



■ 社會及環保報告
SOCIAL AND
ENVIRONMENTAL REPORT

關於本報告

About this Report

匯報原則

本報告是香港特別行政區政府機電工程署¹的年度社會及環保報告(本報告)。本報告全面闡述我們於2016/17年度，在環境、社會及經濟方面的表現。

本報告參照全球報告倡議組織G4可持續發展報告指引的核心選項而編寫。此外，我們亦依照環境保護署的《環境管制人員適用環保報告指引》而編寫本報告。

全球報告倡議組織的內容索引收錄於本報告末段部分，列載指標並將之與本報告的相關章節對照。為提高本報告的可靠性，我們已通過獨立第三方驗證，以核實報告的質素及準確度，並確保報告內容符合全球報告倡議組織G4可持續發展報告指引的核心選項的要求。

重要議題及報告範圍

本報告載述機電工程署由2016年4月1日至2017年3月31日期間，在可持續發展方面的措施及績效。報告中截至2017年3月31日止的數據乃根據部門所知悉的實際數字(除另外說明)。報告亦涵蓋截至2017年3月31日止的財政年度的財務數據。所有金額均以港元為單位。本署的權責關係、規模、架構，及其供應鏈於報告期間並無重大改變。

透過重要議題評估過程，我們與不同持份者組別²包括職員、客戶及供應商³緊密聯繫，以問卷調查形式⁴收集他們的寶貴意見。我們分析持份者最關注的經濟、社會及環境議題。根據持份者參與活動的結果，我們歸納出一系列重要的議題，並按持份者問卷調查結果排列優先次序⁵。

REPORTING PRINCIPLES

This is the annual Social and Environmental Report (hereafter “the Report”) published by the Electrical and Mechanical Services Department (EMSD)¹ of the Government of the Hong Kong Special Administrative Region (HKSAR). The Report presents a comprehensive overview of our environmental, social and economic performance in 2016/17.




The Report has been prepared in accordance with the Global Reporting Initiative (GRI) Core option of the G4 Sustainability Reporting Guidelines. We have also made reference to the Environmental Protection Department's A Guide to Environmental Reporting for Controlling Officers when developing the Report.

A GRI Content Index has been included at the end of the Report, showing the GRI indicators and the corresponding chapters. To enhance the reliability of the Report, we have sought independent third-party verification to check the quality and accuracy of the Report and ensure compliance with the Core option of the GRI G4 Sustainability Reporting Guidelines.

MATERIAL ASPECTS AND BOUNDARY

Our sustainability initiatives and achievement presented in the Report cover the period from 1 April 2016 to 31 March 2017. Data are based on absolute figures as of 31 March 2017 (unless otherwise stated) to the best of our knowledge. Financial data contained in the Report are reported for the financial year ended on 31 March 2017 with all monetary values presented in Hong Kong Dollars. There were no significant changes with regard to departmental ownership, size, structure, or its supply chain.

Through our materiality assessment process, we engaged our key stakeholder groups² including staff, clients and suppliers³ to solicit their feedback in the form of questionnaire survey⁴. We identified the economic, social and environmental topics that are of greatest concern to the stakeholder groups. As a result, a list of material aspect is consolidated and prioritised based on the outcome of the stakeholder survey⁵.

類別 Categories	重要議題 ⁶ Material Aspects ⁶	範圍 Boundaries 機電工程署的運作 ⁷ 主要供應商的運作 ⁸ Operations of EMSD ⁷ Operations of Our Major Suppliers ⁸	
 環境 Environmental	生態保育 ⁹ Ecological Conservation ⁹	✓	
	節約能源 Energy Conservation	✓	✓
	污水及廢物處理 Effluents and Waste Treatment	✓	
	廢氣控制 Emissions Control	✓	
	節約用水 Water Conservation	✓	
	物料使用 Use of Materials	✓	
	評估供應商/承辦商的環境表現 Supplier/Contractor Environmental Assessment	✓	
	運輸的環境影響 ⁹ Environmental Impacts of Transportation ⁹	✓	
 經濟 Economic	財務表現 Financial Performance	✓	
	部門的採購政策 Departmental Procurement Practices	✓	✓
	間接經濟影響 ⁹ Indirect Economic Impact ⁹	✓	
	客戶的滿意度 Customer Satisfaction	✓	
 社會 Social	員工培訓及教育 Employee Training and Education	✓	
	職業健康及安全 Occupational Health and Safety	✓	
	員工投訴機制 Grievance Mechanisms (Labour Practices)	✓	
	多元化及平等機會 Diversity and Equal Opportunity	✓	
	員工政策 Employment Policy	✓	
	避免對員工強迫勞動 Avoid Forced Labour	✓	

我們的社會及環保報告2016/17可於網上查閱。歡迎讀者直接與我們聯繫(電郵：bssd@emsd.gov.hk)，就我們在可持續發展方面的績效或報告方式，提出寶貴意見。

Our Social and Environmental Report 2016/17 is also available online. Readers are welcome to provide feedback on our sustainability performance or reporting approach by contacting us directly at bssd@emsd.gov.hk.

¹ G4-17 ² 主要持份者組別主要參考其與機電工程署的運作的相關性而挑選及聯繫 (G4-25) ³ G4-24 ⁴ G4-26 ⁵ G4-18

¹ G4-17 ² Major stakeholder groups are identified and engaged with reference to their relevance to EMSD's operations (G4-25) ³ G4-24 ⁴ G4-26 ⁵ G4-18

⁶ G4-19, G4-27 ⁷ G4-20 ⁸ G4-21 ⁹ G4-23 新加入於本報告

⁶ G4-19, G4-27 ⁷ G4-20 ⁸ G4-21 ⁹ G4-23 Newly covered in this Report



實現可持續發展 Sustainability at EMSD

管理方針

機電工程署透過持續綠色作業，以及規管服務和營運服務團隊積極協助政府、業界及公眾提升能源效益及節能成效，致力建設可持續社會。

規管服務的可持續發展

為應對氣候變化，政府於2017年1月公布《香港氣候行動藍圖2030+》，列出2030年之前及之後的政策行動計劃。為履行2016年《巴黎協定》下的責任，行動藍圖旨在透過增加能源效益及減少氣體排放，以達致於2030年的絕對碳排放量減低26%至36%。

作為規管機構，我們負責檢視及制訂能源效益、節能及公共設施等的主要法例。最新的《淡水冷卻塔實務守則》於2016年12月推出，整合及改善淡水冷卻塔計劃的申請程序效率及參與要求。《預防退伍軍人病工作守則》亦於同期推出，加強了有關冷熱水供應系統的疾病預防措施。我們亦於2016/17年度推行「強制性能源效益標籤計劃」第三階段，擴大現有計劃涵蓋範圍，達致最佳節能效果。

我們積極支持政府更廣泛使用可再生能源、推廣能源效益及節能的計劃和措施。我們持續為有關計劃及措施進行推廣、提供專業諮詢及技術支援，如《建築物能源效益條例》、香港建築物能源效益註冊計劃，及與環境局合作推行的「全民節能2016」等運動。機電工程署亦透過不同方式舉辦一系列宣傳活動，如「慳電熄一熄青年獎」及「慳神大比拼2016」推廣日、技術研討會、講座、學校外展暑期計劃及展覽等。這些教育活動旨在建立節能及安全使用能源的公眾意識。

儘管推行可持續發展時遇到不少挑戰，機電工程署會繼續掌握現時地區及國際發展的趨勢，支持政府制訂能源效益規管框架，邁向節能及低碳經濟。

MANAGEMENT APPROACH

EMSD is committed to making every effort to realise a sustainable society through our green operation and pivotal roles in assisting the government, industry and the public in maximising energy efficiency and energy saving performance through our Regulatory Services and Trading Services.

