水務署
WATER SUPPLIES DEPARTMENT

穩健供水 應對氣候變化

Water Security and Climate Resilient Development

年報 Annual Report 2015/16

抱負
Vision

在滿足客戶對優質供水服務的需求，務求有卓越之表現

To excel in satisfying customers' needs for the provision of quality water services

信念
Values

- **C** 以客為本 **C**ustomer Satisfaction
- **R** 確保質量 **R**eliability
- **E** 重視環保 **E**nvironmental Awareness
- **D** 竭盡所能 **D**edication
- **I** 精益求精 **I**mprovement
- **T** 同心協力 **T**eamwork

使命 Mission

- 以最符合成本效益的方式為客戶提供可靠充足的優質食水及海水
  To provide a reliable and adequate supply of wholesome potable water and sea water to our customers in the most cost-effective way
- 提供以客戶為本的服務
  To adopt a customer-oriented approach in our services
- 維持及激勵一支能幹、高效率及完全投入的工作隊伍，以服務社群
  To maintain and motivate an effective, efficient and committed workforce to serve the community
- 時刻關注對保護環境方面須負的責任
  To remain conscious of our responsibilities towards the environment
- 善用資源和科技，力求不斷改善服務
  To make the best use of resources and technology in our striving for continuous improvement in services

目錄 Contents

部門總覽
Corporate Profile

香港的供水對本港居民的生活不可或缺，同時亦是支援本港可持續發展的關鍵要素。香港特別行政區政府水務署負責監測及維持香港的食水及海水供應。食水及海水透過兩個完全獨立的水務基建設施供應。遍佈本港17個水塘的集水區收集的本地集水約佔香港總食水用量二至三成。本港的供水大部分由中國南部的東江輸入，經嚴格處理及監測，務求符合最新國際水質標準。所有食水會儲存在廣泛分佈的配水庫內，以待配送至各家各戶及商用物業。

自二十世紀五十年代以來，我們充分利用香港鄰近中國南海的地理優勢，將經處理的海水用作沖廁用途。為確保香港的供水穩健，我們透過海水化淡、再造水、中水重用及集蓄雨水等先進技術，努力開拓新水源。這六個水源將成為重要支柱，進一步提升香港的穩健供水及適應未來新形勢的能力。

作為香港最大的能源用戶之一，水務署已實施相關措施，透過開發可再生能源，致力減少能源消耗。水務署更因此而成為首個獲得ISO 50001能源管理系統認證的政府部門。

我們的抱負是滿足客戶對優質供水服務的需求，務求有卓越之表現。為此，水務署致力提供以客戶為本的服務，確保我們的用戶獲得最有效及優質的服務。

Hong Kong's water supply is indispensable to the livelihood of the people who live here and is critical to support the Territory's sustainable developments. The Hong Kong SAR Government's Water Supplies Department is charged with the responsibility of monitoring and maintaining reliable and adequate fresh and sea water supplies. Fresh water and sea water are supplied through two entirely separate systems of waterworks infrastructure. Local yield collected in rainfall catchment areas comprising 17 impounding reservoirs accounts for about 20% to 30% of Hong Kong's total fresh water consumption. The major proportion of our water supply comes from Dongjiang in the southern part of mainland China. It is subject to stringent treatment and monitoring in order to meet the latest international water quality standards. These water resources are maintained in an extensive array of service reservoirs for distribution to homes and commercial developments.

Since the 1950s we have taken full advantage of Hong Kong's geographic proximity to the South China Sea to adopt sea water for flushing purposes. To ensure that Hong Kong's water remains secure, we make concerted efforts to exploit new water sources by introducing advanced methodologies such as desalination, water reclamation, grey water recycling and rainwater harvesting. These six water sources will become the pillars that support Hong Kong with enhanced water security and our ability to adapt to new situations in the future.

As one of the largest energy consumers in Hong Kong, the Water Supplies Department has also implemented measures to reduce our energy footprint through the development of viable renewable energy sources. As a result, we are the first government department to earn the ISO 50001 Energy Management System certification.

Our vision is to excel in satisfying customers' needs for the provision of quality water services. With this in mind, the Water Supplies Department's committed workforce has adopted a customer-oriented approach to ensure that our users receive the most effective and high quality service.

主要統計數字 （截至二零一六年三月三十一日）
Principal Statistics (as at 31 March 2016)

水塘數目
No. of Impounding Reservoirs **17** 個 nos.

總存水量
Total Storage Capacity **586.05** 百萬立方米 million cubic metres

濾水廠數目
No. of Water Treatment Works **21** 個 nos.

每日總濾水量
Total Daily Treatment Capacity **5.02** 百萬立方米 million cubic metres

食水抽水站數目
(包括食水和原水抽水站及泵房)
No. of Fresh Water Pumping Stations (including both fresh & raw water pumping stations and pump houses) **154** 座 nos.

每日總抽水量
Total Daily Pumping Capacity **31.61** 百萬立方米 million cubic metres

海水抽水站數目
No. of Salt Water Pumping Stations **35** 座 nos.

每日總抽水量
Total Daily Pumping Capacity **2.08** 百萬立方米 million cubic metres

食水及海水抽水站數目
No. of Combined Fresh Water & Salt Water Pumping Stations **7** 座 nos.

每日總抽水量
Total Daily Pumping Capacity **0.29** 百萬立方米 million cubic metres

食水配水庫數目
No. of Fresh Water Service Reservoirs **174** 座 nos.

總存水量
Total Storage Capacity **4.29** 百萬立方米 million cubic metres

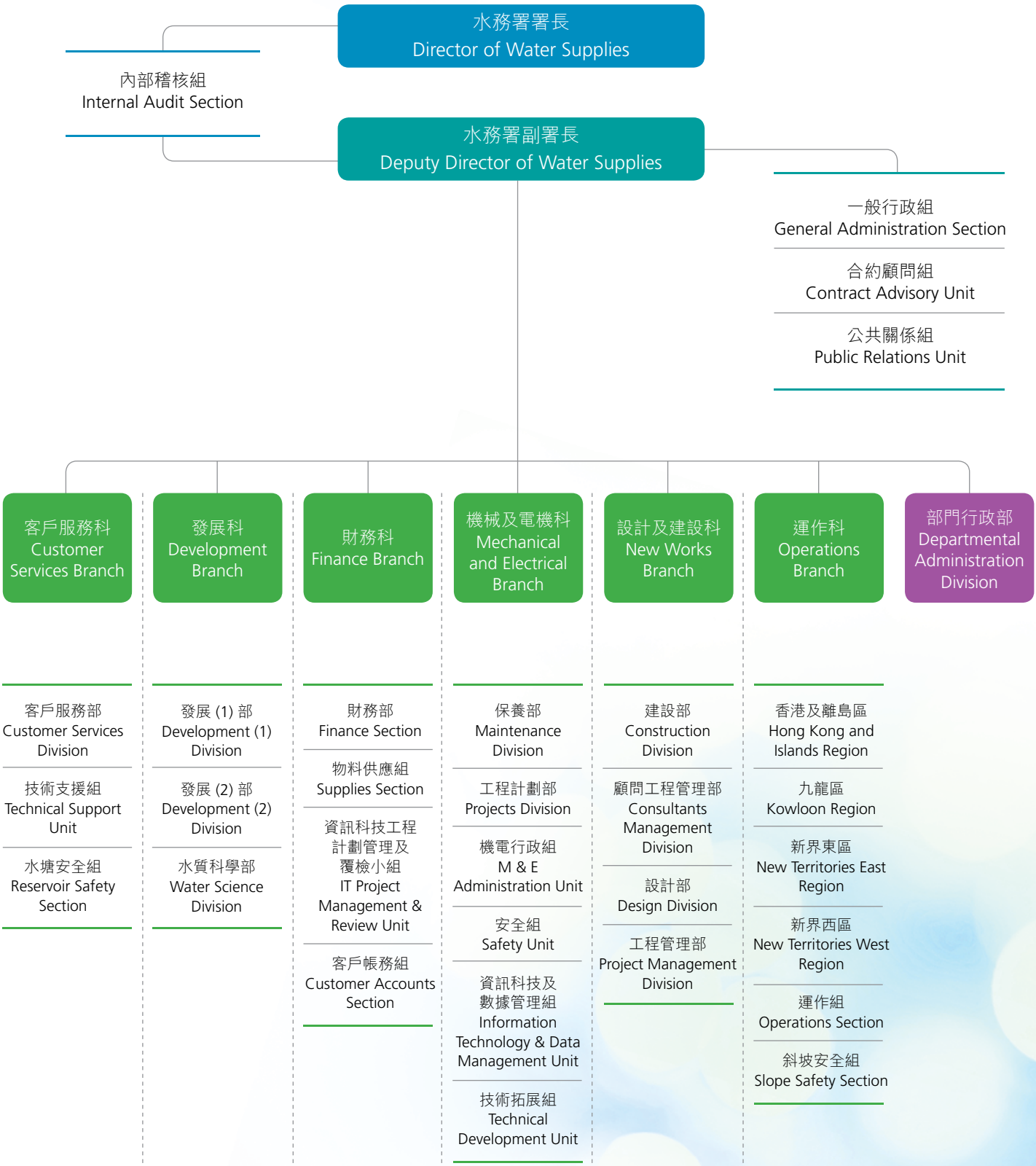
海水配水庫數目
No. of Salt Water Service Reservoirs **54** 座 nos.

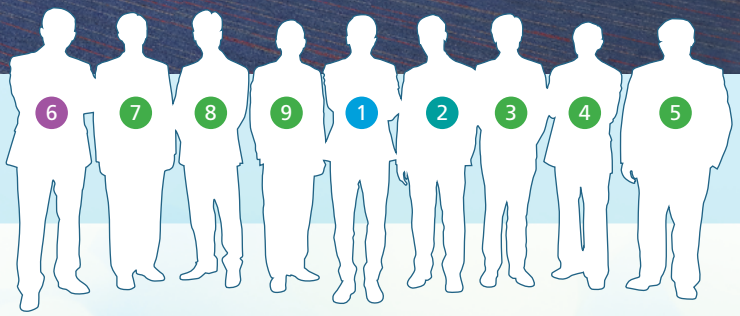
總存水量
Total Storage Capacity **0.26** 百萬立方米 million cubic metres

食水水管長度
(直徑20毫米至2,400毫米)
Length of Fresh Water Mains (20 mm to 2,400 mm diameter) **6,511** 公里 kilometres

海水水管長度
(直徑20毫米至1,200毫米)
Length of Salt Water Mains (20 mm to 1,200 mm diameter) **1,564** 公里 kilometres

水務署組織圖
WSD Organisation Chart





1 林天星工程師, 太平紳士
Ir LAM Tin Sing, Enoch, JP
水務署署長
Director of Water Supplies

2 黃仲良工程師, 太平紳士
Ir WONG Chung Leung, JP
水務署副署長
Deputy Director of Water Supplies

3 陳仲勤工程師
Ir CHAN Chung Kun
助理署長/運作
Assistant Director/ Operations

4 林正文工程師
Ir LAM Ching Man
助理署長/客戶服務
Assistant Director/ Customer Services

5 陸偉雄工程師
Ir LUK Wai Hung
助理署長/設計及建設
Assistant Director/ New Works

6 譚偉源先生
Mr TAM Wai Yuen
部門秘書
Departmental Secretary

7 李光明先生, 太平紳士
Mr LEE Kwong Ming, JP
助理署長/財務
Assistant Director/ Finance

8 周世威工程師
Ir CHAU Sai Wai
助理署長/發展
Assistant Director/ Development

9 黃敏清工程師
Ir WONG Man Ching
助理署長/機械及電機
Assistant Director/
Mechanical & Electrical

大事紀要
Events in Brief

二零一五年
五月
May 2015

客戶聯絡小組第七十二次會議
The 72nd Customer Liaison Group (CLG) Meeting

客戶聯絡小組第七十二次會議於二零一五年五月舉行。當日，水務署向組員簡介「海水化淡在香港的發展」及「新界西北及薄扶林區海水沖廁轉換計劃」。

The 72nd meeting of the CLG took place in May 2015. Various presentations to attending members were: "Seawater Desalination in Hong Kong" and "Conversion of Flushing Supply from Fresh Water to Salt Water at Northwest New Territories and Pok Fu Lam".

二零一五年
五月
May 2015

「東江水供港50周年」紀念儀式
Commemoration Ceremony - 50th Anniversary of Dongjiang Water Supply to Hong Kong

為紀念東江水供港50周年，粵港兩地政府特別於二零一五年五月二十八日假香港特區政府總部舉行紀念儀式，行政長官梁振英、廣東省省長朱小丹和一眾粵港兩地相關官員一同出席儀式，兩地官員更於儀式上簽訂二零一五年至二零一七年的東江水供港協議。

To mark the 50th anniversary of Dongjiang water supply to Hong Kong, the Governments of the Hong Kong Special Administrative Region and Guangdong Province launched a commemoration ceremony at the Central Government Offices on 28th May 2015. The Chief Executive, Mr LEUNG Chun-ying, the Governor of Guangdong Province, Mr ZHU Xiaodan, and other relevant officials of the Guangdong and Hong Kong Governments attended the ceremony and witnessed the signing of an agreement for the supply of Dongjiang water to Hong Kong for the period from 2015 to 2017.

二零一五年
六月
June 2015

「東江水供港50周年」巡迴展覽
Roving Exhibitions for 50th Anniversary of Dongjiang Water Supply to Hong Kong

本署於二零一五年六月至九月期間組織一系列「東江水供港50周年」巡迴展覽，介紹東江供水的歷史、相關基建設施的發展，以及廣東與香港政府實施的用水質量監測及巡查工作。本署期望藉此活動，讓公眾回顧東江水供港的歷史，了解水務署為確保香港可靠供水所作出的努力，以及提高對水資源開發及保護的意識。

The Department organised a series of roving exhibitions on the 50th Anniversary of Dongjiang Water Supply to Hong Kong at various districts from June to September 2015. The exhibitions introduced the history of the Dongjiang water supply arrangement, the related infrastructure development and the water quality monitoring and inspection work by the Guangdong and Hong Kong Governments. These events provided an opportunity for members of the public to look back nostalgically on the history of the Dongjiang water supply and to appreciate the efforts and dedication of WSD staff to ensure a reliable water supply for Hong Kong and to raise public awareness about the importance of water resources development and protection.

二零一五年
六月
June 2015

2015沙田龍舟競賽
Shatin Dragon Boat Race 2015

水務署龍舟隊在二零一五年六月二十日端午節，於「沙田龍舟競賽」的男子中龍混合公開賽及鳳艇公開賽分別奪得冠軍及殿軍，是歷年來的最佳成績。

The Dragon Boat Team of the Water Supplies Department was Champion and 2nd runner-up in Men's Open and Women's Open respectively at the Shatin Dragon Boat Race 2015 held on 20 June 2015 in Tuen Ng Festival. This was the best result ever achieved.

二零一五年
七月
July 2015

2015保護水資源大使證書頒發典禮
Certificate Presentation Ceremony for Water Conservation Ambassadors 2015

「保護水資源大使選拔賽」為「節約用水 — 從家開始」宣傳活動的重點，由本署於二零零八至二零零九學年在全港小學舉辦，以鼓勵青少年珍惜水資源。來自41所小學約5,500名學生參加了本年度的比賽，人數創歷年之最，當中587名學生獲委任為保護水資源大使。本署已於二零一五年七月在九龍灣國際展貿中心舉行「保護水資源大使證書頒發典禮」。於典禮期間，新任大使宣誓承諾會努力保護我們珍貴的水資源。

The Water Conservation Ambassador Selection Scheme was the highlight of the "Water Conservation Starts from Home" promotional campaign, which was launched by the WSD in all primary schools during the 2008/09 school year to encourage youngsters to treasure our local water resources. A record high of about 5,500 students from 41 primary schools participated in the scheme this year and 587 students were appointed as Water Conservation Ambassadors. The "Certificate Presentation Ceremony for Water Conservation Ambassadors" was held in July 2015 at the Kowloonbay International Trade & Exhibition Centre. During the ceremony, the New Ambassadors pledged to dutifully take up their roles and protect our precious local water resources.

二零一五年
九月
September 2015

客戶聯絡小組第七十三次會議
The 73rd CLG Meeting

客戶聯絡小組第七十三次會議於二零一五年九月舉行。本署向組員簡報了「電子帳單及繳費(EBPP)服務」及「食水含鉛」。

The 73rd meeting of the CLG was held in September 2015. Presentations were given to members on the "Electronic Bill Presentment and Payment (EBPP) Service" as well as "Lead in Drinking Water".

二零一五年
十月
October 2015

維港泳2015
Harbour Race 2015

維港泳2015於二零一五年十月十八日舉行，吸引逾2,000名游泳健將參與比賽。為慶祝是項比賽五週年，本署亦獲邀參加邀請組1,500米比賽。本署三名參賽者均取得佳績，其中一位更勇奪邀請組冠軍。

The Harbour Race 2015 was held on 18th October 2015, and attracted over 2,000 swimmers to take part in the event. Our Department was invited to participate in the Invitation Group 1,500-metre race in order to celebrate the 5th anniversary of the Race. Our three entrants made sensational achievements and one even became Champion of the Invitation Group.

二零一五年
十月
October 2015

牛潭尾濾水廠開放日
Ngau Tam Mei Water Treatment Works Open Day

為了讓廣大市民有更多機會認識與他們日常生活息息相關的食水水質及處理過程，水務署於十月二十四日假牛潭尾濾水廠舉辦開放日。今年的開放日，吸引了多間學校和團體踴躍報名，參觀人數逾千人，場面非常熱鬧。市民在本署義工同事帶領下，實地參觀整個食水處理過程，並於各展覽攤位進行互動體驗，了解本署的多項發展計劃，當中包括本署自行研發的「海浪推動刷網裝置」、「屯門水力發電站」、「打擊非法取水及禁止在水塘游泳及跳水」、「更換及修復水管計劃」、「水務署手機應用程式」及「智能讀錶系統」等。此外，今年更設有「東江水供港50周年」的展覽，藉此讓參觀者加深對東江水供港歷史及發展的了解，更希望市民認識前人為確保香港有穩定供水所付出的努力和貢獻。

To convey proper and effective messages about water quality and to help introduce the water treatment process to the public, the WSD organised an open day at the Ngau Tam Mei Water Treatment Works for the public to visit on 24th October. More than 1,000 people from all walks of life joined the event. Visitors were guided by our staff for a technical tour on the entire water treatment process. We arranged exhibitions of some newly developed projects like our in-house designed and built wave-powered sea water intake screen cleaning device, the Tuen Mun Water Treatment Works Hydropower Plant, combating unlawful taking of water and prohibiting swimming or diving in reservoirs, the Replacement and Rehabilitation of Water Mains Programme, the WSD Mobile App and Smart Metering System, plus other topics. Moreover, the exhibition on the 50th Anniversary of the Dongjiang Water Supply to Hong Kong was also held to broaden visitors' understanding of the history and development of this important water supply to Hong Kong and give them sense of the great efforts and contributions of past WSD staff in ensuring a reliable water supply for everyone in Hong Kong.

二零一五年
十月
October 2015

國際環保博覽2015
ECO Expo Asia 2015

本署透過參與由香港貿易發展局主辦，環境局協辦的「國際環保博覽2015」，向商界、公共機構及市民展示本署的環保及創新設計「屯門濾水廠水力發電站」及「內聯閉式水力發電系統」。為期四天的博覽會吸引了過千人士到場參觀，其中行政長官梁振英及環境局局長黃錦星前來參觀本署的展覽攤位。

The WSD took part in ECO Expo Asia 2015 hosted by the Hong Kong Trade Development Council (HKTDC) and co-organised by the Environment Bureau. At this event, the WSD presented its environmentally friendly and innovatively designed Tuen Mun Water Treatment Works Hydropower Plant and Inline Hydropower Harnessing Device to visitors from various business sectors, public institutions and the public at large. The 4-day Expo received more than a thousand visitors, including the Chief Executive and Secretary for the Environment Mr. KS WONG, who made a visit to the Department's booth.

二零一五年
十月
October 2015

創新科技嘉年華2015
InnoCarnival 2015

由創新科技署主辦的「創新科技嘉年華2015」於二零一五年十月三十一日至十一月八日在香港科學園舉行，讓市民親身體驗創新科技對生活所帶來的方便與樂趣。為此，本署在現場設置展覽攤位，向市民展示本署正在研發的智能讀錶手機應用程式。這個應用程式將配合自動讀錶系統向客戶提供適時的用水資訊，從而提高市民的節約用水意識。

The "InnoCarnival 2015" organised by the Innovation and Technology Commission was held from 31st October to 8th November 2015, at the Hong Kong Science Park for the public to experience how convenience and fun enters their daily lives through innovation and technology. To this end, the WSD participated the exhibition to demonstrate the pilot smartphone application in smart metering, which publishes the timely water consumption information collected through the automatic meter reading system to the customers for elevating awareness of water conservation.

二零一五年
十一月
November 2015

將軍澳海水化淡廠工程項目第一階段的顧問合約簽署儀式

Signing Ceremony of the Consultancy Agreement for the First Stage of the Tseung Kwan O Desalination Plant

博威工程顧問有限公司獲批將軍澳海水化淡廠第一階段-勘查研究、設計及建造顧問合約，合約價值1.8億港元。合約簽署儀式於二零一五年十一月十六日舉行。

A consultancy agreement worth $180 million was awarded to Black & Veatch Hong Kong Limited for the investigation review, design and construction of the first stage of the proposed desalination plant at Tseung Kwan O. The contract signing ceremony was held on 16th November 2015.

二零一五年
十一月
November 2015

樂施毅行者2015

Oxfam Trailwalker 2015

樂施毅行者2015活動於二零一五年十一月二十日舉行，吸引逾4,500名公眾人士參與。參與者須在48小時內跨越100公里的麥理浩徑。本署12名職員組成三支隊伍參加該項活動，並於限定時間內完成全程100公里的遠足。

The Oxfam Trailwalker 2015 event was held on 20th November 2015, attracting and challenging over 4,500 people to cross the 100 km Maclehose Trail in 48 hours. 12 WSD staff, a total of 3 teams, participated in the event with all teams completing the 100 km trail within the set time limit.

二零一五年
十二月
December 2015

水務署周年旅遊2015
WSD Annual Outing 2015

本年度的周年旅遊在十二月五及六日於東莞舉行，行程包括參觀威遠炮臺和虎門大橋，逾120名職員及其家人參加。

This year's annual outing was held in Dongguan on 5th and 6th December. The outing included visits to the Weiyuan Fort and Humen Pearl River Bridge. Over 120 staff members and their families took part.

二零一五年
十二月
December 2015

水務諮詢委員會廣東之行
Visit to Guangdong by the Advisory Committee on Water Supplies

水務諮詢委員會於二零一五年十二月八日至九日到訪廣東，視察東江供水系統並了解保護東江水整體水質的最新進展及措施。

Members of the Advisory Committee on Water Supplies (ACWS) visited Guangdong during 8th to 9th December 2015 to inspect the Dongjiang water supply system and learned about the latest developments and measures designed to safeguard the overall quality of Dongjiang water.

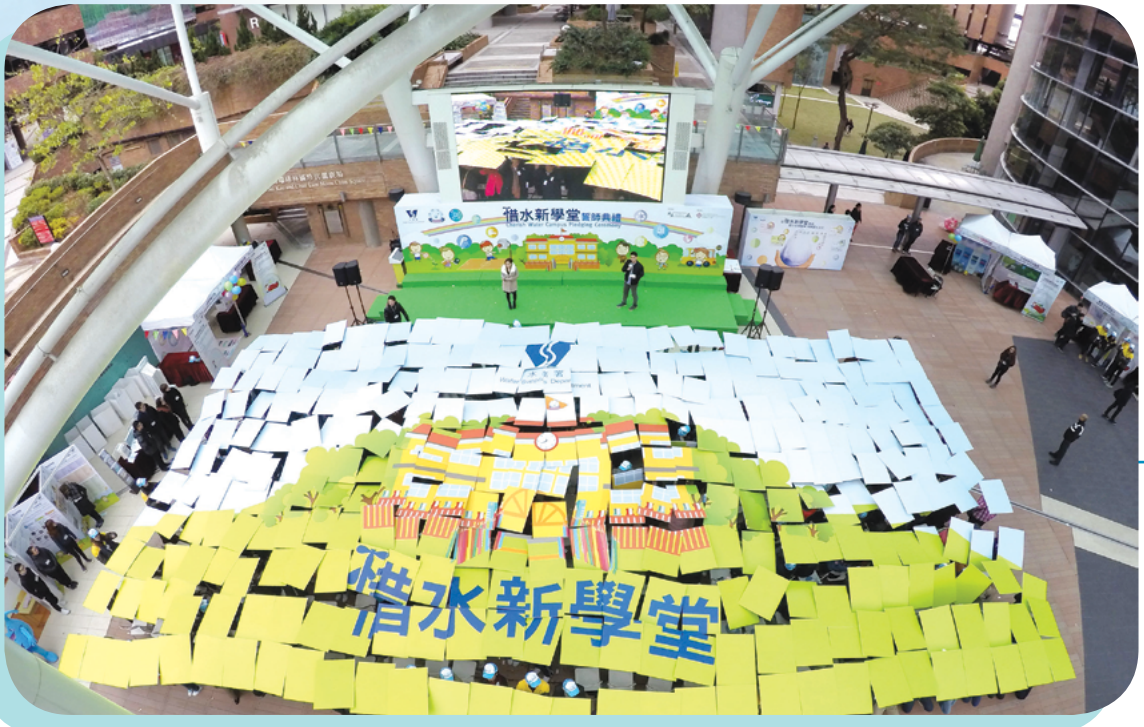
二零一六年
一月
January 2016

惜水新學堂 - 誓師典禮

Cherish Water Campus - Pledging Ceremony

三百多名小學校長和師生於二零一六年一月二十三日出席本署「惜水學堂」節約用水教育計劃的誓師典禮，承諾善用水資源、一同建構惜水文化。發展局常任秘書長（工務）韓志強、環境局副局長陸恭蕙、教育局副秘書長陳嘉琪博士、水務諮詢委員會主席陳漢輝博士，還有水務署署長林天星，和與會者齊齊高舉手上的拼圖，成功拼出巨型的「惜水新學堂」圖案，眾人並同時宣讀承諾口號：「從惜水新學堂做起，協力培育 New Gen 節水文化！」，象徵各校齊心合力，培養青少年的節水文化，共建惜水都市！場內設有遊戲攤位及展覽，以推廣節約用水及水資源可持續性的概念。誓師典禮是「欣賞香港」活動之一。

At the pledging ceremony of the "Cherish Water Campus" on 23rd January 2016, more than 300 primary school principals, teachers and students vowed to make good use of water resources and help build a water-saving culture in Hong Kong. Permanent Secretary for Development, Mr CK HON, Undersecretary for the Environment, Ms Christine LOH, Deputy Secretary for Education, Dr Catherine CHAN, and Chairman of the Advisory Committee on Water Supplies, Dr HF CHAN and Director of Water Supplies, Mr Enoch LAM led the participants in performing a card stunt to create a huge collage spelling out - "Cherish Water Campus". A mass pledge was made with everyone at the same time, reading out: "Start from Cherish Water Campus, join hands to nurture a water saving culture among the new generation!". This signifies the schools' commitment to water conservation education in order to help develop Hong Kong into a 'water-saving' city. There were game booths and exhibitions as well to promote water conservation and water sustainability. The ceremony was part of the "Appreciate Hong Kong" Campaign.



二零一六年
一月
January 2016

客戶聯絡小組第七十四次會議
The 74th CLG Meeting

客戶聯絡小組第七十四次會議於二零一六年一月在牛潭尾濾水廠舉行。本署為小組成員安排導賞，並向成員介紹「私人供水系統的維修及保養」及「配合可持續供水之能源管理系統」。

The 74th meeting of the CLG was held in January 2016, at the Ngau Tam Mei Water Treatment Works. Following a guided tour for members to the facility, presentations were given to members on the "The Maintenance of Private Water Supply Systems" and "Energy Management Systems for Sustainable Water Supply".

二零一六年
一月
January 2016

香港工程師學會四十周年運動會暨家庭同樂日
The Hong Kong Institution of Engineers 40th Anniversary Sports and Family Fun Day

香港工程師學會於二零一六年一月三十一日在香港大學何鴻燊體育中心舉辦四十周年運動會暨家庭同樂日，超過七百名嘉賓、會員及其家人出席參與。本署代表亦參與多項團隊遊戲，歡度愉快的週日午後時光。

Over 700 guests, members and their families participated in the Hong Kong Institution of Engineers 40th Anniversary Sports and Family Fun Day on 31st January 2016, at the Stanley Ho Sports Centre, located on the campus of the University of Hong Kong. Representatives of our department joined in various team games and enjoyed a warm and pleasant Sunday afternoon.

二零一六年
二月至三月
February to
March 2016

大廈優質供水認可計劃－食水（2.0版）講座
Seminar on Quality Water Supply Scheme for Buildings - Fresh Water (Plus)

因應於二零一五年十二月底推出的水質檢測優化措施「大廈優質供水認可計劃－食水(2.0版)」，本署於二零一六年二月二十六日及二零一六年三月十六日為物業管理公司舉辦兩場講座（合共四場），以介紹有關措施及解答有關查詢。

Following the launch of the enhancement measures for water quality examination under the re-titled "Quality Water Supply Scheme for Buildings – Fresh Water (Plus)" in late December 2015, two seminars (four sessions in total) for property management companies were held on 26th February 2016, and 16th March 2016, to introduce the measures and to answer relevant enquiries.

二零一六年
三月
March 2016

由愛德基金會主辦及水務署協辦「活水 • 行2016」，推廣節約用水
"Walk for Living Water 2016" Organised by The Amity Foundation with WSD's Participation to Promote Water Conservation

由愛德基金會主辦及水務署協辦的第六屆「活水 • 行」，於二零一六年三月五日在馬鞍山海濱長廊圓滿舉行，成功為中國缺水地區建造食水系統而籌得善款。是次活動讓參與者體驗每日長距離的擔水步行。水務署署長林天星主持開幕儀式，並親身參與步行活動。於該活動期間，水務署專門設置若干遊戲攤位，讓參與者深入了解香港水資源的獨特情況，並藉此向市民推廣節約用水。

The 6th "Walk for Living Water", organised by the Amity Foundation and supported by the WSD, was held at the Ma On Shan Promenade on 5th March 2016, successfully raising funds for building water systems in water-deprived areas of Mainland China. Through this fundraising walk, participants experienced for themselves the hardship of walking long distances with water-filled buckets carried on their backs. Director of Water Supplies not only officiated at the opening ceremony, but also participated in the walk as well. During the event, the WSD arranged a number of game booths to provide insights into the unique circumstance of Hong Kong's water resources as well as to promote water conservation in general.

