們已完成了三個現有設施的美化工程。 Target met. We completed enhancement works of three existing facilities.

covers

three existing facilities by carrying out landscaping and greening works

#### 種植12.000棵樹和灌木 Plant 12.000 trees and shrubs

完全符合法定環境影響評估程序

安裝30個特色渠蓋 Installation of 30 nos, thematic manholes

100%達標。我們種植了29.964棵樹和灌木。 100% Target met. We planted 29,964 trees and shrubs.

達標。我們安裝了49個特色渠蓋。 Target met. We installed 49 nos, of thematic manhole covers.

#### 在工程項目和日常運作中全面遵守有關環保的法例和規定

Meeting all statutory and regulatory requirements on environmental performance in our projects and operations

Fully comply with the statutory EIA process	Target met.
完全符合環保法例要求 Fully comply with environmental legislations	99.5%達標。會密切監察因入水超出設計能力引致排放超出標準事件。 99.5% target met. Non-compliance incidents of discharge licence due to exceedance of design capacity were closely monitored.

目 標

#### 2024-25年度環保事務目標

Environmental Targets 2024-25

#### 發展智能科技、完善運作、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期望

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

自2022-23年起,三年內進行三項嶄新的可持續發展技術的試驗計劃

Conduct trials of three new sustainable technologies within a three-year period starting from 2022-23

#### 展開三項研發完善運作及創新技術的項目

Conduct three Research and Development (R&D) items for optimisation and innovation technologies

每年至少六次與社區組織/環保團體/學者會面,研討可持續發展事務

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

#### 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減緩、滴應及應變措施

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

自2022-23年起的三年內,將雷動車佔所有車輛的行車里數比率保持不少於20%

Maintain the mileage percentage of electric vehicles among all vehicles to no less than 20% in three years starting from 2022-23

#### 為七個主要的污水處理廠進行內部碳審計

Conduct internal carbon audits at seven major STWs

#### 於2024-25年度完成六個節省能源項目以達致相關省電(再生能源及完善運作)

Complete six energy saving projects with relevant energy saving in 2024-25 (for renewable energy and process optimisation)

#### 再浩水和回用雨水的使用量達到平均每日2 200 立方米

Use an average of 2,200 cubic metres of reclaimed water and harvested water per day

#### 用紙量達至零增長,保持在2020-21年度的水平

Achieve zero growth of paper usage from 2020-21 level

#### 引入藍綠排水建設、增加綠化、保護生態系統及促進社區的健康、宜居性及生物多樣性

Developing blue-green drainage infrastructure, maximising greening, conserving ecosystems and enhancing community health, liveability and biodiversity

#### 诱過園境和綠化工程美化三個現有設施的外觀

Enhance the external appearance of three existing facilities by carrying out landscaping and greening works

#### 種植12.000棵樹或灌木

Plant 12 000 trees or shrubs

#### 安裝特色渠蓋

172

Install thematic manhole covers

#### 在工程項目和日常運作中全面遵守有關環保的法例和規定

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



2023-24年度社會事務目標 Social Targets 2023-24

成果 Achievement 2024-25年度社會事務目標

Social Targets 2024-25

#### 降低渠務署員工的工傷意外率

Minimising the accident rate of DSD staff

渠務署員工的工傷意外率為每 年每1.000名員工不多於五宗 The accident rate of DSD's staff, be within five cases per 1,000 staff per year

達標。報告期內每年每1,000名員工有3.1宗工傷

Target met. 3.1 occupational injuries per 1.000 staff per year was reported in the reporting period.

與2023-24年度工作目標一致 Same as the 2023-24 target

#### 降低渠務署承建商的工傷意外率

Minimising the accident rate of DSD contractors

渠務署承建商的工傷意外率應 低於每100,000工時0.6宗須呈 報音外

The accident rate of DSD's contractors, be less than 0.6 cases of reportable accident per 100,000 man-hours worked 達標。報告期內渠務署承建商每100,000工時有 0.12宗須呈報意外。

Target Met. The DSD's contractors had 0.12 reportable accident per 100,000 man-hours in the reporting period.

與2023-24年度工作目標一致 Same as the 2023-24 target

#### 舉行內部安全督導委員會會議,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

Organise Safety Steering Group Meeting with a view of maintaining occupational safety and health awareness of professional, technical and site supervisory staff, consultants and contractors

最少舉辦兩次安全督導委員會 達標。共舉辦了兩次會議。 Organise at least two Safety Steering Group Meeting

Target met. Two meetings were organised.

與2023-24年度工作目標一致 Same as the 2023-24 target

#### 提高承建商的職安健意識

Promoting the awareness on occupational safety and health amongst contractors

保持最少80%合資格的渠務署 新建工程合約及30%合資格的 渠務署維修工程合約參加發展 局主辦的[公德地盤嘉許計劃] Maintain at least 80% of the DSD's eliaible new works contracts and 30% of the DSD's eligible maintenance contracts participating in the Considerate Contractors Site Award Scheme (CCSAS) run by Development Bureau

達標。全部39項合資格的渠務署新建工程合約 均參加了發展局的「公德地盤嘉許計劃 |(100%): 而全部16項合資格的渠務署維修工程合約參加了 該計劃(100%)。

Target met. All 39 DSD's eligible new works contracts participated in CCSAS (100%): 16 DSD's eligible maintenance contracts participated in CCSAS (100%).

與2023-24年度工作目標一致 Same as the 2023-24 target

# 常規服務 Routine Services

服務 Service	承諾 Pledge	2023-24年度 工作目標 Performance Target 2023-24	成果 Achievement	2024-25年度 工作目標 Performance Target 2024-25	
清理堵塞污水渠/排 水渠 Clearance of blocked sewers/drains	即日回應在下午一時前接獲的 投訴 Respond within the same day for complaints received before 1 pm	99%	99.65%		
	翌日正午前回應在下午一時後 接獲的投訴 Respond before noon of the next day for complaints received after 1 pm	99%	99.61%		
	市民對清理工作的滿意程度 <sup>1</sup> Customers satisfied with the clearing work <sup>1</sup>	95%	99.93%	與2023-24年度工 作目標一致	
為接駁公共排水/排 污系統的工程提供技 術審核 Technical audit for connection to the public drainage/ sewerage systems	於接獲HBP1表格後九個工作天 內回應 Reply to the applicant within nine working days upon receipt of HBP1 application	99%	99.66%	Same as the 2023- 24 target	
回應關於排污費帳目 的書面查詢 Response to written	兩個工作天內作出初步回應 Initial response within two working days	100%	100%		
enquiries on sewage charge accounts	一個月內作出詳細回覆 Full reply within a month	98%	100%		

服務 Service	承諾 Pledge	2023-24年度 工作目標 Performance Target 2023-24	成果 Achievement	2024-25年度 工作目標 Performance Target 2024-25
回應其他投訴和查詢 Response to other complaints and enquiries	十天內作出回應 Within ten calendar days	98%	98.41%	
提供渠務系統紀錄圖 則 Provision of drainage	即日安排查閱 Allow inspection within the same day	95%	100%	
record plans	確認付款後的四個工作天內提 供影印本 Provide photocopy within four working days upon confirmation of payment	95%	100%	與2023-24年度工 作目標一致 Same as the
在涉及挖掘路面的渠 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,簡介正進行的漢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%	99.98%	2023-24 target

<sup>1</sup> 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:主要統計數據

Appendix II: Key Statistics and Data



#### 環境工作表現1

Environmental Performance<sup>1</sup>

能源使用量(302-1, 302-2, 302-3)

Energy Consumption (302-1, 302-2, 302-3)

		單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24		
渠務署(302-1) By the DSD (302-1)									
直接能源 Direct Energy									
汽油	徵用車隊 Pool cars		533 (16,132)	685 (20,737)	642 (19,444)	552 (16,713)	363 (11,007)		
Gasoline	部門車隊 AM cars	て 业 住 耳っ	2,837 (85,928)	2,605 (78,895)	2,518 (76,272)	2,563 (77,614)	2,456 (74,356)		
柴油³ Diesel oil³	柴油機,鍋爐, 熔爐 Diesel fuel engine, boilers, furnace	千兆焦耳 <sup>2</sup> (公升) GJ <sup>2</sup> (Litre)	111 (3,056)	143 (3,928)	54 (1,480)	59 (1,616)	35 (960)		
B5生物柴油 <sup>4</sup> B5 Biodiesel <sup>4</sup>	燃油發電機 Fuel generator		5,468 (150,000)	4,313 (118,300)	32,143 (881,700)	18,035 (494,700)	0 (0)		
可再生能源所產生 Total equivalent e from renewable en	lectricity generated		27.96	27.28	28.98	27.57	22.32		
生物氣所產生的電 Electricity generat		百萬千瓦時	26.681	25.798	27.374	25.807	20.876		
水力發電所產生的 Electricity generat	的電力 ed from hydropower	Million kWh	0.023	0.033	0.127	0.093	0.095		
太陽能所產生的電 Electricity generat	動力 red from solar power		1.257	1.447	1.479	1.602	1.345		
渠務署(302-1) E	By the DSD (302-1)								
間接能源 Indirec	t Energy								
購買電力 <sup>6</sup> Electricity purchas	ed <sup>6</sup>	千兆焦耳 <sup>2</sup> (百萬千瓦時) GJ <sup>2</sup> (Million kWh)	1,070,496 (297.36)	1,113,372 (309.27)	1,146,564 (318.49)	1,122,296 (311.75)	1,153,838 (320.51)		

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24			
總能源耗量 Total Energy Consumption									
總能源耗量(302-1) Total Energy Consumption (302-1)	兆瓦時 MWh	299,827	311,406	328,200	317,578	321,303			
處理每單位體積污水的平均總能源耗 量(302-3) Average total energy consumption per unit volume of sewage treated (302-3)	兆瓦時/ 百萬立方米 MWh/ million m³	290.25	298.28	316.79	311.05	311.04			
渠務署的承建商(302-2) By the DSD's Contractors (302-2)									
直接能源 Direct Energy									
汽油 Gasoline	千兆焦耳2	5,191 (157,208)	10,907 (330,313)	9,597 (290,641)	7,047 (213,410)	10,500 (324,871)			
柴油 Diesel	(公升) GJ² (Litre)	67,626 (1,855,021)	93,028 (2,551,807)	123,882 (3,398,145)	191,286 (5,247,085)	204,534 (6,143,460)			
間接能源 Indirect Energy									
電力 Electricity	千兆焦耳 <sup>2</sup> (百萬千瓦時) GJ <sup>2</sup> (Million kWh)	14,808 (4.11)	20,903 (5.81)	81,890 (22.75)	34,102 (15.98)	92,819 (22.80)			
總能源耗量 Total Energy Consumpti	ion								
總能源耗量 Total energy consumption	兆瓦時 MWh	24,337	34,681	59,827	71,073	82,532			

- <sup>1</sup> 因渠務署在本報告期內的工程項目增加,例如污水處理廠重建,故此承辦商的整體環境數據較往年上升。 Due to the increase in the DSD's construction projects during the reporting period, for example, the reconstruction of STWs, the overall environmental data of contactors has increased compared with the previous year.
- 2 換算成千兆焦耳的轉換系數為汽油(0.033千兆焦耳/公升)、柴油(0.036千兆焦耳/公升)、電力(0.0036千兆焦耳/千瓦時)。因估算方式使用不同的轉換系數,致能源使用量的有效數據有細微不同。
  - Conversion factors for standardising units to GJ are gasoline (0.033 GJ/L), diesel (0.036 GJ/L), electricity (0.0036 GJ/kWh). Since different conversion factors are adopted in estimation methods, the significant figures of energy consumption are slightly different.
- 3 柴油耗量僅包含該報告期內已進行內部碳審計的七間污水處理廠。
  - The consumption of diesel oil only includes the seven STWs under internal carbon audit in the respective reporting period.
- 4 B5生物柴油耗量僅包含該報告期內已進行內部碳審計的七間污水處理廠。
  The consumption of B5 Biodiesel only includes the seven STWs under internal carbon audit in the respective reporting
- 5 渠務署使用的可再生能源包括水力發電、太陽能和生物氣。
  - The renewable energy sources harnessed by the DSD include hydropower, solar power and biogas.
- 總購買電力量包括九龍政府合署和西區裁判法院的辦公室,以及本署轄下防洪和污水處理設施(包括污水處理廠、污水泵房及雨水泵房)。並不適用於稅務大樓的辦公室耗電量。總能源使用量的計算方式為汽油使用量和購買電力量相加。

The total electricity purchasedincludes the offices at Kowloon Government Offices, Western Magistracy, and the DSD's flood prevention and sewage treatment facilities (including sewage treatment works, sewage pumping stations and stornwater pumping stations). Electricity consumption at office at Revenue Tower is not applicable. The total energy consumption is calculated by the addition of gasoline consumption and amount of electricity purchased.