Sustainability in our Regulatory Services

To combat climate change, the HKSAR Government released the new Hong Kong's Climate Action Plan 2030+ in January 2017 that sets out policy actions to be enforced by and beyond 2030. To fulfil our commitment under the 2016 Paris Agreement, the Action Plan intends to increase energy efficiency and reduce gas emissions and to meet our absolute carbon emissions pledge of reducing 26-36% by 2030.

As a regulatory body, we review and formulate key legislation in areas like energy efficiency, resource conservation and public utilities. In December 2016, the latest Code of Practice for Fresh Water Cooling Towers (FWCT) was published to consolidate and improve the efficiency of the application procedures and requirements of the Scheme. At the same time, the Code of Practice for Prevention of Legionnaires' Disease was also issued in December 2016 to enhance precautionary measures pertaining to hot and cold water supply systems, featuring updates in the practical guidelines for associated facilities in preventing the disease. In 2016/17, we also pushed forward the third phase of Mandatory Energy Efficiency Labelling Scheme (MEELS) to expand the existing scope of the scheme in order to attain maximum energy saving potential.

We take proactive role in supporting the wider use of renewable energy as well as launching energy efficiency and energy saving programmes and initiatives by the government. We continuously help promote and provide professional advisory services and technical support for these initiatives such as the Buildings Energy Efficiency Ordinance and Energy Efficiency Registration Scheme for Buildings and campaigns jointly organised by the Environment Bureau and us including the Energy Saving for All 2016. EMSD also holds a wide range of promotional campaigns through extensive means. Examples include workshops and the promotion day for the Youth Energy Saving Award, Energy Saving Championship Scheme 2016, technical forum, seminars, school outreach summer programmes and exhibitions. These educational activities aim to build public awareness of energy conservation and safety compliance.

Despite facing the impending challenges of developing sustainable initiatives, EMSD continues to keep abreast of existing regional and global developments to support the government in drawing up an energy efficiency regulatory framework to move towards an energy saving and low carbon economy.



營運服務的可持續發展

機電工程署其中一個主要職責是為客戶提供優質機電工程服務，同時亦會盡量減低服務對環境的影響。因此，我們一直於部門運作及工程相關工作中盡量採用最新科技，以作節能及實施能源管理方面的業界典範。

我們早已獲得ISO 9001、ISO 14001及OHSAS 18001認證，並將這些系統整合為綜合管理系統，管理及減低對品質、環保及職業安全健康的影響。利用這套綜合管理系統，我們能更有效地處理不同程序，找出不合規行為及持續改進的空間。此外，總部大樓獲得ISO 50001認證亦是我們不斷提升能源管理的成果。

我們致力為香港社會創造長遠及正面的裨益，透過推行節能及使用可再生能源和頂尖科技，鼓勵客戶和業界與我們緊密合作，一同推動可持續發展。

Sustainability in our Trading Services

At EMSD, one of our core responsibilities is to provide quality electrical and mechanical services for our clients while mitigating the impacts on the environment. To this end, we continue to use latest technologies and lead the industry by examples in achieving energy conservation and practising energy management through our departmental operations and engineering associated work.

As an early adopter of ISO 9001, ISO 14001, and OHSAS 18001, we have combined these systems into an Integrated Management System (IMS), managing and reducing our impact on quality, environmental and occupational health and safety. By implementing the IMS, we are able to support various processes with higher efficiency and identify non-compliances and opportunities for continual improvement. We have also demonstrated ongoing commitment to energy management through acquisition of ISO 50001 certification for our headquarters.

We aspire to create long-term positive sustainability impacts on Hong Kong community. By taking the lead to execute projects with a focus on energy saving and adoption of renewable energy and state of the art technologies, we encourage vibrant collaborations with our clients and among industry in advancing sustainability.



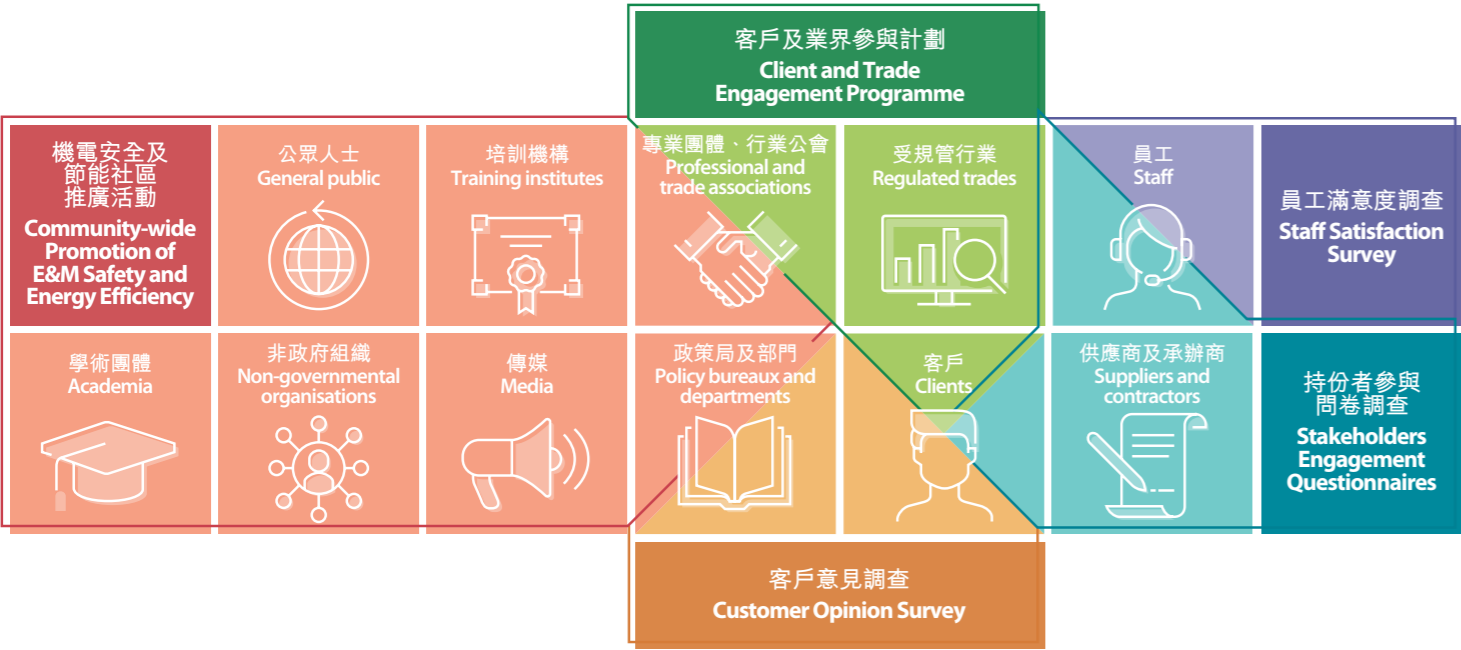
實現可持續發展 Sustainability at EMSD

持份者的參與

我們的主要持份者及參與方法¹

STAKEHOLDER ENGAGEMENT

Our Key Stakeholders and Engagement Process¹



機電工程署致力追求更卓越的可持續發展表現。我們定期與員工、客戶、供應商、承辦商，及其他主要持份者聯繫，進一步擴闊溝通層面。我們重視不同持份者的意見，以達致持續改進。我們採用了不同方式讓持份者參與其中，以上列舉部分例子²，詳情可參閱社會成效章節。