二零一六年
三月
March 2016

水務署新春嘉年華2016
WSD Chinese New Year Carnival 2016

本署員工及其家屬在二零一六年三月六日於水務設施（配水庫頂部）舉行的嘉年華中歡度新春，節目包括遊戲攤位、舞獅、魔術表演及武術表演。

On 6th March 2016, staff and their families celebrated the Lunar New Year at a carnival in a waterworks installation (rooftop of a service reservoir) featured with game stalls, a lion dance as well as magic shows and martial arts performances.

二零一六年
三月
March 2016

「水論壇2016」
"Water Forum 2016"

聯合國把每年的三月二十二日定為「世界善用食水日」。為響應這個極具意義的日子，香港地球之友聯同水務署及香港中文大學賽馬會地球保源行動合辦「水論壇2016」，主題為「水資源安全：源起東江　海綿城市」。該活動吸引了近200名來自香港和中國內地的學者、商會、環保組織和專業團體代表出席論壇，就水資源保育與可持續發展互相交流意見和分享經驗。水務署亦於同場舉辦「東江水供港發展歷程」專題展覽，介紹東江水供港的歷史、相關基建發展及粵港兩地監測水質的工作。

The United Nations has designated the 22nd of March each year as "World Water Day". To mark the significance of this day, Friends of the Earth (Hong Kong) collaborated with the WSD and the CUHK Jockey Club Initiative Gaia to organise the 'Water Forum 2016' with the theme "Water Security: From Dongjiang to Sponge City". The Forum drew nearly 200 academics and representatives from various business sectors, green groups and professional bodies from both Hong Kong and mainland China. Participants exchanged views and shared their experiences about water resource conservation and sustainable development. The WSD also held a special exhibition about the development of the Dongjiang water supply to Hong Kong at the venue introducing the history and its related infrastructure development as well as the water quality monitoring and testing work carried out by the Guangdong and Hong Kong Governments.

二零一六年
三月
March 2016

協助和富社會企業舉辦「香港水足印定向2016」
"Hong Kong Water Race 2016" co-organised with Wofoo Social Enterprises

由和富社會企業主辦及水務署協辦的第四屆「香港水足印定向」於二零一六年三月二十日在中環海濱活動空間舉行。出席開幕典禮的嘉賓有立法會會長曾鈺成、發展局局長陳茂波、水務署署長林天星以及和富社會企業會長李宗德博士。為完成與水相關的任務並取得分數，逾4,000名參賽者穿過中西區的繁華街道，由一個檢查點跑步前往另一個檢查點。本署亦派出定向跑隊伍參與比賽，而水務署義工隊亦協助有關工作。第四屆「香港水足印定向」是「欣賞香港」活動的一部分。

The 4th Hong Kong Water Race organised by Wofoo Social Enterprises and co-organised by the WSD was held at the Central Harbourfront Event Space on 20th March 2016. Among the officiating guests were the President of the Legislative Council, Mr Jasper Tsang, Secretary for Development, Mr Paul CHAN, Director of Water Supplies, Mr Enoch LAM and the President of Wofoo Social Enterprises, Dr. Joseph LEE. Over 4,000 participants ran from checkpoint to checkpoint amidst the hustle and bustle of the streets in the Central and Western District, completing water-related tasks to score points. There were WSD teams of orienteers competing, as well as members from the WSD Volunteer Team helping out at the event. The 4th Hong Kong Water Race event was also part of the "Appreciate Hong Kong" Campaign.

林天星工程師, 太平紳士
Ir LAM Tin Sing, Enoch, JP

水務署署長
Director of Water Supplies

署長的話
Director's Statement

落實及推動本港短期及長期的穩健供水發展，是水務署的崇高使命。為實現這一目標，本署與相關持份者和社會各界齊心協力，通力合作，務求妥善紓緩氣候變化所帶來的任何潛在威脅，確保現在及將來繼續為全港市民提供安全用水。

The Water Supplies Department (WSD) has a noble mission in the implementation and promotion of water resilience development in Hong Kong over both the near- and long-term. To achieve these ends, the Department has been collaborating with relevant stakeholders and indeed society at large, so that through our joint cooperative efforts, any potential threats caused by climate change can be duly mitigated while supplies of water will continue to remain secure for everyone now and in the future.

全面水資源管理策略

本署早於二零零八年便已推出全面水資源管理策略，目的是在未來全球氣候變化導致任何緊急情況時，確保可持續供應水資源。

該策略強調需要透過積極推行節約用水計劃以限制用水需求，以及採用積極的網絡管理以控制用水流失，同時開拓新的水資源。

雖然全面水資源管理為本港寶貴水資源的可持續使用奠定堅實的基礎，但本署仍必須應對多項嚴峻挑戰，包括當前氣候變化所帶來的切身威脅、廣東省多個城市對輸入東江水的競爭日趨加劇，以及本署能否滿足本港人口與經濟預計持續增長下的用水需求。

本署需要未雨綢繆，認真審視現時所面對的威脅，並警惕任何不可預見的挑戰或不確定因素出現。為此，本署現正著手全面檢討現有全面水資源管理策略，務求採用及推行有助本署制定全新綜合全面水資源管理策略的新措施，以造福本港，確保水資源至少直至二零四零年仍可持續使用。

Total Water Management Strategy

Back in 2008, the Department initiated a Total Water Management (TWM) strategy aiming at ensuring sustainable water resources in the event of any future contingencies that might arise from global climate change.

This plan emphasised the need to limit the demand for water through active water conservation schemes and by the introduction of proactive network management to control water loss while at the same time exploiting new water resources.

While TWM has laid a solid cornerstone for Hong Kong's sustainable use of our precious water resources, the Department still has to contend with a number of serious challenges, including today's existential threats from the climate change, as well as tighter competition amongst various cities in Guangdong Province to import Dongjiang water, and our ability to meet the water demands for the projected continuous growth of Hong Kong's population and economy.

The Department has taken a long, serious look at the extant threats we face and has been vigilant for any unforeseen challenges or uncertainties. For this reason, we are currently undertaking a comprehensive review of the existing TWM strategy in order to apply and introduce updated initiatives that will allow us to formulate a new, comprehensive TWM strategy to benefit Hong Kong and achieve sustainable water usage until at least the year 2040.

香港的食水供應
Water Supply in Hong Kong

現時三大來源
Three Current Taps

本地集水 Local Yield	海水沖廁 Seawater Flushing	輸入東江水 Dongjiang Water
16%	22%	62%

未來三大來源
Additional Three Future Taps

海水化淡 Desalinated Water	再造水 Reclaimed Water	中水重用及集蓄雨水 Recycled Grey Water & Harvested Rainwater
每年 50-100 百萬立方米 mcm/year	每年 21 百萬立方米 mcm/year	計劃於安達臣道石礦場用地發展項目中使用 Planned for use at the Anderson Road Quarry Site Development

人口 Population
730萬/7.3M

2015耗水量 2015 Consumption

973 百萬立方米 mcm/year (食水 Fresh water) + 272 百萬立方米 mcm/year (鹹水 Salt water)

= 每年 1,245 百萬立方米 mcm/year

六管齊下的供水來源

繼全面水資源管理策略及其他現行措施付諸實施後，水務署現正致力建立由本地集水、輸入東江水、沖廁海水、海水化淡、再造水、中水重用及集蓄雨水組成的供水結構。這六個供水來源將共同構成本港未來的供水支柱，確保全港水資源更為安全、可靠及穩健。

Six-pronged Water Supply Sources

Following the implementation of our TWM Strategy and other on-going initiatives, WSD is moving towards the establishment of a water supply structure comprising local yield, imported Dongjiang water, seawater for flushing, desalinated water, reclaimed water, recycled grey water and harvested rainwater. These six water supply sources altogether will be the future pillars supporting our great Territory with enhanced water security, reliability and resilience.

海水化淡

我們正在積極推進將軍澳海水化淡廠的逆滲透技術設計工作，預計初期日均產能達1.35億公升，日後可擴建至最高日均產能2.70億公升。該化淡廠將採用自動化運作，並配備先進的配水控制系統，能夠供應相當於本港總食水用量半成（擴建後為一成）的食水。

再造水

水務署將分階段向用戶供應由新界東北石湖墟污水處理廠經三級處理生產的再造水作非飲用用途。二零二二年，上水及粉嶺居民將會率先使用這種再造水。再造水設施全面投產後，將有助本港每年節省約2,100萬立方米食水（佔本港總食水用量百分之二）。

中水重用及集蓄雨水

水務署下定決心透過中水重用及集蓄雨水來開拓新的水資源。為此，本署倡導在安達臣道石礦場用地發展項目中將收集的雨水用作灌溉用途，並推動供應重用的中水作沖廁用途。

節約用水

水務署一直致力於推動全港節約用水，針對多個目標而推行多項「軟硬兼備」的節水措施。

本署與本地小學攜手合作，於二零一五/二零一六學年推出「惜水學堂」節約用水教育計劃，藉以向學校、家庭及廣大市民傳播節約用水的理念。本署亦與餐飲及酒店業持份者合作，實施最佳實務指引，務求提高用水效率。

Seawater Desalination

We are actively going ahead with the design of a reverse osmosis technology desalination plant at Tseung Kwan O with an output capacity of 135 million litres per day during the initial stage with provisions for future expansion to reach a maximum capacity of 270 million litres per day. This plant will be automated and equipped with an advanced distributed control system, capable of supplying fresh water equivalent to 5% (10% after expansion) of the total fresh water consumption in Hong Kong.

Water Reclamation

Supplies of reclaimed water converted from tertiary treated sewage effluent at the existing Shek Wu Hui Sewage Treatment Works in the north-eastern part of the New Territories will be provided to consumers for non-potable purpose in phases starting with those living in Sheung Shui and Fanling in 2022. After the water reclamation facility is fully commissioned, this will help Hong Kong save about 21 mcm of fresh water (2% of Hong Kong's total fresh water consumption) each year.

Grey Water Recycling and Rainwater Harvesting

WSD is resolutely determined to exploit new water resources from recycled grey water and rainwater. For this reason, we have initiated a scheme to supply recycled grey water for flushing at the Anderson Road Quarry Site Development in addition to the use of harvested rainwater for irrigation purpose.

Water Conservation

WSD has long been dedicated to water conservation on a community-wide scale, introducing software and hardware water-saving initiatives targeting at multiple goals.

We have worked hand-in-hand with primary schools to introduce the "Cherish Water Campus" during the 2015/2016 academic year in order to sow the seeds of water conservation in schools, families and the community at large. We have also collaborated with catering and hotel stakeholders for the implementation of best practice guidelines for greater water use efficiency.

本署持續加快推進為公共租住屋邨安裝水龍頭及花灑節流器的計劃。本署亦已建立其他節約用水合作計劃，其中「齊來慳水十公升」運動得到公眾大力支持，很大程度上有賴與本署合作機構的協助與配合。位於天水圍的全新水資源教育中心亦正在興建中，計劃於二零一八/一九年啟用，屆時將可進一步推廣及宣傳節約用水。

此外，本署亦正在制訂計劃，分階段逐步將現行自願參與用水效益標籤計劃轉為強制計劃。第一階段會於二零一七年年初起實施，強制新建及現有樓宇內新安裝的供水系統必須使用在用水效益標籤計劃下註冊的指定產品，並須提交水務表格WWO46。而在第二階段中，本署建議所有可供售賣的用水裝置必須註冊用水效益標籤計劃。

Our programme of installing flow controllers in the taps and showers of the public rental housing estates continues apace. We have also set up other cooperative ventures to water conservation. Among these, the 'Let's Save 10 Litre Water' campaign has garnered good public support thanks in large part to the assistance and cooperation received from our partner organisations. A new Water Resources Education Centre in Tin Shui Wai is also under construction and slated for commissioning in 2018/19 to further promote and publicise water conservation.

Further, we are formulating plans in stages to transform the current Water Efficiency Labelling Scheme (WELS) from a voluntary initiative into a mandatory scheme. During the first stage, we will mandate the use of designated products registered under WELS for newly completed plumbing systems installed in new buildings and existing buildings requiring the submission of WWO form 46 with effect from early 2017. Under the second stage, we propose that all water consumption devices on sale shall be registered under WELS.

智管網

引進智管網系統有助本署持續監控配水管網。智管網涉及在監測區域的供水網絡內安裝頂尖監控及感應設備。本署計劃在全港建立共2,000個監測區域，而目前已建成約850個。本署亦將採購一套智能網絡電腦管理系統，藉以分析監測區域所收集的數據。整個智管網系統一旦投入使用，將比傳統方式更加迅速和準確地發現管網的問題，有助本署在更短時間內針對水管滲漏造成的用水流失採取適當的應對措施。

Water Intelligent Network

The introduction of a Water Intelligent Network (WIN) system allows us to monitor continuously our water distribution network. WIN involves the installation of state-of-the-art monitoring and sensing equipment in water supply network of the District Metering Areas (DMAs). We plan to establish altogether 2,000 DMAs over the Territory and currently have about 850 already in place. We will also procure an intelligent network computer management system to analyse the data collected from the DMAs. Once commissioning of the entire WIN system is in place, problems along the network can be detected more quickly and accurately than by conventional means, allowing us to take proper countermeasures against water loss through water main leakage within a shorter period of time.

自動讀錶系統先導計劃

水務署的另一項重要措施是運用自動讀錶來節約用水和控制用水流失。為精益求精，本署採用智能自動讀錶系統來提高讀錶效率，向客戶提供更優質服務。智能自動讀錶系統將可自動讀取用水數據，並把數據傳輸至中央數據庫進行計算收費和分析，以改善供水規劃及管理。為配合手機用戶的殷切需求和推廣節約用水的目標，水務署亦正在開發合適的手機應用程式，以便客戶輕鬆查閱用水數據。本署計劃在新發展地區建構一個智能供水網絡，例如在九龍東及安達臣道石礦場用地發展項目中採用先進的自動讀錶系統及智管網。

Automatic Meter Reading Pilot Scheme

Another key initiative of WSD involves Automatic Meter Reading (AMR) being deployed for water conservation and water loss control. In search of excellence, we can improve meter reading efficiency and provide better services to customers through the adoption of a smart metering scheme. By applying smart metering technology, the water consumption data can be read automatically and transferred to a central database for billing and analysis. This will result in better planning and management of water supplies. With the twin purposes of promoting water conservation and meeting the needs of today's ubiquitous mobile phone users, the WSD is also developing suitable phone applications to facilitate easy access to water consumption data. We plan to deploy a smart water network in new development areas such as the Development of Kowloon East and Anderson Road Quarry Site by applying the most advanced AMR technology together with WIN.

先進技術

我們深明不能固步自封，必須不斷引入先進的技術，以維持和提升本署應對未來挑戰的能力。我們借鑑引入生物感應技術進行水質控制及水力發電的成功經驗，正在石壁水塘及船灣淡水湖的水面鋪設太陽能板，實行浮動太陽能板發電試驗計劃。我們還密鑼緊鼓，在將軍澳海水化淡廠運用先進的逆滲透薄膜技術把海水過濾及淨化，以生產優質的食水。此外，我們亦正在制訂計劃，在大型濾水廠運用尖端的薄膜技術生產液氯，以消除運輸及儲存液氯的潛在風險，更有效保障本港液氯供應的安全性。總而言之，有賴於先進的知識、技術和創意，我們充滿信心以專業精神面對未來挑戰。

Advanced Technologies

We know that we cannot rest on our laurels and must continue to incorporate technological advances in order to maintain and improve our competencies for tomorrow's world. Emulating the successful examples of introducing biosensing techniques for water quality control and hydropower turbine generation, we are piloting a solar energy generation scheme by installing floating photovoltaic panels in the Shek Pik Reservoir and Plover Cove Reservoir. We are also actively working to produce high quality drinking water from seawater by utilising cutting edge reverse osmosis membrane technology at the desalination plant in Tseung Kwan O. Further, using state-of-the-art membrane technology, we are developing schemes to generate liquid chlorine in major water treatment works to eliminate the potential risk of liquid chlorine transportation and storage, and better safeguard the security of the liquid chlorine supply in Hong Kong. All in all, applying advanced knowledge, technology and creativity, we can face the future challenges with confidence and professionalism.

林天星工程師, 太平紳士

水務署署長

Ir LAM Tin Sing, Enoch, JP

Director of Water Supplies

主要工作表現指標
Key Performance Indicators

財政年度（百分比）
Financial Year (Percentage)

指標 Indicators	13/14	14/15	15/16
食水水質 (供水接駁位置) [100%符合世界衛生組織在2011年制定的《飲用水水質準則》#] Fresh Water Quality (at connection points) [100% compliant with WHO's "Guidelines for Drinking-water Quality"(2011#)]	達到指標 Target achieved	達到指標 Target achieved	**達到指標 Target achieved**
鹹水水質 (供水接駁位置) [96%符合水務署所定的水質指標] Salt Water Quality (at connection points) [96% compliant with WSD Water Quality Objectives]	達到指標 Target achieved	達到指標 Target achieved	**達到指標 Target achieved**
食水供水水壓（15 至30米）λ Fresh Water Supply Pressure (15 – 30 metres) λ	100	100	**100**
鹹水供水水壓（15米）λ Salt Water Supply Pressure (15 metres) λ	100	100	**100**

財政年度（百分比）
Financial Year (Percentage)

指標 Indicators	13/14	14/15	15/16
到場處理故障投訴所需的時間 Response time for Attendance to Fault Complaints			
食水供應故障^（在半天內） Fresh Water Supply Fault^ (within half a day)	100	100	**100**
其他（24小時內） Others (within 24 hours)	100	100	**100**
因預算進行的工程而暫停供水的時間長度（98%於八小時內）* Duration of Suspension of Water Supply for Planned Works (98% within 8 hours)*	達到指標 Target achieved	達到指標 Target achieved	**達到指標 Target achieved**
水錶準確程度@（偏差程度不超過±3%）） Accuracy of Water Meters@ (inaccuracy not exceeding ± 3%)	96.4	96.7	**97.0**
初步回覆市民的來信（十個曆日） Interim Reply to Correspondence from the Public (10 Calendar Days)	99.96	99.91	**99.95**

\# 已於二零一二年八月採用世界衛生組織在二零一一年制定的飲用水水質準則。
The 2011 WHO Guideline standards were adopted in August 2012.

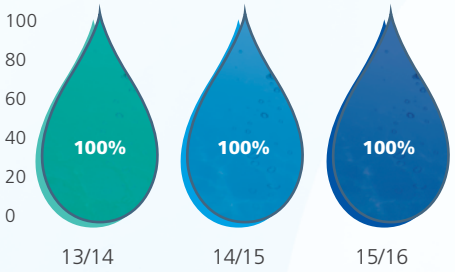
λ 配水系統的最低的剩餘水壓（或水壓幅度），在系統的盡頭除外。
Minimum residual pressure (or pressure range) in the distribution systems except at their extremities.

^ 包括食水供應中斷、食水受污染及內部食水管爆裂而可能導致水浸的情況。
Including cases of no fresh water supply; polluted fresh water supply; and internal fresh water pipe burst likely to cause flooding.

@ 在驗錶時，如水錶的偏差程度不超過±3%，水錶即視作運作正常。
Water meters are deemed to register correctly if their inaccuracy does not exceed ± 3%

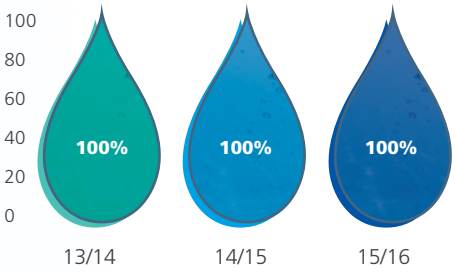
* 二零一五/ 二零一六年度提高後的服務目標。二零一三/ 二零一四年度及二零一四/ 二零一五年度為97%於八小時內。
Enhanced target for 2015/16. Targets for 2013/14 and 2014/15 were 97% within 8 hours.

食水供水水壓
Fresh Water Supply Pressure



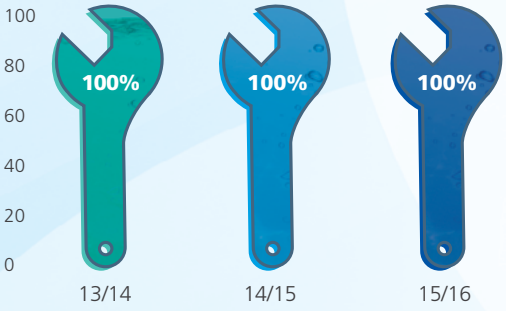
財政年度 Financial Year

鹹水供水水壓
Salt Water Supply Pressure



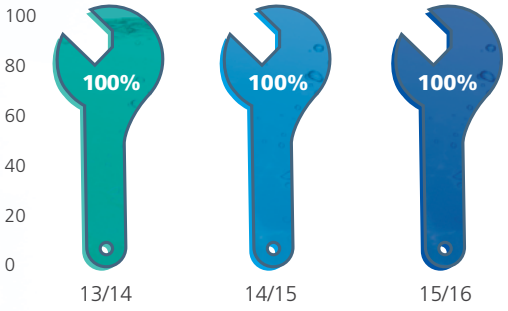
財政年度 Financial Year

到場處理故障投訴的時間
Response Time for Attendance to Fault Complaints



財政年度 Financial Year

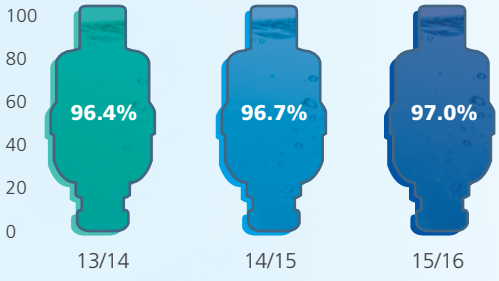
食水供應故障（在半天內）
Fresh Water Supply Fault^ (within half a day)



財政年度 Financial Year

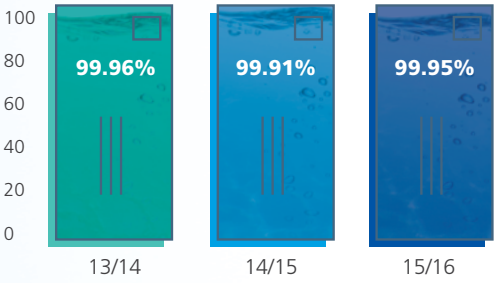
其他（24小時內）
Others (within 24 hours)

水錶準確程度
Accuracy of Water Meters



財政年度 Financial Year

初步回覆市民的來信
Interim Reply to Correspondence from the Public



財政年度 Financial Year

供水管理
Water Supply Management

全面水資源管理

於二零零八年發佈的「全面水資源管理策略」為我們持續使用珍貴的水資源提供堅實基礎。此策略強調控制用水需求增長及加強供水，以令香港能更好地應對未來的不明朗因素及挑戰。本署一直多管齊下，採取軟硬兼備的策略，向住宅用戶及非住宅用戶推廣節約用水。除控制用水需求外，我們亦已完成為期15年的老化水管更換及修復的計劃，大幅減少水管滲漏情況，並逐步建立「智管網」，持續監測供水網絡狀況，以便及時採取適當行動。上述措施讓我們成功開創管網管理新紀元。

Total Water Management

The Total Water Management strategy released in 2008 provides a firm foundation for us to move toward sustainable use of our precious water resources. This strategy places emphasis on containing the growth of water demand and strengthening supply to better prepare Hong Kong for future uncertainties and challenges. Our Department has been implementing a multi-pronged approach to promote water conservation in the domestic and non-domestic sectors, applying both hardware and software strategies. On the other front of controlling water demand, we have achieved significant reductions in water main leakage through the completion of a 15-year programme of replacement and rehabilitation for aged water mains, and are progressively establishing the Water Intelligent Network (WIN) to continuously monitor the health of water supply networks in order to respond with timely and appropriate actions, bringing network management into a new era.

策略回顧

本署深知水資源所面臨的挑戰，因此，本署於二零一四年底聘請顧問，對全面水資源管理策略進行檢討。檢討仍在進行中，而檢討結果將用於提出新措施加強本署的處變能力，為應對不明朗因素及挑戰（氣候變化的潛在影響、廣東省多個城市對東江水的競爭，以及本港的預期人口增長）做好準備。

Strategy Review

The Department fully recognises the challenges faced by our water resources. With this in mind, we appointed consultants in late 2014 to conduct a study to review our Total Water Management Strategy. The review is still on-going and its results will be used to develop new initiatives to strengthen our resilience and preparedness against uncertainties and challenges, including the potential impact of climate change, as well as the competition among various cities in Guangdong Province for Dongjiang water resources and the projected growth of Hong Kong's population.

六管齊下的供水結構

目前，香港供水系統有三個分支，包括本地集水區收集的雨水、從廣東輸入的東江水及沖廁用海水，於二零一五年分別佔12.45 億立方米總耗水量（包括沖廁用水需求）的16%、62%及22%。憑藉這三個水源，香港多年來一直擁有可靠的供水。

然而，為使香港能充分應對氣候變化，人口及經濟快速增長帶來的食水需求增加，以及廣東省城市對東江水的競爭等挑戰，本署致力透過用水流失管理及節約用水控制用水需求增長，並探索受氣候影響較少的海水化淡及再造水作為可替代水源。隨著該等措施的推行，本署正致力建設六個分支的供水結構，該結構由現有三個來源 - 本地集水、輸入的東江水及沖廁用海水，以及三個新增來源，（即海水化淡、再造水和中水重用及集蓄雨水）構成。這六個供水來源將成為提升香港穩健供水及適應性的重要支柱。

6-Pronged Water Supply Structure

Currently, Hong Kong has a 3-pronged water supply system, comprising rainwater from local catchments, imported water from Dongjiang in Guangdong, and the use of sea water for toilet flushing. The share breakdown of total water consumption (including flushing water demand), 1,245 million cubic metres in 2015, came to 16%, 62% and 22% respectively. These three water sources have provided Hong Kong with a reliable water supply over the decades.

Nevertheless, to better prepare Hong Kong for the challenges of climate change and the increasing demand for fresh water due to rapid population and economic growth, as well as competition for Dongjiang water among the cities in Guangdong Province, we have been striving to contain water demand growth through water loss management and water conservation and to exploit alternative water resources which are less susceptible to climate change, including sea water desalination and water reclamation. With the implementation of these measures, the WSD is moving toward the establishment of a 6-pronged water supply structure, comprising the existing three sources -- local yield, imported Dongjiang water and sea water for flushing, supplemented by three new sources i.e. desalinated water, reclaimed water, plus recycled grey water and rainwater harvesting. These six water supply sources will become the pillars supporting Hong Kong with enhanced water security and adaptation into the future.

本地集水

遍佈全港17個水塘的集水區佔香港面積近三成。一般而言，收集的雨水大多不受污染，然而，為安全起見，本署採取額外措施，包括進行定期巡查、檢查水質及對集水區進行必要維修和清除泥石等。本地雨水收集約佔總食水用量二至三成。

Local Yield

All across Hong Kong, covering nearly 30% of the Territory, are rainfall catchment areas with 17 impounding reservoirs. In general, rainwater is largely uncontaminated. However, as additional measures for safety, the Department makes regular inspections, checks water quality, carries out necessary maintenance and removes debris in the catchwaters. Local yield generally accounts for about 20% to 30% of our total fresh water consumption.

海水沖廁

除飲用水源外，本署同樣重視海水沖廁應用。薄扶林及新界西北（包括屯門東、元朗及天水圍）海水供應水務基建設施完成後，海水供水網絡覆蓋的人口已由八成上升至八成半。有關地區的海水沖廁轉換工作正在逐步進行。

Sea Water for Flushing

In addition to potable water sources, we also place great importance on the application of sea water for toilet flushing. Following completion of the waterworks infrastructure for the supply of sea water to Pokfulam and North West New Territories (Tuen Mun East, Yuen Long and Tin Shui Wai), the population coverage has increased from 80% to 85%. Conversion of flushing supply to sea water in these areas is now underway.

海水化淡

除雨水、東江水及沖廁用海水外，本署一直積極開發新的供水來源，包括海水化淡、再造水及中水重用及集蓄雨水。

氣候變化可能影響香港的供水穩健，因此我們應用先進的逆滲透技術，開始在將軍澳興建海水化淡廠。我們於二零一五年十一月聘請顧問進行將軍澳擬建設施的初步設計。於設計過程中，我們將參考海外經驗並研究濾水程序方面的創新設計。這些設計可減少能源消耗，並提供先進的能量回收系統等設施，從而提升濾水廠的整體能源效益。

設計階段預期大概將於二零一七年年底完成。本署的目標於二零一八年年初啟動化淡廠的建造。化淡廠的目標產量預期可滿足香港約半成的食水需求，日後產量可擴大至滿足本港約一成的食水需求。

Sea Water Desalination

Apart from rainwater, Dongjiang water and sea water for flushing, we have been actively developing new sources of water supply, including sea water desalination, water reclamation and grey water recycling/rainwater harvesting.

In order to counter the possibility that climate change could disrupt the security of our water supply in Hong Kong, we have embarked on the construction of a desalination plant in Tseung Kwan O (TKO), using advanced reverse osmosis technology. We hired consultants in November 2015 to proceed with the design of the first stage of the proposed facility in TKO. During the course of the design, we will make reference to overseas experiences and will look into the introduction of suitable innovative designs in terms of treatment processes that require less energy consumption as well as offer advanced energy recovery systems etc. to enhance the plant's overall energy efficiency.