#### 溫室氣體排放量<sup>7</sup> (305-1, 305-2, 305-3, 305-4, 305-5) Greenhouse Gas (GHG) Emissions<sup>7</sup> (305-1, 305-2, 305-3, 305-4, 305-5)

		單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24		
渠務署(305-1, 305-2)	渠務署(305-1, 305-2) By the DSD (305-1, 305-2)								
範圍1及2 Scope 1 an	d 2								
燃燒汽油 (範圍1)(305-1)	徴用車隊 Pool Cars		38.07	48.94	45.89	39.44	25.98		
Gasoline Combustion (Scope 1) (305-1)	部門車隊 AM Cars		202.79	186.19	180.00	183.17	175.50		
溫室氣體排放 (範圍1) GHG emission (Scope 1)	污水處理 <sup>8</sup> Sewage Treatment <sup>8</sup>	二氧化碳當量, 以公噸計算	2,080.85	1,949.45	3,946.36	2,893.00	3,568.09		
溫室氣體抵消 GHG emissions offset	種植 <sup>9</sup> Planting <sup>9</sup>	Tonnes CO <sub>2</sub> e	68.68	74.80	69.54*	70.43	65.56		
範圍1溫室氣體總排放 Scope 1 Total GHG emi	ssions		2,253.65	2,109.78	4,102.71	3,045.18	3,704.01		
購買電力(範圍2) <sup>10</sup> (30 Electricity purchased (Scope 2) <sup>10</sup> (305-2)	5-2)		208,151.30	216,486.90	222,940.62	218,225.00	224,357.70		
體總排放(305-4) Total GHG emission per	處理每單位體積污水的平均溫室氣		203.68	209.38	219.15	216.72	220.78		
渠務署的承建商(305-3	B) By the DSI	D's Contractors (	(305-3)						
範圍3 Scope 3									
燃燒燃料(範圍3) <sup>11</sup> Fuel consumption (Scop	pe 3) <sup>11</sup>	二氧化碳當量, 以公噸計算	4,749	6,802	8,392	6,305	15,573		
購買電力(範圍3) Electricity purchased (Se	cope 3)	以公嘅計算 Tonnes CO <sub>2</sub> e	2,879	4,064	15,923	11,183	19,886		
處理每單位體積污水的 體總排放(305-4) Total GHG emission per of sewage treated (305-	r unit volume	二氧化碳當量, 以公噸計算/ 百萬立方米 計算 Tonnes CO <sub>2</sub> e/ million m <sup>3</sup>	7.38	10.41	23.47	17.13	34.33		

- 温室氣體排放量的計算是參考香港環保署及機電工程署在2010年2月編製的《香港建築物(商業、住宅或公共用途)的温室氣體排放及減除的審計和報告指引》。温室氣體包括二氧化碳、甲烷及氧化亞氮。
- GHG emissions 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 EPD and EMSD, HKSAR in February 2010. Types of GHG include CO,, CH, and N,O.
- 此數據僅包含該報告期內已進行內部碳審計的七間污水處理廠。污水處理過程中產生的溫室氣體排放包括固定燃燒、移動燃燒、製冷/空調設備、硝化和反硝化過程、污泥消化器的甲烷釋放。
- It only includes calculation of seven STWs that under internal carbon audit in the respective reporting period. The GHG emissions generated in sewage treatment processes include stationary combustion, mobile combustion, refrigeration/air-conditioning equipment, nitrification and denitrification process, methane release from sludge digester.
- 勢據僅包含該報告期內已進行內部碳審計的七間主要污水處理廠內所種植的樹木數目計算。每棵樹的預設減除潛能值,是根據香港的地理位置、林地類型和樹木的估計密度而建議的。這個數字適用於在香港普遍可以達到至少5米的樹木。 The data was only calculated based on the number of trees planted in the seven major STWs under internal carbon
- The data was only calculated based on the number of trees planted in the seven major STWs under internal carbon audit in the respective reporting period. The default figure for the removal potential of each unit of tree is suggested based on Hong Kong's location, woodland types, and estimated density of trees. The figure is applicable to all trees commonly found in Hong Kong which are able to reach at least 5 metres in height.
- 10 間接(範圍2)溫室氣體排放是根據中電及港燈相應的可持續發展報告的最新排放系數計算。
  - Scope 2 GHG emissions were calculated based on the latest yearly emission factors from the corresponding sustainability reports of CLP and HEC.
- 由固定燃燒柴油及流動燃燒汽油產生,即車輛用油。渠務署承建商的車輛用油所產生的溫室氣體排放量是基於所有車輛均為消耗汽油的私家車的假設而計算。渠務署會持續改善數據統計方式以提高數據準確性。
- Generated from stationary combustion of diesel and mobile combustion of petrol i.e. vehicle consumption. GHG emissions from vehicle consumption by the DSD's contractors were calculated based on the assumption that all vehicles were passenger cars that consume gasoline. The DSD will continue optimising the data collection method to enhance data accuracy.

#### 耗水量12 (303-1, 303-3, 303-5)

Water Consumption<sup>12</sup> (303-1, 303-3, 303-5)

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
用於防洪及污水處理設施的 淡水耗用量 <sup>13</sup> (303-5) Freshwater consumption at flood prevention and sewage treatment facilities <sup>13</sup> (303-5)	立方米	2,525,919	2,682,821	2,465,409	2,113,614	2,379,744
污水處理設施的再造水每日 生產量 Daily reclaimed water produced at sewage treatment facilities	m <sup>3</sup>	1,576	1,607	2,505	2,420	1,970
再造水佔用水量百分比 Percentage of reclaimed water used	%	0.06	0.06	0.10	0.11	0.08

#### 污水處理(2-6)

Sewage Treatment (2-6)

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
污水處理量(2-6) Volume of sewage treated (2-6)	百萬立方米 Million m <sup>3</sup>	1,033	1,044	1,036	1,021	1,033
從污水中移除的生化需氧量 Biochemical oxygen demand removed from sewage	公噸 Tonnes	132,089	131,888	113,288	103,583	109,336
從污水中移除的懸浮固體量 Suspended solids removed from sewage		207,672	216,945	170,558	167,352	179,312
從污水中移除的氮量 Nitrogen removed from sewage		7,084	7,250	7,966	7,596	7,202
從污水中移除的脱水污泥量 Dewatered sludge removed from sewage		381,045	389,878	403,826	393,660	403,428
從污水中移除的隔濾物量 Screenings removed from sewage		12,842	12,671	12,497	11,555	12,779
從污水中移除的砂礫量 Grits removed from sewage		4,981	4,998	4,977	4,689	5,096

enhance data accuracy.

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<sup>12</sup> 渠務署所耗用的淡水和再造水均為可再生物料。其中,淡水為來自城市供水系統的自來水。
Freshwater and reclaimed water consumed by the DSD are renewable materials. The freshwater is municipal water from the city's water supply system.

<sup>13</sup> 由於渠務署並未涉及海水取水及排放,所以此數據已呈現渠務署的總耗水量。
The DSD does not involve in seawater withdrawal and discharge. Therefore, this figure represents the total water consumption of the DSD.

#### 廢物管理<sup>14</sup> (306-2, 306-3, 306-4, 306-5) Waste Management<sup>14</sup> (306-2, 306-3, 306-4, 306-5)

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24			
建築及拆卸廢料 Construction and Demolition (C&D) Materials									
運往堆填區的建築及拆卸廢物 <sup>15</sup> C&D waste disposed to landfills <sup>15</sup>	⊘ stā	6,188	14,380	9,514	6,458	4,766			
運往公眾堆填區的建築及拆卸廢物 <sup>16</sup> C&D waste disposed to public fill areas <sup>16</sup>	公噸 Tonnes	68,491	230,594	191,487	307,387	329,917			
可循環再造廢料收集量 Recyclable V	Vaste Collected								
廢紙 <sup>17</sup> Waste paper <sup>17</sup>		15,083	16,415	12,002	17,529	18,201			
鋁罐 <sup>18</sup> Aluminium cans <sup>18</sup>	公斤 kg	87	80	97	71	24			
膠樽 <sup>18</sup> Plastic bottles <sup>18</sup>		46	33	48	29	30			
無害廢物總量 Total non-hazardous waste	公噸 Tonnes	74,694	244,991	201,013	313,863	334,701			
打印機墨水匣 Printer cartridges	數目	825	902	829	745	1,042			
可充電電池 Rechargeable batteries	No.	39	41	34	71	45			
有害廢物總量 <sup>19</sup> Total hazardous waste <sup>19</sup>	公噸 Tonnes	0.13	0.14	0.13	0.12	0.18			

#### 物料使用<sup>20</sup> Material Consumption<sup>20</sup>

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
渠務署 By the DSD						
紙張總用量 Total paper consumption		9,091	9,555	9,516	9,734	9,735
A4紙張 A4 paper	숙 Reams	8,726	9,230	9,182	9,425	9,337
A3紙張 A3 paper		365	305	334	309	398
購買含再造成分的A4/A3紙張 Purchased A4/A3 paper with recycle content	令 (佔購入紙張的 百分率) Reams (% of total paper purchased)	9,091 (100%)	9,555 (100%)	9,516 (100%)	9,734 (100%)	9,735 (100%)
每名員工紙張用量 (以職員編制計算) Paper consumed per staff (By establishment)	숙 Reams	4.5	4.7	4.6	4.8	4.6
渠務署的承建商 By the DSD's Co	ontractors					
鋼筋 Rebar	公噸	14,998	8,257	34,548	14,455	16,761
鋼 Steel	Tonnes	9,843	7,416	10,283	11,661	20,464
磚塊 Bricks	立方米 m³	140	209	582	101	629
水泥 Cement	公噸 Tonnes	2,181	3,816	3,901	2,013	1,881
沙漿 Cement mortar	立方米	812	982	717	941	1,065
混凝土 Concrete	m <sup>3</sup>	57,418	71,794	112,718	104,271	163,295
沙 Sand		6,857	25,245	6,772	6,530	2,274
石料 Stones	公噸 Tonnes	6,326	13,308	11,023	25,968	59,552
辦公室用紙 Office paper		66	34	157	102	474

<sup>20</sup> 除紙張為可再生物料外,其他均為非可再生物料。 Except for paper, which is a renewable material, others are non-renewable materials.

<sup>14</sup> 渠務署中央收集不同分部和承建商的廢物數據。

The DSD centrally collects waste data from different divisions and contractors.

<sup>15</sup> 廢物包括金屬、塑膠、紙張或紙皮包裝物料,以及其他廢料,包括一般廢物。

Waste includes metals, plastics, paper/cardboard packaging waste and other wastes, such as general refuse.

<sup>16</sup> 廢物包括磚塊、混凝土、建築廢料、瓦礫,以及挖掘料。

Waste includes bricks, concrete, building debris, rubble and excavated soil.

<sup>17</sup> 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.

<sup>18</sup> 由於未能獲得相關數據,數字並不包括於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 Western Magistracy as the data were not available.

<sup>19</sup> 一個打印機墨水匣估計為0.15公斤,而一個可充電電池估計為0.167公斤。有害廢物總量(噸)的計算方法是(打印機墨水匣的數量\*0.15+可充電電池的數量\*0.167)/1000。

A printer cartridge is estimated as 0.15 kg while a rechargeable battery is estimated as 0.167 kg. The total hazardous waste (in tonnes) is calculated by (the amount of printer cartridges\*0.15+ the amount of rechargeable batteries\*0.167)/1000.

#### 綠化 Greening

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
總種植樹木數量 Total no. of trees planted	棵 Tree	239	62	4	80	1,787
增設的綠化天台面積 Area of green roof added	平方米 m²	7,359	644	1,163	0	92

#### 社會工作表現 Social Performance Social Performance

#### 員工 Staff

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24 <sup>21</sup>
職員編制 Staff establishment	數目 No.	2,020	2,050	2,056	2,049	2,052
首長級人員 Directorate		18	18	19	19	19
專業人員 Professional		346	368	372	372	375
技術人員及工地督導人員 Technical & Site Supervisory		920	962	968	978	980
一般職系人員 General & Common Grades		540	543	544	542	543
第一標準薪級人員 Model Scale I		196	159	153	138	135

# 2023-24年度職員編制<sup>22</sup> (2-7, 405-1) Staff Breakdown in 2023-2024<sup>22</sup> (2-7, 405-1)

	單位 Unit	以實際人數計算 <sup>23</sup> By Strength <sup>23</sup>
渠務署 By the DSD		
員工人數(2-7) No. of Staff (2-7)	人數 No.	1,757
按性別分類 By Gender		
男性 Male	% (人數No.)	80.93 (1,422)
女性 Female	% (入数NO.)	19.07 (335)
按職位分類 By Post		
首長級人員 Directorate		1.08 (19)
專業人員 Professional		19.12 (336)
技術人員及工地督導人員 Technical & Site Supervisory	% (人數No.)	52.76 (927)
一般職系人員 General & Common Grades		22.83 (401)
第一標準薪級人員 Model Scale I		4.21 (74)
按僱用類型及性別分類(2-7) By Employment Type	, by Gender (2-7)	
For Civil Service Staff (永久合約)		
全職(男性) Full-time (Male)	O/ (   thi-h   )	80.93 (1 422)
全職(女性) Full-time (Female)	% (人數No.)	19.07 (335)
按年齡分類 By Age		
20-29歲 Age 20-29		10.70 (188)
30-39歲 Age 30-39		30.51 (536)
40-49歲 Age 40-49	% (人數No.)	28.80 (506)
50-59歲 Age 50-59		26.29 (462)
60歲或以上 Age 60 or above		3.70 (65)
按國籍分類 By Nationality		
中國 Local	O/ ( I Phn )	100 (1,757)
外國 Non-local	% (人數No.)	0 (0)

<sup>22</sup> 我們的主要營運由渠務署員工負責執行。 The majority of our operations are performed by the DSD's employees.

<sup>21</sup> 數據截至2024年3月31日。 Data as of 31 March 2024.

<sup>23</sup> 數據截至2024年3月31日。 Data as of 31 March 2024.