EMSD goes beyond the boundary in attaining our goals for sustainability. To extend our reach and magnify our positive impact on the community, we regularly engage our staff, clients, suppliers and contractors and other key stakeholders. We value feedback solicited from our various stakeholders, which enable continual furtherance of our sustainability performance. We apply various approaches in our stakeholder engagement process, some of the examples are listed above². More details can be found in the Chapter of Social Performance.

¹ G4-24 ² G4-26

¹ G4-24 ² G4-26

可持續發展的卓越成果

獲得ISO認證

機電工程署多年來力求不斷進步，致力為客戶提供優質機電工程服務。我們定期檢討工作程序，努力成為提供優質服務及持續綠色作業的業界典範。

SUSTAINABILITY EXCELLENCE

Achieving ISO Certifications

Over the years, EMSD is committed to providing clients with quality E&M engineering services through continuous improvement. We endeavour to strive for excellence by regularly reviewing our processes in order to become the trade model for delivering quality service and sustaining green operation.

機電工程署獲ISO認證的時序

Timeline for ISO Certifications Achievements

1999	ISO 9001 品質管理系統企業認證 ISO 9001 Quality Management System Corporate Certification
2000	ISO 14001 環境管理系統企業認證 ISO 14001 Environmental Management System Corporate Certification
2001	OHSAS 18001 職業健康及安全管理系統認證 OHSAS 18001 Occupational Health and Safety Management System Certification
2002	建立綜合管理系統 Established Integrated Management System (IMS)
2008	數據中心獲ISO 27001 資訊保安管理系統認證 ISO 27001 Certification – Information Security Management System of our Data Centre
2015	機電工程署總部大樓獲ISO 50001 能源管理系統認證 ISO 50001 Energy Management System Certification – EMSD Headquarters Building

獎項及嘉許

我們盡心及傑出的員工憑其出色的服務及安全表現所獲得的嘉許，進一步肯定及鼓勵我們的工作。參與各種比賽及計劃有助鼓勵員工與時並進，緊貼最新的創新科技發展，從而啟發及不斷推進我們的機電服務。

Awards and Recognition

We are encouraged by the recognition received for our dedicated and talented staff, as well as their effort in service and safety excellence. Through participating various competitions and schemes, it can be of great help in keeping up our staff with advanced innovations and technologies that are inspiring to strengthen our electrical and mechanical engineering services.



實現可持續發展 Sustainability at EMSD



2016年傑出學徒獎勵計劃

參與我們技術員訓練計劃的兩位見習技術員郭俊霆先生及黃文軒先生於2017年3月在職業訓練局舉辦的傑出學徒獎勵計劃，獲嘉許成為2016年傑出學徒。他們獲安排到韓國考察，了解當地學徒制度及行業的最新發展。

2016 Outstanding Apprentice Awards

In March 2017, two trainees under our Technician Training Scheme, Mr Kwok Chun-tung and Mr Wong Man-hin were both selected as the 2016 Outstanding Apprentices in the Outstanding Apprentices Award organised by the Vocational Training Council. They also took part in an exchange visit to Korea to learn about the local apprenticeship system and latest development of the industry.

傑出工程學員獎

我們兩名見習工程師許詠然女士（電子）和甄富濠先生（電機）分別獲得了香港工程師學會2016年度傑出工程學員獎第一名及第三名。今後我們將繼續優化見習工程師訓練計劃，培養更多優秀又具熱誠的年輕工程師。

Trainee of the Year Award

Two of our engineering graduates, Ms Hui Wing-yin (Electronics) and Mr Yan Fu-ho (Electrical), won the first and third prizes of the Hong Kong Institution of Engineers (HKIE) Trainee of the Year Award 2016 respectively. We will continue to enhance our Engineering Graduate Training Scheme, nurturing more outstanding and passionate young engineers.



傑出青年工程師獎

傑出青年工程師獎每年由香港工程師學會舉辦，表揚年輕工程師的貢獻及成就。我們非常榮幸本署工程師蕭曉暉先生獲得2017傑出青年工程師獎，工程師梁志滔先生亦獲頒優異獎。而助理工程師郭倩明女士、蔡曜暉先生、鄭緯德先生及梁卓烽先生亦以他們創新及出色的工程知識應用，獲得香港工程師學會青年會員創意獎2017（組別I）大獎。

Young Engineer of the Year Award

The Young Engineer of the Year Award is organised annually by the HKIE to recognise contribution and achievement of young engineers. We were proud of our engineers, Mr Siu Hiu-fai in obtaining the Young Engineer of the Year Award 2017 and Mr Leung Chi-to in receiving the Certificate of Merit. In addition, our young assistant engineers, Ms Kwok Sin-ming, Mr Choi Yiu-fai, Mr Cheng Cheuk-tak and Mr Leung Cheuk-fung gained the Grand Prize of the HKIE Innovation Awards for Young Members 2017 – Category I for their outstanding innovative application of engineering theories.

傑出職安健員工嘉許計劃

機電工程署一直將員工的健康及安全放在首要位置。2017年2月，我們參與由職業安全健康局、勞工處、立法會勞工界議員及勞顧會僱員代表聯合舉辦的第九屆全港傑出職安健員工嘉許計劃。我們兩名員工趙祖全先生及張立忠先生分別獲得管工組別銅獎及前線員工組別優異獎。

Outstanding Occupational Safety and Health Employees Award

EMSD places top priority on the safety and health of our employees. In February 2017, we participated in the 9th Outstanding Occupational Safety and Health (OSH) Employees Award co-organised by the Occupational Safety and Health Council, Labour Department, Labour Representative of Legislative Council and Employee Representatives of Labour Advisory Board. Two of our employees, Mr Chiu Cho-chuen and Mr Cheung Lap-chung were awarded the Outstanding OSH Employee Award – Bronze (Supervisor Category) and Merit (Frontline Staff Category) awards respectively.



香港工程師學會迎新會暨頒獎典禮。
The HKIE New Members' Reception cum Prize Presentation Ceremony.



第九屆全港傑出職安健員工嘉許計劃頒獎禮。
The 9th Outstanding OSH Employees Award Ceremony.





實現可持續發展 Sustainability at EMSD



機場管理局工程承包商安全運動頒獎典禮。
Airport Authority's TSD Contractors Safety Campaign
Award Presentation Ceremony.