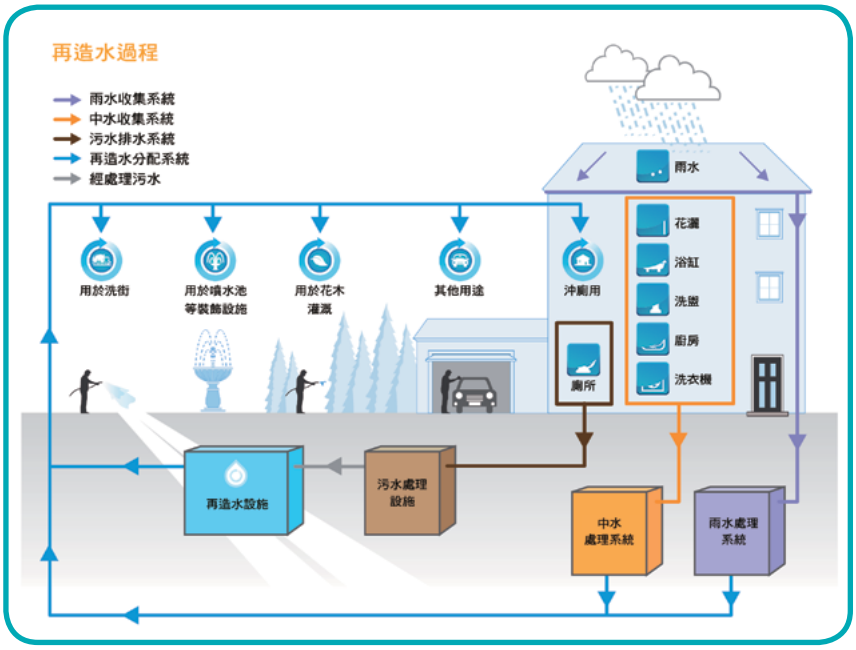
The design phase is anticipated to be completed by about the end of 2017. We aim to begin construction of the plant early by 2018. The target output is expected to meet about 5% of the fresh water demand in Hong Kong with provisions for expanding its capacity in the future to meet about 10% of the Territory's total fresh water needs.

再造水

本署亦計劃分階段向上水、粉嶺及古洞北和粉嶺北新發展地區提供石湖墟污水處理廠經三級處理的再造水作非飲用用途，其中上水及粉嶺將於二零二二年起率先使用。本署已開始設計配水庫及輸水幹管，預計向上述地區全面供應再造水最終可望每年節省約2,100萬立方米的食水。同時，本署正在研究再造水供應的各種財務及法律事宜。

Water Reclamation

We also plan to effect the supply of reclaimed water converted from tertiary treated sewage effluent at the Shek Wu Hui Sewage Treatment Works to Sheung Shui, Fanling and New Development Areas in Kwu Tung North and Fanling North for non-potable uses in phases starting with Sheung Shui and Fanling from 2022 onwards. We have begun the design of a service reservoir and associated trunk mains and anticipate that the full-fledged reclaimed water supply to the above areas will ultimately save up to 21 million cubic metres of fresh water each year. Concurrently, we are studying the various financial and legal aspects of reclaimed water supply.



中水重用及集蓄雨水

從浴室、洗手盆和廚房洗滌盆等地方收集得的水稱為中水，中水與收集的雨水經處理後可予重用，作非飲用用途。

本署一直在探索更廣泛地應用中水重用及集蓄雨水系統，並在合適的新政府項目中加以安裝。發展局和環境局發出的環保政府大樓聯合技術通告已納入詳細指引，讓新建政府大樓在盡可能在合理的情況下安裝處理和再造設施，通過中水重用或集蓄雨水系統減少以食水作非飲用用途。

Grey Water Recycling and Rainwater Harvesting

Water collected from baths, showers, wash basins and kitchen sinks is known as grey water. Along with harvested rainwater, these supplies can be treated and reused for non-potable purposes.

We have been exploring the wider use of grey water recycling and rainwater harvesting systems by installing them in suitable new government projects. Detailed guidelines have been incorporated into the Joint Development Bureau and Environment Bureau Technical Circular in Green Government Buildings so that new government buildings with the potential of reducing their fresh water demand for non-potable applications through rainwater harvesting or a grey water recycling system will be able to install on-site treatment and recycling facilities as much as is reasonably possible.

在規劃大規模新項目時，本署將與相關政府部門通力合作，考慮在適當情況下預留空間及所需款項，以便日後引進中水重用及集蓄雨水系統。

就此而言，水務署正計劃在安達臣道石礦場用地發展項目中建設中水重用系統。該系統由政府集中營運，主要處理在發展項目內從用戶收集的中水作沖廁用途。該系統將包括一個抽水機組的中水處理廠、一個經處理中水的配水庫、收集及輸送中水的管道。水務署已對處理廠進行初步設計，現時正在進行顧問遴選程序。

When planning large-scale new projects, we will, in collaboration with relevant government departments, consider reserving space and necessary provisions where appropriate to facilitate the introduction of grey water recycling and rainwater harvesting systems in the future.

In this regard, the WSD plans to construct a grey water recycling system at the Anderson Road Quarry site, which is a centralised government-operated system treating grey water collected from end users within the development for flushing use. This system will comprise a grey water treatment plant with associated pumpsets, a treated grey water service reservoir, pipes for grey water collection, delivery and distribution of the treated grey water to the service reservoir and consumers respectively. The WSD has carried out a preliminary design of the treatment plant and the consultant selection process is currently in progress.

供水危機管理

為確保全港供水可靠及充足，本署須時刻作好準備應對任何影響供水的不可預見問題。為此，我們已制訂一個危機管理計劃、乾旱應變計劃和多個其他應變計劃，以隨時準備快速調配資源及協調各個緊急行動。

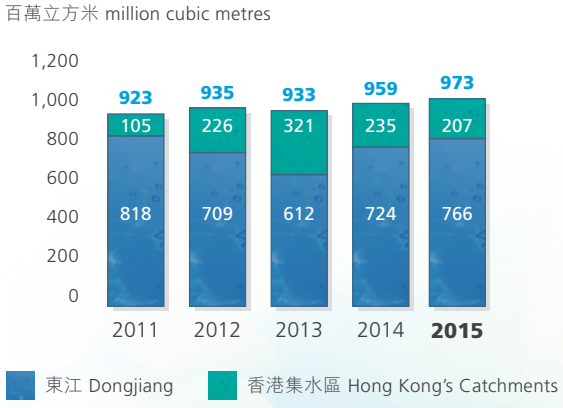
此外，本署已透過各種溝通途徑與其他政府部門保持緊密聯絡，以便在發生危機的情況下，協調各方緊急應變措施以確保持續供水。

Water Supply Crisis Management

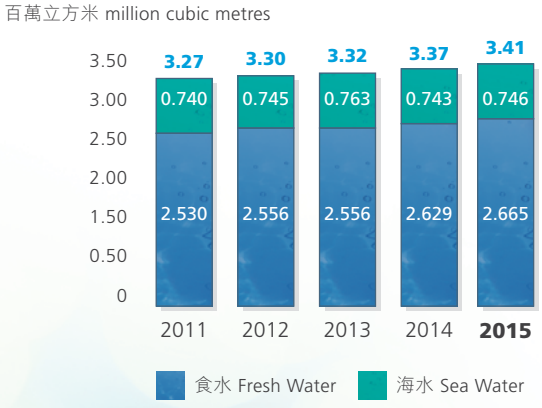
To ensure a reliable and adequate water supply for Hong Kong, it is essential for the Department to prepare for any unforeseen problems in the water supply system. For this reason, we have a crisis management plan, drought contingency plan and several other contingency plans in place to maintain a state of readiness for the rapid mobilisation of resources and coordination of emergency actions.

In addition, we have maintained close contact with other government departments through various communication means in order to coordinate emergency responses to maintain continuous water supplies in the event of crises.

二零一一年至二零一五年全年供水量
Annual Quantity of Raw Water Supply 2011 - 2015

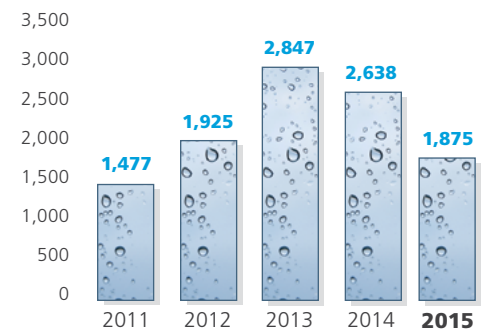


二零一一年至二零一五年總平均日耗水量（食水及海水）
Total Average Daily Consumption (Fresh water and sea water) 2011-2015



二零一一年至二零一五年全年降雨量
Annual Rainfall 2011-2015

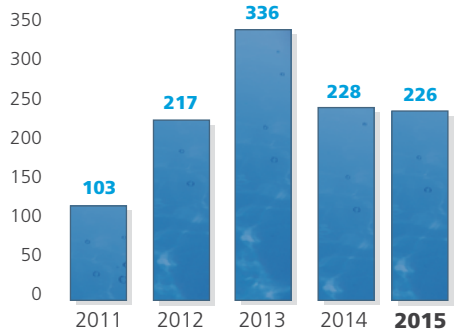
毫米 millimetres



註：長期平均降雨量為2,399毫米
Note : Long Term Mean Rainfall is 2,399 millimetres

二零一一年至二零一五年全年集水量
Annual Yield 2011 - 2015

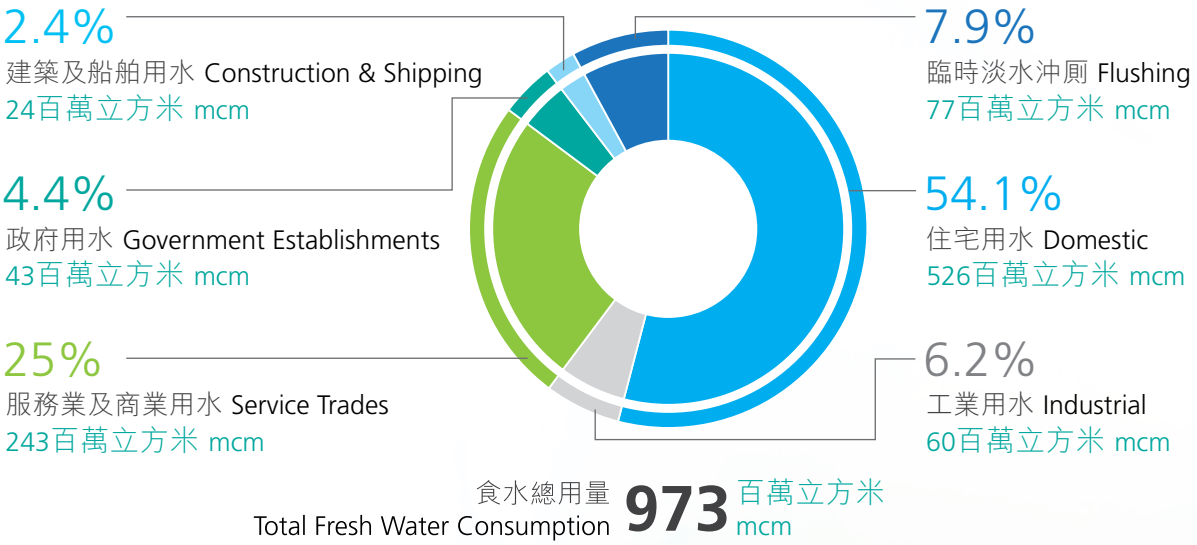
百萬立方米 million cubic metres



註：長期平均集水量為295百萬立方米
Note : Long Term Mean Yield is 295 million cubic metres

二零一五年按用水類別劃分的食水用量（百萬立方米）佔總量百分比
Annual Fresh Water Consumption 2015 by Sectors in Million Cubic Metres (MCM) and Percentage of Total

百萬立方米 million cubic metres



食水總用量 Total Fresh Water Consumption **973** 百萬立方米 mcm

二零一一年至二零一五年按用水類別劃分的全年食水用量
Annual Fresh Water Consumption (by Sectors) 2011 – 2015

百萬立方米 million cubic metres

年份 Year	2011	2012	2013	2014	2015
住宅用水 Domestic	498	505	504	516	526
工業用水 Industrial	58	59	58	60	60
服務業及商業用水 Service Trades	236	236	234	240	243
政府用水 Government Establishments	41	41	41	44	43
建築及船舶用水 Construction & Shipping	14	18	20	23	24
臨時淡水沖厠 Flushing	76	76	76	76	77
食水總用量 Total Fresh Water Consumption	923	935	933	959	973

培養節約用水文化
Fostering Water Conservation Culture

提倡節約用水

用水效益標籤計劃

本署於二零零九年開始實施自願參與的「用水效益標籤計劃」，鼓勵用戶使用節水器具及設備。計劃從起初對沐浴花灑進行標籤，至現在發展至包括水龍頭、洗衣機、小便器用具和節流器在內。

本署正在制訂計劃，以分階段強制推行用水效益標籤計劃。第一階段，本署將強制要求新建樓宇和進行大規模翻新的現有樓宇使用節水產品，並會在正式實施前評估其可能造成的影響。

Making Water Conservation Count

Water Efficiency Labelling Scheme (WELS)

In 2009, the Department began implementing the voluntary Water Efficiency Labelling Scheme (WELS) to encourage consumers to use appliances and equipment that conserve water. From the initial labelling of showers for bathing, the scheme has now expanded to include water taps, washing machines, urinal equipment and flow controllers.

The Department is formulating plans to mandate WELS in stages. In the first stage, we will mandate the use of water efficient products in new developments and existing buildings undergoing major renovation and will assess its probable impacts before implementation.

在政府大樓、學校及公共屋邨加裝節水裝置

截至二零一六年三月底，本署已為31個公共屋邨約52,600名租戶安裝花灑和水龍頭節流器，該等屋邨的耗水數據顯示節流器可有效幫助租戶減少用水。同時，在政府大樓和學校加裝節水設備的第一及第二階段工程完成後，本署已於二零一六年三月繼續展開第三階段工程，為約2,260幢政府大樓和學校安裝35,900個節流器。

「齊來慳水十公升」運動

截至二零一六年三月底，約140,000個參與家庭在「齊來慳水十公升」運動中免費獲贈節流器，鼓勵市民與我們一同加入節約用水的行列。

Retro-fitting Government Buildings, Schools and Public Housing Estates with Water-saving Devices

By the end of March 2016, the Department had installed flow controllers on the taps and showers of about 52,600 households at 31 public rental housing estates. Water consumption statistics from these estates show that the flow controllers are effective in helping households reduce water consumption. Moreover, following completion of the first and second phases of retrofitting plumbing fixtures with water-saving devices in government buildings and schools, we have been moving ahead with the third phase and have installed 35,900 flow controllers in nearly 2,260 government buildings and schools as of March 2016.

"Let's Save 10 Litres Water" Campaign

By the end of March 2016, nearly 140,000 participating households had been provided with complimentary flow controllers under the "Let's Save 10 Litres Water" Campaign. Individuals were encouraged to join forces with us to save water.

提高公眾節水意識

節水教育與宣傳

從二零零九年一月起，水務署已在「節約用水－從家開始」宣傳活動中為小學舉辦一系列節水教育活動，當中包括「保護水資源大使選拔賽」、「巡迴講座」及「校園用水考察」。過往多年，本署已在購物商場及屋苑舉辦超過260場巡迴展覽，向市民推廣節約用水。本署亦組織臨時「水資源教育中心」導賞參觀活動，讓小學生認識到本地水資源稀缺，並向他們講解香港供水系統的歷史，鼓勵他們實踐節約用水。

於二零一五／一六學年，水務署加強及整合校園活動，推出理論與實踐相結合的「惜水學堂」節約用水教育計劃（「惜水學堂」）。「惜水學堂」旨在拓寬學生的水資源知識，並提高他們對節約用水及水資源可持續性的認識，以應對氣候變化的影響。在「惜水學堂」中，水務署為學校提供教材，並開設教師培訓工作坊，藉以促使學生把知識及意識轉化為行動及宣傳。所有參與學校均會被評為「節約用水校園」，並就所完成的節約用水活動獲得獎勵。水務署於二零一六年一月二十三日舉辦了「惜水學堂」誓師典禮，標誌著教育計劃正式啟動。截至二零一六年三月底，超過170間學校參與「惜水學堂」節約用水教育計劃。

水務署於二零一二年在旺角辦事處設立臨時水資源教育中心，主要接待小學生到訪，同時亦歡迎學校及非盈利機構預約參觀。由於旺角辦事處計劃於二零一八年搬遷至天水圍，水務署已著手策劃在天水圍新辦事處設立永久水資源教育中心。永久水資源教育中心預計將於二零一八／一九年啟用，屆時將會增加展覽面積，以便向學生及不同年齡的社會各階層人士介紹更多關於節水及水資源的新措施及深入資訊。

Raising Public Awareness

Education and Promotion

Since January 2009, the WSD has run a series of educational programmes for primary schools including the "Water Conservation Ambassador Selection Scheme", "School Roadshow" and "School Water Audit" under the "Water Conservation Starts from Home" promotional campaign. Over the years, the Department has hosted over 260 roving exhibitions at shopping malls and housing estates to promote water conservation in the community. We have also organised guided tours to the temporary Water Resources Education Centre (WREC) to educate students about the scarcity of our local water resources, and explain to them the history of Hong Kong's water supply system while encouraging everyone to adopt water-saving practices.

During the 2015/16 school year, the WSD enhanced and combined these school programmes by launching the "Cherish Water Campus" integrating theory with practice. The aim is to broaden students' knowledge about water resources and raise their awareness of water conservation as well as water sustainability to address the effects of climate change. In "Cherish Water Campus", the WSD provides schools with teaching kits and conducts teacher training workshops with a view to facilitating the transformation of students' knowledge and awareness into action and advocacy. Each participating school is accredited as a "Cherish Water Campus" and receives awards for water conservation activities completed. On 23rd January 2016, the WSD hosted a "Cherish Water Campus" pledging ceremony to mark the launch of the programme. By the end of March 2016, more than 170 schools had joined the water conservation programme.

Established in 2012 in the WSD's Mong Kok Office, the temporary WREC received primary school students, and is open to schools and non-profit organisations for visits by appointment. With the Mong Kok Office scheduled to be relocated to Tin Shui Wai in 2018, the WSD has embarked on a project to establish a permanent WREC in its new Tin Shui Wai office. The permanent WREC, expected to be commissioned in 2018/19, will have an expanded exhibition area to introduce more new initiatives and in-depth materials covering various aspects of water conservation and water resources to cater for a wider spectrum of visitors of all ages from students to the general public.

保護水資源大使選拔賽

保護水資源大使選拔賽為「節約用水－從家開始」宣傳活動的重點，由水務署於二零零八／零九學年在所有小學推行，旨在鼓勵青少年珍惜本地水資源，並提醒他們身邊的同學和親友身體力行節約用水。保護水資源大使乃按參賽者的家庭成員人數及家庭用水數據，根據他們的節水成效進行評選。今年，來自41間小學約5,500名學生參與了該項選拔賽，參賽人數創新高，比上年增加約1,000人。其中15間學校至少連續五年參賽，與水務署攜手培養學生的節約用水文化，為奠定水資源可持續使用的基礎。於二零一五年七月十日，本署在九龍灣國際展貿中心舉辦保護水資源大使證書頒發典禮。587名小學生獲委任為保護水資源大使，協助宣傳節約用水。

Water Conservation Ambassador Selection Scheme

The Water Conservation Ambassador Selection Scheme was the highlight of the "Water Conservation Starts from Home" promotional campaign which was launched by WSD in all primary schools during the 2008/09 school year to encourage youngsters to treasure our local water resources as well as to remind their classmates, family members and friends to participate in water conservation. The ambassadors are selected based on their achievements in water conservation taking into consideration the number of their household members as well as the data collected from participants about their domestic water consumption. This year, a record high of about 5,500 participants from 41 primary schools participated in the scheme. The number of participants has increased by about 1,000 compared with last year. Among the schools, 15 have joined the scheme for at least five consecutive years, working together with the WSD to nurture a culture of water conservation among young students and laying the foundations for future sustainable use of water resources. On 10th July 2015, the Department held a certificate presentation ceremony for the Water Conservation Ambassadors at the Kowloonbay International Trade & Exhibition Centre. 587 primary students were appointed as Water Conservation Ambassadors to help promote water conservation.

公開講座和展覽

為紀念東江水供港50週年，水務署於二零一五年六月至九月在全港各區舉行巡迴展覽。展出地點包括：香港歷史博物館、屯門大會堂、元朗劇院、香港文物探知館、高山劇場、九龍公園、稅務大樓及各區政府辦事處。

為響應「世界善用食水日」這個極具意義的日子，香港地球之友聯同水務署及香港中文大學賽馬會地球保源行動於二零一六年三月二十二假香港中文大學合辦「水論壇2016」，主題為「水資源安全：源起東江　海綿城市」。是次論壇邀請了來自中國內地及香港的水務研究專家學者及環保專業人士就水資源安全問題發表演講，內容涵蓋四大主題－「國家十三五計劃的水政策和氣候變化」、「水源保護及保育－東江」、「創新水願景及企業護水責任」和「海綿城市及其在香港的潛力」。論壇更設有圓桌討論及答問環節，以促進講者與聽眾交流觀點和分享經驗。

Public Lectures and Exhibitions

To commemorate the 50th anniversary of the Dongjiang water supply to Hong Kong, the Department organised roving exhibitions in various districts of Hong Kong between June and September 2015. Exhibition venues included: the Hong Kong Museum of History, Tuen Mun Town Hall, Yuen Long Theatre, Hong Kong Heritage Discovery Centre, Ko Shan Theatre, Kowloon Park, Revenue Tower and Government offices in various districts.

To mark the significance of the "World Water Day" on 22nd March, Friends of the Earth (Hong Kong) collaborated with the WSD and the CUHK Jockey Club Initiative Gaia to organise the Water Forum 2016 with the key theme: "Water Security: From Dongjiang to Sponge City" on the day. Experts in the fields of water supply and environmental protection from Mainland China and Hong Kong were invited to give talks on water resources security, covering four topics – "Water Policies in the 13th Five-Year Plan and Climate Change", "Water Conservation for Dongjiang (East River)", "Water Innovation and Social Responsibility for Water Corporate" and "Sponge City and its Potential in Hong Kong". Panel discussions and Q&A sessions were held to promote an exchange of views and encourage experience sharing between the speakers and the audience.

用水效益檢討

本署已完成對泳池、公園、街市、廁所、垃圾收集站和懲教所等政府管理設施的用水效益檢討，並發佈最佳實務指引。有關私人業界酒店及餐飲業的最佳實務指引將於二零一六年年底頒布。推行用水效益檢討的主要目標是降低整體耗水量。檢討程序讓我們掌握以事實為基礎的工具，在制訂節約用水建議之餘，更有助我們保持一貫的服務水平。

Water Efficiency Review

We have completed water efficiency reviews and issued best practice guidelines for government-managed swimming pools, parks, markets, toilets, refuse collection points and correctional institutions. The best practice guidelines for hotel and catering operations in the private sector will be promulgated by the end of 2016. Our primary objective is to reduce overall water consumption. The review process gives us fact-based tools to formulate water-saving recommendations without having to compromise the overall level of services.

防止非法取水

本署負責執行《水務設施條例》及《水務設施規例》，並對違法人士採取法律行動。根據《水務設施條例》，除非水務監督批准，否則未經水錶量度取水屬違法行為。為協助阻止和打擊非法取水，本署於二零一三年增加檢控組的人手加強執法行動。因此，二零一三年至二零一五年，檢控組平均每月處理的個案數目達138宗，較增加人手前增長約1.4倍。宣傳方面，我們加快推出多個關於防止非法取水的教育和宣傳計劃，服務對象除本署內外的政府職員之外，亦包括市民大眾，有關教育和宣傳活動包括濾水廠開放日及學校巡迴探訪、港鐵車站廣告、研討會、水費通知，以及政府及私人物業、客戶諮詢中心及水資源教育中心張貼的海報及宣傳牌。

Preventing Illegal Water Use

The Department is responsible for administering the Waterworks Ordinance (WWO) and Waterworks Regulations as well as taking legal action against offenders. It is an offence under the WWO to draw water without a meter except with the permission of the Water Authority. To help deter and combat any illegal use of water, the Department's Prosecution Unit (PU) was strengthened in 2013 in order to enhance enforcement action. As a result, the average number of cases handled by the PU per month from 2013 to 2015 has increased by about 1.4 times to 138 cases compared to the period prior to the strengthening of manpower. In terms of publicity, we have accelerated a number of education and information programmes on preventing the illegal use of water not only to government officers within and outside the Department but also to the public during events such as Treatment Works Open Day and school tours, advertisements in MTR stations, and at seminars, notices on water bills as well as posters and promotion boards displayed at government and private properties, customer enquiry centres and at the WREC.

改善供水網絡

在過去十年間，本署在減少水管爆裂方面取得明顯成效，水管爆裂宗數由二零零零至零一年度的2,500宗下降至二零一五至一六年度僅148宗，主要歸功於本署在15年內更換及修復接近3,000公里的老化水管（全港水管總長度約為8,000公里），因而大幅提高了供水的可靠程度。

我們目前採用全球最先進的建造方法和技術進行工程。在合適情況下，我們採用無坑挖掘法，包括內喉緊貼法、原位內搪喉管法、水管推頂法和定向鑽挖法，以便減少路面施工的阻塞和對公眾的滋擾。

在鄉郊地區，水務署亦已於二零一三年十月開始更換海底水管，包括大嶼山至長洲、坪洲至周公島及周公島至喜靈洲的海底水管。為此，我們採用橫定向鑽挖法在海床岩層鋪設管道，盡量減少對環境的整體影響，同時避免干擾海陸考古地點和海上交通。定向鑽挖工程仍在繼續，預期將於二零一六年年中竣工。

Improving the Supply Network

Over the past ten years, the Department has made dramatic improvements in reducing water main bursts from 2,500 cases in 2000/01 to just 148 cases in 2015/16. This has been accomplished in large part through the success of our 15-year programme of replacement and rehabilitation of about 3,000 km of aged water mains out of a total of around 8,000 km of pipelines all across Hong Kong, resulting in significantly higher water supply reliability.

In carrying out this work, we apply the world's most advanced construction methods and technologies. Where applicable, we use trenchless construction, including close-fit lining of existing mains, cure in-place pipes, pipe jacking and horizontal directional drilling (HDD) to help reduce above ground construction and limit disturbances to the public and traffic.

Outside of the urban areas, starting from October 2013 the WSD also began replacing undersea pipelines, including the sections from Lantau to Cheung Chau, Peng Chau to Sunshine Island and Sunshine Island to Hei Ling Chau. To do this, we employed HDD to lay the pipelines at the seabed rock level to minimise the overall environmental impact as well as to avoid disrupting marine and terrestrial archaeological sites and marine traffic. The HDD works are still in progress and we anticipate completion by mid-2016.

用水流失管理措施

本署定期進行音聽視察、噪聲測井、最低晚間流量測試和分段流量測漏，以探測漏水情況，並應用最新區域持續監測及水壓管理技術，加強控制用水流失。我們全力盡早發現可疑漏水情況，以便即時採取措施避免進一步流失並防止情況惡化以致水管爆裂。

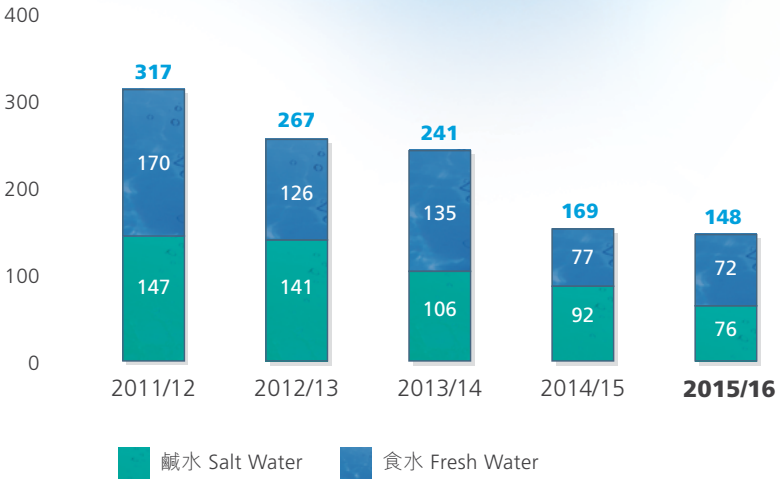
本署已將部分測漏工作外判予專門承造商，定期對全港的水務署水管進行有效檢測，同時我們以評估表現的方式鼓勵承建商進行更多檢測。迄今為止，九龍和新界的多條水管均成功採用評估表現的方式由專門承造商進行檢測。

Water Loss Management Initiatives

The Department conducts regular leak detection through sounding and visual inspections, noise logging, minimum night flow tests and step tests. The control of water loss has also been strengthened through the application of the latest district continuous monitoring and pressure management technologies. We are doing our best to detect suspected leaks as early as possible so that we can take immediate action to cut further losses and stop the deterioration that could lead to water main bursts.

Some leak detection work has been outsourced to specialist contractors to maintain effective regular leak detection of all WSD water mains in Hong Kong. We have also adopted a performance-based approach to motivate contractors to detect more leaks. To date, a number of the water mains in Kowloon and New Territories have been successfully inspected by the specialist contractors using this performance-based approach.