#### 2023-24年度高級管理人員編制(405-1)

Senior Management Breakdown in 2023-24 (405-1)

	單位	以實際人數計算
	Unit	By Strength <sup>22</sup>
員工人數 No. of Staff	人數 No.	7
按年齡分類 By Age		
20-29歲 Age 20-29		0 (0)
30-39歲 Age 30-39		0 (0)
40-49歲 Age 40-49	% (人數No.)	0 (0)
50-59歲 Age 50-59		71.43 (5)
60歲或以上 Age 60 or above		28.57 (2)
按國籍分類 By Nationality		
中國 Local	% (人數No.)	100 (7)
外國 Non-local	% (入数NO.)	0 (0)
按性別分類 By Gender		
男性 Male	% (人數No.)	85.71 (6)
女性 Female	76 (八數NO.)	14.29 (1)

#### 培訓(404-1) Training (404-1)

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
培訓課程 <sup>24</sup> Training courses <sup>24</sup>	數目 No.	600	331	411	417	489
受訓員工 Trainees	人數 No.	6,873	4,062	4,766	5,893	6,785
員工培訓時數 Training hours received	小時 Hours	58,781	31,374	42,901	55,252	61,690
員工平均培訓時數 (以員工實際人數計算) Average training hours per staff (Based on the staff strength)		33.86	17.56	26.91	31.15	35.11
培訓總開支 (只包括本地培訓) <sup>24</sup> Total expenditure on training (Includes local training only) <sup>24</sup>	元 \$	3,772,082	2,017,411	4,164,501	4,385,307	6,864,368

#### 2023-24年度員工培訓時數 (404-1)

Training Hours Breakdown in 2023-2024 (404-1)

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)		
按性別分類 By Gender					
男性 Male	1,432	6,429	4.5		
女性 Female	295	1,797	6		
按職位分類 By Post					
首長級人員 Directorate	30	1,781	59.37		
專業人員 Professional	408	20,119	49.31		
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 & Common Grades and Model Scale   Staff	1,310	35,677	27.23		

<sup>24</sup> 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 Civil Service Training and Development Institute and staff-initiated external courses.

#### 2023-24年度新入職員工和員工流失量(401-1)

New Employees and Staff Turnover in 2023-24 (401-1)

			ı		ı		
	單位	新入職員工25	新入職員工率(%)26	員工流失量27	員工流失率(%)28		
	Unit	New Employee <sup>25</sup>	New Employee Rate (%) <sup>26</sup>	Staff Turnover <sup>27</sup>	Staff Turnover Rate (%) <sup>28</sup>		
按年齡分類 By Age							
20-29歲 Age 20-29		31	16.49	24	12.77		
30-39歲 Age 30-39		25	4.66	71	13.24		
40-49歲 Age 40-49	人數	5	0.99	39	7.71		
50-59歲 Age 50-59	No.	2	0.43	47	10.18		
60歲或以上 Age 60 or above		0	0 0		70.76		
按性別分類 By Gender							
男性 Male	人數	47	3.31	186	13.08		
女性 Female	No.	16	4.78	41	12.24		
按國籍分類 By Nationality							
中國 Local	人數	63	3.59	227	12.92		
外國 Non-local	No.	0	0	0	0		

#### 供應鏈管理

Supply Chain Management

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24		
供應商社會評估 <sup>29</sup> Supplier Social Assessment <sup>29</sup>								
使用社會標準篩選的新供應商 百分比 Percentage of new suppliers that were screened using social criteria	%	100	100	100	100	100		

- 25 以上數字包括於2023年4月1日至2024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 2023 to 31 March
- 26 新入職員工率的計算方法是新來就業的指定類別的僱員/指定類別的僱員人數。
  - New employee rate is calculated by Employees in the specified category of new coming employment/Number of employees in the specified category.
- 27 員工流失率數字不包括在部門間轉職的人員。
  - The staff turnover figures exclude staff on inter-departmental transfer.
- 28 員工流失率的計算方法是指定類別的員工離職/指定類別的員工人數。 Staff turnover rate is calculated by Employees in the specified category leaving employment/Number of employees in
- 29 在評估供應商報價和監督合約的階段,本署設有社會標準、環境標準、國家安全等要求。 Requirements such as social criteria, environmental criteria and national security criteria would be conducted at the stages of supplier quotation evaluation and contract monitoring.

#### 2023-24反貪污培訓參與人數(205-2)

Number of employees participating in anti-corruption training in 2023-24 (205-2)

	培訓人數(以實際人數計算) No. of Trainees (By Strength)	培訓百分比 Training Rate(%)
所有員工 All Staff		
按職位分類 By Post		
首長級人員 Directorate	2	6.67
專業人員 Professional	73	17.89
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 & Common Grades and Model Scale I Staff	114	8.70

#### 社區工作及慈善捐款(203-1)

Community Work and Charitable Contributions (203-1)

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
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	1,332	521	864	1,518	1,291
已完成的義工項目數目 Number of voluntary projects completed	數目 No.	39	14	34	63	22
員工募捐 Employee fundraising	千元 \$'000	65	25	59	11.5	8.85

#### 職業安全及健康(403-9)

Occupational Safety and Health (403-9)

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24	
死亡數目 <sup>30</sup> Number of fatalities <sup>30</sup>							
總死亡數目及比率 Number of fatalities		0	0	1	0	0	
渠務署員工 The DSD staff	人數 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 the DSD's contractors	. INO.	0	0	1 (女性) (Female)	0	0	
每10萬工時發生的致命意外率 <sup>31</sup> Fatal accident rate per 100,000 man-hours <sup>31</sup>							
渠務署員工 The DSD staff	-	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 the DSD's contractors	-	0	0	0.01	0	0	
非致命意外數目32 Number of Non-fatal Acc	idents <sup>32</sup>						
渠務署員工 The DSD staff	l dal-	5	2	5	7	6	
由承辦商負責的建築及維修工程 Construction and maintenance works undertaken by the DSD's contractors	人數 No.	10	11	17	11	16	
每10萬工時發生的非致命意外率 <sup>31</sup> Non-fatal accident rate per 100,000 man-hours <sup>31</sup>							
渠務署員工 The DSD staff	_	0.08	0.03	0.08	0.11	0.10	
由承辦商負責的建築及維修工程 Construction and maintenance works undertaken by the DSD's contractors	-	0.14	0.15	0.15	0.09	0.12	

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24	
嚴重後果工傷的數目Number of high-consequence work-related injury							
渠務署員工 The DSD staff	- 人數 No.	1	0	0	0	0	
由承辦商負責的建築及維修工程 Construction and maintenance works undertaken by the DSD's contractors		4	5	2	5	7	
每10萬工時發生的嚴重後果工傷率31 High-co	nsequence w	ork-related i	njury rate pe	r 100,000 ma	n-hours <sup>31</sup>		
渠務署員工 The DSD staff	-	0.16	0	0	0	0	
由承辦商負責的建築及維修工程 Construction and maintenance works undertaken by the DSD's contractors	-	0.06	0.06	0.02	0.04	0.05	

#### 總工作時數(2-8, 403-9)

Total hours worked (2-8, 403-9)

	單位 Unit	2023-24
渠務署員工 The DSD staff	小時	3,415,608
由承辦商負責的建築及維修工程 Construction and maintenance works undertaken by the DSD's contractors	Hours	13,878,664

<sup>30</sup> 由於2021-22年的死亡事故仍由警方調查中,因此未能提供其事故原因。 As the fatal accident of 2021-22 is subjected to the outcome of the investigation by the Police. Therefore, solid reason of the fatal accident is not able to provide.

<sup>&</sup>lt;sup>31</sup> 香港建造業的意外率依據勞工處公布的統計數字,使用每10萬工時發生1.67宗意外換算,相當於每1,000名工人每年發生60宗意

The accident rate of the Hong Kong Construction Industry is based on the published statistics of the Labour Department and using a conversion of 1.67 accidents per 100,000 man-hours equivalent to 60 accidents per 1,000

<sup>32</sup> 事故類型包括提舉或搬運時受傷、滑倒、絆倒或在同一高度摔倒、人從高處墜落、撞擊固定或靜止物體以及被墜落物體擊中。 Accident types including injured whilst lifting or carrying, slip, trip or fall on same level, fall of person from height, striking against fixed or stationary object and struck by falling object.

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#### 經濟工作表現

#### Economic Performance

本署的開支主要分為營運開支和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: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 the 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**

		單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
經常開支	個人薪酬 Personal Emoluments		1,009.37	1,040.59	1,061.86	1,091.51	1,134.48
Recurrent Expenditure	部門開支 <sup>33</sup> Departmental Expenses <sup>33</sup>	百萬元 \$M	1,869.07	1,999.50	2,088.88	2,311.92	2,416.01
非經營帳目開支 Capital Account Expend	支 支		81.12	90.79	73.17	63.56	97.32
總額 Total			2,959.56	3,130.88	3,223.91	3,466.99	3,647.81

#### 33 包括強制性公積金和公務員公積金的供款。 It included expenses on Mandatory Provident Fund and Civil Service Provident Fund contributions.

#### 基本工程的項目開支(203-1)

Capital Works Project Expenditure (203-1)

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-2434
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.	{2} [24]	{9} [19]	{9} [21]	{10} [26]	{9} [22]
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	{1,345} [34,758]	{4,577} [33.897*]	{4,577} [31,867]	{5,857} [31,386]	{9,359} [26,107]
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.	{21} [44]	{35} [40]	{39} [39]	{39} [45]	{34} [47]
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	{27,031} [77,608]	{57,532} [59,880]	{57,971} [69,143]	{57,303} [71,252]	{56,453} [70,566]

#### 污水處理服務經營帳目

Sewage Services Operating Accounts

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
排污費收入 Sewage Charge Revenue		1,189.3	1,078.8	1,020.1*	1,050.6	1,190.4
工商業污水附加費收入 Trade Effluent Surcharge Revenue		160.6	4.0	12.4	0.6	62.1
其他收入 Other Revenue		54.4	56.6	57.6	57.0	55.4
總收入 Overall Revenue	百萬元	1,404.3	1,139.4	1,090.1	1,108.2	1,307.9
開支(不包括折舊) Expenditure (Excluding Depreciation)	\$M	(2,634.2)	(2,707.9)	(2,741.5)	(2,960.5)	(3,142.1)
折舊 Depreciation		(1,595.9)	(1,594.0)	(1,717.9)	(1,706.7)	(1,734.1)
總開支 Overall Expenditure		(4,230.1)	(4,301.9)	(4,459.4)	(4,667.2)	(4,876.2)
(虧損)(2-6) (Deficit) (2-6)		(2,825.8)	(3,162.5)	(3,369.3)	(3,559.0)	(3,568.3)

<sup>34 {}</sup>內數字為施工中的工程項目,金額以付款當日價格計算:[]內數字為正在規劃或設計的工程項目,金額以相應財政年度的九月價格計算。

Figures in { } are projects under construction and the amount shown in money-of-the-day prices; figures in [ ] are projects under planning or design and amount shown in September prices of the corresponding financial year

#### 污水處理服務收回經營成本比率35

Sewage Services Operating Cost Recovery Rate<sup>35</sup>

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
排污費及工商業污水附加費收入 Revenue of Sewage Charge and Trade Effluent Surcharge		1,349.9	1,082.8	1,032.5	1,051.2	1,252.5
排污費及工商業污水附加費開支 (不包括折舊) <sup>36</sup> Expenditure (excluding depreciation) of Sewage Charge and Trade Effluent Surcharge <sup>36</sup>	百萬元 \$M	2,580.4	2,652.0	2,684.1	2,903.8	3,087.0
收回經營成本比率 <sup>37</sup> Operating Cost Recovery Rate <sup>37</sup>	%	52.3	40.8	38.522	36.2	40.6

#### 污水處理服務的使用量和付款統計數字(2-6) Sewage Service Charge Consumption and Payment Statistics (2-6)

	2019-20	2020-21	2021-22	2022-23	2023-24
自來水用戶數目(以千計) Number of water accounts (in thousand)	3,078	3,116	3,159	3,196	3,230
需缴付排污費的用戶數目(以千計) Number of water accounts liable to pay Sewage Charge (in thousand)	2,853	2,889	2,933	2,963	3,004
工商業污水附加費繳納戶數目(以千計) Number of accounts - Trade Effluent Surcharge (in thousand)	30	31	33	34	35



#### 過去五年接到有關污水處理服務收費的查詢數目

Number of Enquiries Received about Sewage Services Charge for the Past Five Year

	2019-20	2020-21	2021-22	2022-23	2023-24
電話查詢 Telephone Enquiries	2,342	3,566	2,738	2,795	2,309
書面查詢 Written Enquiries	31	347	284	300	275

#### 過去五年所處理有關行業重新分類的申請

Business Reclassification Application Handled for the Past Five Years

	2019-20	2020-21	2021-22	2022-23	2023-24
個案數目 No. of Cases Handled	61	56	58	62	65

#### 過去五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

	2019-20	2020-21	2021-22	2022-23	2023-24
工商業污水附加費的新繳納戶數目 No. of New TES Accounts Identified	574	750	955	1,117	893

<sup>35</sup> 本表的收入及開支總額均不包括「其他雜項服務」。

<sup>&</sup>quot;Miscellaneous services" are excluded from the revenues and expenditure in this table.