機場管理局工程承包商安全運動

機電工程署的助航燈系統團隊於2017年3月在機場管理局(機管局)舉辦的工程承包商安全運動2016/17中，奪得安全問答比賽及最佳工作間安全檢查比賽季軍。

Airport Authority's Technical Services Department (TSD) Contractors Safety Campaign Award

In March 2017, EMSD's Airfield Ground Lighting Team won 2nd runner-up in Safety Quiz and Best Workplace Safety Inspection Competition respectively in TSD Contractors Safety Campaign 2016/17 organised by the Airport Authority (AA) Hong Kong.

機場安全嘉許計劃

我們兩名員工徐志傑先生及陳仲謙先生於2016/17機場安全嘉許計劃獲得模範安全行為獎項。頒獎典禮於2017年3月由機管局舉辦，表揚於過去一年為機場安全作出的貢獻。

Airport Safety Recognition Scheme

Two of our employees, Mr Chui Chi-kit and Mr Chan Chung-him, have been honoured with the Role Model Safety Behaviour Award at the 2016/17 Airport Safety Recognition Award in March 2017 held by the AA, recognising continuous contribution to airport safety throughout the year.

2016/17機場安全嘉許計劃
頒獎典禮。
2016/17 Airport Safety
Recognition Award
Presentation Ceremony.



年度重點



機電工程署於2016年12月出版《淡水冷卻塔計劃小冊子》及《淡水冷卻塔實務守則》，以配合相關規例、國際標準的最新要求及行業的良好作業。

Highlights of the Year

EMSD has published the FWCT Scheme Brochure and Code of Practice for FWCT in December 2016 to cope with the latest regulatory requirements and international standards, and be in line with industry good practice for using FWCTs.



預防退伍軍人病委員會亦於2016年12月出版《預防退伍軍人病工作守則》。

Prevention of Legionnaires' Disease Committee has also published the Code of Practice for Prevention of Legionnaires' Disease in December 2016.



機電工程署總部大樓於2016年成為首棟獲香港綠色建築議會頒發「綠建環評既有建築」最終鉑金級證書的現有政府大樓，並獲得「綠建環評社區」鉑金級證書。

EMSD Headquarters Building was the first existing government building being awarded the Final Platinum Rating Certification under BEAM Plus Existing Buildings and Platinum Rating Certification under BEAM Plus Neighbourhood from the Hong Kong Green Building Council in 2016.



於2016年客戶意見調查創下客戶滿意指數歷史新高，以8分為滿分計，取得6.45分。

Attained a record high Customer Satisfaction Index of 6.45 out of 8 in the 2016 Customer Opinion Survey.



於2016年員工滿意度調查創下員工滿意度指數歷史新高，以10分為滿分計，取得6.8分。

Attained a record high Staff Satisfaction Rating of 6.8 out of 10 in the 2016 Staff Satisfaction Survey.



「建築信息模擬－資產管理」系統取得香港專利。

Patent granted to Building Information Modelling – Asset Management System.



與機管局共同設計的助航燈系統不斷電切換模擬器取得設計專利。

Patent granted to Uninterruptible Power Transfer Simulator for Airfield Ground Lighting System with Airport Authority.



與環境局合作推行「全民節能2016」運動。

Jointly launched the Energy Saving for All 2016 Campaign with the Environment Bureau.



環保成效

Environmental Performance

機電工程署透過實施多項能源效益法例及政策，致力改進香港的能源效益表現。我們亦實施環境管理系統，盡量控制及減少營運帶來的重要環境影響，並持續改善我們的環保表現，推動香港成為一個更環保的城市。

環境管理系統

自2000年起，我們根據ISO 14001的標準，制訂及實施環境管理系統，以達致綠色作業。我們多年來一直密切關注環境管理系統的最新發展，並相應地提升我們的系統。於2016/17年度，我們為升級環境管理系統展開了籌備工作，以配合最新的2015年版本的ISO 14001標準。我們為系統加入了新的風險為本模式，以生命周期的角度評估環境影響。我們亦採用了「合併及轉換」方法，將ISO 9001品質管理系統及ISO 14001環境管理系統整合成一個綜合管理系統。

透過實施環境管理系統，我們定期檢查我們的營運對不同環境範疇所造成的影響，包括空氣、水、噪音、視覺、土地污染、資源利用、動植物及一般滋擾。當發現到重要的潛在影響，系統的控制機制便會提供相應的環境指引及程序手冊，以免造成實際影響。

除了在營運基金及規管服務採用環境管理系統外，我們於總部大樓亦實施了多項環保措施，致力節約資源、減少廢物及防止污染。我們亦與承辦商、供應商及其員工保持溝通，盡力減少對環境所造成的影響。

EMSD is committed to improving the energy efficiency of Hong Kong through the introduction of various energy efficiency legislations and policy initiatives. We also implement an Environmental Management System to control and minimise all significant environmental impacts associated with our operations and improve our environmental performance continuously. It is our mission to motivate and draw concerted efforts to make Hong Kong a greener city.

ENVIRONMENTAL MANAGEMENT SYSTEM

Since 2000, we have developed and implemented the Environmental Management System (EMS) in accordance with the ISO 14001 Standard in pursuit of greener operation. Throughout the years, we have closely followed the latest development of the EMS standard and upgrade our systems accordingly. In 2016/17, we have been paving the way to upgrade our EMS to comply with the latest 2015 version of the ISO 14001 Standard, incorporating the new risk-based approach and identifying and evaluating our environmental aspects with due consideration of a life cycle perspective. We also adopted a "Merge and Convert" approach to combine the management systems in quality (ISO 9001) and environment (ISO 14001) into an Integrated Management System.

Through adopting the EMS, we regularly review the environmental aspects of our operations according to their impacts on air, water, noise, visual, land contamination, resource use, flora and fauna, and general nuisance. When significant potential impacts were identified, a control mechanism which includes the corresponding environmental instruction and procedure manual will be available to prevent the occurrence of the potential impacts.

Apart from adopting the EMS for our EMSTF and regulatory service, we strive to conserve resources, minimise waste and prevent pollution through implementing various green measures at our headquarters. We also communicate with our contractors, suppliers and their staff to minimise environmental impacts as far as practicable.

透過節能邁向綠色城市

作為推廣能源效益及可再生能源的主要部門，機電工程署推出了多項措施及計劃，致力達致政府減低能源強度的目標。

建築物能源效益

建築物佔全港用電量約90%，改善建築物的能源效益可有效節能。因此，機電工程署實施了《建築物能源效益條例》、建築物能源效益資助計劃、為政府建築物進行能源審核，及草擬《重新校驗技術指引》。

《建築物能源效益條例》

《建築物能源效益條例》於2012年9月正式實施，列出四個主要屋宇裝備裝置安裝工程類別的最低能源效益設計標準。根據條例要求，進行以下類別的工程時，需遵行《建築物能源效益守則》所訂明的設計標準：

- i) 新建建築物的空調、照明、電力、升降機及自動梯裝置；及
- ii) 主要裝修工程。

根據條例要求，商業大廈業主須根據《能源審核守則》，每十年進行一次能源審核。

為配合技術提升和行業發展，《建築物能源效益守則》及《能源審核守則》會每三年進行一次檢討，首次檢討已於2015年完成。透過於2015年版《建築物能源效益守則》內採用較嚴格的標準，預期會在2025年前，累計節省約50億千瓦小時能源，相當於減少約350萬噸溫室氣體排放量。機電工程署已於2017年年初準備第二次檢討。

ENERGY SAVING FOR A GREENER CITY

As a key player to promote energy efficiency and encourage the wider use of renewable energy, EMSD has put in place a number of measures and initiatives driving towards the government's energy intensity reduction target.