水管爆裂修理個案統計數字
Statistics on Mains Bursts



測漏統計數字
Statistics on Leak Detection

食水
Fresh Water

各財政年度所進行的測漏工作
Tests Conducted Per Financial Year

年份 Year	2011/12	2012/13	2013/14	2014/15	2015/16
最低晚間流量測試次數 No. of Minimum Night Flow Tests	174	139	92	63	39
分段流量測漏次數（或滲漏測試） No. of Step Tests (or Leakage Tests)	25	13	15	7	19
音聽視察次數 No. of Sounding & Visual Inspections	3,221	3,282	2,918	4,121	3,271
經發現的滲漏個案數目 No. of Leaks Detected	2,006	1,432	1,237	1,448	1,143
估計每日可節省的食水量（立方米/日） Estimated Quantity of Fresh Water Saved (cubic metres/day)	79,531	57,128	47,872	42,125	50,847

鹹水
Salt Water

各財政年度所進行的測漏工作
Tests Conducted Per Financial Year

年份 Year	2011/12	2012/13	2013/14	2014/15	2015/16
音聽視察次數 No. of Sounding & Visual Inspections	532	516	488	1,212	1,688
經發現的滲漏個案數目 No. of Leaks Detected	154	127	116	197	164
估計每日可節省的鹹水量（立方米/日） Estimated Quantity of Salt Water Saved (cubic metres/day)	21,719	35,040	19,881	30,561	21,447

水質
Water Quailty

水質及健康標準

廣東當局已採取有效措施，確保輸港的東江水水質符合國家《地表水環境質量標準GB3838-2002》第II類（適用於集中式生活飲用水地表水源地一級保護區）的標準，有關標準是適用於集中式生活飲用水地表水源地的最高標準。有關措施和項目包括興建新污水處理廠、遷走具污染性的工廠和農場、鋪設專用輸水管道、建立東江流域水量水質監控系統，以及在深圳水庫設立生物硝化站等。此外，我們亦在接收東江水的木湖抽水站設有在線水質監察系統，該系統透過先進的監控及資料收集系統運作，全天二十四小時密切監測輸港東江水的水質。此外，我們繼續加強和實施水安全計劃，以控制供水過程中出現食水受污染的風險，我們將不遺餘力地採取一切預防性措施，務求達到水安全計劃的目標，對本港食水供應的水質嚴格把關，保障公眾的健康。我們將繼續運用創新的生物感應預警系統密切監察斑馬魚的行為，以盡早發現輸港的東江原水的異常情況。一旦發現水中含有有害物質，我們會即時採取適當措施跟進及處理。為加強水質監察，我們內部亦研發了一款嗅覺儀，並配合簡易氣味嗅味層次分析法，由濾水廠的操作員於日常進行定期味道及氣味方面的水質評估，有效地監測水質及調整濾水過程，從而確保食水水質在感觀性上達致用戶可接受水平。我們亦一直密切關注世界衞生組織《飲用水水質準則》的最新發展及修訂，並承諾香港食水符合有關標準。我們正按照世界衞生組織在二零一一年制訂的準則來監測食水水質。

Water Quality and Health Standards

Guangdong authorities have taken effective steps to ensure that the quality of Dongjiang water that reaches Hong Kong meets the national standard set out for Type II waters (applicable for the abstraction for human consumption in first class protection area) in the "Environmental Quality Standards for Surface Water GB3838-2002", which is the highest standard applicable for the abstraction for human consumption. This has been achieved through a combination of measures and projects, including the construction of new sewage treatment plants, removal of polluting factories and farms, commissioning of dedicated aqueducts, implementing the Dongjiang River Basin Water Quantity and Quality Monitoring and Control System, and the on-going operations of the bio-nitrification plant at the Shenzhen Reservoir. Moreover, we also maintain an on-line Water Quality Monitoring System that runs via an advanced SCADA system at the Muk Wu Pumping Station, where we receive Dongjiang Water, to closely gauge the quality of imported Dongjiang water around the clock. Further, we continue to enhance and implement the Water Safety Plan (WSP) to control the risks of contamination of the drinking water supply, and we will diligently implement all preventive measures to meet the objectives of WSP to safeguard the quality of the drinking water supply in Hong Kong to protect public health. We will continue to use the innovative Biosensing Alert System by closely monitoring the behaviour of the Zebrafish to detect abnormalities in the Dongjiang water supplied to Hong Kong and take appropriate and prompt measures for immediate follow-up actions when harmful substance in the water is found. To enhance water quality monitoring, we have also developed in-house an olfactometer for use in water quality monitoring in conjunction with the simplified Flavour Profile Analysis. Regular taste and odour surveillance of the drinking water supply enables operators for taste and odour assessment to monitor water quality and adjust water treatment processes effectively so as to ensure that the drinking water quality is aesthetically acceptable to consumers. We also stay up to date concerning the latest developments and revisions to the Guidelines for Drinking-water Quality published by the World Health Organization (WHO), which is the standard that WSD has pledged to comply with for drinking water supplied to the consumers in Hong Kong. Currently, we are monitoring the drinking water quality in accordance with the WHO's Guidelines published in 2011.

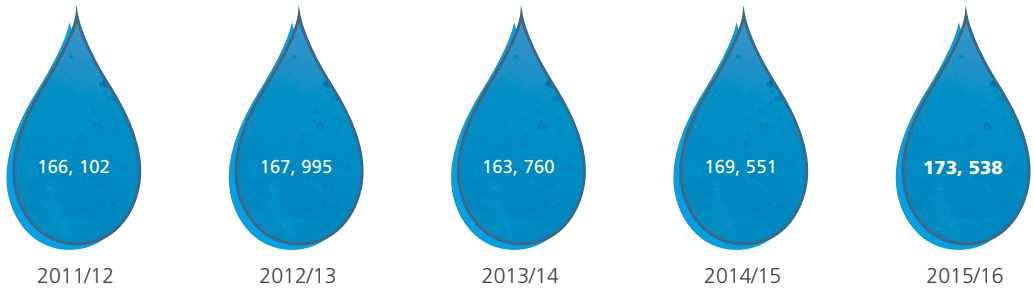
我們分別從集水區、進水口、木湖抽水站的東江水接收點、水塘、濾水廠、配水庫、食水分配系統以至用戶的水龍頭處抽取水樣本進行物理、化學、細菌學、生物學和輻射學方面的化驗，從而有系統地監測整個食水處理過程、供水及分配系統的水質。每年我們抽取及檢測超過16萬個樣本。

Water quality throughout the entire treatment, supply and distribution system is systematically monitored by means of physical, chemical, bacteriological, biological and radiological examinations of water samples taken at catchment, intakes, receiving point of Dongjiang water at Muk Wu Pumping Station, impounding reservoirs, water treatment works, service reservoirs, distribution systems and consumers' taps. More than 160,000 samples are taken and tested each year.

因應在公共屋邨的食水中發現鉛含量超標及社會對水龍頭食水安全的關注，我們在全港增加採集用戶水龍頭的水樣本進行鉛含量測試。於二零一五年七月至二零一六年三月期間，我們從用戶水龍頭抽取約1370個水樣本進行鉛含量測試(當中並不包括公共屋邨和政府學校，因為已另有計劃為這些屋邨和學校取樣作鉛含量測試)。所有樣本均符合世界衞生組織準則所訂定鉛含量不超過每公升10微克的暫定準則值。香港食水水質的概況已上載到水務署網頁。

In response to the excess lead found in drinking water in Public Rental Housing (PRH) Estates and community concern about the safety of tap water, an additional water sampling exercise at accessible consumers' taps has been carried out for lead testing over the Territory. During the period from July 2015 to March 2016, about 1370 water samples from consumers' taps have been taken for lead testing (excluding PRH Estates and government schools where water samples have been taken for testing of lead content under separate exercises). All of the samples complied with the Provisional Guideline Value of 10 µg/L for lead set out in the WHO's Guidelines. Summary of the drinking water quality of Hong Kong has been uploaded to the website of WSD.

化驗樣本總數
No. of Water Samples Taken



東江原水內平均氨氮及錳水平
Average Ammoniacal Nitrogen and Manganese Levels in Dongjiang Water

財政年度 Financial Year	2013/14	2014/15	**2015/16**
錳（毫克／公升）Manganese (mg/L)	0.02	0.03	**0.03**
氨氮（毫克／公升）Ammoniacal Nitrogen (mg/L)	0.05	0.05	**0.04**

水務基建設施
Waterworks Infrastructure

改善水務基建設施及提升運作效率，讓香港享有更可靠的供水系統。
Hong Kong enjoys the benefits of a water supply that boasts greater reliability as a result of improved waterworks infrastructure and increased operational efficiencies.

智管網

本署計劃安裝感應器，沿整個供水網絡設立監測區域和相關水壓管理區，逐步建立智管網系統。全港智管網將設有約2,000個監測區域/ 水壓管理區，同時亦將安裝智能網絡管理電腦系統，以便對感應器收集的數據進行持續的（及在必要時進行實時的）網絡表現分析，以監測供水網絡的狀況。

截至二零一六年三月，我們成功設立850多個監測區域，其中220個同時兼為水壓管理區。此外，我們將建立上述智能網絡管理電腦系統，並將其與所有監測區域/水壓管理區連接。有賴智管網，我們得以持續監測及分析供水網絡狀況，並採用最符合經濟效益的方式，以維持供水網絡的健康狀況。

Water Intelligent Network

The Department plans to progressively implement the Water Intelligent Network (WIN) system by installing sensors to create District Metering Areas (DMAs) and associated Pressure Management Areas (PMAs) all along the water supply networks. There will be about 2,000 DMAs/PMAs throughout the entire Territory under WIN. An intelligent network management computer system will also be put in place to enable continuous (and where necessary real-time) network performance analysis of the data collected from the sensors to monitor conditions of the water supply networks.

As of March 2016, we have successfully installed some 850 DMAs with 220 of them serving as PMAs as well. Moreover, we will establish the above mentioned intelligent network management computer system and will link up all the DMAs/PMAs to it. With WIN, we will be able to continuously monitor and analyse the condition of the water supply networks and determine the most cost-effective means to maintain the healthiness of the networks.

提升供水能力

供水是基建設施的基石，對支援香港未來發展極其重要。為此，目前東涌正在設建一座新的食水配水庫，以應對因北大嶼山在建的主要項目（包括餘下的東涌擬定發展項目和第三條機場跑道項目）而增加的用水需求。

為應對新界上水、粉嶺和大埔不斷增加的住宅發展項目，本署將興建新配水庫，同時搭建配套的幹管配水系統，以滿足與日俱增的用水需求。桌山配水庫新建工程及配套水管敷設工程將於二零一六年年底動工。新配水庫及配套水管系統採用靈活設計，以便日後在需要時最終更改成再造水系統作沖廁用途。

Expanding Water Supply Capacity

As a major infrastructural cornerstone, our water supply is critical to support Hong Kong's future development. For this reason, a new fresh water service reservoir in Tung Chung is now being designed to cope with increased water demand resulting from major developments now underway in North Lantau, including the proposed remaining development projects in Tung Chung and the future third airport runway project.

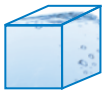
To deal with expanding housing developments in Sheung Shui, Fanling and Tai Po in the New Territories, new service reservoirs with associated trunk and distribution systems will be constructed to meet increasing water demands there. Construction of a new service reservoir at Table Hill and associated water main laying will begin at the end of 2016. The new service reservoir and associated water mains system were designed flexibly to accommodate their eventual conversion to become part of the future reclaimed water supply system for flushing, when needed.

濾水廠設施升級

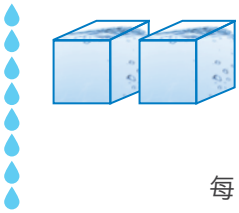
沙田濾水廠南廠的原地重置工程及大埔濾水廠的擴建工程現時均處於大幅擴建的興建階段，擴建後將有助確保我們有足夠能力為公眾供應最高水質標準的飲用水。這兩座濾水廠是處理原水的重要中心，原水經處理後會分配至全港各地。這些項目正在分階段推進，以配合全港與日俱增的食水需求。

Upgrading Water Treatment Facilities

Re-provisioning of the Sha Tin Water Treatment Works South Works and expansion of Tai Po Water Treatment Works are all currently at the construction stage to allow major capacity increases, which will ensure adequate capacity to produce the highest levels of potable water for the public. These two facilities are important centres for the treatment of raw water prior to its distribution across Hong Kong. These projects are being delivered in phases to meet the ever growing demand for potable water throughout the Territory.



Phase One
第一期
400,000
cubic metres of
water per day
每日生產四十萬立方米的水



Phase Two
第二期
800,000
cubic metres of
water per day
每日生產八十萬立方米的水

新近竣工的第一期擴建工程推動大埔濾水廠的濾水量上升至每日400,000立方米，第二期設施現已如期推進，及至二零一八年年中，濾水量將增加至每日800,000立方米。沙田濾水廠南廠已於二零一五年年底啟動原地重置工程的準備工作，計劃於二零二三年年底全面投入服務。

The recent completion of Phase One expansion works has boosted the output capacity of the Tai Po Water Treatment Works to 400,000 cubic metres of water per day and the Phase Two facility is now on pace to increase its capacity to 800,000 cubic metres per day by mid-2018. The preparatory work for the on-site re-provisioning of the Sha Tin Water Treatment Works South Works began in late 2015 with the facility slated for full commissioning by the end of 2023.

更換及修復工程

為減少水管滲漏情況，本署自二零零零年起便開始實施全港水管更換及修復計劃，以對全港總長約8,000公里的水管中約3,000公里的老化水管進行更換及修復。工程的主要部分已於二零一五年年底完成。

Replacement and Rehabilitation Works

To reduce leakage, the Department, since 2000, has been implementing a territory-wide Replacement and Rehabilitation (R&R) programme to replace and rehabilitate about 3,000km of aged water mains out of Hong Kong's total of around 8,000km of water mains. A major portion of this work was completed by the end of 2015.

提升水務運作效率

我們已開始更換各食水及原水抽水站的老化水管。這些工程在二零一六年年底完成後，抽水站的可靠程度及運作效率將大幅提升。

此外，六個主要濾水廠的現有手動控制設備將由遙距控制設備操作，以提高整體運作效率。手動操作閥驅動器將於二零一八年年底前分階段逐步由遙距控制電動驅動器取代。

用以遙距監測相關供水地區內抽水站和配水庫等供水網絡設施的現有四個區域監控及資料收集系統正在分階段進行升級。香港及離島、九龍及新界西的系統已如期完成，並已投入運作。餘下的新界東區域監控及資料收集系統的升級工程正如期進行，預計將於二零一六年年底完成，屆時將可提供充足的監控能力，以應對未來十年供水系統的增長。

Improving Waterworks Operational Efficiencies

We have begun the replacement of aged water pipework at various fresh water and raw water pumping stations. Following completion of these replacement projects by the end of 2016, the reliability and operational efficiency of the pumping stations will be significantly enhanced.

In addition, the existing manual control equipment at six major water treatment works will be mechanised with remote control facilities in order to enhance their overall operational efficiency. Manually operated valve actuators will be gradually replaced in stages with remotely controlled electrical actuators by the end of 2018.

The existing four Regional SCADA Systems that are used to remotely oversee water supply network facilities such as pumping stations and service reservoirs in their respective water supply regions are being upgraded in stages. The systems for Hong Kong and Islands, as well as Kowloon and the New Territories West Regions have been completed on schedule and are already in operation. The upgrading work for the remaining New Territories East Regional SCADA System is on schedule and will be completed by the end of 2016. It will provide sufficient control and monitoring capacity to cope with the growth of the water supply systems over the next decade.

六個主要濾水廠的分佈式控制系統的現代化改造工程正迅速推進。其中四個系統裝置已於過去數年成功更新並已投入運作，牛潭尾濾水廠的現代化改造工程亦正如期進行，預計將於二零一七年三月完成。至於餘下的凹頭濾水廠，相關規劃及設計工作已啟動，預計將分別於二零一九年及二零二一年分兩階段完成。

The modernisation work for the Distributed Control Systems (DCS) for six major water treatment works is moving ahead apace. While four DCS units were successfully commissioned over the past years, the modernisation work at the Ngau Tam Mei Water Treatment Works is on schedule and will be completed by March 2017. As for the remaining Au Tau Water Treatment Works, planning and design work has already started and the project is expected to be completed in two phases by 2019 and 2021, respectively.

我們致力持續提升抽水站與濾水廠的供電及監控系統。屯門海水抽水站正在更換高壓電掣板及增設一套現代化控制系統，以提高為整個屯門地區提供沖廁用水的可靠程度。該項目預計將於二零一七年年初完成。

We are committed to the on-going improvement of the electrical power supply systems as well as the monitoring and control systems of pumping stations and water treatment works. Replacement of a high voltage switchboard and addition of a set of modernised control systems is underway at the Tuen Mun Salt Water Pumping Station to improve its reliability for providing flushing water across the Tuen Mun area. The project is scheduled for completion in early 2017.

本署將於二零一六年對上水濾水廠及北港濾水廠已服務長達數十年的現有脫水設備啟動升級工程，以提高設備的可靠程度及運作效率。

Following many decades of service, improvement work on the existing dewatering plants will be initiated at the Sheung Shui Water Treatment Works and Pak Kong Water Treatment Works in 2016 to enhance plant reliability and operational efficiency.

除氯系統是一種防護裝置，有助於防止氯氣在罕見的系統故障期間防止氯氣釋放至大氣層，保障濾水廠時刻安全運作。繼銀鑛灣濾水廠及油柑頭濾水廠完成除氯系統的現代化改造及更換工程後，沙田濾水廠亦已於二零一五／一六年度進行翻新。

Chlorine scrubbers, which prevent chlorine gas from leaking into the atmosphere in the unlikely event of a system failure, are protective devices to keep water treatment works operating safely at all times. Following the completion of the modernisation and replacement of the chlorine scrubber systems at the Silver Mine Bay Water Treatment Works and Yau Kom Tau Water Treatment Works, upgrading at the Sha Tin Water Treatment Works got underway as well in 2015/16.


優質食水
Quality Water
優質生活
Quality Living

優化供水設施

水務署致力妥善管理所有水務基建設施的使用周期，務求在可接受的風險框架內，以最符合經濟效益的方式實現最高的服務水平。

近年來，隨著建築信息模擬技術發展一日千里，為多個建築項目帶來經濟效益，水務署進行了試驗研究，探索應用建築信息模擬應用程式進行設施管理的潛在裨益。試驗研究已於二零一五年年中順利完成。事實證明，在設施管理領域應用建築信息模擬的概念完全切實可行。憑藉該項研究，水務署於二零一五年四月及八月分別榮獲兩項建築信息模擬獎項，即「buildingSMART Hong Kong International BIM Award 2015」及「Autodesk建築信息模擬設計大獎2015 － 香港、澳門及台灣」。

本署員工按照維修保養責任定期監察6,500個斜坡，於去年對約80個斜坡展開後續預防性保養及提升工程，當中大多數斜坡毗鄰水務署重要設施。有關工程包括打泥釘、斜坡表面加固、在斜坡護面的牆腳栽種植物、改善排水系統、提供安全通道走廊、常規栽種植被等。各項措施均有助大大減低山泥傾瀉的風險及山泥傾瀉對生命和財產的威脅。

我們亦定期進行監察，檢討配水庫和水塘的安全和穩定性，並就維修工程提出建議，確保配水庫和水塘完善。去年，本署內部員工和外聘顧問分別完成112份詳盡檢查報告和16份獨立檢查報告。

Optimising Waterworks Assets

At the WSD, one of our primary goals is to manage the life cycles of all waterworks infrastructure in order to achieve the optimal level of service in the most cost-effective manner all within an acceptable risk framework.

With the rapid advancement of Building Information Modelling (BIM) technology in recent years and its success in bringing about the cost-effective delivery of construction projects, the WSD has taken the initiative through a pilot study to explore the potential benefits of using BIM applications for asset management. The pilot study was completed successfully in mid-2015. The concept applying BIM in asset management has proved to be wholly viable and workable. With this study, WSD won two BIM Awards, namely the "buildingSMART Hong Kong International BIM Award 2015" and "Autodesk BIM Awards 2015 – Hong Kong, Macau and Taiwan" in April and August 2015, respectively.

Our staff routinely inspects 6,500 slopes that fall under our maintenance responsibility. Last year we carried out subsequent preventive maintenance and upgrading work for about 80 slope features, most of which are close to important WSD installations. This included soil-nailing, slope surface stabilisation, construction of toe planter walls, improvements to drainage systems, providing safe access corridors, general planting and other measures. The result of all these efforts has been a dramatic decrease in the risk of landslides as well as the danger they pose to life and property.

We also regularly conduct inspections to review the safety and stability of service reservoirs and impounding reservoirs, making recommendations for maintenance work to ensure each reservoir's integrity. During the past year, we completed 112 detailed inspection reports as well as 16 independent inspection reports by our internal staff and external advisors, respectively.

以可靠性為主的維修

於荃灣原水抽水站及大窩村海水抽水站進行的以可靠性為主的維修研究計劃均已完成。由於各種水務設施已訂有更加全面的維修策略模板，最後一個以可靠性為主的維修研究計劃將於明年在掃桿埔二號食水抽水站展開。對於已完成以可靠性為主的維修研究的設施，本署會繼續落實重新設計項目及跟進行動，以根據報告結果檢討已制訂的維修計劃。為在適當時候調整機械和電力設施的維修策略，本署會依據所收集的數據，對以可靠性為主的維修計劃的落實情況展開全面檢討。

Reliability Centred Maintenance

The additional projects for implementing Reliability Centred Maintenance (RCM) for two pumping stations vis-a-vis the Tsuen Wan Raw Water Pumping Station and Tai Wo Tsuen Salt Water Pumping Station have been completed. With more comprehensive templates of maintenance strategies already developed for various kinds of waterworks installations, the last project at the So Kon Po No. 2 Fresh Water Pumping Station will be carried out in the coming year. For those installations in which the RCM study has been completed, implementation of re-design items and follow up actions to review the planned maintenance programme based on the report findings will continue. An overall review will be initiated on the outcome of RCM implementation with reference to the data being collected in order to refine our maintenance strategies for mechanical and electrical assets in due course.

主要濾水廠及抽水站的機械和電力設施狀況評估

為制訂全面的設施舊設備更換計劃，我們已完成30個抽水站的狀況評估，並將於明年對另外18個設施進行評估。我們會持續進行此類評估，以制訂及更新設施管理計劃。

Condition assessments of Mechanical and Electrical assets for major Water Treatment Works and Pumping Stations

To formulate a comprehensive replacement programme for old plant equipment, condition assessments for 30 pumping stations have been completed with assessments for another 18 installations set for the coming year. We will continue to conduct these assessments on an ongoing basis to develop and update our asset management plan.

資本投資
Capital Investment

財務及水費
Finance and Water Charges

水費

與世界其他主要城市相比，香港用戶為優質食水所繳付的費用相對低廉，除了一九九六年六月修訂的非本地船隻用水收費外，水費自一九九五年二月至今亦一直維持不變。

收費幅度

住宅用戶的食水水費（沖廁用水除外）按以下四級制，以四個月為期計算：

Water Charges

Water consumers in Hong Kong pay less for high quality fresh water than their counterparts in most major cities around the world. Water charges have not been revised since February 1995 (other than the charge for non-local vessels which was last revised in June 1996).

Scale Of Charges

Fresh water for domestic use (other than flushing) is charged at four-month period rates set out in a four-tier system as follows.

	每單位(1立方米)收費 Charging rate per unit of one cubic metre
第一級 — 首12個單位 Tier 1 for the first 12 units	免費 Free
第二級 — 繼後的31個單位 Tier 2 for the next 31 units	$4.16(註一)(Note 1)
第三級 — 再繼後的19個單位 Tier 3 for the next 19 units	$6.45(註二)(Note 2)
第四級 — 餘下單位 Tier 4 for the remainder	$9.05(註三)(Note 3)

作其他用途的食水，會根據其用途按下表所列收費：

Fresh water for other uses is charged at different rates as follows based on the purpose of consumption.

用途 Purpose	每單位(1立方米)收費 Charging rate per unit of one cubic metre
商業 Trade	$4.58 (註四)(Note 4)
建築 Construction	$7.11 (註五)(Note 5)
航運(非本地船隻) Shipping (Non-local Vessels)	$10.93 (註六)(Note 6)
航運(本地船隻) Shipping (Local Vessels)	$4.58 (註七)(Note 7)
航運以外用途(非本地船隻)，並以預付票繳交水費 Any purpose other than Shipping (Non-local Vessels) where payment is made against a prepaid ticket	$4.58 (註七)(Note 7)
沖廁水每四個月的收費率 Flushing per 4 month period	
— 首30個單位 for the first 30 units	免費 Free
— 餘下單位 for the remainder	$4.58 (註七)(Note 7)

註一：一九七九年推出水費分級制度時，第二級收費為大致可收回每單位的淨生產成本，即每單位的總生產成本(包括固定資產平均淨值的目標回報率)減去每單位的差餉補貼，並按照水錶記錄的總耗水量計算。在其後的水費檢討，由於對所有級別實施統一加費幅度，以收回整體水務經營成本，因此第二級的建議收費並不等同於當時每單位的淨生產成本。於二零一五至一六年度，每單位的淨生產成本為11.5元，遠超4.16元的收費水平，主要因為水費自一九九五年起並無任何變動。

Note 1. When the tariff structure was introduced in 1979, the charge for the second tier was to recover approximately the net unit production cost, which meant the full unit production cost (including a target rate of return on ANFA) less the average contribution from rates per unit, calculated based on the quantity of the metered consumption. In the subsequent tariff reviews, the proposed charging rate for the second tier was not equal to the prevailing net unit production cost because a uniform rate of increase for all tiers was adopted taking the waterworks operating costs as a whole. In 2015-16, the net unit production cost is $11.5, which is materially higher than the charging rate of $4.16, mainly because water tariffs have not been changed since 1995.

註二：一九七九年推出水費分級制度時，第三級收費為大致可收回每單位的總生產成本，即每單位的平均生產成本(包括固定資產平均淨值的目標回報率)，並按照水錶記錄的總耗水量計算。在其後的水費檢討，由於對所有級別實施統一加費幅度，以收回整體水務經營成本，因此第三級的建議收費並不等同於當時每單位的總生產成本。於二零一五至一六年度，每單位的總生產成本為15.7元，遠超6.45 元的收費水平，主要因為水費自一九九五年起並無任何變動。

Note 2. When the tariff structure was introduced in 1979, the charge for the third tier was to recover approximately the full unit production cost which meant the average production cost per unit (including a target rate of return on ANFA), calculated based on the quantity of the metered consumption. In the subsequent tariff reviews, the proposed charging rate for the third tier was not equal to the prevailing full unit production cost because a uniform rate of increase for all tiers was adopted taking the waterworks operating costs as a whole. In 2015-16, the full unit production cost is $15.7, which is materially higher than the charging rate of $6.45, mainly because water tariffs have not been changed since 1995.

註三：第四級收費定價比第三級收費高出約40%，目的是不鼓勵過量及浪費用水。

Note 3. The fourth tier is set at about 40 per cent higher than the third tier to discourage extravagant and wasteful use of water.

註四：一九九二年前，商業用途的收費與住宅用戶第二級收費相同。自一九九二年起，商業用途的收費修訂至高於住宅用戶第二級收費水平，旨在減少對非住宅用戶的補貼。

Note 4. Prior to 1992, the charging rate for trade purpose was equal to the second tier rate for domestic purpose. Commencing from 1992, the charging rate for trade purpose was set higher than the second tier rate for domestic purpose mainly for reducing the subsidy to non-domestic consumers.

註五：一九九二年前，建築用途的收費與住宅用戶第三級收費相同。自一九九二年起，建築用途的收費修訂至高於住宅用戶第三級收費水平，旨在減少對非住宅用戶的補貼。

Note 5. Prior to 1992, the charging rate for construction purpose was equal to the third tier rate for domestic purpose. Commencing from 1992, the charging rate for construction purpose was set higher than the third tier rate for domestic purpose mainly for reducing the subsidy to non-domestic consumers.

註六：航運(非本地船隻)收費於一九九六年作出修訂，當時收費水平訂為高於每單位總生產成本的40%，目的是不鼓勵非本地船隻在香港取水。

Note 6. The charging rate for shipping (non-local vessels) was last revised in 1996, setting at 40% above the full unit production cost at that time for discouraging the taking of water in Hong Kong.

註七：此等收費與商業用途收費相同。

Note 7. These charging rates were set at the rate equal to the charging rate for trade purpose.

鹹水沖廁費用全免。

Sea water for flushing is supplied free of charge.

水務經營帳目自一九九八年至九九年度起已錄得虧損，需依靠政府一般收入補助。二零一五至一六年度錄得虧損11.386億港元，成本回收率為88.1%。政府會繼續定期檢討水費，審慎考慮各項因素，包括承擔能力、水務設施的財政狀況、當時的經濟狀況，以及立法會議員的意見。

除水費外，水務設施規例(第102A章)亦列明25項法定收費項目。我們一直遵照政府的「用者自付」原則檢討這些收費項目，旨在悉數收回服務供應成本。於二零一五至一六年度，25項法定收費項目維持不變。

Waterworks operations have seen deficits since 1998-99 which means that it is subsidised by general government revenues. In 2015-16, the deficit was $1,138.6M and the cost recovery rate was 88.1%. The Government continues to review the water tariff periodically, taking into consideration a number of factors, including affordability, financial performance of waterworks operations, the prevailing economic situation and the views of Legislative Council members.

Other than water charges, there are 25 statutory fee items stipulated in the Waterworks Regulations (Cap. 102A). We have been periodically reviewing these fee items in accordance with the Government-wide "user pays" principle which aims to recover the full cost of providing services. During the year 2015-16, 25 statutory fee items remain unchanged.

水費收入總覽

於二零一五至一六年度，約13%住宅用戶毋須支付任何水費；42%達到第二級水費，需繳付每單位4.16元水費；21%需繳付第三級水費，即每單位6.45元；餘下24%需繳付第四級水費，即每單位9.05元的水費。於二零一五至一六年度，260萬住宅用戶(包括無須繳付水費之用戶)每月平均水費為48元。根據政府統計處的住戶開支統計調查，水費開支約相等於住戶每月平均開支的0.3%。

Profiles of the Revenue from Water Charges

During the year 2015-16, about 13 per cent of domestic customers were not required to pay water charges, 42 per cent were paying up to the tier 2 rate of $4.16 per unit, 21 per cent were paying up to the tier 3 rate of $6.45 per unit and 24 per cent were paying up to the tier 4 rate of $9.05 per unit. For the 2.6 million domestic customers, the average water charge in 2015-16, including those not required to pay any charge, was $48 per month. According to the Census & Statistics Department household expenditure survey, the water charge amounts to about 0.3 per cent of the average monthly household expenditure.