<sup>36</sup> 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。

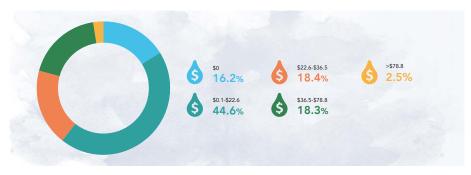
Depreciation is not recovered through the Sewage Charge and the Trade Effluent Surcharge at present.

<sup>37</sup> 數字已反映2019-20至2023-24年度的排污費及工商業污水附加費的寬減措施。2019-20,2020-21,2021-22,2022-23和2023-24年度未計寬減措施的收回經營成本比率分別為58.9%,59.5%,58.4%,55.3%及50.3%。 The figures have reflected concessions on the Sewage Charge and the Trade Effluent Surcharge in 2019-20 to 2023-24. The Operating Cost Recovery Rates without calculation of the concessions in 2019-20, 2020-21, 2021-22, 2022-23 and 2023-24 are 58.9% , 59.5% , 58.4% , 55.3% and 50.3% respectively.

#### 2023-24年度污水排放用戶用水量(566百萬立方米)-用戶情況 Water Consumption of Sewered Accounts (566 million m³) – Customers Pattern in 2023-24



住宅用戶- 2023-24年度排污費收費情況(元/月)
Domestic Accounts – Sewage Charge Payment Pattern in 2023-24 (\$/month)



工商業污水附加費用戶一 2023-24年度工商業污水附加費收費情況(元/月) TES Accounts – TES Payment Patterns in 2023-24 (\$/month)



# 排污費(10.5億元) - 2023-24年度用戶種類收費情況<sup>38</sup> Sewage Charge (\$1.05 billion) - Revenue Pattern by Type in 2023-24<sup>38</sup>



#### 工商業污水附加費(60萬元) - 2023-24年度用戶種類收費情況 TES (\$0.6 million) - Revenue Pattern by Type in 2023-24



<sup>38</sup> 數字只屬暫時性,有待污水處理服務帳目委員會確認。

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

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#### 排污費及工商業污水附加費(10.5億元)-2023-24年度用戶種類收費情況 Sewage Charge and Trade Effluent Surcharge (\$1.05 billion) -

Sewage Charge and Trade Effluent Surcharge (\$1.05 billion) - Revenue Pattern by Type in 2023-24



#### 其他主要數據 Other Key Statistics

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24
防洪 Flood Prevention						
水浸黑點總數 Total no. of flooding blackspots	數目 No.	5	4	4	4	4
地下雨水渠總長度 Total length of stormwater drains		2,429	2,410	2,410	2,414	2,415
人工河道總長度 Total length of engineered channels	公里 km	363	366	366	371	377
雨水排放隧道總長度 Total length of drainage tunnels		21	21	21*	21	21
雨水泵房總數 Total no. of stormwater pumping stations	數目 No.	36	36	36	36	36

	單位 Unit	2019-20	2020-21	2021-22	2022-23	2023-24	
污水處理 Sewage Treatment							
公共污水收集網絡覆蓋 (佔人口百分比) <sup>39</sup> Coverage of Public Sewerage (Population Percentage) <sup>39</sup>	%	93.7	93.8	93.9	94.0	94.1	
污水收集網絡總長度 Total length of sewerage network	公里	1,841	1,864	1,893	1,922	1,925	
污水隧道總長度 Total length of sewage tunnels	km	63	63	63*	81	81	
污水處理設施總數 Total no. of sewage treatment facilities	數目 No.	324	328	330	332	339	
總污水處理量 Total volume of sewage treated		1,033.34	1,044.15	1,036.38	1,020.56	1,033.09	
基本處理 By Preliminary Treatment		50.37	21.45	0.24	0.18	0.18	
一級處理 By Primary Treatment		4.86	4.33	4.44	3.81	3.72	
化學強化一級處理 By Chemically Enhanced Primary Treatment	百萬立方米 Million m <sup>3</sup>	783.53	821.00	833.91	819.65	831.65	
二級處理 By Secondary Treatment		194.41	197.23	197.65	196.70	197.31	
三級處理 By Tertiary Treatment		0.17	0.14	0.14	0.22	0.24	
每天產生的總污泥量 <sup>40</sup> Total sewage sludge generated daily <sup>40</sup>	公噸 Tonnes	1,041	1,068	1,106	1,079	1,105	
處理污水時使用電力而引起的溫 室氣體排放系數 Emission factor of GHG emissions due to electricity used for processing sewage	-	0.20	0.21	0.21	0.21	0.22	

數據標註\*已經過重新計算。

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Figure marks with \* has been recalculated.

small treatment plants is measured after being received by the EPD.

<sup>39</sup> 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.

<sup>40</sup> 大部分的污泥於污水處理廠內以磅秤量度重量,而小型廠房的污泥重量由環保署接收後量度。
Most of the sludge is weighed on a scale in the sewage treatment plants, while the weight of the sludge generated in small treatment plants is measured after being received by the EPD.

# 附錄三:渠務署對氣候相關財務 披露工作小組的回應

#### Appendix III: DSD's Response to Task Force on Climate-Related Financial Disclosures (TCFD)

應對與氣候變化相關的風險及機會需要 長遠規劃,本署致力於識別與氣候相關 的風險因素,同時根據氣候相關財務披 露工作小組(TCFD)框架,報告我們所遇 到的風險及機會。此方法包含四個關鍵 領域:管治、策略、風險管理以及度量 與目標。我們正積極制定策略,以降低 已識別的風險並把握新出現的機會、加 強我們的管治結構以進行有效監督 、將 氣候考量納入我們的策略規劃、採用穩 健的風險管理實務,以及建立明確的指 標和目標,以衡量我們在應對這些氣候 相關挑戰方面的進展。

渠務署致力提供世界級的雨水排放服務 及污水處理服務,一方面減低水浸風 險,以避免市民因氣候變化而造成的人 身安全威脅及經濟損失。另一方面, 引用各種節能措施,提升雨水及污水設 施的運作效率,以舒緩氣候變化帶來的 Addressing the risks and opportunities associated with climate change requires long-term planning and thorough consideration, and the Department is committed to identifying climate-related risk factors and reporting on the risks and opportunities we encounter, in alignment with the Task Force on Climate-Related Financial Disclosures (TCFD) framework. This approach encompasses four key areas: governance. strategy, risk management, and metrics and targets. We are actively developing strategies to mitigate identified risks and capitalise on emerging opportunities, strengthening our governance structures for effective monitoring, integrating climate considerations into our strategic planning, employing robust risk management practices, and establishing clear metrics and targets to measure our progress in addressing these climate-related challenges.

The DSD is dedicated to providing world-class stormwater and wastewater drainage services, which not only reduce flooding risks to protect citizens from safety hazards and economic losses caused by climate change but also implement various energy-saving measures to enhance the operational efficiency of stormwater and sewage facilities, thereby alleviating the impacts of climate change.



# Governance

#### 1.1 管理層就氣候相關風險與機會的監督

Senior Management's oversight of climate-related risks and opportunities

渠務署高級管理層就氣候相關的風險與 機遇制定應對方針,監督部門可持續發 ,確保全面涵蓋多個可 持續發展範疇。本署設立三個專責委員 渠務署副署長和助理署長領導 員會分別為環保管理委員會 安全督導委員會和研究及發展督導委員 會主動檢討和監督相關的可持續發 ,並提供適當的建議。另外,本 署亦設立兩個由副署長和助理署長領導 的工作小組,即可持續發展報告工作小 組和能源及排放管理小組。

渠務署高級管理層以可持續發展的指 , 就氣候變化制定及確立相關的目 標、策略、政策及行動,在惡劣天氣下 (亦包括颱風和暴雨)確保水浸風險得以 ,讓社會盡快復常。渠務署高級管 理層亦確保各渠務設施實踐節約措施 舒緩對氣候變化引致的影響,亦考量職 業健康和安全。

應對氣候變化需要城市、區域及國際間 的協作,渠務署高級管理層積極與各地 交流,吸收各地經驗,並制定合作機 制。

The Department's senior management is ultimately accountable for overseeing the DSD's sustainability strategy and performance, holistically covering a wide range of sustainability aspects, and has developed response strategies for climate-related risks and opportunities. The Department has established three committees, led by the Deputy Director and Assistant Directors, that proactively review and supervise relevant sustainability initiatives and provide appropriate recommendations. These committees are the Green Management Committee, the Safety Steering Group and the Research and Development Steering Committee. In addition to the three committees, the Department is supported by two working groups, which are the Taskforce on Sustainability Reporting and Energy and Emission Management Team, which led by the Deputy Director and Assistant Directors.

The senior management of the DSD sets and establishes relevant goals, strategies, policies, and actions regarding climate change using sustainability indicators to alleviate flood risks under inclement weather conditions (including typhoons and heavy rain) and assist in bringing the community back to normal soon after. Additionally, the senior management of the DSD ensures that all drainage facilities implement conservation measures to mitigate the impacts of climate change while considering occupational health and safety.

Addressing climate change requires collaboration at urban, regional, and international levels. The senior management of the DSD actively engages with various regions to learn from their experiences and develop cooperative mechanisms.



我們於2022年已更新了雨水排放系統 手冊,參考政府間氣候變化專門委員會 (IPCC)第六次評估報告,更新了氣候變 化引致降雨量增加及海平面上升的設計 考量。渠務署亦檢視了天文台自1884年 起至2023年過去超過140年所錄得的雨 量數據,於2024年更新了《雨水排放系 統手冊》的設計雨量參數。為檢討及制 訂長遠防洪策略,加強應對氣候變化的 能力並作好準備,本署正進行「應對海 平面上升和極端降雨的防洪管理策略規 劃研究 |,評估氣候變化遠至世紀末對 本港雨水排放系統的影響,並制定具前 瞻性的防洪管理策略。

In 2022, we have updated the Stormwater Drainage Manual (SDM), referencing the Intergovernmental Panel on Climate Change (IPCC)'s Sixth Assessment Report and updated design standards for the rainfall increase and sea level rise associated with climate change. The design rainfall parameter of SDM was updated in 2024 after reviewing over 140 years of the rainfall data collected from 1884 to 2023 by the Hong Kong Observatory. To review and formulate long-term flood management strategies that strengthen our capacity to respond to climate change, the Department conducted a "Strategic Planning Study on Flood Management against Sea Level Rise and Extreme Rainfall". This study assesses the impact of climate change on Hong Kong's stormwater drainage system up to the end of this century and develops forward-looking flood management strategies.

#### 1.2 管理層在評估與管理氣候相關風險與機會的角色

Management's role in assessing and managing climate-related risks and opportunities



#### 環保管理委員會

Green Management Committee

渠務署成立了環保管理委員會(GMC) 由副署長領導。該委員會負責監察渠務 署環境管理政策的檢討,制定環境目 標, 並監察環保措施的成效, 包括處理 氣候相關風險及問題的計劃和措施。

於報告期內,委員會召開了兩次會議, 就節能、減排、減廢、綠化等議題進行 深入討論, 並檢討環保措施的進展。

of environmental programmes and initiatives, including plans and actions to address climate-related risks and concerns. During the reporting period, the Committee held two meetings to have in-depth discussions on topics including energy conservation, emission reduction, waste reduction and greening, as well as to review

the progress of environmental initiatives.

The DSD has formed the Green Management Committee (GMC).

which is led by the Deputy Director. This Committee oversees the

review of the DSD's environmental management policy, develops

environmental goals and objectives, and monitors the effectiveness



#### 安全督導委員會

Safety Steering Group

委員會由副署長領導,負責監督和促進 本署的職業安全與健康。該委員會制訂 安全標準及指引、制定改善程序及措 施, 並檢討其實施情況及成效以預防工 傷意外。

於報告期內,委員會舉行了兩次會議。 檢討本署工地及僱員的安全表現, 並推 行各項改善措施,致力促進職業安全及 健康。

Led by the Deputy Director, the Group is responsible for overseeing and promoting occupational safety and health within the Department. To prevent work-related accidents, the Group sets safety standards and guidelines, formulates improvement procedures and measures, and reviews their implementation and effectiveness.

During the reporting period, the Group held two meetings to review the safety performance of the Department's construction sites and employees, and to implement various enhancement measures, striving to promote occupational safety and health

#### Research and Development Steering Committee

委員會由副署長領導,負責進行研究工 作,以支援渠務署的發展計劃。委員會 由兩個小組組成,分別統籌土木工程及 機電工程的研究項目。

在報告期內,委員會共舉行了五次會 議。本署共完成九個不同主題的研究項 目,包括污水處理設施的混凝土防腐塗 料、研究修復後污水幹渠的性能、利 用人工智能進行管道狀況視像分析、生 物污水處理廠微生物群落數據庫、原污 水、經處理污水及雨水排放中的微塑膠 研究,以及超聲波污泥預處理設施等。

Led by the Deputy Director, the Committee is responsible for conducting research to support development plans of the DSD. The Committee consists of two teams, which coordinate research projects in civil engineering and electrical and mechanical engineering respectively.