Buildings Energy Efficiency

Hong Kong's buildings account for about 90% of the city's electricity usage. There are huge energy saving potentials through improving the buildings' energy efficiency. In this regard, EMSD has implemented the Buildings Energy Efficiency Ordinance, Buildings Energy Efficiency Funding Schemes, conducted energy audits for government buildings, and drafted the Technical Guidelines on Retro-Commissioning.

Buildings Energy Efficiency Ordinance

The Buildings Energy Efficiency Ordinance (BEEO), enforced in September 2012, has set out the minimum energy efficiency design standards for four key types of building service installations. Under the BEEO, the following areas are required to comply with the design standards as stipulated in the Building Energy Code (BEC):

- i) air-conditioning, lighting, electrical as well as lift and escalator installations in newly constructed buildings; and
- ii) major retrofitting works.

Under the BEEO, owners of commercial buildings are required to carry out energy audit once every ten years in accordance with the Energy Audit Code (EAC).

To cope with technological advancement and evolving industry practices, the BEC and EAC will be reviewed every three years, with the first review completed in 2015. By adopting more stringent standards in BEC 2015 edition, it is expected to bring about a cumulative energy saving of 5 billion kWh by 2025, equivalent to a reduction in greenhouse gas (GHG) emissions of about 3.5 million tonnes. EMSD has started the preparation for the second review in early 2017.





環保成效 Environmental Performance

建築物能源效益資助計劃

自2009年4月開始，機電工程營運基金一直為環境局提供支援，實施由環境及自然保育基金撥款資助的建築物能源效益資助計劃。該計劃提供約4.5億元資助建築物業主以進行能源及二氧化碳排放綜合審計，並推行能源改善項目。資助計劃已於2012年停止接受申請，機電工程營運基金一直監察涉及大約6 000座已獲批資助的建築物的進度，直至計劃完成為止。獲批准的計劃每年估計將節省約1.6億千瓦小時的能源，相等於減少約120 000噸碳排放量。

《重新校驗技術指引》

除了《建築物能源效益條例》及建築物能源效益資助計劃外，機電工程營運基金積極推廣「重新校驗」這個具成本效益的方案，以鼓勵現有建築物進行節能工作。為了推動更多建築物業主進行重新校驗，機電工程署草擬相關的技術指引，說明重新校驗的流程及重點，為業主及業界提供明確清晰的節能改善建議。該技術指引於2017年7月公布。

為政府建築物節能

機電工程營運基金受委託為340座主要政府建築物，於2017/18年度或之前進行能源審核，並根據每座建築物的運作和技術特性尋找節能空間。此項措施旨在協助政府決策局及部門檢查其建築物的能源使用情況，並實施相應節能措施，減低建築物用電量。

Buildings Energy Efficiency Funding Schemes

Since April 2009, the EMSTF has been supporting the Environment Bureau to implement the Buildings Energy Efficiency Funding Schemes (BEEFS), with the funding support from the Environment and Conservation Fund. The BEEFS have provided \$450-million-worth subsidies for building owners to conduct energy-cum-carbon audits, and carry out energy efficiency improvement works. The application of BEEFS was closed in 2012 and the EMSTF continues to monitor the progress of all the approved projects, involving around 6 000 buildings, until their completion. It is estimated that a total energy saving of around 160 million kWh per annum, about 120 000 tonnes carbon reduction, would be yielded by the approved projects.

Technical Guidelines on Retro-commissioning

Apart from the BEEO and BEEFS, the EMSTF has actively pursued the cost effective programme of "Retro-commissioning" (RCx) to further encourage energy conservation works in existing buildings. To facilitate building owners to carry out RCx, EMSD has drafted the Technical Guidelines on Retro-commissioning to clarify the RCx process and focus, and to provide clear energy saving improvement proposals for building owners and the industry. The Guidelines are issued in July 2017.

Energy Savings in Government Buildings

The EMSTF has also been entrusted with 340 major government buildings to conduct energy audits and identify energy saving opportunities in their operational and technical aspects by 2017/18. This initiative aims to facilitate government bureaux and departments to review their buildings' energy profile and implement appropriate saving measures to cut down energy consumption of their buildings.

水冷卻系統

淡水冷卻塔計劃

淡水冷卻塔計劃於2000年推行，旨在於非住宅類型建築物推廣使用具節能效益的淡水冷卻塔於空調系統中。按早前的研究結果顯示，與風冷式空調系統相比，水冷式空調系統在環境、經濟及財務方面均有更大效益。為推廣水冷式空調系統，機電工程署在2016年12月就本計劃完成了最近一次的檢討，並簡化了申請程序及更新了計劃的要求。

自推出淡水冷卻塔計劃起，機電工程署已收到1 046份申請。當中2 290座淡水冷卻塔已落成並投入運作。預計所有申請的安裝完成後，每年可節省4.65億千瓦小時用電量，相當於每年減少約325 000噸二氧化碳排放量。

為防止淡水冷卻塔因受污染而傳播退伍軍人病，機電工程署自2011/12年度起一直採取多項措施監察淡水冷卻塔水質。根據淡水冷卻塔計劃，如水樣本的退伍軍人桿菌含量等如或超出上限，冷卻塔擁有人需要採取減除行動。2016/17年度共收到904個冷卻塔水樣本。