過去五年按用戶類別劃分的水費收入分析如下：

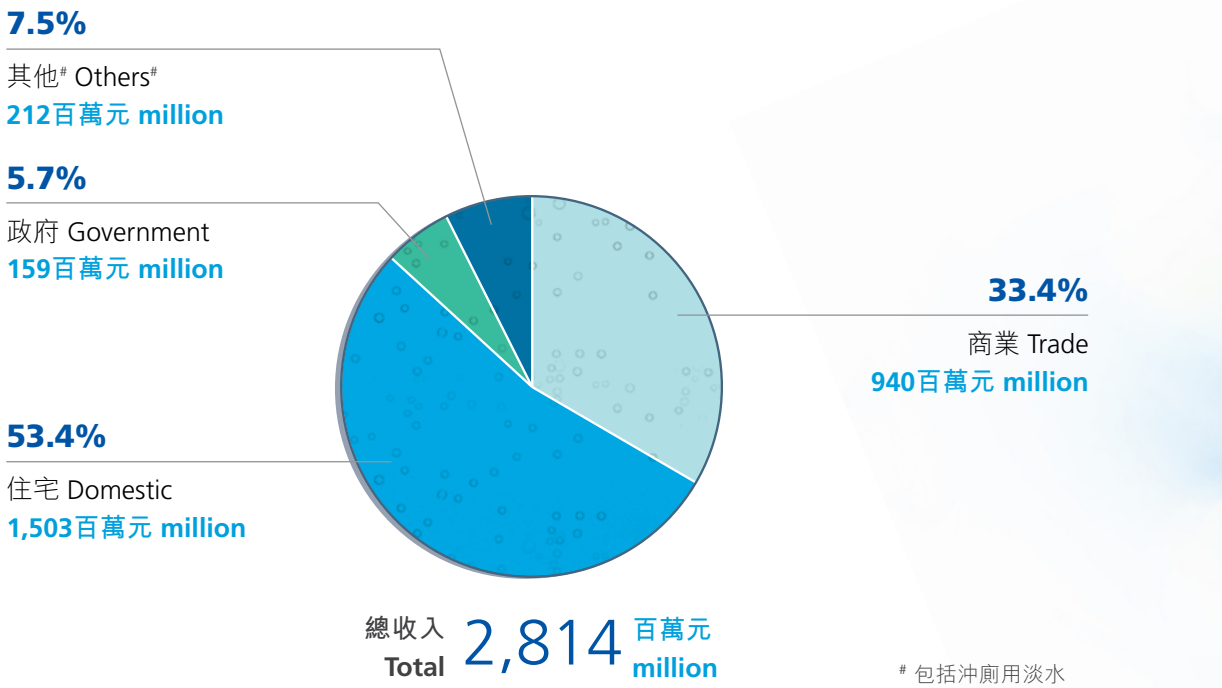
An analysis of the water charges by sector over the past five years is as follows.

百萬元 $M	11/12	12/13	13/14	14/15	15/16
商業 Trade	913	905	903	933	**940**
住宅 Domestic	1,414	1,437	1,452	1,474	**1,503**
政府 Government	155	156	159	155	**159**
其他# Others#	175	185	201	215	**212**
總收入 Total	2,657	2,683	2,715	2,777	**2,814**

包括沖廁用淡水

including fresh water for flushing

二零一五／一六年度水費收入(按用戶類別劃分，以百分比顯示)
Water Charge (% by Sectors) 2015/16



包括沖廁用淡水

including fresh water for flushing

收入及開支分析

水費收入包括一般水費、各項收費、牌費，以及代客戶進行工程的收費。在編製水務賬目時，會以應計賬目基準呈列財務表現及狀況，其中包括各項非現金收入項目，主要為差餉補貼、免費用水補貼及政府用水。總運作成本主要包括員工費用、購買東江水支出、折舊、運作、行政及其他費用。過去五年的收入及開支分析如下：

Analysis of Revenue and Expenditure

The revenue collections include chargeable water supplies, fees, licences, and reimbursable work. In preparing the Waterworks Operating Accounts which present the financial results and positions on an accrual accounts basis, the revenues include non-cash items, mainly contribution from rates, contribution from free allowance, and water supplies for government usage. The total operating costs include mainly staff costs, purchase costs of Dongjiang water, depreciation, operating charges, plus administration and other expenses. An analysis of the revenue and expenditure over the past five years is as follows.

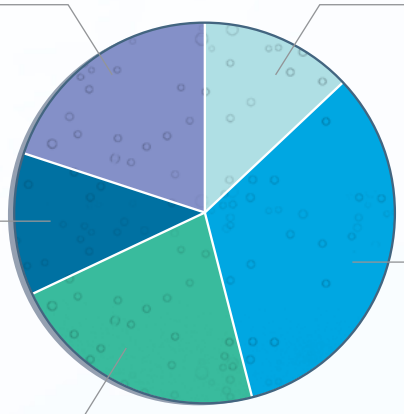
收入
Revenue
（百萬元 $million）

財政年度 Financial Year	11/12	12/13	13/14	14/15	15/16
一般水費 Chargeable Supplies	2,502.6	2,527.2	2,555.8	2,622.0	**2,654.9**
差餉補貼 Contribution from Rates	2,947.4	3,561.0	3,970.6	4,263.4	**4,574.4**
免費用水補貼 Contribution from Free Allowance	1,173.4	912.4	918.7	*961.3	**1,009.2**
政府用水 Supplies to Government Establishments	154.5	156.2	159.0	155.1	**158.9**
各項收費及其他 Fees, charges and others	29.0	31.0	26.5	28.9	**37.1**
總額 Total	6,806.9	7,187.8	7,630.6	8,030.7	**8,434.5**

* 二零一四至一五年度的免費用水補貼因應過往年度調整而重列。詳情請參閱附件四。

* The contribution from free allowance in 2014-15 is restated as a result of prior year adjustment. Please refer to Annex IV for more details.

二零一五／一六年度住宅用戶每月水費分佈圖
Distribution of Household Average Monthly Bill 2015/16



開支
Expenditure
（百萬元 $million）

財政年度 Financial Year	11/12	12/13	13/14	14/15	15/16
員工費用 Staff costs	1,401.3	1,486.0	1,528.7	1,586.6	**1,659.2**
運作、行政及其他費用 Operating, Administration & Other Expenses	1,680.3	1,698.3	1,747.9	1,841.0	**1,918.7**
東江水 Dongjiang water	3,397.1	3,594.5	3,802.2	4,031.2	**4,296.1**
折舊 Depreciation	1,353.5	1,416.7	1,482.7	*1,583.5	**1,699.1**
總額 Total	7,832.2	8,195.5	8,561.5	9,042.3	**9,573.1**

* 二零一四至一五年度的折舊因應過往年度調整而重列。詳情請參閱附件四。

* The depreciation in 2014-15 is restated as a result of prior year adjustment. Please refer to Annex IV for more details.

本署致力以符合成本效益的方式提供服務，並大力投資在固定資產、設備、資訊科技及人力資源方面，藉此提高運作效益及員工生產力，務求滿足市民對更優質服務的需求。社會大眾以及我們的用戶可以放心，我們會實行嚴謹的財務紀律，在提供優質服務滿足用戶需要之餘，不忘提升成本效益，這方針是我們實現抱負和使命的基本法則。

The Department is committed to providing services as cost effectively as possible. We have made substantial investments in fixed assets, equipment, information technology and human resources to improve operational efficiency and staff productivity to meet the demands for a higher quality of services by the public. Our customers and the public at large can rest assured that we will exercise strict financial discipline and be very cost conscientious in delivering our quality services to meet the demand of our customers. This is our underlying approach in achieving our vision and missions.

可持續運作
Sustainable Operations

經驗及準確理解供水所需的條件是我們維持可持續運作的重要元素。

本署致力：

- 嚴格遵守環保規例
- 善用能源和燃料
- 限制氣體排放
- 盡量減少辦公室用品的消耗
- 盡量減少處理食水過程中使用的化學品
- 盡量減少供水系統的用水流失量
- 盡量減少建築工程對環境造成的影響
- 減少化驗室、工場和濾水廠的固體、液體及化學廢物
- 盡量減少污水排放，並盡可能循環再用
- 減少抽水站發出的噪音
- 提倡安裝綠化屋頂
- 提倡使用再造紙

Experience and a precise understanding of what is required in terms of viable water supplies are key elements that enable us to operate in a sustainable manner.

The WSD is committed to:

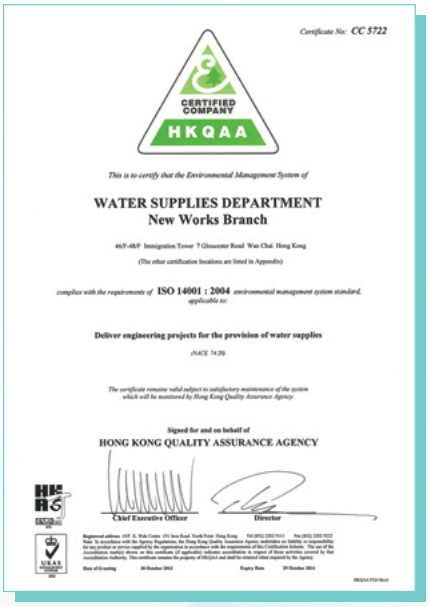
- Working in strict compliance with environmental regulations
- Optimising the use of energy and fuel consumption
- Limiting gaseous emissions
- Minimising the consumption of glossary items in offices
- Minimising the use of chemicals in the water treatment process
- Minimising water loss across the distribution system
- Minimising environmental impacts that can arise from construction work
- Reducing the quantities of solid, liquid and chemical wastes generated by our laboratories, workshops and treatment works
- Minimising the discharge of effluent and where possible recycle effluent
- Reducing noise generated from pumping stations
- Encouraging the establishment of green roofs
- Encouraging the use of recycled paper

關注環境

本署的抱負是致力滿足客戶對優質供水服務的需求，務求每天取得卓越表現。作為以上承諾的一部分，我們願意承擔對維持環境清潔應負的責任。為此，本署的設計及建設科肩負重任，力求盡量減低水務規劃、設計及建設對環境造成的任何影響。自二零一三年年初至今，設計及建設科一直奉行嚴格規約，作為按照ISO 14001所制訂環境管理體系的一部分。環境管理體系要求：「為已規劃及新增的工程項目、發展項目、產品及服務提供供水服務時，妥善做好環境管理工作」。於二零一三年十月，設計及建設科獲頒ISO 14001: 2004環境管理體系標準認證，有關認證適用於供水工程項目推展。其後本署制訂多項環境管理計劃，並每年進行檢討，以幫助實現環境清潔目標。

Environmental Focus

The vision of the Department is to excel each day in satisfying the need to provide quality water supply services to our customers. As part of that commitment, we fully appreciate the responsibilities we have in maintaining a clean environment. For this reason, the New Works Branch of the Department is tasked to ensure that all impacts to the environment are minimised in planning, designing and building waterworks. Since early 2013, The New Works Branch has followed a strict protocol as part of the Environmental Management System (EMS) in accordance with ISO Standard 14001. The EMS mandate is: "Environmental management while providing water supply services from planned and new engineering projects, developments, products and services". In October of 2013, the New Works Branch obtained ISO14001:2004 Environmental Management System Standards certification applicable to the delivery of engineering projects for the provision of water supplies. A host of environmental management programmes have subsequently been developed and reviewed annually to assist in achieving our environmental objectives and targets.



嶄新技術和設備

熱成像安全監測系統

熱成像安全監測系統試驗項目已在北港濾水廠成功推行，我們希望在沙田濾水廠(南廠)項目等其他設施應用該系統。該系統有助減少水務設施的安全設施和區域照明的耗電量，同時盡量減輕光污染對附近居民的滋擾。

New Technology and Equipment

Thermal Vision-based Security Surveillance System

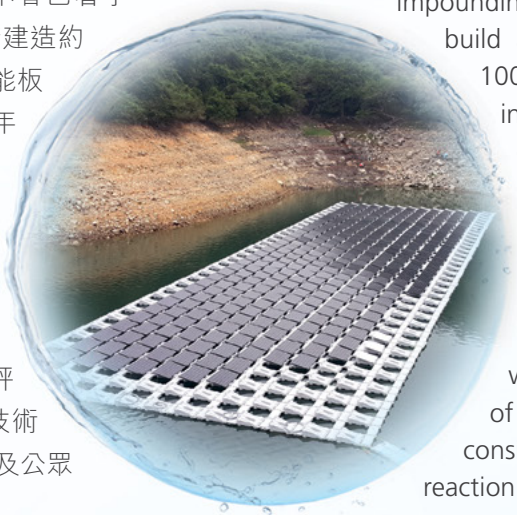
With the successful implementation of the pilot thermal vision-based security surveillance system at the Pak Kong Water Treatment Works, we are looking to apply this system at other installations such as the Sha Tin Water Treatment Works (South Works) project. The system reduces electrical consumption of the security and area lighting of waterworks installations as well as helps minimise the nuisance of light pollution on residents living nearby.

在水塘鋪設浮動太陽能板發電系統

為應對氣候變化及節省寶貴的土地資源，過去數年，全球各地已開展興建大型的浮動太陽能發電場，通過在水塘和灌溉池塘的水面上安裝浮動太陽能板收集太陽能發電。為檢視在香港水塘安裝大型的浮動太陽能板發電系統的可行性，本署已著手計劃於二零一六年在石壁水塘建造約100千瓦容量的試驗浮動太陽能板發電系統，以及於二零一七年在船灣淡水湖建造容量相若的試驗浮動太陽能板發電系統。除了發電外，大型浮動太陽能發電場還將有助減少水塘的水蒸發，抑制海藻生長，提高水質。我們將在試驗項目中評估浮動太陽能板發電系統的技術性能，同時亦會考慮環境問題及公眾的反應。

Floating Solar Power Systems at Impounding Reservoirs

To combat climate change and save precious land resources, the last few years have seen the rapidly growing construction of floating solar farms around the world to harvest solar energy by installing floating Photovoltaic (PV) panels over the water surface of reservoirs and irrigation ponds. To examine the feasibility of the deployment of large scale floating PV power systems at our impounding reservoirs, plans are in the works to build a pilot floating solar system of about 100kW capacity at the Shek Pik Reservoir in 2016 and another one with similar capacity at the Plover Cove Reservoir in 2017. Apart from generating electricity, large floating solar farms will also help reduce water evaporation of reservoirs and improve water quality by inhibiting algae growth. In the pilot project, we will evaluate the technical performance of the floating PV power system, as well as consider the environmental issues and public reaction.

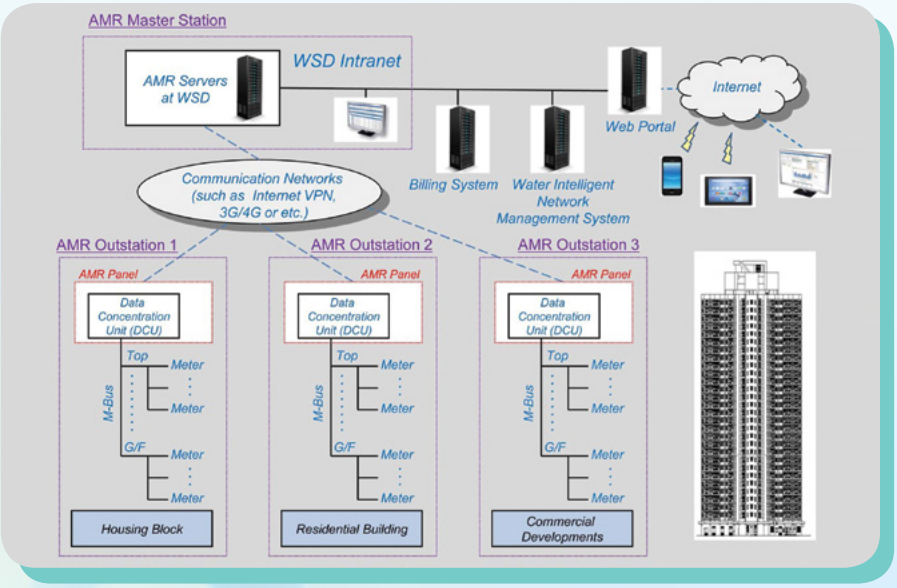


推行自動讀錶，發展智慧城市

為配合政府發展智慧城市的計劃，我們將在東九龍及安達臣道石礦場用地發展區推行自動讀錶系統先導計劃。當中新的私人和公共發展項目會於二零一八/一九年起分階段安裝智能水錶。透過智能自動讀錶系統，能提高讀錶效率外，還可向用戶提供適時的用水資訊，以提升節約用水意識。

Automatic Meter Reading for Smart City

In support of the government's initiative to forge smart cities, a large scale Automatic Meter Reading (AMR) pilot project will be implemented at the Development of Kowloon East and Anderson Road Quarry Site as one of our smart water initiatives. New private and public developments at these development areas will be installed with smart water meters progressively starting from 2018/19. In addition to remote reading of water meters, the AMR system can provide timely water consumption data and related information to customers to raise their awareness about water conservation.



可持續發展

騰出一個分區辦事處，善用土地資源造福社群

規劃署二零零九年完成的旺角購物區地區改善計劃建議我們搬遷旺角洗衣街的新界西分區辦事處，以騰出現址用於造福社群。該分區辦事處將遷往天水圍。新分區辦事處樓宇建築工程已於二零一五年八月動工，預計將於二零一八年竣工。建築工程進度正如期進行，打樁工程現時正全力展開。該搬遷將改善新界西分區的運作效率及水務設施的維修保養工作。搬遷後，洗衣街的現址將騰出，用於旺角購物區地區及其他造福社群的用途。

Sustainable Development

Releasing a Regional Office to Optimise Land Use for the Public's Benefit

The Area Improvement Plan for the Shopping Area of Mong Kok (AIP), which was completed by the Planning Department in 2009, recommended that our New Territories West (NTW) Regional Office at Sai Yee Street, Mong Kok be relocated to release the site for the benefit of public use. The regional office will be relocated to Tin Shui Wai. The construction work for the new regional office building began in August 2015 with completion slated for 2018. The progress of the construction is on schedule with piling work now in full swing. The relocation will enhance operational efficiency and maintenance of waterworks facilities in the NTW region. After the relocation, the site at Sai Yee Street will be released for AIP and other beneficial uses for the community.

將水務設施遷往岩洞

為配合政府增加土地供應的政策，發展岩洞是滿足社會發展需要的可行方法。政府已提出方案搬遷現有設施至岩洞，以在岩洞安裝新設施，從而騰出現址作房屋或其他用途，滿足本港長遠的社會及經濟需要。鑽石山食水配水庫及鑽石山海水配水庫已確定適合搬遷至岩洞。本署就建議搬遷項目進行的可行性研究已接近完成。騰出的現址建議土地用途主要是提供房屋，以滿足社區需要，以及提供政府、機構或社區所需設施及休憩空間，以造福當地社群。

除該建議搬遷外，水務署亦正聯同土力工程處，確定具可行性且經濟上可行、適宜遷往岩洞的其他潛在配水庫。

Caverning of Waterworks Installations

In line with the Government's policy of increasing land supply, rock cavern expansion is a practical approach for meeting the developmental needs of our society. The Government has initiated proposals to relocate existing facilities to caverns so that the released sites can be used for housing or other uses to meet Hong Kong's long- term social and economic needs. The Diamond Hill Fresh Water Service Reservoir and Diamond Hill Salt Water Service Reservoir were identified as suitable facilities for relocation to caverns. The feasibility study for the proposed relocation project is nearing completion. The proposed land uses of the released site focus on the provision of housing in meeting the community demand and the needed facilities comprising Government, institution or community facilities and open space in serving the local community.

In addition to this relocation proposal, the WSD is also working with Geotechnical Engineering Office to identify other potential service reservoirs that may be feasible and economically viable for relocation to caverns.

延伸海水供應系統，節約寶貴的食水

華富邨、貝沙灣和數碼港的海水供應現已投入使用，而有關薄扶林區將沖廁用水由食水轉為海水的工程仍在密鑼緊鼓展開。

新界西北部(包括屯門東、元朗及天水圍)的新供水核心系統已於二零一五年竣工，元朗的七個屋邨已於二零一五至一六年將沖廁用水由食水轉為海水。有關樓宇的水管系統檢查工作目前正在進行，而天水圍、元朗工業邨及元朗區等地的屋邨的改建工程隨後將會展開。

此外，東涌的新海水供應項目現處於規劃階段。

Extending the salt water supply system to save precious fresh water

Salt water delivery to Wah Fu Estate, Bel-Air and Cyberport is now in operation and the conversion to salt water for flushing in Pok Fu Lam continues apace.

The new core system for water supply to the North West New Territories, serving Tuen Mun East, Yuen Long and Tin Shui Wai was completed in 2015. Seven housing estates in Yuen Long have now been converted to salt water for flushing in 2015-16. Plumbing inspections for those relevant buildings are currently in progress and conversion works, including estates in Tin Shui Wai, Yuen Long Industrial Estate and the Yuen Long area, will follow afterwards.

Moreover, a new salt water supply system for Tung Chung is currently in the planning stage.

樹木管理及樹木風險評估

為綠化我們的城市，保持斜坡、集水區、水塘和通道等水務設施的安全及可持續景觀，本署一直努力不懈，確保公眾得以享用，並維持環境的原生態。為此，我們繼續實施全面的樹木風險評估和管理計劃，確保識別存在結構或健康問題的樹木，以及時採取減低相關風險的措施，並對有問題的樹木進行定期監測和檢查。倘若當前並無有效措施將樹木風險降至可接受水平，則只能移除樹木，並另外種植樹木，彌補景觀損失。在可行情況下，我們會對現有樹木加以保護，選擇及種植能保護生態和節約用水的本土樹木，並進行不同主題種植，美化景觀。

Tree Management and Tree Risk Assessment

We have long contributed toward making our city greener as well as maintaining healthy and sustainable landscape within WSD's installations, including slopes, catchments, impounding reservoirs and access roads in order to ensure the public's enjoyment and to maintain a pristine environment. To this end, we have continued to implement a comprehensive tree risk assessment and management scheme to ensure that trees with structural or health problems are being identified for timely risk mitigation procedures and undergo regular monitoring and inspections for any identified problematic trees. In cases where no effective measures are present to reduce tree risks to an acceptable level, tree removal is the last resort and replacement tree planting is undertaken to compensate for the landscape loss. Where practical, we incorporate existing tree preservation and protection, select and plant native species for ecological conservation and water saving, and carry out thematic planting to enhance the landscape.

使用及節約能源

作為全港其中一個最大的耗能用戶，本署在制定可行再生能源計劃的同時，仍不斷採取全面措施減少能源足跡。過去一年，我們已成功將辦事處的耗電量減少4.0%。

Energy Use and Savings

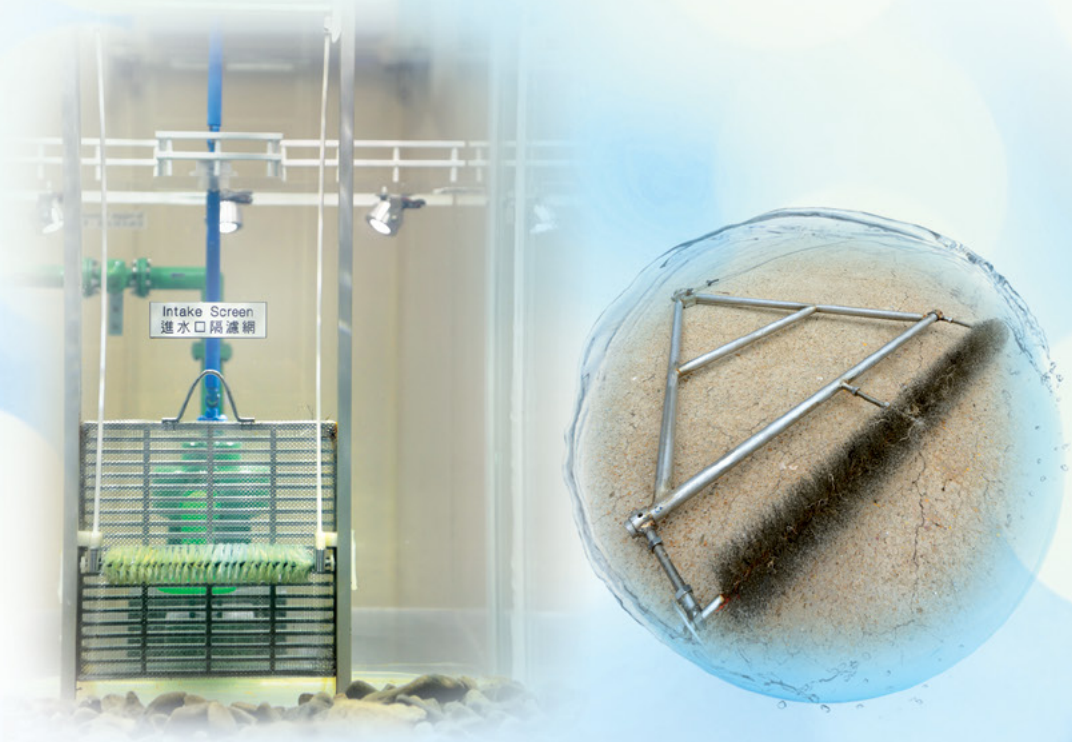
As one of the largest energy consumers in Hong Kong, the Department is implementing comprehensive measures to reduce its energy footprint while developing viable renewable energy initiatives. Over the past year, we have successfully reduced electricity consumption in our offices by 4.0 per cent.

海浪推動刷網裝置

本署自行開發的創新海浪推動刷網裝置，是借助浪潮自動清潔海旁抽水站的進水口濾隔網，以防止海洋生物依附生長，此舉大幅節省人力及能源成本。目前，大部份海旁海水抽水站已陸續加設該裝置。

Wave-powered Cleaning Device

The Department has developed an innovative wave-powered cleaning device driven by sea waves to prevent marine organisms from growing on the intake screens of seafront salt water pumping stations. This has resulted in significant manpower and energy savings. The majority of seafront salt water pumping stations have been installed with this device.



ISO 50001能源管理系統

二零一四年十二月，本署獲得ISO 50001能源管理系統認證，適用於香港特別行政區的集水、儲水、運水、濾水、分配水源及食水和海水供應方面。我們是首個獲得此項認證的香港政府部門。但我們深知，不應因此而鬆懈。我們將繼續推進多個正在實施的能源管理計劃，並每年作出檢討，務求達致節能目標。

環氧樹脂塗料工程的第一個階段已經完成，幾乎所有水泵的抽水效率均有所提高。我們將繼續為水泵加添環氧樹脂塗料。

ISO 50001 Energy Management System

In December 2014, the WSD was awarded the ISO 50001 Energy Management System certification applicable to the collection, storage, transfer, treatment, distribution and supply of fresh water and sea water within the Hong Kong, SAR. We were the first government department in Hong Kong to have received the certificate. We understand that there is certainly no room for complacency and we will continue a host of on-going energy management programmes, and make annual reviews to assist in achieving our energy saving objectives and targets.

Stage one of ceramic epoxy coating work has been completed and nearly all pump efficiency has improved as a result. We will continue to apply ceramic epoxy coating to water pumps.

水力發電站

屯門濾水廠首個水力發電機順利投入服務後，我們已展開第二期工程，著手於現址安裝第二台發電機。於二零一七年初完成整個工程後，我們預計每年將節省用電量3,000,000千瓦時，而二氧化碳排放量將減少2,000公噸。此外，在首個水力發電站成功興建的基礎上，我們將在沙田濾水廠重置工程中再建一個水力發電站。該工程的設計已於二零一五年十月啟動，預計將於二零一九年之前竣工。

Hydropower Generation plant

After the successful commissioning of the first hydropower generator at the Tuen Mun Water Treatment Works, we are now proceeding to Phase II of the project to install the second generator at the site. Upon completion of the entire project in early 2017, we estimate an annual savings in electricity of 3,000,000 kWh with a reduction of 2,000 tonnes of CO_2 emissions. Moreover, building on the success of installing the first hydropower generator, we plan to build another hydropower plant in the reprovisioning project of the Sha Tin Water Treatment Works. The design stage of this project began in October 2015 and is expected to be completed by 2019.

內聯閉式水力發電裝置

本署致力與香港理工大學(理大)合作研發內聯閉式水力發電裝置。適用於250毫米口徑水管使用的發電裝置原型已通過嚴格的實驗室測試，現正計劃於未來幾年增加這裝置的產量，在本署的智管網監測區域進行安裝。理大已申請創新科技署創新及科技支援計劃的項目撥款，而本署則作為公營機構身份，為其申請提供支援。內聯閉式水力發電裝置將為實時監測供水網絡的地下監測設備持續供電，以管理供水水壓及檢測水管是否存在滲漏。

In-line hydropower harnessing devices

The WSD has been collaborating with the Hong Kong Polytechnic University (PolyU) in the research and development of inline hydropower harnessing devices (IHHD). The prototypes suitable for use in the 250mm diameter pipes have passed vigorous laboratory tests and a plan is underway in the coming years to increase the production of the IHHD for deployment in the district metering areas (DMA) of the WSD's Water Intelligent Network.

PolyU has applied for project funding under the Innovation and Technology Support Programme (ITSP) of the Innovation and Technology Commission (ITC) with WSD serving as the supporting public sector body for the application. The IHHD will continuously power the underground monitoring equipment for real-time monitoring of the water distribution network in order to manage water supply pressure and detect water leakage in distribution pipework.

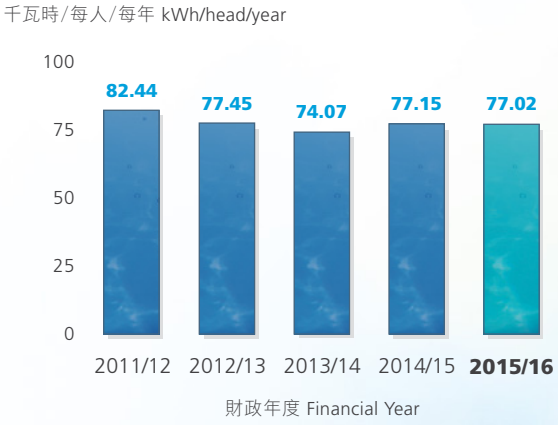
實施變速抽水裝置

變速抽水泵運作是現有及新建抽水站中的其中一項重要的節能措施。本署已在新建的華富海水抽水站展開一項試驗項目，以變速抽水泵運作模式供應沖廁海水給相關的供水區域。本署亦計劃在小西灣海水抽水站的提升工程及建議重置的夏慤道食水抽水站等新建設備亦將採用類似設計。

Implementation of variable speed pumping

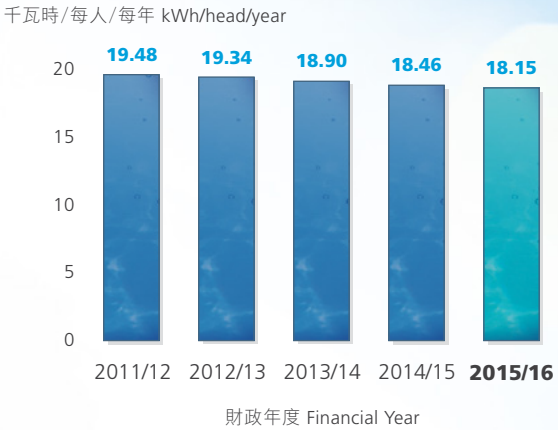
Variable speed pump operation is one of the key initiatives that can cut a pump's energy consumption for both existing and new pumping stations. A pilot scheme has been implemented at the newly commissioned Wah Fu Salt Water Pumping Station to supply sea water for toilet flushing in the related supply zone. A similar design will also be adopted for uprating work at the Siu Sai Wan Salt Water Pumping Station and new installations such as the proposed reprovisioned Harcourt Road Fresh Water Pumping Station.