During the reporting period, the Committee held five meetings. The Department completed a total of nine research projects on diversified topics, covering Concrete Corrosion Protective Coatings for Sewage Treatment Facilities, Study on Rehabilitated Trunk Sewer Performance, Video Analytics of Pipeline Conditions using Artificial Intelligence, Database on the Microbial Community in Biological Sewage Treatment Works, Study of Microplastics in Raw Sewage, Treated Effluent and Stormwater Discharge, and Ultrasonic Sludge Pre-treatment Facilities,



#### 惠青委員會 作監察及督導

Oversight and Supervision

#### 環保管理 委員會

Green Management Committee

#### 安全督導 研究及發展督導 委員會 Safety Steering

Research and Development Steering Committee

Branch

委員會

#### 能源及排放 管理小組 Energy and Emission

工作小組 Taskforce on Sustainability Management Reporting Team

#### 實施可持續 相關策略、 政策與目標

Implementation of Sustainability-related Strategies, Policies, and Goals

設計拓展科 Projects and Development Branch

操作維修科 Operations and Maintenance Branch

Group

機電工程科 Flectrical and Mechanical

污水處理服務科 Sewage Services Branch

總部技術支援組 Headquarters Technical Support Group

可持續發展報告

#### 2.1 與氣候相關的短、中和長期風險和機會

The climate-related risks and opportunities over the short, medium, and long term.

#### 氣候相關風險

Climate-related Risks

#### 描述及對渠務署運作的潛在影響 Description and Potential Impact

Description and Potential Impact on the DSD's Operations

#### 應對措施

Response Measures

#### 實體風險 Physical Risks

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- 海平面上升:氣候變化導致 海平面上升及由颱風引起的 風暴潮及越堤浪增加,當低 窪地區出現海水倒灌,沿岸 地區出現越堤浪,便會造成 水浸風險
- 降雨量增加:一般而言,氣候變化下,年降雨量及極端降雨的頻率都會增加。因此會增加現有雨水排放系統的自荷
- 政府識別了26個風險較高的沿岸低窪或當風住宅地區,包括7個風暴潮點以及3個越堤浪點。渠務署連同其他部門已採取一系列應對措施,以盡量減低水浸風險。
- 識別約220個容易淤塞地點,在收到天文台 暴雨預警,會調配人手巡查相關位置。
- 在低窪地區進行防洪工作,例如安裝可拆卸 式擋水板、放置沙包、止回閥、裝上防洪 閘板及增高河堤的擋水高度,以減低因風暴 潮而導致的水浸風險。
- 持續擴展及改善現有雨水排放系統,以應付不斷上升的水浸風險。
- 更新雨水排放系統手冊,以調整與氣候變化 相關的設計參數。
- 進行顧問研究,以制定針對海平面上升和極端降雨的防洪管理策略。
- 就極端天氣發生的水浸事件進行水浸風險評估,並檢討現有的緊急應變準備和計劃。

#### 氣候相關風險 Climate-related Risks

# 描述及對渠務署運作的潛在影響 Description and Potential Impact on the DSD's Operations

#### 應對措施

Response Measures

#### 實體風險 Physical Risks



- Sea level rise: Rise of the sea level and strom surge and overtopping waves induced by typhoons are aggravated under climate change, causing flooding when seawater backflow occurs in the low-lying areas and overtopping waves approach in coastal areas
   Increase of rainfall: In general,
- Increase of rainfall: In general, annual rainfall and frequency of extreme rainfall increase due to climate change. As a result, the existing drainage system may be overloaded
- The Government has identified high-risk 26 coastal low-lying or windy residential areas, including seven Storm Surge Spots and three Overtopping Wave Spots. The DSD, along with other departments, has implemented a series of measures to minimise flood risks.
- Approximately 220 locations which are susceptible to blockage have been identified, and personnel are deployed to inspect these locations upon receiving rainstorm warnings from the Hong Kong Observatory.
- Flood prevention works are being carried out in low-lying areas, such as installing removable flood barriers, placing sandbags, installing non-return flap valves, building flood walls and increasing the height of riverbanks to manage flood risks caused by storm surge.
- Continuous expansion and improvement of existing drainage system to cope with rising flood risks.
- Stormwater Drainage Manual has been updated to adjust design standards related to climate change.
- A consultancy study has commenced to formulate strategies on flood management against sea level rise and extreme rainfall.
- Conduct flood risk assessments for flooding incidents caused by extreme weather and review existing emergency response preparations and plans.

氣候相關風險 Climate-related Risks	描述及對渠務署運作的潛在影響 Description and Potential Impact on the DSD's Operations	應對措施 Response Measures
技術風險 Technological Risk	■ 過渡至低排放技術:採用可再生能源和節能技術	<ul> <li>於各污水處理廠及污水泵房的戶外空間安裝太陽能光伏系統,小蠔灣污水處理廠內的故陽能發電系統是目前香港特別行政區政府設施中規模最大。</li> <li>隨着淨化海港計劃第二期甲的正式啟用,渠務署在昂船洲污水處理廠進行了嶄新的小小力發電渦輪系統先導計劃,以試驗將污水流動時的水壓轉化為電力,該系統的發電量為38千瓦。</li> <li>一直有效利用這些生物氣生產電能和熱能,當中位於沙田污水處理廠的雙燃料(生物氣生的冷卻水及廢氣內的餘熱,會被回收以提供熱能來維持污泥消化缸的運作。</li> </ul>
	■ Transition to low-emission technology: The adoption of renewable energy and energy-efficient technologies	<ul> <li>Solar photovoltaic systems have been installed in the outdoor spaces of various sewage treatment plants and pumping stations, with the solar photovoltaic system at Siu Ho Wan Sewage Treatment Works being currently the largest among the government facilities in Hong Kong.</li> <li>With the official commissioning of Phase 2A of the Harbour Area Treatment Scheme, the DSD has initiated a pilot trial at the Stonecutters Island Sewage Treatment Works, featuring an innovative small-scale hydro-turbine system. This system converts the flow of sewage into electricity, generating 38 kilowatts.</li> <li>We have effectively utilised biogas to produce electricity and thermal energy. The dual-fuel (biogas and diesel) power generation system at Sha Tin Sewage Treatment Works has been operating for many years. The waste heat generated from the cooling water and exhaust gases is recovered to provide thermal energy for maintaining operations.</li> </ul>

	氣候相關機會 Climate-related Opportunities	描述及對渠務署運作的潛在影響 Description and Potential Impact on the DSD's Operations
資源效率 Resource Efficiency	<ul><li>提高能源效率</li><li>採用回收技術</li></ul>	<ul><li>以水資源採集與回用系統為例,減少能源消耗,降低資源使用和營運成本。</li></ul>
	<ul><li>Improve energy efficiency</li><li>Adopt recycling technology</li></ul>	Taking the water harvesting system as an example, reduce energy consumption, lower resource consumption and operating costs.
能源來源 Energy Source	● 發展可再生能源來源	<ul><li>通過實施可再生能源項目及節能措施,減少 對化石能源的依賴。</li><li>以產生的可再生能源抵銷日常用電量。</li><li>積極響應及支持《香港氣候行動藍圖2050》。</li></ul>
	Develop renewable energy sources	<ul> <li>Reduce reliance on fossil energy by implementing renewable energy projects and energy-saving measures.</li> <li>Offset daily electricity consumption with the renewable energy generated.</li> <li>Proactively respond to and support Hong Kong's Climate Action Plan 2050.</li> </ul>

#### 2.2 考慮到不同的氣候相關情境,包括攝氏兩度或更低的情況,組織策略的適應力

Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

減緩及適應氣候變化已被認定為本署的 關鍵性議題,我們積極將氣候相關風險 納入整體風險管理架構,定期透過重要 性評估程序來評估關鍵議題。在報告期 間,我們同時識別了與氣候相關的風險 和機遇,以及支持發展穩健可持續發展 策略所需的相應措施。

此外,本署於2022年展開「應對海平面上升和極端降雨的防洪管理策略規劃研究」,參考了世界各地先進城市的做法,制訂綜合的防洪管理策略,融合不同的雨水排放系統改善工程、藍綠排水建設、管理及應變措施等,亦會考慮不同措施的成本效益,以應對長遠至本世紀末可能出現的挑戰。

渠務署早於1994至2010年間推行雨水排 放整體計劃及雨水排放系統研究,逐步 檢視港九新界的雨水排放系統及提出短 期及長期改善措施,確保系統符合防洪 標準。本署會繼續檢視及優化雨水排放 系統,應對不斷提高的氣候危機。在本 年及去年度有11項主要雨水排放系統改 善工程正在施工及正計劃展開另外7項 雨水排放系統改善工程,應對各區不同 的地理、市區環境等因素造成的水浸風 險。就緊急應變策略上,本署跟隨政府 「超前準備、加強預警、果斷應急、訊 速復原」方針,緊急應變隊伍數目已由 70隊大幅增加至超過160隊,應急運作 基地亦由過往13個增至超過30個,覆蓋 香港不同地區,以提升我們的機能性及 應變力。

We are actively working to integrate climate-related risks into our overall risk management framework and regularly assess key issues through a materiality assessment process. Climate change mitigation and adaptation have been recognised as critical material topics for us. During the reporting period, we identified both climate-related risks and opportunities, along with the corresponding measures needed to support the development of a robust sustainable development strategy.

Taking cases from advanced cities worldwide as references, we have commenced the "Strategic Planning Study on Flood Management Against Sea Level Rise and Extreme Rainfall" in 2022 to formulate an integrated flood management strategy, incorporating various drainage improvement works, Blue-Green Drainage Infrastructure, management and emergency response measures. Cost-effectiveness of different measures will also be considered to address possible challenges till the end of the century.

From 1994 to 2010, the DSD implemented Drainage Master Plan studies, gradually reviewing the drainage systems in Hong Kong, Kowloon, and the New Territories and proposing both short-term and long-term improvement measures to ensure that systems meet flood prevention standards. We will continue to review and optimise drainage systems in response to the escalating climate crisis. In this year and last year, there are 11 major stormwater drainage improvement works under construction and seven drainage improvement works planned to commence, aimed at addressing flooding risks arising from various geographical and urban environmental factors. We have followed the "Advanced Emergency Preparedness, Enhanced Early Warning, Decisive Emergency Response and Speedy Recovery" approach by the Government. To enhance our functions and resilience, the number of emergency response teams has been significantly increased from 70 to over 160, and the number of emergency support stations has also increased from 13 to more than 30, covering different regions in Hong Kong.



#### 風險 Risk

#### 3.1 本署識別及評估氣候相關風險的程序

The Department's processes for identifying and assessing climate-related risks

Climate change-related risks are highly pertinent to the DSD's operations. To address this, we established the Hydrometric Information System to monitor and manage flood risks. This system collects data from over 300 remote devices, including rain gauges, tide gauges, and water level sensors, as well as information related to climate risks from other departments. These data are utilised to track flooding conditions, enabling timely analysis and resource coordination in response to severe weather events. Simultaneously, the DSD maintains close communication with the Hong Kong Observatory to prepare for impending rainstorms. We continuously monitor areas vulnerable to flooding, which include 26 high-risk coastal low-lying or windy residential areas and 220 locations which are susceptible to blockage. Improvement measures are carried out for related locations, and personnel are deployed as needed to address flooding issues.

#### 3.2 描述本署管理氣候相關風險的流程 Describe the Department's processes for managing climate-related risks

渠務署與國際緊密聯繫,參考各地防洪標準,亦就氣候變化評估遠至世紀末對本港雨水排放系統影響並引致的風險,以制訂相關策略。同時,本署亦定時更新《雨水排放系統手冊》,規範新建的雨水排放系統的設計,強化基建設施,減低長遠風險。另外,我們積極教育公眾確保雨水排放系統暢彌,並在極端天

氣下遠離河道,減低市民生命安全的風

險。

渠務署與各相關部門已設立完善溝通機制,應變突如其來的氣候風險,於紅色或黑色暴雨警告信號、新界北部水浸特別報告、八號烈風或暴風信號或以上熱帶氣旋警告下,「緊急事故控制中心」亦會啟動。部門內部亦會就突發事故作演練,設計不同情景,提升同事的應對能力,亦不斷完善風險處理流程。

The Department maintains close international connections, referencing flood prevention standards from various regions. We assess the potential impacts and risks of climate change on Hong Kong's stormwater drainage system, extending to the end of this century, to formulate relevant strategies. Additionally, we regularly update the Stormwater Drainage Manual to regulate the design of newly constructed drainage systems, reinforcing infrastructure to reduce long-term risks. Additionally, we actively educate the public to ensure the proper functioning of drainage systems and advise them to stay away from waterways during extreme weather events to minimise risks to public safety.

The DSD has established a comprehensive communication mechanism with relevant departments to respond to sudden climate risks, and the "Emergency Control Centre" will be activated when Red or Black Rainstorm Warning Signal, Special Announcement on Flooding in the northern New Territories, or a Tropical Cyclone Warning Signal No. 8 or above is in force. Internally, we conduct drills for unexpected incidents, designing various scenarios to enhance our staff's response capabilities while continually improving our risk management processes.

# APPENDIX III: DSD'S RESPONSE TO TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD

#### 3.3 如何將識別、評估和管理氣候相關風險的程序整合到本署的整體風險管理中 How processes for identifying, assessing, and managing climate-related risks are integrated into the Department's overall risk management

渠務署诱過系統化方法,將與氣候相關 的風險管理融入其整體框架內,包括識 別、評估及管理這些風險。渠務署根據 署方的職能, 並採用重要性評估程序以 評估主要的氣候議題, 並確認氣候變化 減緩及適應為關鍵議題

為了減低雨水排放設施的負荷及減輕熱 , 渠務署推廣[藍綠排水建設] 概念,遵循[滲、蓄、淨、用、排]方 針,採集和善用雨水,最後才排放。例 如:加入綠化天台、多孔透水路面、規 劃河畔公園及蓄洪湖、採用雨水收集及 回用系統等可持續排水元素。

此外,渠務署參與氣候變化基建工作小 組,與其他政府部門合作,制訂適應氣 候變化的政策及措施以應對氣候變化。

The DSD integrates climate-related risk management into its overall framework through a systematic approach that includes identifying, assessing, and managing these risks. Based on the Department's functions, the DSD employs a materiality assessment process to evaluate key climate issues, recognising climate change mitigation and adaptation as critical topics.