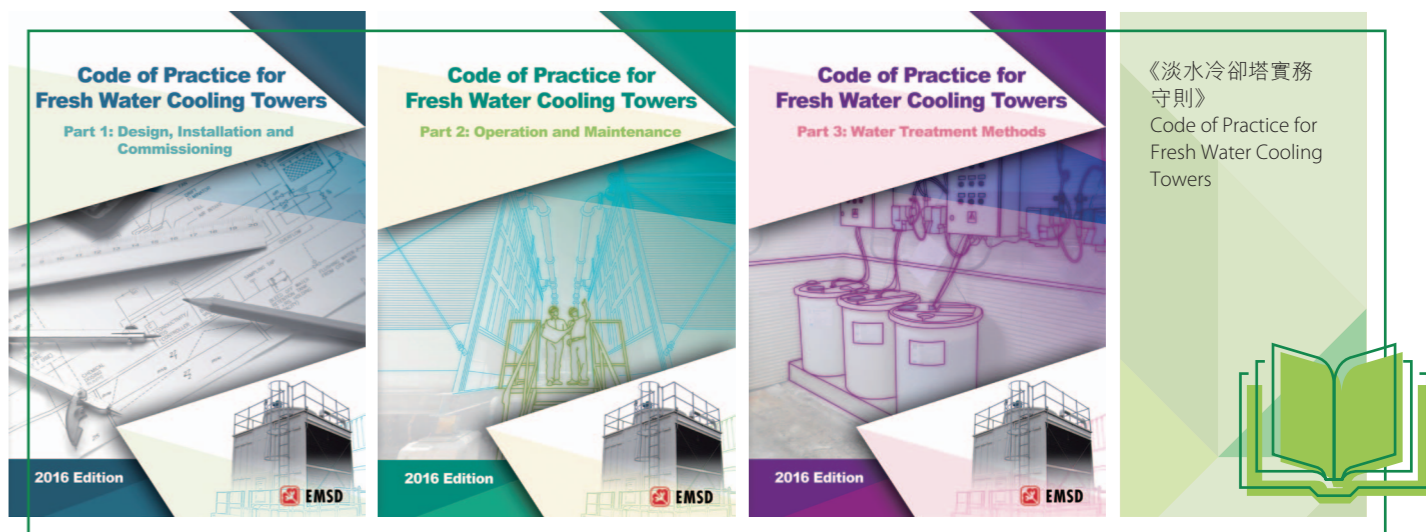
Water Cooling Systems

Fresh Water Cooling Towers Scheme

The Fresh Water Cooling Towers (FWCT) Scheme was launched in 2000 aiming to encourage a wider use of fresh water in cooling towers for energy efficient air-conditioning systems in non-domestic buildings. Previous studies concluded that the use of water-cooled air-conditioning systems (WACS) has greater environmental, economic and financial benefits than air-cooled air-conditioning systems. To foster the adoption of WACS, a review was completed in December 2016 to streamline the application procedures and update the requirements of the FWCT Scheme.

Since launch of the FWCT Scheme, EMSD has received 1 046 applications. Among them, 2 290 FWCTs have been completed and put into operation. It is estimated that the completed installations could save up to 465 million kWh electricity annually, which is equivalent to around 325 000 tonnes carbon reduction per annum.

To prevent the outbreak of Legionnaires' disease due to contamination of the FWCTs, EMSD has been implementing various measures to regulate water quality of the FWCTs since 2011/12. Under the FWCT Scheme, owners of the FWCTs are required to carry out abatement actions if water samples with total legionella count are equal to or above the stipulated upper threshold. In 2016/17, 904 water samples were taken from FWCTs.





環保成效 Environmental Performance

為加快配合最新的法規要求及推廣業界良好作業，機電工程署於2016年推出了《淡水冷卻塔計劃小冊子》及《淡水冷卻塔實務守則》。預防退伍軍人病委員會亦於同年推出《預防退伍軍人病工作守則》，以保障公眾安全。

啟德區域供冷系統

為提升新發展區域的節能效益，啟德發展區安裝了區域供冷系統，為該區域的建築物的中央冷氣提供冷水。與傳統風冷式空調系統相比，區域供冷系統的耗電量可減少達35%。區域供冷系統估計每年可節省高達8 500萬千瓦小時電力，相當於每年減少59 500噸二氧化碳排放量。此計劃的一期及二期工程已完成，現正進行第三期甲的工程。

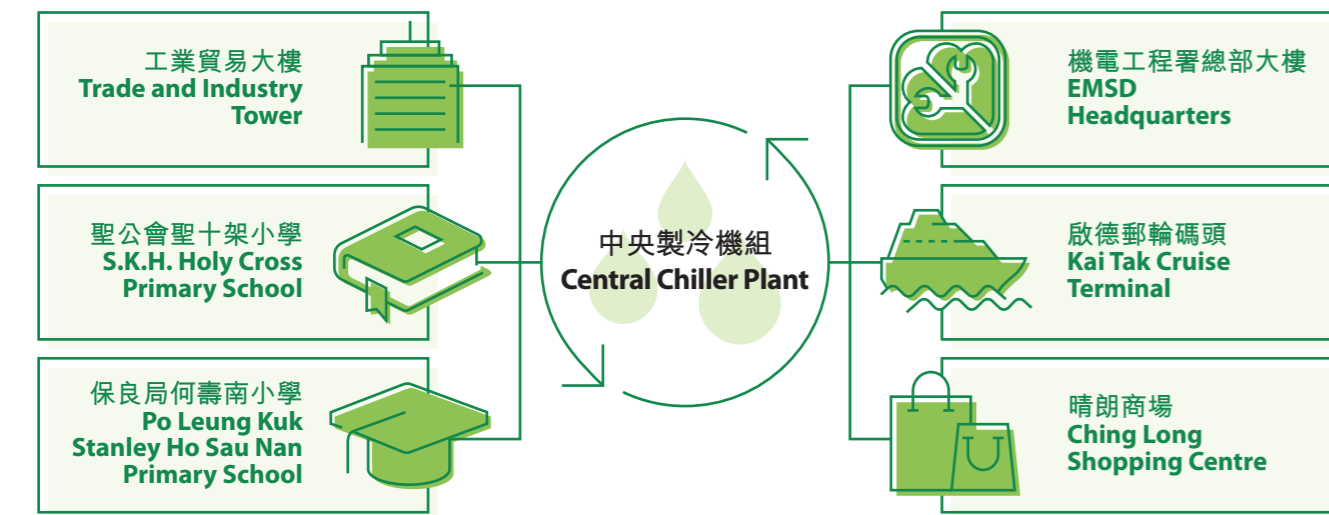
啟德發展計劃區域供冷系統用戶（2017年中期）

To facilitate compliance with the latest regulatory requirements and promote industry best practices, EMSD published the FWCT Scheme Brochure and Code of Practice for Fresh Water Cooling Towers in 2016. During the same year, the Prevention of Legionnaires' Disease Committee also released the Code of Practice for Prevention of Legionnaires' Disease to protect the public at large.

District Cooling System at the Kai Tak Development

To promote energy saving in newly developed areas, a District Cooling System (DCS) was installed at the Kai Tak Development (KTD) to supply chilled water to buildings in the new development area for centralised air-conditioning. Compared to traditional air-cooled air-conditioning systems, DCS consumes at most 35% less electricity than the traditional systems. It is estimated that the use of DCS at KTD can save up to 85 million kWh electricity annually, which is equivalent to 59 500 tonnes of carbon reduction per annum. The Phase I & II of the KTD project were completed and the Phase IIIA is underway.

Users of DCS at KTD (as of mid-2017)



能源效益產品

強制性能源效益標籤計劃

「強制性能源效益標籤計劃」自2009年11月實施，旨在為消費者提供更清楚的產品能源效益表現。計劃現時涵蓋五種產品，包括冷氣機、冷凍器具、緊湊型熒光燈（慳電膽）、洗衣機及抽濕機。在此計劃下，製造商及進口商需要在指定的電器上貼上能源標籤。截至2017年6月，約有8 300款產品型號已被列入計劃名單當中。

為鼓勵更多具能源效益產品推出市面，自2015年11月25日起，冷氣機、冷凍器具及洗衣機已全面實施更嚴格的能源效益等級標準。

機電工程署現正計劃實施第三階段的「強制性能源效益標籤計劃」，以涵蓋更多電器產品。第三階段的標籤計劃可帶來更多的節能量，估計每年約1.5億千瓦小時，相當於每年減少105 000噸碳排放量。計劃書已於2017年5月提交立法會審議。