人均耗電量(食水及原水)
Per Capita Electricity Consumption (Fresh Water and Raw Water)

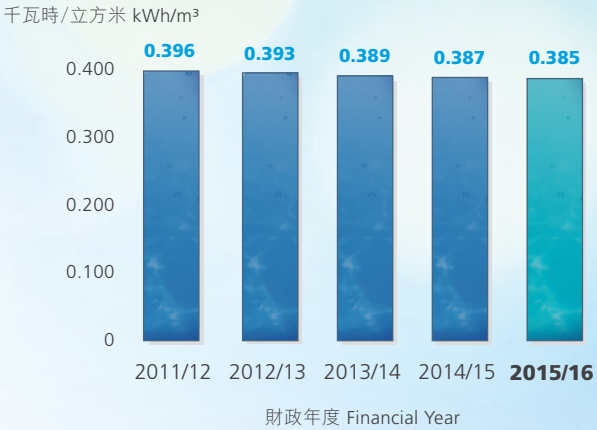


每單位耗電量(食水及原水)
Unit Electricity Consumption (Fresh Water and Raw Water)

人均耗電量(海水)
Per Capita Electricity Consumption (Sea Water)



每單位耗電量(海水)
Unit Electricity Consumption (Sea Water)



辦公室每單位樓面面積的耗電量
Office Electricity Consumption Per Unit Floor Space

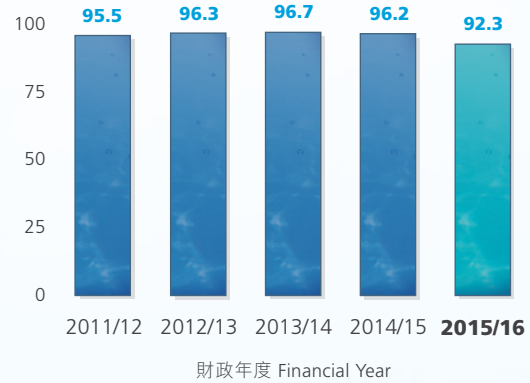
千瓦時/平方米 kWh/m²

人均住宅食水耗用量
Per Capita Domestic Fresh Water Consumption

公升/日 Litres/day

人均沖廁水耗用量(食水及海水)
Per Capita Flushing Water Consumption (Fresh Water & Sea Water)

公升/日 Litres/day



耗紙量
Paper Consumption

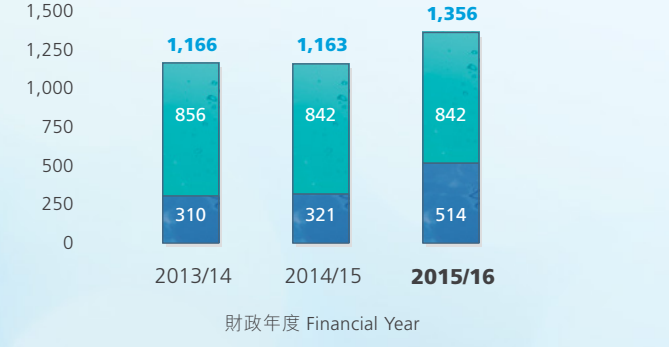
令 Reams

註：人均沖廁水耗用量(食水及海水)包括住宅及非住宅沖廁耗水量

Note: Per Capita Flushing Water Consumption (Fresh Water & Sea Water) consists of domestic and non-domestic flushing water consumption.

內部工作所需揮發性有機化合物耗用量
VOC Consumption for In-house Work

公斤 kg



公用集調車輛資料
Information on Vehicle Pool Transport

	公務用車數量 No of Government Vehicles in Operation			總燃料耗用量(公升) Total Fuel Consumption (Litres)			總車程(公里) Total mileage (km)		
	13/14	14/15	15/16	13/14	14/15	15/16	13/14	14/15	15/16
柴油 Diesel	16	16	19	22,569	18,581	23,386	116,082	85,058	117,327
汽油 Petroleum	190	186	181	534,972	534,440	497,598	2,732,005	2,641,642	2,287,717
混合(汽油/電力) Hybrid (Petrol/Electric)	18	18	18	15,265	14,920	12,435	246,496	239,631	204,159
液化石油氣 LPG	13	13	13	35,187	53,802	57,218	107,640	157,962	165,590
電力 Electricity	9	13	15	-	-	-	74,572	82,740	97,188

廢氣排放
Emissions

(以公噸計) (Figures in Tonnes)	二氧化碳 CO_2			二氧化硫 SO_2			氮氧化物 NO_x			可吸入懸浮粒子 RSP		
	13/14	14/15	15/16	13/14	14/15	15/16	13/14	14/15	15/16	13/14	14/15	15/16
直接廢氣排放 Direct Emissions												
公務用車(柴油) Vehicle fleet (Diesel)	59	48	55	-	-	-	1	-	1	-	-	-
公務用車(汽油) Vehicle fleet (Petrol)	1,299	1,216	1,114	-	-	-	1	1	1	-	-	-
公務用車(液化石油氣) Vehicle fleet (LPG)	59	88	85	-	-	-	-	-	-	-	-	-
間接廢氣排放 Indirect Emissions												
耗用電(九龍及新界) Electricity Consumed (Kowloon and New Territories)	371,581	391,276	332,732	209	250	78	455	482	313	13	15	7
耗用電(港島) Electricity Consumed (Hong Kong Island)	50,394	51,587	50,737	17	17	18	52	56	52	1	1	1
總量 Total	423,392	444,215	384,723	226	267	96	509	539	366	14	16	8

專注客戶服務
Focusing on Customer Service

作為一個以客為本的政府機構，我們盡量向公眾提供不同的溝通渠道，確保用戶能迅速與我們聯絡，從而清楚得知各區水務工作的進展情況。

As a customer-focused organisation, we at the Department make ourselves as accessible as possible to the public to ensure that our customers can reach us quickly and, in turn, are clearly informed of any water-related developments in their districts.

保持溝通

客戶電話諮詢中心服務意見調查

於二零一五年，本署委託私人顧問公司對客戶電話諮詢中心的服務進行意見調查，調查結果令我們深受鼓舞。84%受訪客戶對客戶電話諮詢中心的服務表示滿意，滿意程度較上一次於二零零八年進行的調查上升20%。總體而言，滿意程度指數亦由二零零八年的7.1攀升至最近一次調查的8.0。

Staying in Touch

Opinion Survey on Customer Telephone Enquiry Centre (CTEC) Services

In 2015, the Department secured the services of a private consulting firm to carry out an opinion survey on CTEC and we were encouraged by the results. 84% of customers polled said they were satisfied with CTEC services. This was a 20% increase compared to the last survey done in 2008. The overall satisfaction index also rose from 7.1 in 2008 to 8.0 in the most recent survey.

智能手機流動應用程式

我們於二零一四年推出可供用戶查閱水務署的重要資訊（包括暫停供水通告及帳單資訊）的「水務署流動應用程式」服務，其後，我們透過向用戶提供二維碼，方便他們在便利店繳交水費而無需出示編印的水費單，藉此加強服務。

Mobile App for Smartphones

After the launch of the "WSD Mobile App" service in 2014 for users to view important information from the WSD (including water suspension notices and billing information), the service has been further enhanced by providing a QR code to facilitate users to make payments at convenience stores without the need to present their paper water bills.

電子帳單服務

我們已精簡並提升電子帳單服務，包括在付款到期日前向電子帳單客戶發出提醒，使服務更方便快捷。用戶亦可在網上查閱最近兩年的用水量及付款記錄。截至二零一六年三月三十一日，58,200名用戶已選擇以電子方式接收水費帳單，比去年同期增加23,800名或69%。

e-bill Service

Our e-bill service has been streamlined and enhanced to improve user friendliness and convenience, including sending a reminder to e-bill customers before the payment due date and allowing users to view their water consumption and payment records over the last two years online. As of 31st March 2016, 58,200 customers have opted to receive their water bills electronically, representing an increase of 23,800 or 69%, compared with the same time last year.

方便用戶繳費

本署乃提供電子帳單及繳費服務的參與商家之一，於二零一五年九月一日開始提供該服務，電子帳單及繳費服務是由香港金融管理局推出的一站式平台，用戶可透過網上銀行戶口接收電子帳單、管理及安排繳付水費。此外，我們計劃於二零一七年年中接受以電子支票的方式繳交水費單。

Facilitating Bill Payments

We are one of the participating merchants that provides Electronic Bill Presentment and Payment (EBPP) services effective from 1st September 2015. EBPP is a one-stop platform launched by the Hong Kong Monetary Authority for users to receive, manage and schedule payments for electronic bills through internet banking accounts. We are also planning to accept e-cheques for payment of water bills in mid-2017.

水錶及讀數

本署積極更換已達指定使用年期的水錶。於二零一五至一六年度，我們分別更換了約229,000個小型和1,400個大型舊水錶。因此，於本財政年度年底仍在使用的小型及大型舊水錶的比例分別只有4.2%和2.3%，正在使用而讀數準確度符合理想水平的水錶比例則由二零一四至一五年度的96.7% 上升至97.0%。

Meters and Readings

The Department has been actively replacing water meters that have reached their designed service lives. During 2015/16 we replaced about 229,000 small and 1,400 large old meters respectively. As a result, there will only be 4.2% of old small meters and 2.3% of old large meters remaining in operation by the end of the financial year. As a consequence, the percentage of those meters now operating at their desired accuracy has risen to 97.0% from 96.7% for the period 2014/15.

讓用戶取得最新資訊

客戶聯絡小組

客戶聯絡小組於一九九三年七月成立，由水務署副署長擔任主席，並由三十名來自社區各界人士組成。客戶聯絡小組會議每四個月舉行一次。小組成員已就供水服務提出許多具建設性的意見及建議，成為水務署及客戶之間有效的溝通渠道。去年，小組成員曾參觀牛潭尾濾水廠，並聽取了關於「香港海水化淡」、「薄扶林及新界西北部沖廁用水由食水轉為海水」、「電子帳單及繳費服務簡介」、「食水含鉛」、「私人供水系統的維修保養」及「可持續供水的能源管理系統」的講解。

Keeping Customers Informed

The Customer Liaison Group

The Customer Liaison Group (CLG) was formed in July 1993 and is chaired by the Deputy Director of Water Supplies and comprises thirty members from different districts and sectors of the community. The CLG meetings are held once every four months. Many constructive views and suggestions concerning water supply services have been put forward by Group members and this has served as an effective communication channel between the Department and our customers. During the past year, members visited the Ngau Tam Mei Water Treatment Works. Presentations were also given to members on "Seawater Desalination in Hong Kong", "Conversion of Flushing Supply from Fresh Water to Salt Water in the Northwest New Territories and Pok Fu Lam ", "An Introduction to Electronic Bill Presentment and Payment (EBPP) Service", "Lead in Drinking Water", "The Maintenance of Private Water Supply Systems" and "Energy Management Systems for Sustainable Water Supply".

家用水質

大廈優質供水認可計劃－食水(2.0版)(自二零一五年十二月二十七日起改名)

有關計劃鼓勵業主及樓宇管理公司妥善維修及保養大廈的供水系統。就個別公共租住房屋發現食水樣本含鉛超標，本署已檢討上述計劃中水質化驗的標準。在水資源及供水水質事務諮詢委員會[1]的支持和贊同下，本署已於二零一五年十二月二十七日推出計劃的優化部分，包括加入重金屬的測試和擴大抽取水樣本的範圍。此外，計劃名稱已改為「大廈優質供水認可計劃－食水　(2.0版)」。本署至今已向業主／樓宇管理公司頒發3,523張金、銀及藍證書，以表揚其盡力維修及保養內部食水供水系統。

Water Quality in the Home

The Quality Water Supply Scheme for Buildings – Fresh Water (Plus) (re-named since 27 December 2015)

This scheme encourages building owners and property management agents to maintain their plumbing systems properly. In view of excessive lead content found in drinking water samples taken from some public housing estates, the Department has reviewed the protocols for water quality examination under the above scheme. With the endorsement of the Advisory Committee on Water Resources and Quality of Water Supplies , the Department launched the enhancement measures of the scheme on 27th December 2015, which include testing of four heavy metals and expanding the scope of water sampling. Moreover, the scheme has been re-named "Quality Water Supply Scheme for Buildings – Fresh Water (Plus)". To date 3,523 Gold, Silver and Blue certificates have been awarded to building owners/property management companies in recognition of their dedication to maintaining the quality of their internal fresh water plumbing systems.

[1] 水資源及供水水質事務諮詢委員會於二零一六年四月改稱為水務諮詢委員會。
The Advisory Committee on Water Resources and Quality of Water Supplies was re-named Advisory Committee on Water Supplies (ACWS) in April 2016.

大廈優質供水認可計劃－沖廁水

該計劃鼓勵業主及樓宇管理公司妥善維修保養大廈的沖廁系統。本署至今已向業主及／或樓宇管理公司頒發1,390張藍證書，以表揚其內部沖廁系統得到妥善維修及保養。

Quality Water Supply Scheme for Buildings – Flushing Water

This scheme encourages building owners and property management agents to maintain their flushing plumbing systems properly. So far the Department has awarded 1,390 Blue certificates to building owners and/or property management companies in recognition of their proper maintenance of internal flushing plumbing systems.

客戶數目 (截至二零一六年三月三十一日)
Number of Accounts (as at 31st March 2016)

開創未來
Shaping Our Future

本署致力培育一支出色的管理團隊，同時推行工作場地計劃，藉以提升在所有供水環節供應優質食水的能力。
The Department is dedicated to the development of a strong managerial leadership team while at the same time initiating workplace programmes to improve competencies that involve all phases of providing high quality water supplies.

培訓

水務署已培育一支富有才幹和竭誠服務的工作隊伍，並安排他們在本署各級部門任職。我們為(4,407)名員工安排深入培訓計劃，確保我們能持續滿足並超越用戶的需要和期望。本年度，我們參與一項名為「工程師講座」的跨部門知識分享會聯合計劃。我們定期向各部門（即土木工程拓展署、路政署、渠務署、運輸署及水務署）的工程組員工提供講座，講者包括具備專業知識、經驗或在特定或專業領域受過特別培訓的專業人員、退休公務員或專家。該項集中式計劃旨在促進知識分享、建立知識社群及激發員工的興趣。另外，為增進員工在智能水錶及智能用水網絡管理方面的知識，我們安排六名員工前往英國，參加為期兩週的技術轉移培訓計劃。該培訓讓員工了解最新技術，有助我們部署智管網。

Training

The WSD has nurtured a talented and highly dedicated workforce that extends across the entire range of the Department's operations. We scheduled in-depth training schemes for our (4,407) staff members to make sure that we continue to meet and exceed the needs and expectations of our customers. This year, we participated in a jointly instituted programme of inter-departmental knowledge sharing sessions entitled ENGINEER Talks. Talks were delivered to staff members of Works Group of departments viz Civil Engineering and Development Department (CEDD), Highways Department, Drainage Services Department, Transport Department and WSD on a regular basis and speakers included professionals, retired officers or experts with valuable knowledge, experience or special training in their particular or specialised areas. The centralised programme is to facilitate knowledge sharing, build up a knowledge community and arouse staff members' active interest. Also to enhance the knowledge of our staff members on smart metering and smart water network management, we arranged six staff members to attend 2-week technical transfer training programme in the United Kingdom. The training provided our staff members the latest technology which was beneficial to our implementation of the WIN.

我們繼續提供培訓，以加強或提升員工的技術知識和管理能力，培訓內容尤其集中在濾水、安全性及資訊科技方面。

於二零一五／一六年度，我們已提供共10,324 個工日的培訓，成本達290 萬港元。在減低工作地點意外方面，統計數字顯示，水務工程合約意外率一直處於較低水平。事實上，我們的意外率遠低於政府就工務工程合約所定的安全上限。

We continued to provide training programmes to enhance or upgrade the technical knowledge and managerial skills of our staff members, particularly in the area of water treatment, safety and information technology.

In 2015/16, we have conducted a total of 10,324 training days at a cost of HK$2.9 million. With respect to lowering workplace accidents, the statistics show that we are maintaining a consistently low rate of cases on waterworks contracts. In fact, we are well below the safety limits designated by the Government for public works contracts.

於二零一五至一六年度，
本署一共實行了
In 2015/16, we have conducted a total of
10,324
個培訓日 training days

培育一支盡心盡力的工作隊伍

我們亦已在本署各級管理層與員工之間建立穩健而有效的溝通渠道。為此，部門協商委員會及轄下小組委員會提供多個有效平台，供全體員工就共同關切的事項交換意見。除定期會議外，本署亦就員工關切的事項安排與工會舉行臨時會議及協商簡報會，而高級管理人員亦定期到訪各辦事處及工作場地，向員工通報部門重要事項及解答員工關切的主要問題，提升士氣。本署期望所有主管人員在履行職責時以提高生產力及改善服務作為第一要務。為此，本署已推出多項激勵計劃，鼓勵員工出謀獻策，務求改善服務及提升工作效率。提出的創新建議經試行、試驗及實施後，明顯提升了我們的服務質素和運作效率。

Fostering a committed workforce

We have also established strong and effective communications channels between managers and staff within the Department. In this regard, the Departmental Consultative Committee and its sub committees have provided useful forums to create an open exchange of ideas on issues of common concern for all staff members. Apart from regular meetings, the Department also holds ad hoc meetings and consultative briefings with staff unions on issues of concern to staff members. Senior management personnel also make regular visits to individual offices and work sites to help boost staff morale while updating staff on key departmental issues and addressing major staff concerns. As part of their duties, all supervisors are expected to make productivity enhancements and service delivery improvements a top priority. To this end, the Department has introduced a number of motivation schemes to encourage staff to contribute their ideas and opinions on how to improve service delivery and foster greater operating efficiency. The result is that new innovative ideas are being tried, tested and implemented, significantly helping us achieve impressive service and operational improvements.

向合作伙伴學習

我們與多間頂尖學術機構和私營公司一同研究及發展多個項目，從而加強了雙方在技術發展和新技術應用方面的合作。本署積極培養創新文化，致力加強各級員工的信心。年內，員工為協助全面提升本署運作達致卓越表現而提出許多意見和建議，本署亦已仔細考慮有關建議，並在可行情況下付諸實行。

於二零一零年，本署設立技術轉移工作坊及培訓小組，以便提高員工對水處理最新發展的認識。我們舉辦研討會及技術考察，了解設計、合約管理、濾水程序和濾水廠運作。年內，226 名員工參加兩場知識分享會，並兩次前往濾水廠和本署及其他部門的建築地盤進行技術考察。本署的工程顧問及承建商會繼續與員工分享先進的技術知識。

由於濾水廠運作本質上屬於非常專業的範疇，而且各濾水廠的濾水程序及設備大同小異，本署在濾水廠為前線員工安排別開生面的實地培訓，藉以轉移各濾水廠運作的經驗及技術。於二零一五／一六年度，本署為操作人員提供電氣設備及設施培訓，並為新員工安排入職課程。

部門職位互調計劃

自二零零九年起，水務署參與「自願性職位互調計劃」，將本署的工程師調派至土木工程拓展署等工程部門，以擴闊他們的視野和工作經驗。「自願性職位互調計劃」成效顯著，現已踏入第七年，成功互調31對工程師。本署所有部門的工程師都可申請其中一類職位互調，一般為期兩年。從「自願性職位互調計劃」的經驗所得，水務署及土木工程拓展署自二零一四年十一月起向二零零八年起獲聘任的工程師實施部門指令職位互調。每項互調一般為期三年。本署深信職位互調經驗有利於員工的事業發展，並為他們提供一個全新的環境，讓他們展現決斷行事的能力和才能。

Learning from partnerships

We have formed a great many partnerships with academic institutions and private sector firms on research and development projects. This has led to strengthened collaborative relationships on technological developments and newly developed applications. The Department actively cultivates a culture of innovation and we have worked hard to bolster confidence throughout the organisation. The large number of ideas and suggestions submitted by staff during the year that help raise the overall excellence of our operations have been carefully considered and, where feasible, these ideas have been implemented.

In 2010, the Department formed a technology transfer workshop and training group to help increase knowledge about the latest developments in water treatment. We held seminars and technical visits on design, contract management, treatment processes and treatment plant operations. During the year, 226 staff participated in knowledge-sharing at two seminars and two technical visits to water treatment plants as well as our Department's construction sites and those of other departments. Our engineering consultants and contractors continue to share their advanced technical knowledge with staff.

Since the operation of water treatment works is by nature very specialised, and the treatment process and the plants of each water treatment works are similar, we arrange special on-site training for frontline staff at our water treatment works in order to facilitate the transfer of experience and technical know-how on how each facility operates. In 2015/16, we conducted training on electrical equipment and facilities for operators and arranged an induction course for new recruits.

Departmental Cross Postings

Since 2009, the WSD has participated in a Voluntary Cross Posting Scheme (VCPS) that seconds engineers from our Department to CEDD's group of departments in order to expand their overall exposure and broaden their work. This successful scheme, now in its seventh year, has teamed up 31 pairs of engineers. Engineers from all sections of our Department can apply for one of these cross-posting positions for a term which normally spans two years. Based on the experience gained from VCPS, the WSD and CEDD have since November 2014 implemented a Management Initiated Cross Posting (MICP) for engineers appointed since 2008. To date, postings for six pairs of engineers have been effected under the MICP. The duration of each MICP is normally three years. The Department believes strongly that this cross-posting experience helps staff members with their career development and offers a fresh new environment for people to display their personal initiative and individual capabilities.

建立團隊

為協助全體員工更妥善維持工作與生活的平衡，水務署過去一年舉行了各式各樣的體育活動，超過400名員工參與其中。我們亦鼓勵員工參與外界團體及專業機構舉辦的各項體育活動，例如部門際乒乓球比賽、部門際高爾夫友誼杯、香港工程師學會四十周年運動會暨家庭同樂日及其他各種活動。以上各項活動均有助在員工之間建立更深厚的團隊精神之餘，亦有助促進員工培養健康的生活習慣。

Team Building

To foster a better work-life balance among all staff members, the Department held a series of diversified sports events with more than 400 participants over the past year. Staff members are also encouraged to participate in sports events organised by external parties and professional institutions, such as the Inter-departmental Table Tennis Tournament, Inter-departmental Golf Friendship Cup, the Hong Kong Institution of Engineers 40th Anniversary Sports and Family Fun Day and many others. These events have greatly contributed to building a stronger esprit de corps among staff as well as fostering healthier life styles for everyone.

義務工作

本署人員一如既往積極參與義務工作，履行對社會的承諾及展現對社會的關懷。於年內，我們的義工參加了超過93項慈善活動，當中包括籌款活動、探訪老人院及協助殘疾人士。員工義務工作時數合計達5,005小時，有20名員工獲得個人金、銀、銅嘉許狀，表揚他們服務社區的貢獻。

Voluntary Work

Staff volunteers showed their on-going commitment and concern for the community by taking part in more than 93 charity events during the year. These included fund raising efforts, visiting the homes of the elderly and assisting the disabled. A total of 5,005 community service hours were spent and 20 staff received individual Gold, Silver and Bronze awards in recognition of their dedication to voluntary work to the community.

獎項和嘉許

本署在本港及國際均獲得多項殊榮，以認同我們在服務、創新及人力發展方面的成就。

本署於二零一五／一六年度獲得的獎項包括：

Awards and Recognition

The Department has received a number of awards, both locally and globally, that recognise our work in the areas of service, innovation and manpower development.

The awards received by the Department in 2015/16 include:

公務員優質服務獎勵計劃
- 隊伍獎（內部支援服務）金獎
- 特別嘉許（創新意念）獎

Civil Service Outstanding Service Award Scheme
- Team Award (Internal Service) Gold Prize
- Special Citation (Innovation) Prize

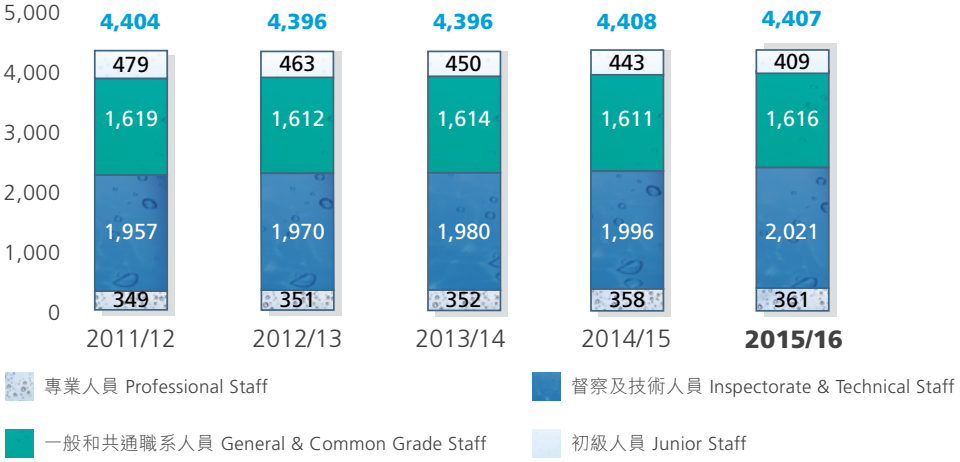
building SMART Hong Kong International BIM Award 2015
- Autodesk建築信息模擬設計大獎2015 － 香港、澳門及台灣
- Autodesk BIM Awards 2015 – Hong Kong, Macau and Taiwan

二零一五至一六年度香港公益金「僱員募捐計劃」
- 政府部門最高籌款獎第三名

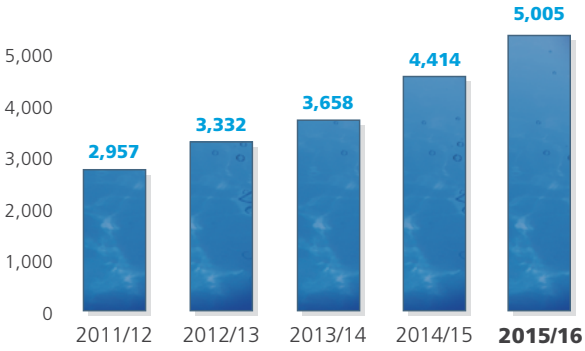
The Community Chest's Employee Contribution Programme 2015/16
CARE Scheme (Civil Service Category)
- 3rd Highest Donation

二零一五年度申訴專員嘉許獎公職人員獎
The Ombudsman's Awards 2015 for Officers of Public Organisations

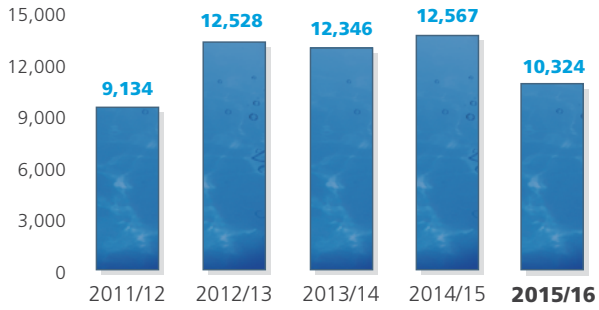
員工編制
Staff Establishment



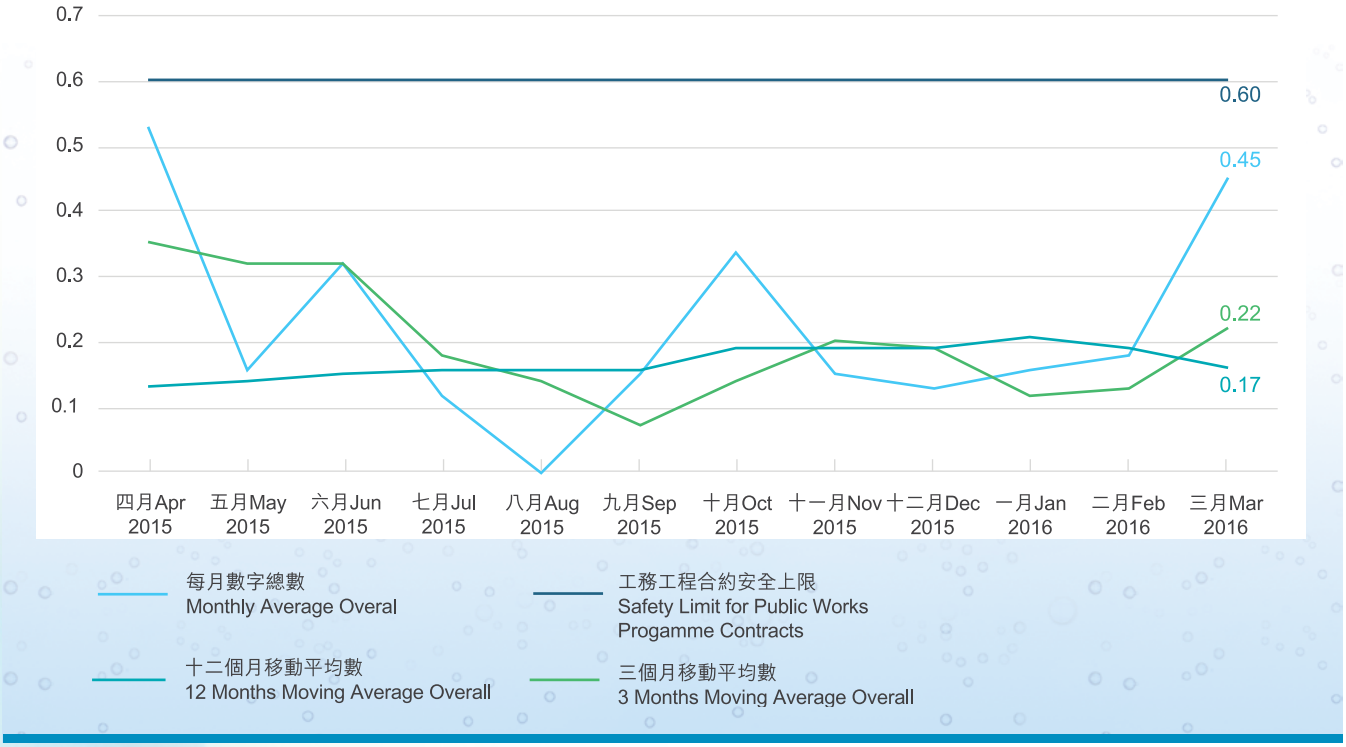
水務署義工工時數目
No. of Man-hours for WSD Volunteers