To alleviate the pressure on drainage facilities and reduce the urban heat island effect, the DSD encourages "Blue-Green Drainage Infrastructure" concept for rainwater collection, reuse and discharge by the principles of infiltration, retention, storage, purification, reuse and discharge. Examples include incorporating green roofs and porous pavements, planning riverside parks, constructing flood retention lakes, and implementing rainwater collection and reuse systems as sustainable drainage elements.

Additionally, the DSD collaborates with other government departments through the Climate Change Working Group on Infrastructure to develop policies and measures for climate change adaptation aimed at addressing climate change challenges.

#### 度量與目標

**Metrics and Targets** 

4.1 本署根據其策略及風險管理流程,用於評估氣候相關風險和機會的度量標準

The metrics used by the Department to assess climate-related risks and opportunities in line with its strategy and risk management process

我們定期量度與氣候變化和風險相關的度量,包括碳排放量(二氧化碳公噸)等。 We regularly measure metrics relating to climate change and risks, including Total gross carbon emissions (tonnes of CO2e), etc.





诱過持續監控這些度量,渠務署可增強其有效管理氣候相關挑戰的能力 同時支持可持續發展措施。

By continuously monitoring these metrics, the DSD enhances its capacity to manage climate-related challenges effectively while supporting sustainable development initiatives.

4.2 範圍1、範圍2,以及(如適用)範圍3溫室氣體(GHG)排放,以及相關風險 Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks

我們就七間主要污水廠定期進行內部碳 審計,每年報告節圍1、節圍2和節圍3 的溫室氣體排放量。更多詳情請參閱本 報告中的附錄二:主要統計數據。

We regularly conduct internal carbon audits for seven major sewage treatment works and report on Scope 1, Scope 2 and Scope 3 greenhouse gas emissions annually. Please refer to Appendix II: Key Statistics and Data in this Report for more details.

4.3 本署用於管理氣候相關風險和機會的目標,以及對應目標的表現

The targets used by the Department to manage climate-related risks and opportunities and performance against targets

與此同時,我們每年均會檢討目標以更 新下年度的目標。例如,我們的目標是 在2023-24年度完成六項節能項目,以 實現相關的節能目標(可再生能源和改 善營運)。詳情請參閱本報告中的附錄 一:完成目標及附錄二:主要統計數據。

We review our targets annually to update the targets for the following year. For example, we aim to complete six energy saving projects in the 2023-24 to achieve the associated energy-saving targets (renewable energy and operational improvements). For details, please refer to Appendix I: Meeting The Targets and Appendix II: Key Statistics and Data in this Report.

# 附錄四:全球報告倡議組織內容索引

Appendix IV: GRI Content Index





使用聲明 Statement of Use	渠務署已根據全球報告倡議組織標準匯報2023年4月1日至2024年3月31日期間的內容。全球報告倡議組織於本次內容索引一基本服務確認全球報告倡議組織內容索引表達清晰,並與全球報告倡議組織準則保持一致,所有披露的參考項亦與本報告相應的章節相符。本次服務按本報告的英文版本進行。 The Drainage Services Department has reported in accordance with the GRI Standards for the period 1 April 2023-31 March 2024. For the Content Index — Essentials Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting in accordance with the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders. The service was performed on the English version of the report.
採用的GRI 1	GRI 1:基礎2021
GRI 1 used	GRI 1: Foundation 2021
適用的可持續發展報告行業標準	沒有
Applicable GRI Sector Standard(s)	None

GRI標準 GRI Standard	披露項目 Disclosure		參照相關章節及/或超連結 Relevant section(s) and/or URL(s)		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance	
GRI 2:一般 披露2021		機構概況 Irganisational profile					
GRI 2: General disclosures 2021	2-1	組織詳細資訊 Organisation details	關於本報告 About the Report	p.6		<b>✓</b>	
	2-2	組織可持續發 展報告中包含 的單位 Entities included in the Organisation's sustainability reporting	關於本報告 About the Report	p.6		V	

GRI標準 GRI Standard	披露項 Disclosu		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance		
GRI 2:一般 披露2021 GRI 2: General disclosures 2021	2-3	匯報期、頻率 及聯絡點 Reporting period, frequency and contact point	關於本報告 About the Report 回應表格 Feedback Form p.6	p.6 p.212	果務署自2012-13年 度起毎年發布可持 續發展報告。 The DSD has been publishing the annual Sustainability Report since 2012-2013. 本報告於2025年5月 30日發布。 This Report was published on 30 May 2025	✓		
	2-4	信息重述 Restatements of information	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.174		✓		
	2-5	外部認證 External assurance	關於本報告 About the Report 驗證聲明 Assurance Statement	p.7 p.208		1		
	營運活動及員工資訊 Activities and workers							
	2-6	活動、價值鍵和其他業務關係 Activities, value chain and other business relationships	管治方針 Governance Approach 持分者參與 Stakeholder Engagement 主要職責 Core Responsibilities 附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.54 p.62 p.132 p.180	於2023-24年度, 經本署物料供應組 採購的服務和產品 100%來自本地(即 指香港)供應商/承 辦商或分銷商。 Procurement of services and goods made by the Department's Supplies Unit in 2023-24 are 100% local (i.e. Hong Kong) suppliers, contractors or local agents.	•		
	2-7	員工 Employees	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.180	報告期內或報告期之間的員工人數沒有顯著波動。 There are no significant fluctuations in the number of employees during the Reporting Period or between reporting periods.	<b>,</b>		

GRI標準 GRI Standard	披露項目 Disclosure		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
GRI 2:一般 披露2021 GRI 2: General disclosures 2021	2-8	員工之外的工 作者 Workers who are not employees	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.180	報告期內或報告期之間的員工人數沒有顯著波動。 There are no significant fluctuations in the number of employees during the Reporting Period or between reporting periods.	1
	管治 Governa	ince				
	2-9	管治架構及組成 Governance structure and composition	管治方針 Governance Approach	p.57		1
212	2-10	最高管治機構 的提名與遴選 Nomination and selection of the highest governance body	不適用。 Not applicable.		果務署作為香港特別行政區的政府部門,秉持香港特別 行政區公務員事務局的規章與法規。 The DSD follows the rules and regulations shown in the Civil Service Bureau (CSB) of the HKSAR as the DSD is the governmental department of the HKSAR.	<b>/</b>
	2-11	最高管治機構 的主席 Chair of the highest governance body	管治方針 Governance Approach	p.57	渠務署作為香港特別行政區的政府部門,其最高管治機構為部門的高級管理層。 The DSD is the governmental department of the HKSAR and the highest governance body of the department is the senior management.	<b>,</b>
	2-12	最高管治機構 在監督影響管 理方面的角色 Role of the highest governance body in overseeing the management of impacts	管治方針 Governance Approach	p.56		1

GRI標準 GRI Standard	披露項 Disclosu		參照相關章節及/Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
GRI 2:一般 披露2021 GRI 2: General disclosures 2021	2-13	為管理影響的 責任授權 Delegation of responsibility for managing impacts	管治方針 Governance Approach	p.57	三個專責委員會每 年向高級管理層就 管理渠務署對環 境、職業安全和研 究發展進行匯報。 Three committees report to the senior management on the management of the DSD's impacts on environment, occupational safety and research development every year.	<i>y</i>
	2-14	最高管治機構 在可持續發展 報告中的角色 Role of the highest governance body in sustainability reporting	管治方針 Governance Approach	p.20	渠務署高級管理層 負責審核和批准可 持續發展報告的信息,包括實質性議題。 The senior management of the DSD is responsible for reviewing and approving the information in the sustainability reports, including material topics.	<b>✓</b>
	2-15	利益衝突 Conflicts of interest	品行和紀律 Conduct and Discipline	/	果務署作為香港特別行政區的政府部門,持份者不涉及股東,利益衝突。指引載於https://www.csb.gov.hk/tc_chi/admin/conduct/134.html The DSD acts as a governmental department of the HKSAR, shareholders are not applicable to the DSD's nature. The guideline on conflict of interest is listed on the website at: https://www.csb.gov.hk/english/admin/conduct/134.html	

GRI標準 GRI Standard	披露項		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
GRI 2:一般 披露2021 GRI 2: General disclosures 2021	2-16	關鍵重大事件 的溝通 Communication of critical concerns	關於本報告 About the Report	p.8		1
	2-17	最高管治機構 的集體知識 Collective knowledge of the highest governance body	管治方針 Governance Approach	p.57		1
	2-18	最高管治機構 的績效評估 Evaluation of the performance of the highest governance body	工作表現管理 Performance Management		渠務署作為香港 特別行政區的政 府部門,工作表 現管理制度詳情 載於https://www. csb.gov.hk/tc_chi/ admin/pm/173. html The DSD acts as a governmental department of the HKSAR and the details of the performance management system are listed on the website at: https:// www.csb.gov.hk/ english/admin/pm/173. html	<b>y</b>
	2-19	薪酬政策 Remuneration policies	薪酬政策 Pay Policy	/	渠務署作為香港特別行政區的政府部門,薪酬政策載於https://www.csb.gov.hk/tc_chi/admin/pay/38.html The DSD acts as a governmental department of the HKSAR and the pay policy is listed on the website at: https://www.csb.gov.hk/english/admin/pay/38.	•

GRI標準 GRI Standard	披露項目 Disclosure		參照相關章節及/或超連結 Relevant section(s) and/or URL(s)		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
	2-20	薪酬確定流程 Process to determine remuneration	年度薪酬調整 Annual Pay Adjustment		果務署作為香港特別行政區的政府部門・年度薪酬調整機制載於https://www.csb.gov.hk/tc_chi/admin/pay/55.html The DSD acts as a governmental department of the HKSAR and the annual pay adjustment mechanism is listed on the website at: https://www.csb.gov.hk/english/admin/pay/55.html	<b>y</b>
	2-21	年度總薪酬比 率 Annual total compensation ratio	總薪級表 Master Pay Scale		渠務署作為香港特別行政區的政府部門,總薪級表載於https://www.csb.gov.hk/tc_chi/admin/pay/42.html The DSD acts as a governmental department of the HKSAR and the master pay scale is listed on the website at: https://www.csb.gov.hk/english/admin/pay/42.html	<b>y</b>

GRI標準 GRI Standard	披露項		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance		
GRI 2:一般 披露2021	策略、政策與實務 Strategy, policies, and practices							
GRI 2: General disclosures 2021	2-22	可持續發展策 略聲明 Statement on sustainable development strategy	署長序言 Director's Statement	p.3		✓		
	2-23	政策承諾 Policy commitments	管治方針 Governance Approach 部門政策 Departmental Policies	p.54		<b>√</b>		
	2-24	嵌入政策承諾 Embedding policy commitments	管治方針 Governance Approach 環境管理 Environmental Management 關愛員工 Caring for Our Staff	p.54 p.98 p.118		1		
	2-25	補救負面影響 的流程 Processes to remediate negative impacts	主要職責 Core Responsibilities 關愛員工 Caring for our Staff 持份者參與 Stakeholder Engagement	p.97 p.121 p.134	渠務署設有24小時 渠務熱線。 The DSD has established a 24-hour drainage hotline.	J		
	2-26	尋求建議及提 出疑慮的機制 Mechanisms for seeking advice and raising concerns	主要職責 Core Responsibilities 持份者參與 Stakeholder Engagement 附錄一:完成 目標 Appendix I: Meeting the Targets	p.97 p.132-167 p.171		✓		
216	2-27	遵守法律及法 規 Compliance with laws and regulations	管治方針 Governance Approach 部門政策 Departmental Policies	p.54		1		

GRI 2: 一般 2-28 協會的會員資	\$5.76 TER 24 N.I.T.I.D.
披露2021 GRI 2: General disclosures 2021  Membership associations	果務署屬於以下協會的成員:國際公用事業專業網絡:國際水利與環境工程學會香港建築議會主香港線 合建築
持份者聯繫 Stakeholder engagement	
2-29 引入持份者參 與的方針 About the F Approach to 持份者參! stakeholder Stakeholder engagement Engagemer	p.132-133

J = 20-	 	_	4 m 1000 + ht =	(-b+n)+ (+	/#* \	外部認證
GRI標準 GRI Standard	披露項 Disclosu		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	External Assurance
GRI 2:一般 披露2021 GRI 2: General disclosures 2021	2-30	集體談判協議 Collective bargaining agreements			香港並無集體談判多種與,在報學與一個學學的學學的學學的學學的學學的學學的學學的學學的學學的學學的學學的學學的學學的	
GRI 3:重大 主題2021	重大主	· <del>-</del>	l			
GRI 3: Material Topics 2021	3-1	決定重大議題 的流程 Process to determine material topics	關於本報告 About the Report 實質性評估 Materiality Assessment	p.7 p.10-13		<b>/</b>
	3-2	重大議題清單 List of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment	p.7 p.10-13		<b>✓</b>