綠色作業

除了於建築物及產品推廣能源效益概念外，機電工程署於總部大樓及轄下設施亦實施了多項環保措施，提高員工環保意識及宣傳綠色文化，以達致全面改善環保表現的最終目標。

Energy Efficient Products

Mandatory Energy Efficiency Labelling Scheme

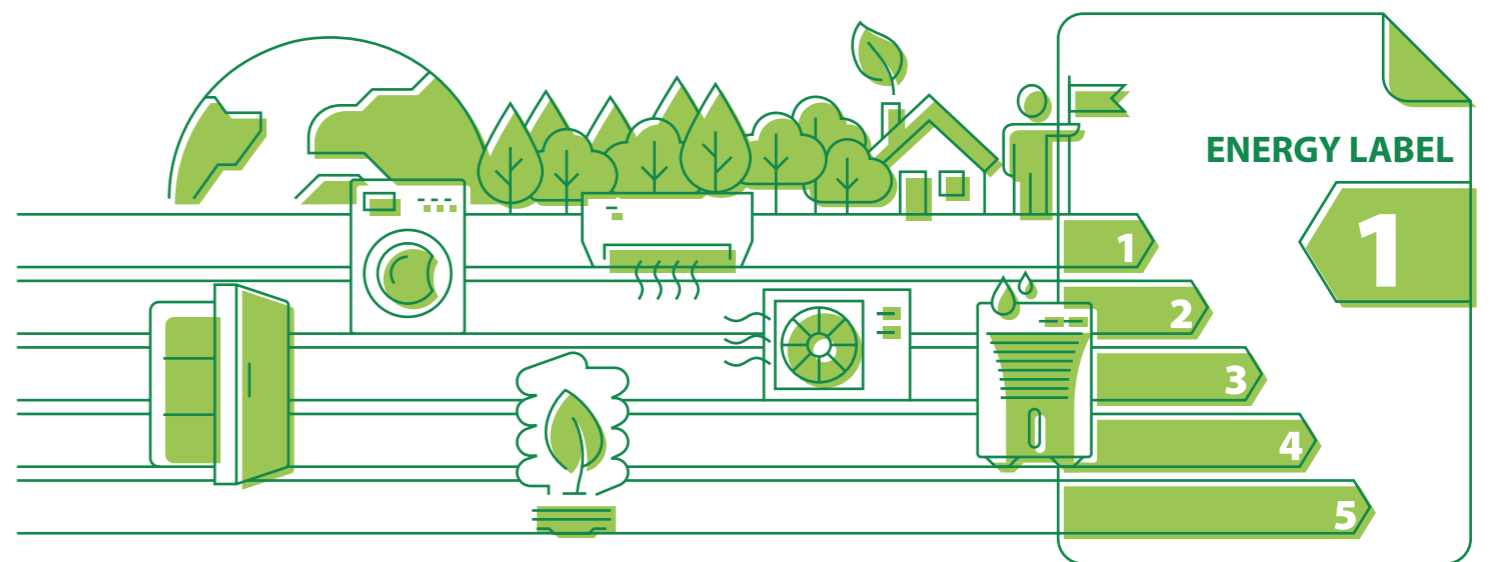
The Mandatory Energy Efficiency Labelling Scheme (MEELS) has been implemented since November 2009, with an aim to better inform consumers about the products' energy efficiency performance. The MEELS currently covers five prescribed products including room air-conditioners, refrigerating appliances, compact fluorescent lamps, washing machines and dehumidifiers. Under the MEELS, manufacturers or importers are required to affix prescribed electrical appliances with energy labels. As of June 2017, around 8 300 product models have been listed under the Scheme.

To encourage the supply of more energy efficient products in the market, more stringent energy efficiency grading standards for room air-conditioners, refrigerating appliances and washing machines have been fully implemented on 25 November 2015.

EMSD is planning for the third phase of MEELS to cover more electrical products under the Scheme. The additional energy saving potential yielded by the third phase of MEELS is estimated to be around 150 million kWh per year, equivalent to 105 000 tonnes of carbon reduction annually. The proposal was submitted to the Legislative Council for consideration in May 2017.

Green Operations

Apart from promoting the concept of energy efficiency in buildings and products, EMSD has implemented a number of green measures in our headquarters and facilities to raise environmental awareness amongst staff and promote a green culture at EMSD, with an ultimate goal to improve our overall environmental performance.





環保成效 Environmental Performance

節約資源

政府於2015年的《施政報告》中承諾由2015/16至2019/20年度，以2013/14年度為基線，於未來五個財政年度把政府建築物的用電量減少5%。除了節能外，機電工程署亦利用各種方法，尋求於營運中減少產生廢物及加入環境的考慮因素。

機電工程署在環境管理系統下制訂了環境管理計劃，定期檢視我們的目標及目的。部分於2016年採用的節約資源措施包括：

- 於午飯時間關掉辦公室照明總掣
- 移除辦公室範圍內不必要的照明，減少耗電
- 聘請空調系統服務供應商評估及提升製冷機及空氣處理機組的效能
- 尋找更多碳粉盒回收商，增加不同品牌的碳粉盒的回收率
- 減少或停止訂閱印刷報紙

除了由第三方營運的員工飯堂及基建設施(例如連接總部的行人天橋和無線電站)外，我們的政府建築物(例如總部大樓、工場、租用辦公室和數據中心)用電量於2013/14至2016/17年度下降了1.5%。在2013/14年度相若的運作情況下，2016/17年度所節省的用電量達3.7%。用電量減少原因在於實施各種內務節能措施，包括使用LED照明設備，以及檢討通風系統的運作時間等。

Resource Conservation

In 2015 Policy Address, the Government pledged to reduce additional 5% electricity consumption in existing government buildings over five years from 2015/16 to 2019/20, using 2013/14 as the baseline. Apart from energy saving, EMSD also made every effort to explore waste reduction potential and include environmental consideration in our operation.


EMSD has formulated an Environmental Management Plan under the EMS and regularly review our targets and objectives. Some of the resource conservation measures adopted in 2016 include:

- To turn off office lighting by the master control switch during lunch hours
- To reduce electricity consumption through de-lamping in office area
- To engage air-conditioning system service providers in reviewing and enhancing chiller and air handling unit performance
- To search for more toner cartridge recyclers to increase the recycling rate of toner cartridge of different brands
- To reduce or stop the subscription of printed newspapers

The total electricity consumption of our government buildings (e.g. the headquarters, depots, rented offices and data centre) excluding staff canteen operated by the third party and infrastructure (e.g. the footbridge connecting to the headquarters, and radio stations) from 2013/14 to 2016/17 was decreased by 1.5%. There was also a 3.7% saving in electricity consumption in 2016/17 when compared with similar operating conditions in 2013/14. The energy reduction is owing to the implementation of various electricity saving measures including the use of LED lighting, review of operating schedule of the ventilation system, etc.