培訓工日
Training Man-days



二零一五／一六年度水務工程合約意外率
Accident Rate for Waterworks Contracts 2015/16

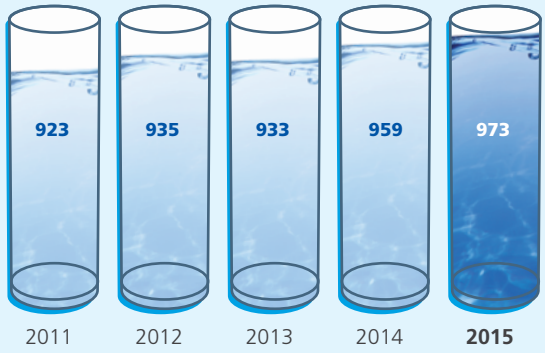


附錄
Appendices

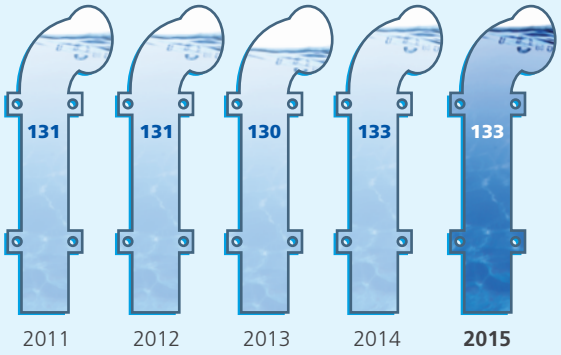
附錄一 Appendix I

全年食水耗用量及人均用水量*
Annual Fresh Water Consumption and Per Capita Consumption*

全年食水用水量
Annual Fresh Water Consumption
(百萬立方米 million cubic metres)



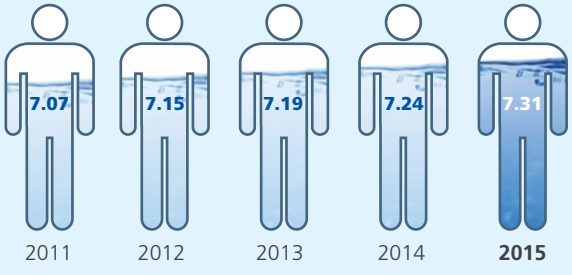
人均用水量
Per Capita Consumption
(立方米/ 每年 cubic metres per year)



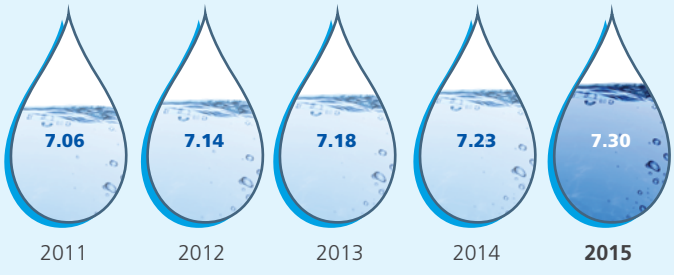
附錄二 Appendix II

全港人口及獲食水供應人口*
Population in HK and Population Served with Fresh Water*

全港人口
Population in Hong Kong
(百萬 million)



獲食水供應人口
Population Served with Fresh Water
(百萬 million)

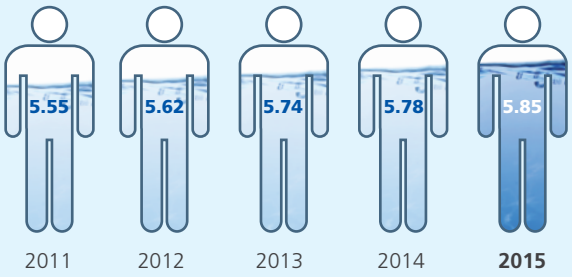


附錄三 Appendix III

全年海水耗用量及獲海水供應人口*
Annual Sea Water Consumption and Population Served with Sea Water*

全年海水用水量
Annual Sea Water Consumption
(百萬立方米 million cubic metres)

獲海水供應人口
Population Served with Sea Water
(百萬 million)



* *根據二零一一年人口普查統計結果得出的人口基準，二零零七年年中至二零一一年年中的人口數字已予以修訂，該修訂已採用計算先前人口數字時還未備妥的人口變動數字。從二零零七年起的人均耗水量及獲供水人口數字已相應作出修訂。*

* *Based on the population benchmark from the results of the 2011 Population Census, the population figures from mid-2007 to mid-2011 have been revised. The revision has incorporated more estimates of population changes that were not yet available at the time when the previous population figures were prepared. Consequently, the per capita consumption figures and population served from 2007 onwards have been revised.*

附錄四 Appendix IV

客戶查詢及申請服務的統計數字
Statistics on Customer Enquires and Requests for Services

個案數目 Number of Requests	2011	2012	2013	2014	2015
書面查詢／申請 Letter	318,986	295,016	212,566	205,630	**215,428**
電話查詢／申請 Telephone	901,758	896,956	897,424	850,050	**833,284**
親身查詢／申請 Counter	398,985	395,238	329,767	317,851	**253,698**
總數 Total	**1,619,729**	**1,587,210**	**1, 439,757**	**1,373,531**	**1,302,410**

附錄五 Appendix V

客戶投訴的統計數字
Statistics on Customer Complaints

年份 Year	2011	2012	2013	2014	2015
與帳戶有關的投訴# Account-Related#	92	135	136	149	**140**
與帳戶無關的投訴 Non-Account-Related	7,169	6,546	6,537	7,390	7,787
總數 Total	**7,261**	**6,681**	**6,673**	**7,539**	**7,927**

 # 由區議會，立法會及申訴專員轉介與帳戶有關的投訴。

#Account-related complaints from District Councils, Legco and Ombudsman.

附錄六 Appendix VI

二零一五／一六年度繳費方式的統計數字
Appendix VI Statistics on Mode of Payment 2015/16

繳費方式 Mode of Payment	交易數目 No. of Cases	百分比 Percentage (%)
親身繳費 In person	3,695,600	50.2
郵寄 By post	87,600	1.2
自動轉帳 Autopay	858,400	11.6
繳費靈 Payment by Phone Service (PPS)	768,900	10.4
自動櫃員機 ATM	386,400	5.2
網上繳費 Internet	1,575,800	21.4
總數 Total	**7,372,700**	**100**

附件
Annexes

附件一 Annex I

水務署向公眾提供的刊物目錄

除另有註明外，所有刊物均可在水務署網頁瀏覽，並備有中英文本。

刊物

可在網上政府書店購買的刊物

- 《香港水務》
- 《香港水務設施條例》及《水務設施規例》

小冊子及單張

在各客戶諮詢中心免費派發的小冊子或單張

- 服務承諾
- 水務簡訊
- 用戶指南
- 食水系統維修指引
- 大潭水務文物徑
- 食水水箱清洗指引
- 耗水量偏高用戶須知
- 僱用持牌水喉匠
- 水的真相
- 香港水塘釣魚樂
- 如何申請供水
- 安裝家庭用貯水式電熱水器須知
- 私人屋邨/樓宇供水系統的維修保養
- 水管裝置識得揀 銅喉焊接合規格 食水安全簡單易辦
- 水錶測試實驗所
- 正確使用大廈消防喉轆
- 大廈優質供水認可計劃 — 食水(2.0版)
- 大廈優質供水認可計劃 — 沖廁水
- 根據香港法例第102章《水務設施規例》第30條規定的水錶測試

List Of WSD Publications Available To The Public

All publications are available on the WSD homepage and in both English and Chinese except where indicated.

Publications

Available at the online Government Bookstore

- Hong Kong's Water
- Waterworks Ordinance and Regulations

Pamphlets/Leaflets/Booklets

Available free at all Customer Enquiry Centres

- Performance Pledge
- Waterlink Newsletter
- Consumer Guide Book
- Fresh Water Plumbing Maintenance Guide
- Tai Tam Waterworks Heritage Trail
- A Guide to Cleansing of Fresh Water Storage Tanks
- Advice for Consumers on High Consumption
- Employment of Licensed Plumbers
- Facts About Water
- Fun of Fishing in Hong Kong Reservoirs
- How to Apply for Water Supply
- Installation of Electric Thermal Storage Type Water Heater for Domestic Purpose
- Maintenance of Water Supply Systems in Private Housing Estates/Buildings
- Make smart choices of pipes and fittings Connect copper pipes with compliant solder Enioy safe drinking water with ease
- Meter Testing Laboratory
- Proper Use of Fire Fighting Hose Reels in Buildings
- Quality Water Supply Scheme for Buildings - Fresh Water (Plus)
- Quality Water Supply Scheme for Buildings - Flushing Water
- Testing of Meters under Waterworks Regulation 30, Chapter 102

- 使用壁掛式熱水罅須知
- 電子帳單登記易 綠色生活好EASY
- 濾水器的使用*
- 供水故障投訴
- 香港的食水處理及水質控制
- 飲食業(食肆)廚房申請供水指引*

- 電子服務*
- 水務署部門單張*

** 未有在水務署網頁提供。*

- Tips for Using Wall-mounted Dispensers
- Register e-Bill for EASY Green Life
- The Use of Water Purifiers / Filters by Consumers*
- Water Supply Technical Fault Complaints
- Water Treatment and Quality Control in Hong Kong
- Guidelines on Water Supply Application for Food Business (Restaurant/Kitchen)*
- Electronic Services*
- Departmental Leaflet*

** Not available on WSD homepage*

可要求索取或在水務署總部提供的小冊子或單張

- 香港的全面水資源管理
- 紅潮對沖廁海水水質的影響
- 「小水點的奇妙旅程」
- 馬鞍山濾水廠
- 牛潭尾濾水廠
- 北港濾水廠
- 沙田濾水廠
- 小蠔灣濾水廠
- 大埔濾水廠
- 大潭篤原水抽水站
- 東江水供港50周年巡迴展覽

- 「切勿非法取水」
- 珍惜水源 切勿污染*
- 《WSD Mobile App》智能電話應用程式*
- 水資源教育中心
- 「<齊來慳水十公升>運動」海報及單張
- 「切勿安裝違規淡水冷卻塔」海報及單張
- 「用水小貼士－如何減低鉛攝入風險」海報及單張
- 「節約用水整合式教育計劃」海報及單張
- 「節約用水　從家開始」海報及單張（以中文、英文、印尼文、菲律賓文和泰文五種語言印製）

Available Upon Request Or Available At WSD Headquarters

- Total Water Management in Hong Kong
- Effect of Red Tides on Seawater for Toilet Flushing
- Little Drop's Marvellous Journey
- Ma On Shan Water Treatment Works
- Ngau Tam Mei Water Treatment Works
- Pak Kong Water Treatment Works
- Sha Tin Water Treatment Works
- Siu Ho Wan Water Treatment Works
- Tai Po Water Treatment Works
- Tai Tam Tuk Raw Water Pumping Station
- Roving exhibition for 50th Anniversary of Dongjiang water supply to Hong Kong
- Unlawful Taking of Water is Prohibited
- Treasure our water Do not contaminate*
- WSD Mobile App*

- Water Resources Education Centre
- Poster and Leaflet on "Let's Save 10L Water" Campaign
- Poster and Leaflet on "Do not Install Unauthorized Fresh Water Cooling Tower"
- Poster and Leaflet on "Water Use Tips - how to reduce the risk of lead intake"
- Poster and Leaflet on "Integrated Education Programme on Water Conservation (IEP)"
- Poster and Leaflet on "Water Conservation Starts from Home" in 5 Languages (Chinese/English/Indonesian/Tagalog/Thai)

- 用戶責任
- 「沖廁用水嚴禁作其他用途」警告字樣標貼紙
- 「消防用水嚴禁作其他用途」警告字樣標貼紙
- 「珍惜每點滴」標貼
- 「節約用水小貼士」標貼
- 「定期檢查維修　慎防食水滲漏」海報
- 「珍惜點滴　積聚未來」海報
- 「參與節約用水　一齊縮短沐浴時間」海報
- 「電子帳單登記易　綠色生活好EASY」海報
- 發給業界的「用水效益標籤計劃－沐浴花灑」單張*
- 發給公眾的「用水效益標籤計劃－沐浴花灑」單張
- 發給業界的「用水效益標籤計劃－水龍頭」單張*
- 發給公眾的「用水效益標籤計劃－水龍頭」單張
- 發給業界的「用水效益標籤計劃－洗衣機」單張*
- 發給公眾的「用水效益標籤計劃－洗衣機」單張
- 發給業界的「用水效益標籤計劃－小便器用具」單張*
- 發給公眾的「用水效益標籤計劃－節流器」單張
- 發給公眾的「選購貼有用水效益標籤的節流器」單張
- 發給業界的「用水效益標籤計劃－節流器」單張*

** 未有在水務署網頁提供。*

- Consumer's Responsibility
- Warning Sticker – Misuse of Flushing Water
- Warning Sticker – Misuse of Fire Services Water
- Sticker – "Treasure every drop"
- Sticker – "Water Saving Tips"
- Poster on "Inspect and maintain plumbing regularly to prevent water leaks"
- Poster on "Save Water for the Future Every Drop Counts"
- Poster on "Save Water Take Shorter Showers"
- Poster on "Register e-Bill for EASY Green Life"
- Leaflet to Trade on "Water Efficiency Labelling Scheme – Showers for Bathing"*
- Leaflet to Public on "Water Efficiency Labelling Scheme – Showers for Bathing"
- Leaflet to Trade on "Water Efficiency Labelling Scheme – Water Taps"*
- Leaflet to Public on "Water Efficiency Labelling Scheme – Water Taps"
- Leaflet to Trade on "Water Efficiency Labelling Scheme – Washing Machines"*
- Leaflet to Public on "Water Efficiency Labelling Scheme – Washing Machines"
- Leaflet to Trade on "Water Efficiency Labelling Scheme –Urinal Equipment"*
- Leaflet to Public on "Water Efficiency Labelling Scheme on Flow Controllers"
- Leaflet to Public on "Choose Flow Controllers with WELS labels"
- Leaflet to Trade on "Water Efficiency Labelling Scheme on Flow Controllers"*

** Not available on WSD homepage*

只在水務署網頁提供的刊物

- 《樓宇內部供水設備防銹蝕喉管物料－一般資料》
- 《樓宇內部供水設備防銹蝕喉管物料－安裝須知》
- 《香港水務標準規格－樓宇內水管裝置適用》
- 各水務署通函
- 樓宇水管裝置手冊
- 水務便覽
- 《水務署年報》

Available On Wsd Homepage Only

- General Information on the Use of Different Types of (Corrosion Resistant Pipe) Materials as Inside Service in Buildings
- Installation Notes of Different Types of Corrosion Resistant Pipe Materials as Inside Service in Buildings
- Hong Kong Waterworks Standard Requirements for Plumbing Installation in Buildings
- WSD Circular Letters
- Handbook on Plumbing Installation for Buildings
- Key Facts
- Annual Report – Water Supplies Department

附件二 Annex II

客戶諮詢中心

港島

- **灣仔客戶諮詢中心**
  灣仔告士打道7 號入境事務大樓1樓

九龍

- **旺角客戶諮詢中心**
  旺角洗衣街128號地下

新界

- **大埔客戶諮詢中心**
  大埔汀角路1號大埔政府合署4樓

- **沙田客戶諮詢中心**
  沙田上禾輋路1號沙田政府合署3樓

- **屯門客戶諮詢中心**
  屯門屯喜路1號屯門政府合署7樓

Customer Enquiry Centres

Hong Kong

- **Wan Chai Customer Enquiry Centre**
  1/F Immigration Tower, 7 Gloucester Road, Wan Chai

Kowloon

- **Mong Kok Customer Enquiry Centre**
  G/F 128 Sai Yee Street, Mong Kok

New Territories

- **Tai Po Customer Enquiry Centre**
  4/F Tai Po Government Offices, 1 Ting Kok Road, Tai Po

- **Sha Tin Customer Enquiry Centre**
  3/F Sha Tin Government Offices, 1 Sheung Wo Che Road, Sha Tin

- **Tuen Mun Customer Enquiry Centre**
  7/F Tuen Mun Government Offices, 1 Tuen Hi Road, Tuen Mun

附件三 Annex III

二零一五年四月至二零一六年三月的食水水質
Drinking Water Quality for the Period of April 2015 - March 2016

甲部. 微生物含量
Part A. Microbiological quality

一般事項
General Points

- 香港是世界上享有最安全食水的地區之一。自二零一二年八月起，水務署便按照世界衞生組織在二零一一年制定的《飲用水水質準則》(世衞2011)，監測香港的食水水質。世衞就食水內所含各物質訂下準則值，食水中縱使含有達至準則值濃度的物質，仍可供體重達60公斤的飲用者在70年內每日飲用2公升，而不致對健康構成重大的影響。
- 如發生嚴重污染的情況，水務署會聯同衞生署採取行動。如有需要，我們會通知公眾採取適當的措施。
- 我們在濾水廠、配水庫、供水接駁點和用戶水龍頭抽取食水樣本，並由合資格的水務署人員在現場和水務署轄下的化驗室進行分析。
- 在這段期間，水務署抽取了逾26,000個經處理的食水樣本作微生物含量分析。
- 基於在這段期間抽取的食水樣本，測試結果顯示這段期間內的食水水質符合世衞在二零一一年制定的《飲用水水質準則》。
- 按國際慣例，達標與否是根據水質監測數據的全年平均值而定。

- Hong Kong enjoys one of the safest water supplies in the world. Since August 2012, we monitor the quality of our drinking water according to the World Health Organization's (WHO) Guidelines for Drinking-water Quality (2011). The WHO recommends a set of Guideline Values (GVs) representing the concentration of constituents in drinking water that will not result in any significant health risk to a consumer weighing 60 kg over a lifetime consumption of 2 litres per day for 70 years.
- In extreme cases of contamination, we will take concerted actions with the Department of Health. The public will be informed to take appropriate measures if necessary.
- Samples were taken at water treatment works, service reservoirs, connection points and consumer taps and analysed at site and in WSD's laboratories by WSD's qualified staff.
- During this period, over 26,000 treated water samples were taken for microbiological analyses.
- Based on water samples taken during this period, the testing results revealed that the drinking water quality for this period complied with the World Health Organization's Guidelines for Drinking-water Quality (2011).
- Compliance is based on the annual average of monitoring data in accordance with international practices.

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011準則值 WHO 2011 Guideline Value	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
埃希氏大腸桿菌 E. coli	菌落數* ／100毫升 cfu* per 100 mL	0	0	0	0	√
總大腸桿菌群# Total Coliforms#	菌落數* ／100毫升 cfu* per 100 mL	0	0	0	-	-
隱孢子蟲@ Cryptosporidium@	卵囊數量／公升 no. of oocyst per L	0.00	0.00	0.00	-	-
賈第蟲@ Giardia@	孢囊數量／公升 no. of cyst per L	0.00	0.00	0.00	-	-

(1) 以上是有關食水水質的摘要報告。

(2) 各數值是根據水務署水質科學部現行品質保證指引所訂的要求而編製。

* 菌落數

\# 世衛2011並沒有為總大腸桿菌群制訂與健康有關的準則值。

@ 雖然世衛沒有就食水所含的隱孢子蟲或賈第蟲制訂與健康有關的準則值，但水務署亦有監測隱孢子蟲及賈第蟲於食水中的含量。每公升0.00的監測數據代表在不少於100公升經處理的食水樣本中，檢測不到卵囊或孢囊。

(1) This is a summary report on drinking water quality.

(2) All values are compiled in accordance with requirements stipulated by the current quality assurance protocol of the Water Science Division of WSD.

* colony forming unit (cfu)

\# WHO 2011 has not established health-related GV for Total Coliforms.

@ Although the WHO has not established any health-related GV for Cryptosporidium or Giardia in drinking water, we also monitor Cryptosporidium and Giardia in our drinking water. The monitoring data of 0.00 per litre represents no oocyst or cyst detected in a volume of not less than 100 litres of treated water sample.

乙部. 世界衞生組織在二零一一年制定的《飲用水水質準則》中所列對健康有影響的化學物質

Part B. Chemicals of health significance as described by World Health Organization's Guidelines for Drinking-water Quality 2011

一般事項

General Points

- 香港是世界上享有最安全食水的地區之一。自二零一二年八月起，水務署已按照世界衞生組織在二零一一年制定的《飲用水水質準則》(世衞2011)來監測香港的食水水質。世衞就食水內所含物質建議一套準則值，即使體重達60公斤的用戶在70年內每日飲用兩公升載有準則值物質含量的食水，亦不會對健康構成重大影響。

- Hong Kong enjoys one of the safest water supplies in the world. Since August 2012, we monitor the quality of our drinking water according to the World Health Organization's (WHO) Guidelines for Drinking-water Quality (2011). The WHO recommends a set of Guideline Values (GVs) representing the concentration of constituents in drinking water that will not result in any significant health risk to a consumer weighing 60 kg over a lifetime consumption of 2 litres per day for 70 years.

- 因應在公共屋邨的飲用水中發現過量鉛，自二零一五年七月中已在用戶水龍頭增加採集水樣本作鉛含量測試。截至二零一六年三月底，水務署已在多個地點抽取約1,300個食水樣本，但當中並不包括公共屋邨和政府學校，因為已另有計劃為這些屋邨和學校取樣作鉛含量測試。

- In response to the excess lead found in drinking water in Public Rental Housing (PRH) Estates, additional water samples have been taken at consumer taps since mid July 2015 for testing of lead content. Up to end March 2016, about 1,300 water samples have been taken at locations excluding PRH Estates and government schools where water samples have been taken for testing of lead content under separate exercises.

- 世衞會就某些物質建議暫定準則值(請參閱附註四)。

- Some GVs are recommended by WHO as provisional GVs. (See Note 4)

- 即使食水中某些物質含量偶爾比世衞所定的準則值為高，亦不反映食水不適宜飲用，因為準則值在制定時，已留了極大的安全邊際。

- Occasional deviations above the WHO GVs do not mean that the water is unsuitable for consumption. Large safety margins have been allowed for in the derivation of the GVs.

- 如發生嚴重污染的情況，水務署會聯同衞生署採取行動。如有需要，我們會通知公眾採取適當的措施。

- In extreme cases of contamination, we will take concerted actions with the Department of Health. The public will be informed to take appropriate measures if necessary.

- 我們在濾水廠、配水庫、供水接駁位置和用戶水龍頭抽取食水樣本，並由合資格的水務署人員在現場和水務署轄下的化驗室進行分析。

- Samples were taken at water treatment works, service reservoirs, connection points and consumer taps and analysed at site and in WSD's laboratories by WSD's qualified staff.

- 基於在這段期間抽取的食水樣本，測試結果顯示這段期間內的食水水質符合世衞在二零一一年制定的《飲用水水質準則》。

- Based on water samples taken during this period, the testing results revealed that the drinking water quality for this period complied with the World Health Organization's Guidelines for Drinking-water Quality (2011).

- 按國際慣例，達標與否是根據水質監測數據的全年平均值而定。

- Compliance is based on the annual average of monitoring data in accordance with international practice.

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011準則值 WHO 2011 Guideline Value	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
丙烯酰胺 Acrylamide	微克/公升 µg/L	< 0.4	< 0.4	< 0.4	0.5	√
草不綠 Alachlor	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	20	√
涕滅威 Aldicarb	微克/公升 µg/L	< 2.5	< 2.5	< 2.5	10	√
艾氏劑和異艾氏劑 Aldrin and Dieldrin	微克/公升 µg/L	< 0.008	< 0.008	< 0.008	0.03	√
銻 Antimony	毫克/公升 mg/L	< 0.001	< 0.001	< 0.001	0.02	√
砷 Arsenic	毫克/公升 mg/L	< 0.001	< 0.001	< 0.001	0.01 (A,T)	√
莠去津和其氯均三秦代謝物 Atrazine and its chloro-s-triazine metabolites	微克/公升 µg/L	< 25	< 25	< 25	100	√
鋇 Barium	毫克/公升 mg/L	0.003	0.023	0.015	0.7	√
苯 Benzene	微克/公升 µg/L	< 2.5	< 2.5	< 2.5	10	√
苯并(a)芘 Benzo(a)pyrene	微克/公升 µg/L	< 0.0020	< 0.0020	< 0.0020	0.7	√
硼 Boron	毫克/公升 mg/L	< 0.02	0.06	0.03	2.4	√
溴酸鹽 Bromate	微克/公升 µg/L	< 2.5	< 2.5	< 2.5	10(A,T)	√
一溴二氯甲烷 Bromodichloromethane	微克/公升 µg/L	< 15	17	< 15	60	√
溴仿 Bromoform	微克/公升 µg/L	< 25	< 25	< 25	100	√

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011準則值 WHO 2011 Guideline Value	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
鎘 Cadmium	毫克/公升 mg/L	< 0.001	< 0.001	< 0.001	0.003	√
夫喃丹 Carbofuran	微克/公升 µg/L	< 1.2	< 1.2	< 1.2	7	√
四氯化碳 Carbon tetrachloride	微克/公升 µg/L	< 0.50	< 0.50	< 0.50	4	√
氯酸鹽 Chlorate	微克/公升 µg/L	< 175	< 175	< 175	700(D)	√
氯丹 Chlordane	微克/公升 µg/L	< 0.050	< 0.050	< 0.050	0.2	√
氯 Chlorine	毫克/公升 mg/L	< 0.1	1.4	0.6	5(C)	√
亞氯酸鹽 Chlorite	微克/公升 µg/L	< 50	< 50	< 50	700(D)	√
氯仿 Chloroform	微克/公升 µg/L	< 50	< 50	< 50	300	√
綠麥隆 Chlorotoluron	微克/公升 µg/L	< 7.5	< 7.5	< 7.5	30	√
毒死蜱 Chlorpyrifos	微克/公升 µg/L	< 7.5	< 7.5	< 7.5	30	√
鉻 Chromium	毫克/公升 mg/L	< 0.001	< 0.001	< 0.001	0.05(P)	√
銅 Copper	毫克/公升 mg/L	< 0.003	0.098	< 0.003	2	√
青乙酰胂 Cyanazine	微克/公升 µg/L	< 0.15	< 0.15	< 0.15	0.6	√
2,4-滴 2,4-D (or 2,4-dichlorophenoxyacetic acid)	微克/公升 µg/L	< 7.5	< 7.5	< 7.5	30	√

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011準則值 WHO 2011 Guideline Value	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
丁基-2,4-二氯酚羥基醋酸 2,4-DB (or 4-(2,4-dichlorophenoxy) butyric acid)	微克/公升 µg/L	< 22	< 22	< 22	90	√
滴滴涕和代謝物 DDT and metabolites	微克/公升 µg/L	< 0.50	< 0.50	< 0.50	1	√
二(2-乙基己基)鄰苯二甲酸鹽 Di (2-ethylhexyl) phthalate	微克/公升 µg/L	< 2	< 2	< 2	8	√
二溴乙腈 Dibromoacetonitrile	微克/公升 µg/L	< 25	< 25	< 25	70	√
二溴氯甲烷 Dibromochloromethane	微克/公升 µg/L	< 25	< 25	< 25	100	√
1,2-二溴-3-氯丙烷 1,2-Dibromo-3-chloropropane	微克/公升 µg/L	< 0.25	< 0.25	< 0.25	1	√
1,2-二溴乙烷 1,2-Dibromoethane	微克/公升 µg/L	< 0.10	< 0.10	< 0.10	0.4(P)	√
二氯乙酸鹽 Dichloroacetate	微克/公升 µg/L	< 12	17	< 12	50(D)	√
二氯乙腈 Dichloroacetonitrile	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	20(P)	√
1,2-二氯苯 1,2-Dichlorobenzene	微克/公升 µg/L	< 250	< 250	< 250	1000(C)	√
1,4-二氯苯 1,4-Dichlorobenzene	微克/公升 µg/L	< 75	< 75	< 75	300(C)	√
1,2-二氯乙烷 1,2-Dichloroethane	微克/公升 µg/L	< 7.5	< 7.5	< 7.5	30	√
1,2-二氯乙烯 1,2-Dichloroethene	微克/公升 µg/L	< 12	< 12	< 12	50	√
二氯甲烷 Dichloromethane	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	20	√
1,2-二氯丙烷 1,2-Dichloropropane	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	40(P)	√

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011準則值 WHO 2011 Guideline Value	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
1,3-二氯丙烯 1,3-Dichloropropene	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	20	√
2,4-滴丙酸 Dichlorprop (or 2,4-DP)	微克/公升 µg/L	< 25	< 25	< 25	100	√
樂果 Dimethoate	微克/公升 µg/L	< 1.5	< 1.5	< 1.5	6	√
1,4-二噁烷 1,4-Dioxane	微克/公升 µg/L	< 12.5	< 12.5	< 12.5	50	√
乙二胺四乙酸 Edetic acid (EDTA)	微克/公升 µg/L	< 50	< 50	< 50	600	√
異狄氏劑 Endrin	微克/公升 µg/L	< 0.15	< 0.15	< 0.15	0.6	√
表氯醇 Epichlorohydrin	微克/公升 µg/L	< 0.4	< 0.4	< 0.4	0.4(P)	√
乙苯 Ethylbenzene	微克/公升 µg/L	< 75	< 75	< 75	300(C)	√
2,4,5-涕丙酸 Fenoprop (or 2,4,5-TP)	微克/公升 µg/L	< 2.2	< 2.2	< 2.2	9	√
氟化物 Fluoride	毫克/公升 mg/L	0.16	0.61	0.48	1.5	√
六氯丁二烯 Hexachlorobutadiene	微克/公升 µg/L	< 0.15	< 0.15	< 0.15	0.6	√
羥基化莠去津 Hydroxyatrazine	微克/公升 µg/L	< 50	< 50	< 50	200	√
異丙隆 Isoproturon	微克/公升 µg/L	< 2.2	< 2.2	< 2.2	9	√
鉛 Lead	毫克/公升 mg/L	< 0.001	0.007	< 0.001	0.01(A,T)	√
林丹 Lindane	微克/公升 µg/L	< 0.50	< 0.50	< 0.50	2	√

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011準則值 WHO 2011 Guideline Value	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
2-甲基-4-氯苯氧基乙酸 MCPA (or 4-(2-methyl-4-chlorophenoxy) acetic acid)	微克/公升 µg/L	< 2.0	< 2.0	< 2.0	2	√
2-甲基-4-氯丙酸 Mecoprop (or MCPP)	微克/公升 µg/L	< 2.5	< 2.5	< 2.5	10	√
汞 Mercury	毫克/公升 mg/L	< 0.00005	< 0.00005	< 0.00005	0.006	√
甲氧滴滴涕 Methoxychlor	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	20	√
甲氧毒草安 Metolachlor	微克/公升 µg/L	< 2.5	< 2.5	< 2.5	10	√
微囊藻毒素-LR(總) Microcystin-LR (total)	微克/公升 µg/L	< 0.5	< 0.5	< 0.5	1(P)	√
禾草特 Molinate	微克/公升 µg/L	< 1.5	< 1.5	< 1.5	6	√
一氯胺 Monochloramine	毫克/公升 mg/L	< 1.0	< 1.0	< 1.0	3	√
一氯醋酸鹽 Monochloroacetate	微克/公升 µg/L	< 10	< 10	< 10	20	√
鎳 Nickel	毫克/公升 mg/L	< 0.001	0.017	0.008	0.07	√
硝酸鹽(以NO_3^-計) Nitrate (as NO_3^-)	毫克/公升 mg/L	< 2.5	14	5.3	50	√
次氨基三乙酸 Nitrilotriacetic acid	微克/公升 µg/L	< 50	< 50	< 50	200	√
亞硝酸鹽(以NO_2^-計) Nitrite (as NO_2^-)	毫克/公升 mg/L	< 0.004	0.023	< 0.004	3	√
N-亞硝基二甲胺 N-Nitrosodimethylamine	微克/公升 µg/L	< 0.025	< 0.025	< 0.025	0.1	√

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011準則值 WHO 2011 Guideline Value	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
二甲戊樂靈 Pendimethalin	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	20	√
五氯酚 Pentachlorophenol	微克/公升 µg/L	< 2.2	< 2.2	< 2.2	9(P)	√
硒 Selenium	毫克/公升 mg/L	< 0.003	< 0.003	< 0.003	0.04(P)	√
西瑪三嗪 Simazine	微克/公升 µg/L	< 0.50	< 0.50	< 0.50	2	√
二氯異氰尿酸鈉(以氰尿酸計) Sodium dichloroisocyanurate (as cyanuric acid)	毫克/公升 mg/L	< 10	< 10	< 10	40	√
苯乙烯 Styrene	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	20(C)	√
2,4,5-涕 2,4,5-T (or 2,4,5-trichlorophenoxy acetic acid)	微克/公升 µg/L	< 2.2	< 2.2	< 2.2	9	√
特丁律 Terbuthylazine	微克/公升 µg/L	< 1.8	< 1.8	< 1.8	7	√
四氯乙烯 Tetrachloroethene	微克/公升 µg/L	< 10	< 10	< 10	40	√
甲苯 Toluene	微克/公升 µg/L	< 175	< 175	< 175	700(C)	√
三氯乙酸鹽 Trichloroacetate	微克/公升 µg/L	< 25	< 25	< 25	200	√
三氯乙烯 Trichloroethene	微克/公升 µg/L	< 18	< 18	< 18	20 (P)	√
2,4,6-三氯酚 2,4,6-Trichlorophenol	微克/公升 µg/L	< 50	< 50	< 50	200 (C)	√
氟樂靈 Trifluralin	微克/公升 µg/L	< 5.0	< 5.0	< 5.0	20	√

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011準則值 WHO 2011 Guideline Value	達標 Compliance
		最低值 Minimum	最高值 Maximum	平均值 Average		
鈾 Uranium	毫克/公升 mg/L	< 0.0002	0.0004	< 0.0002	0.03 (P)	√
氯乙烯 Vinyl chloride	微克/公升 µg/L	< 0.2	< 0.2	< 0.2	0.3	√
二甲苯 Xylenes	微克/公升 µg/L	< 125	< 125	< 125	500 (C)	√

註釋：

（一） 以上是有關食水水質的摘要報告。

（二） 各數值是根據水務署水質科學部現行品質保證指引所訂的要求而編製。

（三） 監測鉛含量的水樣本是在以下地點取樣：(i)濾水廠、配水庫及供水接駁點；及(ii)用戶水龍頭。全部樣本的監測數據均符合世衛制定的0 .01毫克/公升暫定準則值。

Note:

(1) This is a summary report on drinking water quality.