				外部認證
GRI標準	披露項目	參照相關章節及/或超連結	備註(例如:省略)	External
GRI Standard	Disclosure	Relevant section(s) and/or URL(s)	Remark (e.g. omission)	Assurance

# 特定主題披露

TOPIC SPECIFIC DISCLOSURES

# 環境

### ENVIRONMENTAL

環境合規 Environmental Compliance	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach	p.7 p.10-13 p.54-61	我們跟隨政府制定 的環保政策及條例:第446章《土地 排水條例》 We follow the environmental policies and ordinances formulated by the Government: Cap. 446 Land Drainage Ordinance	<b>/</b>
氣味控制 Odour Control	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 年度主題、及環境(ESG)重點 Theme of the Year, and Environmental, Social Governance (ESG) Highlights 管治方針 Governance Approach 主要職責 Core Responsibilities 環境管理 Environmental Management	p.7 p.10-13 p.29-30 p.54-61 p.78-91 p.103-105		,

GRI標準 GRI Standard	披露項 Disclosu		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
可再生能源使 用 Use of Renewable	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality	p.7 p.10-13		✓
Energy			Assessment 管治方針 Governance	p.54-61		
			Approach 環境管理 Environmental Management	p.107-114		
綠色設計與施 工 Green	3-3	重大議題的管 理 Management of	關於本報告 About the Report 實質性評估	p.7 p.10-13		1
Design and Construction		material topics	Materiality Assessment 管治方針 Governance	p.54-61		
			Approach 環境管理 Environmental Management	p.98-101		
氣候變化減緩 及適應	3-3	重大議題的管理	關於本報告 About the Report	p.7		1
Climate Change Mitigation and Adaptation		Management of material topics	實質性評估 Materiality Assessment 管治方針	p.10-13 p.54-61		
			Governance Approach 環境管理 Environmental Management	p.106		

GRI標準 GRI Standard	披露項 Disclosu		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
能源管理 Energy Managem	ent					
GRI 302:能 源2016 GRI 302: Energy 2016	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 環境管理 Environmental Management	p.7 p.10-13 p.59 p.98		1
	302-1	組織內部的能 源消耗量 Energy consumption within the organisation	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.174-175		1
	302-2	組織外部的能 源消耗量 Energy consumption outside of the organisation	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.175		1
	302-3	能源強度 Energy intensity	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.174-175		1
	302-4	减少能源消耗 Reduction of energy consumption	環境管理 Environmental Management 附錄一:完成 目標 Appendix I: Meeting the Targets	p.107 p.168-170		1
	302-5	降低產品和服務的能源需求 Reductions in energy requirements of products and services				1

GRI標準 GRI Standard 水資源及污水管 Water Resources		re	参照相關章節及/或超連結 Relevant section(s) and/or URL(s)		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
GRI 303: 水與放流水 2018 GRI 303: Water and Effluents 2018	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 環境管理 Environmental Management	p.7 p.10-13 p.59 p.103		1
	303-1	共享水資源之 相互影響 Interactions with water as a shared resource	主要職責 Core Responsibilities 環境管理 Environmental	p.64 p.103		/
	303-2	與排水相關影響的管理 Management of water discharge- related impacts	Management 附錄一:完成 目標 Appendix I: Meeting the Targets 新計數據 Appendix II: Key Statistics and Data	p.169-170		1
	303-5	取水量 Water consumption	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.177		<b>√</b>

GRI標準 GRI Standard 氣體排放 Air Emissions	披露項 Disclosu		参照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
GRI 305:排 放2016 GRI 305: Emissions 2016	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 環境管理 Environmental Management	p.7 p.10-13 p.59 p.114		/
GRI 305:排 放2016 GRI 305: Emissions 2016	305-1	直接(範疇1)溫 室氣體排放 Direct (Scope 1) GHG emissions	環境管理 Environmental Management 附錄二:主要	p.114 p.176		1
	305-2 能源間接(範疇 2)溫室氣體排	統計數據 Appendix II: Key Statistics and Data			✓	
					<b>✓</b>	
					<b>√</b>	
	305-5	溫室氣體減排 量 Reduction of GHG emissions				<b>√</b>

GRI標準 GRI Standard 廢物處理 Waste Treatment	披露項 Disclosu		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
GRI 306:廢棄物2020 GRI 306: Waste 2020	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 環境管理 Environmental Management	p.7 p.10-13 p.59 p.115		/
	306-1	廢棄物的產生 及廢棄物相關 重大影響 Waste generation and significant waste-related impacts	環境管理 Environmental Management	p.115		<b>y</b>
	306-2	廢棄物相關重 大影響的管理 Management of significant waste- related impacts	環境管理 Environmental Management 附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.115 p.178-180		✓
	306-3	產生的廢棄物 Waste generated	附錄二:主要 統計數據	p.178-180		✓
	306-4	廢棄物的處置 移轉 Waste diverted from disposal	Appendix II: Key Statistics and Data			/
	306-5	廢棄物的直接 處置 Waste directed to disposal				✓

GRI標準 GRI Standard	披露項目 Disclosure		參照相關章節及/或超連結 Relevant section(s) and/or URL(s)		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
社會 SOCIAL						
內部溝通渠道 Internal Communication Channel	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 關愛員工 Caring for our Staff 持份者參與 Stakeholder Engagement	p.7 p.10-13 p.54-61 p.118-125 p.132-135		✓

GRI標準 GRI Standard 員工政策及員コ	披露項 Disclosu 二比例		參照相關章節及 Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
Employment Police	y and Em	oloyee Ratio				
GRI 401:僱 傭2016 GRI 401: Employment 2016	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 關愛員工 Caring for our Staff	p.7 p.10-13 p.54-61 p.118-125		1
	401-1	新進員工和員 工流動率 New employee hires and employee turnover	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.184		✓
	401-2	提供給全職員 工(不包含臨時 或兼職員工)的 福利 Benefits provided to full-time employees that are not provided to temporary or part-time employees			果務署作為香港特別行政區的政府部門,秉持香港特別行政區公務員事務局的規章與法規。 The DSD follows the rules and regulations shown in the CSB of the HKSAR as the DSD is the governmental department of the HKSAR.	<b>,</b>
	401-3	育嬰假 Parental leave			96.88%員工於育嬰 假後重返工作崗位 (以申請育嬰假人數 和於報告期內仍在 職的員工人數作計 算)。 96.88% return to work after parental leave (calculated by the number of employees who took parental leave and the number of those employees who were still employed within the Reporting Period).	<b>/</b>

GRI標準 GRI Standard 僱員關係	披露項 Disclosu				備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
Employee Relation	ns					
GRI 402: 勞/資關係	3-3	重大議題的管理	關於本報告 About the Report	p.7		1
2016 GRI 402: Labour/		Management of material topics	實質性評估 Materiality Assessment	p.10-13		
Management relations 2016			管治方針 Governance Approach	p.54-61		
			關愛員工 Caring for Our	p.118-125		
			Staff 持份者參與 Stakeholder Engagement	p.132		
	402-1	關於營運變化 的最短預告期 Minimum notice periods regarding	管治方針 Governance Approach 關愛員工	p.56-57		<b>√</b>
		operational changes	Caring for Our Staff			

GRI標準 GRI Standard 職業安全及健園 Occupational Safe		re	參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
GRI 403:職 業健康及安全 2018 GRI 403: Occupational health and	403-1	職業健康安全 管理體系 Occupational health and safety management system	關愛員工 Caring for Our Staff	p.121		<b>V</b>
safety 2018	403-2	危害識別、風 險評估和事件 調查 Hazard identification, risk assessment, and incident investigation	關愛員工 Caring for Our Staff	p.121-122		1
	403-3	職業健康服務 Occupational health services	關愛員工 Caring for Our Staff	p.121-122		1
	403-4	職業健康安全 事務:工作者 的參與、協商 和溝通 Worker participation, consultation, and communication on occupational health and safety	關愛員工 Caring for Our Staff	p.122-125		/

GRI標準 GRI Standard	披露項		參照相關章節及/或超連結 Relevant section(s) and/or URL(s)		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
	403-5	員工職業健康 安全培訓 Worker training on occupational health and safety	關愛員工 Caring for Our Staff	p.123-125		1
	403-6	促進工作者健 康 Promotion of worker health	關愛員工 Caring for Our Staff	p.125		1
GRI 403:職業健康及安全 2018 GRI 403: Occupational health and safety 2018	403-7	預防和減輕與 商業關係直接 相關的職業健 康安全影響 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	持份者參與 Stakeholder Engagement	p.134-135		<b>V</b>
	403-8	職業健康安全 管理體系覆蓋 的工作者 Workers covered by an occupational health and safety management system	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.186-187		1
	403-9	工傷 Work-related injuries	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.186-187		1

GRI Standard 披露項目 Disclosure			參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
員工培訓及發展 Employee Training		cation				
GRI 404: 培訓與教育 2016 GRI 404: Training and education 2016	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 關愛員工 Caring for Our Staff	p.7 p.10-13 p.54-61 p.118-125		<b>/</b>
	404-1	每名員工每年 接受培訓的平 均小時數 Average hours of training per year per employee	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.183		1
	404-2	提升員工職能 及過渡協助方 案 Programmes for upgrading employee skills and transition assistance programs	關愛員工 Caring for Our Staff	p.120-125		/
	404-3	定期接受績效 及職業發展檢 核的員工百分 比 Percentage of employees receiving regular performance and career development reviews			100%的渠務署員工 接受定期的工作表 現評估。 100% of the DSD staff received regular performance evaluations.	1

GRI標準 GRI Standard	披露項			參照相關章節及/或超連結 Relevant section(s) and/or URL(s)		外部認證 External Assurance		
社會經濟合規 Governance			'					
社會經濟合規 Socio-economic Compliance	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach	p.7 p.10-13 p.54-61	我們跟隨政府制定 的政策及條例。 Governance Approach	1		
申訴機制 Grievance Mechanism	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 關愛員工 Caring for Our Staff 附錄一:完成 目標 Appendix I: Meeting the Targets	p.7 p.10-13 p.54-61 p.118-125 p.172-173		<b>V</b>		
技術發展和應用 用Technology Development and Application	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 年度主題、食環境、社會及管治(ESG)重點 Theme of the Year, and Environmental, Social and Governance (ESG) Highlights 管治方針 Governance Approach	p.7 p.10-13 p.26-35		<b>V</b>		

GRI標準 GRI Standard	披露項			參照相關章節及/或超連結 Relevant section(s) and/or URL(s)		外部認證 External Assurance
採購政策 Procurement Policy	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 環境管理 Environmental Management	p.7 p.10-13 p.54-61 p.115		<b>,</b>
供應鍊管理 Supply Chain Management	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 持份者參與 Stakeholder Engagement 附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.7 p.10-13 p.54-61 p.144-147 p.184		1

GRI 標準 GRI Standard	披露項 Disclosu				備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
經濟表現 Economic Perform	nance					
GRI 201:經 濟表現 GRI 201: Economic Performance	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 年度主題、及環境、社會及管治(ESG)重點 Theme of the Year, and Environmental, Social and Governance (ESG) Highlights 管治方針 Governance Approach	p.7 p.10-13 p.26-35		•
	201-1	產生和分配的 直接經濟價值 Direct economic value generated and distributed	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.188-189		1
	201-2	氣候變化所產 生的財務影響 及其他風險與 機遇 Financial implications and other risks and opportunities due to climate change	環境管理 Environmental Management 附錄三:渠務署 就氣候相關財 務揭露之回應 Appendix III: DSD's Response to TCFD	p.106 p.196-207		1
	201-3	固定福利計劃 義務和其他退 休計劃 Defined benefit plan obligations and other retirement plans	-	_	由於保密限制無法 披露與退休計劃相 關的特定財務細節。 Confidentiality constraints prevent disclosure of specific financial details related to retirement plans.	✓

GRI標準 GRI Standard 公共資金及資產 Transparency on F		re	參照相關章節及/或超連結 Relevant section(s) and/or URL(s)		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
GRI 203:間 接經濟影響 2016 GRI 203: Indirect Economic Impacts 2016	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach 主要職責 Core Responsibilities 持份者參與 Stakeholder Engagement	p.7 p.10-13 p.54-61 p.62-97 p.132-167		1
	203-1	基礎設施投資和支持性服務 Infrastructure investments and services supported	主要職責 Core Responsibilities 附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.62-97 p.185, 189		✓
	203-2	顯著的間接經 濟衝擊 Significant indirect economic impacts	主要職責 Core Responsibilities 持份者參與 Stakeholder Engagement	p.62-97 p.132-167		<b>✓</b>
反貪腐 Anti-corruption						
GRI 205: 反 貪腐2016 GRI 205: Anti- corruption 2016	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach	p.7 p.10-13 p.54-61		•

GRI標準 GRI Standard	披露項 Disclosu		參照相關章節及/ Relevant section(s) a		備註(例如:省略) Remark (e.g. omission)	外部認證 External Assurance
	205-2	有關反貪腐政策和程序的溝通及培訓 Communication and training about anticorruption policies and procedures	附錄二:主要 統計數據 Appendix II: Key Statistics and Data	p.185	所有渠務署員工必 須遵守政府制定的 政策及條例:第 201章《防止賄賂條 例》。本署要求德標準。如發現任何涉 嫌貪腐的廠政公署舉報。以作進一步調查。 All DSD staff follow the policy and ordinances formulated by the Government: Cap. 201 Prevention of Bribery Ordinance. The Department requires its staff to adhere to the highest ethical standards. If any suspected corruption cases are reported, they will be submitted to the Independent Commission Against Corruption for further investigation.	
服務質素標準 Service Quality St	andards					
GRI 416:客 戶健康和安全 2018 GRI 416: Customer Health and Safety 2018	3-3	重大議題的管理 Management of material topics	關於本報告 About the Report 實質性評估 Materiality Assessment 管治方針 Governance Approach	p.7 p.10-13 p.54-61		<i>,</i>
	416-2	違反有關產品 及服務健康和 安全法規的事 件 Incidents of noncompliance concerning the health and safety impacts of products and services	_	-	於2023-24年度未有違反法律法規。 No non-compliance with laws and regulations in 2023-24.	<b>/</b>

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# 驗證聲明

香港通用檢測認證有限公司對渠務署2023-2024年可持續發展報告中可持續發展活動的報告

#### 驗證的性質

香港通用檢測認證有限公司(以下簡稱SGS)獲香港特別行政區政府渠務署(以下簡稱渠務署)委託,對《渠務署可持續發展報告2023-24》(以下簡稱「報告」)進行獨立驗證。

### 本驗證聲明的使用者

本驗證聲明旨在告知渠務署的所有持份者。

#### 職責

報告中的資訊及匯報由渠務署負責。SGS並未參與其報告中任何材料的準備工作。

我們的責任是對驗證範圍內的文本、數據、圖表和聲明表達意見、旨在告知渠務署的所有持份者。

### 驗證標準、類型和等級

SGS 用於執行驗證工作引用之 SGS 環境、社會及管治和可持續發展報告驗證規章是依據國際認可之驗證指引和標準為基礎,以及國際審計和鑑證準則委員會發佈的《國際鑒證業務標準(ISAE) 3000 修訂版,歷史財務資訊審計或審查以外的警證業務》驗證標準。

本報告的驗證根據以下的驗證標準執行:

驗證等級 國際整證業務標準 (ISAE) 3000 修訂版,歷史財務資訊審計或審查以外的鑒證業務

### 驗證範圍和報告準則

驗證範圍包括特定績效數據和資訊的質量、準確性和可靠性的評估,以及報告內附表格中的文字和數據。本報告的驗證範圍包括2023年4月1日至2024年3月31日期間的數據和資訊。

### 報告準則

《全球報告倡議組織可持續發展報告標準 2021》(依循)

#### 脸眼方法

驗證包括驗證活動前調研、數據抽樣、文件和紀錄的審查,特定績效數據和資訊的計算和報告。在驗證過程中 也檢查了所選擇的原始數據和支持證據。有限驗證業務所執行的程序在性質和時間上與合理驗證業務有所不同, 並且範圍較小。因此,有限驗證業務中所獲得的驗證級別比執行合理驗證業務低。

#### 使用限制和緩減

獨立審計的財務賬目中提取的財務數據,並未在此驗證過程中與資訊來源進行核對。請垂注本文有關驗證委託的任何局限以及經滅有關局限而採取的行動。

### 獨立性和能力聲明

SGS集團是全球領先的檢驗、測試和驗證機構,在超過140多個關家營運和提供服務,服務包括管理體系和服務 認證;質量、環境、社會和道德審核和培訓,以及環境、社會和可持續發展報告驗證。SGS申明我們獨立於 渠務署和其持份者,我們之間沒有偏見和利益衝突。

驗證團隊之組成基於成員對於此驗證的知識、絕驗和資歷。團隊包括IRCA註冊的EMS首席審核員、ISO 37001 和 ISO 26000審核員、GRI標準委任培訓導節及具備可持續發展報告驗證服務經驗的人員。

### 驗證意見

基於上述的驗證方法和已執行的驗證工作,我們沒有注意到任何事情使我們相信驗證範圍中包含的特定讀效數據 和資訊及報告內容未作出中肯的陳述和編製。而且在所有重大方面已符合以上的報告學則。

驗證團隊認為渠務署已為此報告選擇了適當的驗證等級。

簽署: 代表香港通用檢測認證有限公司

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關靜儀 總監 管理與保證 2025年3月14日

WWW.SGS.COM

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# ASSURANCE STATEMENT

# SGS HONG KONG LTD'S REPORT ON SUSTAINABILITY ACTIVITIES IN DRAINAGE SERVICE DEPARTMENT'S SUSTAINABILITY REPORT 2023-2024

#### NATURE OF THE ASSURANCE

SGS Hong Kong Limited (hereinafter referred to as SGS) was commissioned by the Drainage Services
Department of the Hong Kong Special Administrative Region (hereinafter referred to as DSD) to conduct an independent assurance of 《DSD Sustainability Report 2023-24》 (hereinafter referred to as the Report).

### INTENDED USERS OF THIS ASSURANCE STATEMENT

This Assurance Statement is provided with the intention of informing all DSD's stakeholders.

#### RESPONSIBILITIES

The information in the Report and its presentation are the responsibilities of DSD. SGS has not been involved in the preparation of any of the material included in the Report.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of assurance with the intention to inform all DSD's stakeholders.

#### ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognised assurance guidance and standards and Assurance Engagements Other Than Audits or Reviews of Historical Financial Information is based on the International Standard on Assurance Engagements (ISAE) 3000 (Revised), issued by the International Auditing and Assurance Standards Board.

The assurance of this report has been conducted according to the following Assurance Standard:

Assurance Standard	Level of Assurance
ISAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information	Limited

### SCOPE OF ASSURANCE AND REPORTING CRITERIA

The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance data and information included the text and data in accompanying tables contained in the Report. Data and information were included in this assurance process during the period from 1<sup>st</sup> April 2023 to 31<sup>st</sup> March 2024.

### Reporting Criteria

Global Reporting Initiative ("GRI") Sustainability Reporting Standards 2021 (In Accordance with)

### ASSURANCE METHODOLOGY

The assurance comprised a combination of pre-assurance research, data sampling, documentation and record review, calculating and reporting the specified performance data and information. Raw data and supporting evidence of the selected samples were also examined during the verification process. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable

### assurance engagement been performed.

### LIMITATIONS AND MITIGATION

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process. Note here any other specific limitations for the assurance engagement and actions taken to mitigate those limitations.

#### STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training, environmental, social and sustainability report assurance. SGS affirm our independence from DSD, being free from bias and conflicts of interest with its stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with IRCA EMS Principal Auditor, auditor of ISO 37001 & ISO 26000, nominated tutor of GRI Standards and experience of the SRA assurance service provisions.

#### ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, nothing has come to our attention that causes us to believe that the specified performance data and information and the reporting content included in the scope of assurance is not fairly stated and prepared, in all material respects, in accordance with the above mentioned reporting criteria.

We believe that DSD has chosen an appropriate level of assurance for this stage in their reporting.

#### Signed:

For and on behalf of SGS Hong Kong Limited



Miranda Kwan Director Business Assurance 14 March 2025

WW.SGS.COM

# 渠務署可持續發展報告2023-24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	司 無意見
	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 。		0	0	0	0	0
	這份報告的內容平衡及充份。		0	0	0	0	0
	這份報告的資料可靠。		0	0	0	Ö	0
	這份報告的結構清晰。		Ō	Ō	0	Ō	Ō
	這份報告的圖像與文字的比例合適。		0	0	0	0	0
	這份報告的設計美觀。		0	0	$\circ$	0	0
	這份報告易於閱讀及瀏覽。		0	0	$\circ$	0	0
	這份報告按照報告期提供最新的資訊。		0	0	$\circ$	0	0
	這份報告有助您增加對渠務署的認識。		0	0	0	0	0
2.	請評價我們的可持續發展報告2023-24及可持續發展表现	₹:	優異	良好	尚可	欠佳	差劣
	你會如何評價我們的可持續發展報告?		0	0	$\circ$	$\circ$	0
	你會如何評價我們的可持續發展表現?		0	0	0	0	0
3.	你對我們的報告在以下哪一方面提供的資料最感興趣?						
	○年度主題及環境、社會及管治(ESG)大事回顧	○管治方針	○主要職責	○環境管理		愛員工	○持份者參與
	○其他,請註明						
4.	你認為我們的報告在以下哪一方面提供的資料最有用?						
	○年度主題及環境、社會及管治(ESG)大事回顧	○管治方針	○主要職責	○環境管理	○關	愛員工	○持份者參與
	○其他・請註明						
5.	你希望我們的報告在以下哪一方面提供更多資料?(可選	擇多於一項)					
	○年度主題及環境、社會及管治(ESG)大事回顧	○管治方針	○主要職責	○環境管理		愛員工	○持份者參與
	○其他・請註明						
6.	你認為我們於來年的報告應增加哪些內容?						
7.	你從何獲取渠務署可持續發展報告的資訊?						
	○ 渠務署網頁 ○ 渠務署舉辦的活動 ○ 家人或	成朋友 ○社	交媒體 〇傳	媒 〇學校	○其代	他・請註明_	
8.	其他建議或意見:						
9.	你屬於下列哪個組別?						
	○ 政府部門 ○ 顧問/承建商/供應商	商/建造業	○非政府	機構社區組織	С	學術界	
	○環保團體		○渠務署	員工	C	學生	
	○ 公眾人士   ○ 其他 · 請註明						
如京	北渠務署可持續發展報告有任何查詢・請聯絡本署公共關	係組(電話:259	74 7073/電郵:e	enquiry@dsd.go	v.hk)。請從	k以下途徑交[	回已填妥的表格

給渠務署:

傳真: 3103 0033 電郵:enquiry@dsd.gov.hk 郵寄地址:香港灣仔告士打道5號税務大樓43樓

多謝你的寶貴意見!

# DSD Sustainability Report 2023-24 Feedback Form

Thank you for taking the time to read our report. Your feedback is invaluable in helping us improve our sustainability performance and reporting. Please take

a fe	ew minutes to share your views with us by completing	g the following fee	edback form. Tha	ink you.			
1.	Please indicate whether you agree or disagree wit statements:	h the following	Strongly Agree	Agree	Disagree	Strongly Disagree	No comment
	The Report provides a clear understanding of our v services, as well as our sustainability strategy and p		0	0	0	0	0
	The content of the Report is well-balanced and cor	mprehensive.	$\circ$	0	0	0	0
	The information in the Report is reliable.		0	0	0	0	0
	The structure of the Report is clear.		0	0	0	0	0
	The visual balance of graphics and text in the Report proportioned.	ort is well-	$\circ$	0	0	0	0
	The design of the Report is well-presented and effe	ective.	0	0	0	0	0
	The Report is easy to read and navigate.		0	0	0	0	0
	The Report provides up-to-date information relevant reporting period.	nt to the	0	0	0	0	0
	The Report provides valuable insights into the DSD	).	0	0	0	0	0
2.	Please rate our Sustainability Report 2023-24 and performance:	sustainability	Excellent	Good	Fair	Poor	Bad
	How would you rate our Sustainability Report?		0	0	0	0	0
	How would you rate our sustainability performance	?	0	0	0	0	O
3.	Which section of the report interested you the mo	ost?					
	Theme of the Year and Environmental, Social ar	nd Governance (ES	SG) Highlights	Gover	nance Approach	○ Core	Responsibilities
	○ Environmental Management ○ Ca	aring for Our Staff		○ Stakel	nolder Engageme	nt	
	Other(s), please specify						
4.	Which aspect of the report did you find most usef  Theme of the Year and Environmental, Social ar  Environmental Management  Other(s), please specify.		SG) Highlights		nance Approach nolder Engagemei	_	Responsibilities
5.	Which aspects of the report would you like to see	expanded or exp	lored in more d	etail?			
	Theme of the Year and Environmental, Social ar			_	nance Approach	○ Core	Responsibilities
		aring for Our Staff	. 5 5		nolder Engageme	_	
	Other(s), please specify	anny for Gar Stan		O blanci	loider Engagemen		
6.	What additional content or topics would you like t	to see in our futur	e reports?				
			· .				
7.	How do you typically learn about the DSD Sustain	ability Report?					
	ODSD Website ODSD activities OFamily & fri	iends O Social M	ledia Channels	○Media ○S	chools Other(	s), please spec	ify
	•						
8.	Other suggestions or opinions:						
9.	Which of the following best describes you?						
		Consultant/Con	tractor/Supplier/	Construction Ir	idustry		
		Academic Secto			Green Group		
		Staff of DSD			Students		
		_			_ Students		
	Ugeneral Public (	Other(s), please	specify				

For enquiries about DSD Sustainability Report, please contact our Public Relations Unit (Tel: 2594 7073 / Email: enquiry@dsd.gov.hk)

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

Email: enquiry@dsd.gov.hk Fax: 3103 0033 Mailing address: 43/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong

Thank you very much for sharing your valuable opinion.



### 本報告的電子版及回應表格可參閱以下網址:

# The electronic version of the report and feedback form can be found at the following link:

https://www.dsd.gov.hk/TC/Publicity\_and\_Publications/Publicity/DSD\_Sustainability\_Reports/index.html(繁體中文版)https://www.dsd.gov.hk/SC/Publicity\_and\_Publications/Publicity/DSD\_Sustainability\_Reports/index.html(簡體中文版)https://www.dsd.gov.hk/EN/Publicity\_and\_Publications/Publicity/DSD\_Sustainability\_Reports/index.html(English Version)

# 服務查詢 Service Enquiries

渠務熱線(24 小時)Drainage Hotline (24 Hours):

© 2300 1110

污水處理服務收費諮詢 Sewage Services Charges 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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