(2) All values are compiled in accordance with requirements stipulated by the current quality assurance protocol of the Water Science Division of WSD.

(3) Lead monitoring data for samples were taken at (i) water treatment works, service reservoirs and connection points and (ii) consumer taps. All monitoring results complied with the WHO's provisional guideline value of 0.01 mg/L for lead.

取樣點 Sampling Points	單位 Unit	監測鉛含量結果 Lead Monitoring Data (04/2015 – 03/2016)		
		最低值 Minimum	最高值 Maximum	平均值 Average
(i)	毫克/公升 mg/L	<0.001	0.002	<0.001
(ii)	毫克/公升 mg/L	<0.001	0.007	<0.001

（四） 根據世衛2011：

P = 暫定準則值，因為健康數據資料存在不確定性。

T = 暫定準則值，因為計算所得準則值低於實際處理方法或水源保護等所能達到的水平。

A = 暫定準則值，因為計算所得準則值低於所能達到的定量水平。

D = 暫定準則值，因為消毒程序可能引致超過準則值。

C = 當該物質濃度等於或低於健康基礎準則值時，可能導致水的外觀、味道或氣味改變，引起消費者投訴。

(4) According to WHO 2011:

P = provisional guideline value because of uncertainties in the health database.

T = provisional guideline value as calculated guideline value is below the level that can be achieved through practical treatment methods, source protection, etc.

A = provisional guideline value as calculated guideline value is below the achievable quantification level.

D = provisional guideline value as disinfection may result in the guideline value being exceeded.

C = concentrations of the substance at or below the health-based guideline value may affect the appearance, taste or odour of the water, leading to consumer complaints.

丙部. 輻射水平
Part C. Radiological quality

一般事項
General Points

- 香港是世界上享有最安全食水的地區之一。自二零一二年八月起，水務署已按照世界衞生組織在二零一一年制定的《飲用水水質準則》(世衞2011)來監測香港的食水水質。

- Hong Kong enjoys one of the safest water supplies in the world. Since August 2012, we monitor the quality of our drinking water supply according to the World Health Organization's (WHO) Guidelines for Drinking-water Quality (2011).

- 按照世衞建議，食水中的總 α 及總 β 活度的輻射篩查水平分別為每公升0.5貝可和每公升1.0貝可。當食水的放射性活度低於篩查水平，便不需要對個別放射性核素進行調查或詳細分析。

- According to the recommendation of the WHO, the screening levels for radiation in drinking water are 0.5 Bq/L for gross alpha activity and 1.0 Bq/L for gross beta activity respectively, below which no further investigation or detailed analysis for specific radionuclides is required.

- 如發生嚴重污染的情況，水務署會聯同衞生署採取行動。如有需要，我們會通知公眾採取適當的措施。

- In extreme cases of contamination, we will take concerted actions with the Department of Health. The public will be informed to take appropriate measures if necessary.

- 我們在濾水廠、分配網絡和用戶水龍頭抽取食水樣本，並由合資格的水務署人員在化驗室進行分析。

- Samples were taken at water treatment works, distribution networks and consumer taps and analysed in WSD's laboratories by WSD's qualified staff.

- 基於在這段期間抽取的食水樣本，食水的輻射水平遠低於世衞 2011建議總 α 及總 β 活度的篩查水平，適合安全飲用。

- Based on water samples taken during this period, the radioactivity level of drinking water was well below the screening levels for gross alpha and gross beta activities recommended by the WHO 2011 and was safe for consumption.

輻射水平
Radiological quality

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)			世衛2011篩查水平 WHO 2011 Screening Level	低於篩查水平 Below Screening Level
		最低值 Minimum	最高值 Maximum	平均值 Average		
總 α 活度 Gross alpha activity	貝可/公升 Bq/L	< 0.1	< 0.1	< 0.1	0.5	√
總 β 活度 Gross beta activity	貝可/公升 Bq/L	< 0.2	< 0.2	< 0.2	1.0	√

註釋：

（一） 以上是有關食水水質的摘要報告。

（二） 各數值是根據水務署水質科學部現行品質保證指引所訂的要求而編製。

（三） 總 α 及總 β 活度的報告值設定為世衛篩查水平的20%。

（四） 水務署對逾150個樣本作總 α 及總 β 活度的分析。

Note:

(1) This is a summary report on drinking water quality.

(2) All values are compiled in accordance with requirements stipulated by the current quality assurance protocol of the Water Science Division of WSD.

(3) Reporting values for gross alpha and gross beta activities are set at 20% of their respective WHO screening levels.

(4) Over 150 samples have been analysed for gross alpha and gross beta activities.

丁部. 其他參數
Part D. Other parameters

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)		
		最低值 Minimum	最高值 Maximum	平均值 Average
pH值(水溫25°C時) pH at 25 °C	pH	6.8	9.2	8.5
色度 Colour	Hazen unit	< 3	5	< 3
混濁度 Turbidity	NTU	< 0.1	3.4	0.3
導電率(水溫25°C時) Conductivity at 25 °C	μS/cm	57	226	142
溫度 Temperature	°C	11.1	33.4	24.4
總鹼度(以 $CaCO_3$ 計) Total alkalinity (as $CaCO_3$)	毫克/公升 mg/L	7	63	24
總硬度(以 $CaCO_3$ 計) Total hardness (as $CaCO_3$)	毫克/公升 mg/L	<5	67	37
鈣 Calcium	毫克/公升 mg/L	0.8	21	13
鎂 Magnesium	毫克/公升 mg/L	0.31	2.4	1.6
氯化物 Chloride	毫克/公升 mg/L	< 5	18	10
硫酸鹽 Sulphate	毫克/公升 mg/L	4	26	14
正磷酸鹽(以 PO_4 計) Ortho-phosphates (as PO_4)	毫克/公升 mg/L	< 0.01	0.04	< 0.01
鐵 Iron	毫克/公升 mg/L	< 0.01	0.10	< 0.01

參數 Parameter	單位 Unit	監測數據 Monitoring Data (04/2015 - 03/2016)		
		最低值 Minimum	最高值 Maximum	平均值 Average
鋁 Aluminium	毫克/公升 mg/L	< 0.01	0.10	0.03
二氧化硅(以 SiO_2 計) Silica (as SiO_2)	毫克/公升 mg/L	2.3	21	10
錳 Manganese	毫克/公升 mg/L	< 0.01	0.08	< 0.01

註釋：

(一) 以上是有關食水水質的摘要報告。

(二) 各數值是根據水務署水質科學部現行的品質保證指引所訂的要求而編製。

Note:

(1) This is a summary report on drinking water quality.

(2) All values are compiled in accordance with requirements stipulated by the current quality assurance protocol of the Water Science Division of WSD.

附件四 Annex IV

水務 — 經營帳目
Waterworks – Operating Accounts

二〇一五/一六年度回顧 Review of the Year 2015-16

截至二〇一六年三月三十一日止的財政年度 For the year ended 31 March 2016

工作方面	Activities
按照水錶記錄的淡水耗水量上升1.2%至6.59億立方米	Metered fresh water consumption increased by 1.2% to 659 million cubic metres

財務表現	Financial Performance
收入上升5%	Revenue increased by 5%
開支上升5.9%	Expenditure increased by 5.9%
税後虧損由二〇一四/一五年度的10.116億元(經重列)增至二〇一五/一六年度的11.386億元	Deficit after taxation increased from $1,011.6 million (restated) in 2014-15 to $1,138.6 million in 2015-16
按固定資產平均淨值計算的回報率由二〇一四/一五年度的-1.9%(經重列)降至二〇一五/一六年度的-2%	Return on Average Net Fixed Assets declined from -1.9% (restated) in 2014-15 to -2% in 2015-16

經營帳目 Operating Account

截至二〇一六年三月三十一日止的財政年度 For the year ended 31 March 2016

		註 Note	2016 (百萬元) $M	2015 (經重列) (百萬元) (restated) $M
收入	Revenue	2	**8,434.5**	8,030.7
開支	Expenditure	3	**9,573.1**	9,042.3
税前虧損	**Deficit before taxation**		**(1,138.6)**	(1,011.6)
税項	Taxation	1(e) & (f) and 4	–	–
税後虧損	**Deficit after taxation**	1(j)	**(1,138.6)**	(1,011.6)

附註為這帳目的一部分。 The annexed notes form part of these accounts.

衡量財務表現的指標 Financial Performance Measures

截至二〇一六年三月三十一日止的財政年度 For the year ended 31 March 2016

			2016	（經重列）(restated) 2015
		註 Note	（百萬元）$M	（百萬元）$M
固定資產平均淨值	Average net fixed assets (ANFA)	1(i) and 5	**56,959.2**	53,596.5
實際回報額	Actual return		**(1,138.6)**	(1,011.6)
目標回報額	Target return		**1,936.6**	1,822.3
按固定資產平均淨值計算的實際回報率	Actual return as % of ANFA	1(h)	**(2.0%)**	(1.9%)
按固定資產平均淨值計算的目標回報率	Target return as % of ANFA		**3.4%**	3.4%

附註為這帳目的一部分。 The annexed notes form part of these accounts.

財務狀況表 Statement of Financial Position

二〇一六年三月三十一日結算 As at 31 March 2016

			2016	（經重列）(restated) 2015
		註 Note	（百萬元）$M	（百萬元）$M
可動用淨資產	**Net assets employed**			
固定資產	**Fixed assets**	1(b) & (c) and 5	**58,476.9**	55,441.5
流動資產	Current assets	1(d) and 6	**2,633.9**	2,567.7
流動負債	Current liabilities	7	**(2,449.1)**	(2,388.4)
流動資產淨值	Net current assets		**184.8**	179.3
			58,661.7	55,620.8
財政來源	**Financed by**			
公共資本帳目	**Public capital account**	1(j) and 8	**58,661.7**	55,620.8

附註為這帳目的一部分。 The annexed notes form part of these accounts.

帳目附註

1. 會計政策

(a) 會計基礎

此帳目是根據歷史成本基礎來制定，並略加修訂以包括名義的收支。

(b) 固定資產

(i) 除政府收回的土地外，固定資產不包括水務設施和集水區位處的土地。至於政府收回的土地，其收回成本會包括在有關的工程成本內。

(ii) 至於工程項目，成本包括實際直接開支，和施工期間有關設計、規劃和監督等的員工費用。

(iii) 所有其他固定資產，除了建造中的資產以成本值計算外，均以其成本值減去累積折舊列出。

(c) 折舊

(i) 折舊是根據資產成本值減去使用期末的剩餘值，採用直線攤銷法按其預計使用年期分期攤銷。每年折舊率為：—

隧道、堤壩、收回土地及造林等	1%
土木工程	2%
喉管 — 淡水	2%
— 鹹水	5%
機電工程、機器及設備	4%-14.29%
水錶	8.33%
電腦硬件、軟件及系統	10%
車輛	10%-20%

(ii) 建造中的資產並沒有折舊撥備。

Notes to the Accounts

1. Accounting Policies

(a) Basis of Accounting

The accounts have been prepared on the historical cost basis of accounting modified to include notional receipts and payments.

(b) Fixed Assets

(i) No cost is included for land which is occupied by installations or sterilised by catchment areas except that, where it has been resumed, the cost of resumption has been included in the capital cost of the project concerned.

(ii) For capital projects, the costs include the actual direct expenditure and staff costs for design, planning and supervision during the construction period.

(iii) All other fixed assets are stated at cost less accumulated depreciation except assets under construction which are stated at cost.

(c) Depreciation

(i) Depreciation is provided on a straight-line basis to amortise the cost of fixed assets less residual value over their estimated useful lives. The annual rates of depreciation used are :-

Tunnels, dams, resumption and afforestation, etc.	1%
Civil engineering works	2%
Water mains - fresh	2%
- salt	5%
Mechanical/electrical works, plant and machinery	4%-14.29%
Meters	8.33%
Computer hardware, software and system	10%
Motor vehicles	10%-20%

(ii) No depreciation is provided on assets under construction.

(d) 現有存貨

現有存貨是以加權平均法，按成本值計值。

(e) 稅項

名義利得稅乃按年度預期的應課溢利，以報告期末日期的現行稅率，及過往年度的應付稅項調整而作出所需要的撥備。由於這項公用事業於本年度沒有應課稅溢利，因此無需在帳目上作出名義利得稅的撥備。

(f) 遞延稅項

遞延稅項指就資產及負債帳面值與計算應課稅溢利所用相應稅基間之所有重大暫時差額而作出的適當確認。遞延稅項資產則於應課稅溢利有可能抵銷可扣稅暫時差額時予以確認。由於這項公用事業沒有應課稅溢利可用作抵銷可扣稅暫時差額，因此無需在帳目上就所有重大暫時差額作出遞延稅項撥備。

(g) 僱員福利

僱員福利(包括薪金、酬金、退休金、房屋津貼和年假)會被確認為對僱員當年度所提供之相關服務而列作的應計開支。

(h) 按固定資產平均淨值計算的實際回報率

按稅後溢利或虧損與固定資產平均淨值的比率計算。

(i) 固定資產平均淨值

固定資產平均淨值是指總固定資產值減去累積折舊在期初及期末兩項數值的簡單平均數。

(j) 虧損

由於水務監督沒有獨立的法定身份，其財政資源或虧損均視為政府一般收入的一部分。而有關虧損亦會於這項公共資本帳目中調節。

(d) Stocks in Hand

Stocks in Hand are valued at cost using the weighted average cost method to the extent that it is material.

(e) Taxation

Notional profits tax is provided, where necessary, based on the expected taxable surplus for the year, using the tax rates prevailing at the reporting period end date , and any adjustment to tax payable in respect of previous years. No provision for notional profits tax has been made in the accounts as the utility has no taxable surplus for the year.

(f) Deferred Tax

Deferred tax is recognised, where appropriate, for all material temporary differences between the tax bases of assets and liabilities and their carrying amounts in the accounts. Deferred tax assets are recognised to the extent that it is probable that taxable surplus will be available against which the temporary differences can be utilised. No provision for deferred tax in respect of all material temporary differences has been made in the accounts as the utility has no taxable surplus against which the temporary differences can be utilised.

(g) Employee Benefits

Employee benefits including salaries, gratuities, pensions, housing benefits and annual leave are accrued and recognised as an expense in the year in which the associated services are rendered by employees.

(h) Actual Return on ANFA

This is calculated as a percentage of surplus/deficit after taxation to average net fixed assets (ANFA).

(i) Average Net Fixed Assets

The average net fixed assets (ANFA) represents the simple average of the opening and closing value of total fixed assets less accumulated depreciation.

(j) Deficit

Since the Water Authority does not have a separate legal identity, its financial resources form part of the General Revenue. All deficits are deemed to be financed by the General Revenue and adjusted to the Public Capital Account of the utility.

2. 收入

2. Revenue

		2016 （百萬元） $M	2015 （經重列） （百萬元） (restated) $M
收費供水	Chargeable supplies	**2,654.9**	2,622.0
差餉的津貼	Contribution from rates	**3,409.5**	3,340.4
政府對寬免計劃的津貼	Contribution from Government on concessions	**1,164.9**	923.0
政府為用戶提供免費用水的津貼	Contribution from Government on free allowance to consumers	**1,009.2**	*961.3
政府樓宇用水	Supplies to Government establishments	**158.9**	155.1
收費、牌照及可收回支出的工程	Fees, licences and reimbursable works	**32.1**	24.7
存款利息	Interest from deposits	**5.0**	4.2
		8,434.5	8,030.7

政府對寬免計劃的津貼是為彌補因該年度所作出差餉寬免措施所引致的差額。

The contribution from Government on concessions is to cover the shortfall in contribution from rates resulting from the concession of rates granted during the years.

政府為用戶提供免費用水津貼的計算方法，是把二〇一四/一五年度及二〇一五/一六年度分別為11.0元和11.5元的淡水每單位淨生產成本(已包括按固定資產平均淨值計算的目標回報額，在相關年度分別為每單位2.7元和2.9元)，乘以按照水錶記錄淡水耗用量內的免費用水津貼用量，即每個住宅帳戶於每121.64天首12個用水單位。

The calculation of contribution from Government on free allowance to consumers is based on the fresh water net unit production cost of $11.0 and $11.5 for the year 2014-15 and 2015-16 respectively, which has included a target return on ANFA of $2.7 and $2.9 per unit for the respective years, multiplied by the quantity of metered fresh water consumption within the free allowance quantity of 12 units per account per 121.64 days.

* 根據附註5所述的二〇一四/一五年度固定資產的過往年度調整，因按固定資產平均淨值計算的目標回報額有所減少，而使政府為用戶提供免費用水的津貼減少140萬元，因此淡水每單位淨生產成本亦有所下降。

* As a result of the prior year adjustment of fixed assets in 2014-15 mentioned under Note 5, contribution from Government on free allowance to consumers is decreased by $1.4 million owing to the decrease in target return on ANFA and thus the decrease in fresh water net unit production cost.

3. 開支

3. Expenditure

		2016	（經重列）(restated) 2015
		（百萬元）$M	（百萬元）$M
員工支出	Staff costs	**1,659.2**	1,586.6
經營及行政支出	Operating and administration expenses	**1,918.7**	1,841.0
購買東江水支出	Purchase cost of Dongjiang water	**4,296.1**	4,031.2
折舊	Depreciation	**1,699.1**	*1,583.5
		9,573.1	9,042.3

* 根據附註5所述的二〇一四/一五年度固定資產的過往年度調整，該年折舊降低了480萬元。

* As a result of the prior year adjustment of fixed assets in 2014-15 mentioned under Note 5, the depreciation for the year is reduced by $4.8 million.

4. 稅項

4. Taxation

		2016	（經重列）(restated) 2015
		（百萬元）$M	（百萬元）$M
名義利得稅	Notional profits tax charge for the year	**0.0**	0.0
以下項目的遞延稅項資產/（負債）未被確認：—	Deferred tax assets/(liabilities) not recognized in respect of :-		
未使用的稅項虧損	Unused tax loss	**31,931.5**	*29,432.3
由折舊免稅額所產生的重大暫時差異	Material temporary difference arising from depreciation allowances	**(21,305.8)**	* (19,897.8)

* 根據附註2及附註5所述的過往年度調整，未使用的稅項虧損及由折舊免稅額所產生的重大暫時差異各增加140萬元及480萬元。

* As a result of the prior year adjustments mentioned under Note 2 and Note 5, the unused tax loss and material temporary difference arising from depreciation allowances are increased by $1.4 million and $4.8 million respectively.

5. 固定資產

5. Fixed Assets

		樓宇、過濾器、喉管等 Buildings, Filters, Mains, etc.	機器及設備 Plant and Machinery	電腦硬件、軟件及系統 Computer Hardware, Software & System	鹹水沖廁設施 Salt Water Flushing	船灣淡水湖 Plover Cove	萬宜水庫 High Island	水錶 Meters	車輛 Motor Vehicles	建造中的資產 Assets Under Construction	總額 Total
		（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）$M	（百萬元）**$M**
成本	**Cost**										
二〇一五年四月一日	At 1 April 2015	51,070.6	357.1	363.0	10,996.8	702.0	1,661.2	484.1	89.1	10,062.8	**75,786.7**
*過往年度調整	*Prior Year Adjustment	(25.3)	-	-	(148.2)	-	-	-	-	-	**(173.5)**
二〇一五年四月一日（經重列）	At 1 April 2015 (restated)	51,045.3	357.1	363.0	10,848.6	702.0	1,661.2	484.1	89.1	10,062.8	**75,613.2**
添置	Additions	-	12.7	1.2	-	-	-	53.1	1.8	4,718.3	**4,787.1**
轉發	Transfers	4,979.0	3.1	15.1	976.3	-	-	-	-	(5,973.5)	**-**
處置／註銷	Disposals/Write off	(129.9)	(4.3)	(0.8)	(58.3)	-	-	(28.1)	(6.3)	(16.0)	**(243.7)**
二〇一六年三月三十一日	**At 31 March 2016**	55,894.4	368.6	378.5	11,766.6	702.0	1,661.2	509.1	84.6	8,791.6	**80,156.6**
累積折舊	**Accumulated Depreciation**										
二〇一五年四月一日	At 1 April 2015	14,074.1	185.0	297.7	3,888.4	430.0	1,100.4	209.5	47.0	-	**20,232.1**
*過往年度調整	*Prior Year Adjustment	(11.3)	-	-	(49.1)	-	-	-	-	-	**(60.4)**
二〇一五年四月一日（經重列）	At 1 April 2015 (restated)	14,062.8	185.0	297.7	3,839.3	430.0	1,100.4	209.5	47.0	-	**20,171.7**
該年折舊	Charge for the year	1,115.1	33.9	14.4	448.4	9.3	29.3	40.2	8.5	-	**1,699.1**
處置／註銷後轉回	Written back on Disposals/Write off	(94.6)	(3.6)	(0.8)	(58.3)	-	-	(28.1)	(5.7)	-	**(191.1)**
二〇一六年三月三十一日	**At 31 March 2016**	15,083.3	215.3	311.3	4,229.4	439.3	1,129.7	221.6	49.8	-	**21,679.7**
帳面淨值	**Net Book Value**										
二〇一六年三月三十一日	**At 31 March 2016**	40,811.1	153.3	67.2	7,537.2	262.7	531.5	287.5	34.8	8,791.6	**58,476.9**
二〇一五年三月三十一日（經重列）	At 31 March 2015 (restated)	36,982.5	172.1	65.3	7,009.3	272.0	560.8	274.6	42.1	10,062.8	**55,441.5**

帳目不包括搬遷鑽石山食水及海水配水庫往岩洞的可行性研究及勘查研究、設計工作和建造工程所涉及的資本開支。

* 過往年度調整乃按註銷因拆除或處置資產而本應於二〇一四/一五年度之前已註銷的若干固定資產作出。

The capital expenditure relating to the feasibility study and investigation, design and construction for the relocation of Diamond Hill Fresh Water and Salt Water Service Reservoirs into caverns has been excluded.

* Prior year adjustment is made to write off some of the fixed assets that should have been written off in the years before 2014-15 owing to demolishment or disposal of assets.

6. 流動資產

6. Current Assets

		2016	2015
		（百萬元） **$M**	（百萬元） $M
現有存貨	Stocks in Hand	**104.9**	105.5
應收帳項	Debtors	**521.3**	464.4
與庫務署的往來帳	Current Account with Treasury	**2,007.7**	1,997.8
		2,633.9	2,567.7

7. 流動負債

7. Current Liabilities

		2016	2015
		（百萬元） **$M**	（百萬元） $M
用戶和承建商的按金	Consumers' and contractors' deposits	**2,030.0**	1,939.9
應付帳項	Creditors	**419.1**	448.5
		2,449.1	2,388.4

8. 公共資本帳目

公共資本帳目指政府在這項公用事業的投資。

8. Public Capital Account

The Public Capital Account represents Government's investment in this utility.

		2016	（經重列） (restated) 2015
		（百萬元） **$M**	（百萬元） $M
四月一日結餘	Balance as at 1 April	**55,620.8**	52,053.5
過往年度調整	Prior Year Adjustment	**–**	*(117.9)
四月一日結餘(經重列)	Balance as at 1 April (restated)	**55,620.8**	51,935.6
本年度的虧損	Deficit for the year	**(1,138.6)**	*(1,011.6)
政府的額外現金投資	Additional cash investment by the Government	**4,179.5**	*4,696.8
三月三十一日結餘	Balance as at 31 March	**58,661.7**	55,620.8

* 根據附註2、3及5所述的過往年度調整，公共資本帳目減少1.179億元，由本年度的虧損減少340萬元及政府的額外現金投資增長140萬元所部分抵銷。

* As a result of the prior year adjustments mentioned under Notes 2, 3 and 5, the Public Capital Account is reduced by $117.9 million, partly offset by a reduction in deficit for the year of $3.4 million and an increase in additional cash investment by the Government of $1.4 million.

9. 承擔

於二〇一六年三月三十一日及二〇一五年三月三十一日，未於經營帳目作出撥備的未償還承擔如下：

9. Commitments

Outstanding commitments as at 31 March 2016 and 31 March 2015 not provided for in the operating account were as follows:

		2016 （百萬元） $M	2015 （百萬元） $M
(i) 基本工程項目、物業、機器及設備以及非經常資助金	(i) Capital works projects, property, plant and equipment and capital subvention	**12,201.5**	13,798.4
(ii) 非經常性開支	(ii) Non-recurrent expenditure	**–**	–
(iii) 投資	(iii) Investments	**–**	–
(iv) 貸款及非經常性撥款補助金	(iv) Loans and non-recurrent grants	**–**	–
		12,201.5	13,798.4

10. 比較數字

截至二〇一五年三月三十一日止財政年度的若干比較數字因前述的過往年度調整而已經被重列。

10. Comparative Figures

Certain comparative figures for the year ended 31 March 2015 have been restated owing to the prior year adjustment mentioned above.

財政年度：由每年四月一日起至翌年三月三十一日止
年份：由每年一月一日起至十二月三十一日止

匯率
除另有説明外，本年報所用「元」均指港元。自一九八三年十月十七日起，政府透過一項有關發行紙幣的措施，將港元與美元聯繫，以7.8港元兑1美元為固定匯率。

Financial Year: April 1 to March 31
Year (Calendar Year): January 1 to December 31

Exchange Rates
When dollars are quoted in this report, they are, unless otherwise stated, in Hong Kong dollars. Since October 17, 1983, the Hong Kong dollar has been linked to the US dollar, through an arrangement in the note-issue mechanism, at a fixed rate of HK$7.80 = US$1.

水務署
WATER SUPPLIES DEPARTMENT

香港灣仔告士打道七號入境事務大樓四十八樓
電話：(852) 2824 5000
傳真：(852) 2824 0578
電子郵件：wsdinfo@wsd.gov.hk
互聯網地址：http://www.wsd.gov.hk

48/F Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong.
Telephone : (852) 2824 5000
Facsimile : (852) 2824 0578
E-mail：wsdinfo@wsd.gov.hk
Website address：http://www.wsd.gov.hk

政府物流服務署印
Printed by the Government Logistics Department

本報告採用基本無氯氣漂染紙漿製造之環保紙印刷
使用免化學沖洗版材及大豆油墨印刷
This report is printed on environmentally friendly paper
manufactured from elemental chlorine-free pulp
Printed on chemistry free plate system and soy link