我們的政府建築物由2013/14至2016/17年度的用電量列表如下：

Electricity consumption of our government buildings from 2013/14 to 2016/17 is tabulated below:

	用電量 Electricity consumption (‘000 千瓦小時) (‘000 kWh)	於相若運作情況下的用電量 ¹ Electricity consumption under comparable operating conditions ¹ (‘000 千瓦小時) (‘000 kWh)
 2013/14 (基線 baseline)	14 738	不適用 Not Applicable
2014/15	14 920 (+1.2%)	14 578 (-1.1%)
2015/16	14 998 (+1.8%)	14 582 (-1.1%)
2016/17	14 521 (-1.5%)	14 195 (-3.7%)

機電工程署的水及煤氣用量列表如下：

The water and towngas consumption at EMSD is shown in the table below:

	2014/15	2015/16	2016/17
 水 (立方米)² Water (m³)²	42 547	40 226	36 422
 煤氣 (兆焦耳) Towngas (MJ)	19 392	0 ³	0

¹ 此計算比較於2013/14至2016/17年度仍然有運作的營運單位的淨耗電量的改變。

² 用水量包括總部大樓(由第三方營運的飯堂除外)及土瓜灣和加路連山的工場。

³ 主要使用煤氣供應熱水的加路連山工場於2014/15年度關閉，因此自2015/16年度起，該工場沒有使用煤氣。

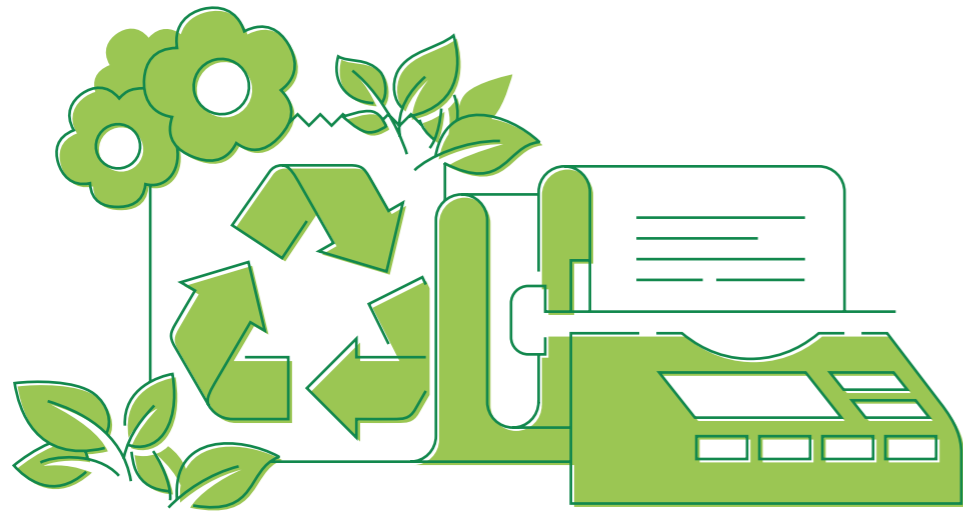
¹ The calculation compares the net consumption changes for operating units that are still under operations from 2013/14 to 2016/17.

² The water consumption covers the headquarters (excluding staff canteen operated by third party) and workshops in To Kwa Wan and Caroline Hill.

³ The Caroline Hill workshop, which used towngas for water heating, was closed in 2014/15. Hence there has been no towngas consumption at this workshop starting from 2015/16.



環保成效 Environmental Performance



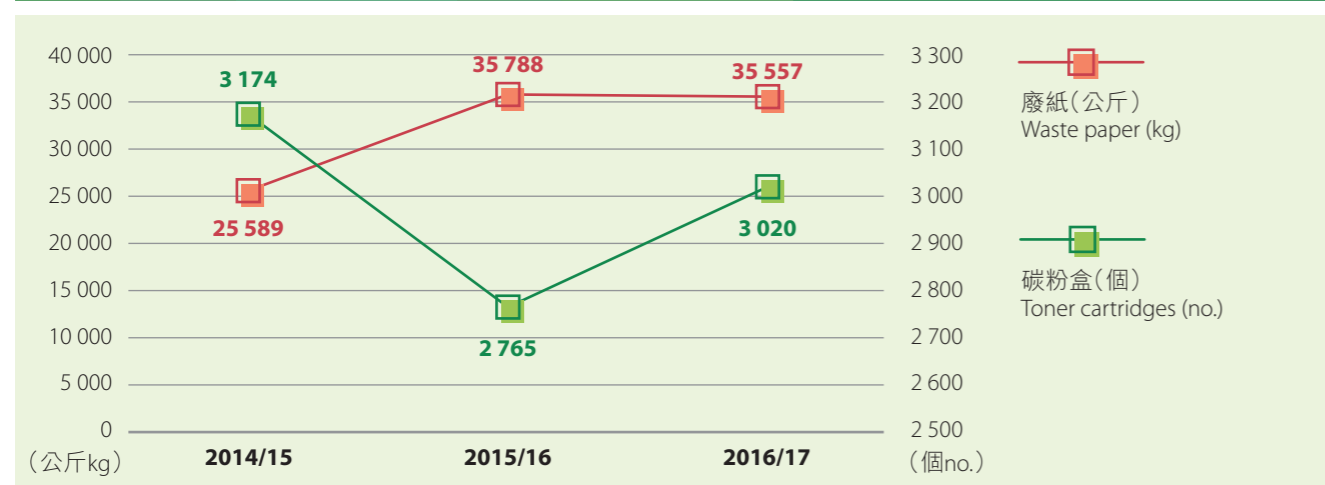
廢物管理

盡量減少產生廢棄物，並盡可能回收可再造物料，是我們的主要廢物管理策略。我們的廢棄物主要來自辦公室和工場，而廢棄物都盡可能回收。辦公室的回收廢棄物主要是紙張及碳粉盒，而工場回收的廢棄物則以舊水銀燈、舊充電電池、金屬廢料、舊車胎及舊光管為主。廢紙及碳粉盒的回收量趨勢列表如下。

Waste Management

Minimising waste generation and maximising material recycling are our major waste management strategies. Our waste mainly comes from office operations and workshop activities, which have been recycled as far as practicable. The major office wastes that we recycled include paper and toner cartridges, while those for workshops include spent mercury lamps, rechargeable batteries, metal scraps, vehicle tyres and spent fluorescent tubes. The trend for waste paper and toner cartridge recycling is shown in below chart.

辦公室廢物循環再用量
Amount of Recycled Office Waste



2016/17年度廢紙回收量輕微下跌主要基於良好的辦公室作業及大量使用雙面印刷。碳粉盒的回收量上升則基於營運需要的增幅。如想了解更多廢物回收詳情，請參閱統計資料摘要。

The slightly decrease in the amount of waste paper recycled in 2016/17 is mainly due to the good office practice of the extensive use of both side of paper. While the increase in the number of toner cartridge recycled is because of the increase in toner consumption for operational requirement. For more information on waste recycling, please refer to Summary of Statistics.

減少氣體排放

為應對氣候變化，控制及減少溫室氣體排放至為重要。機電工程署溫室氣體排放的主要來源來自辦公室和工場的用電和運輸工具的排放。機電工程署於2016/17年度的碳足跡(公噸)列表如下。

Emission Reduction

To combat climate change, it is of paramount importance to control and reduce GHG emissions. The major source of GHG emissions in EMSD is attributed to the consumption of electricity in our offices and workshops, and transportation emission. The breakdown of carbon footprint of EMSD in 2016/17 (in tonnes) is shown in the graph below.

二氧化碳排放當量(公噸)
Tonnes of CO₂-equivalent



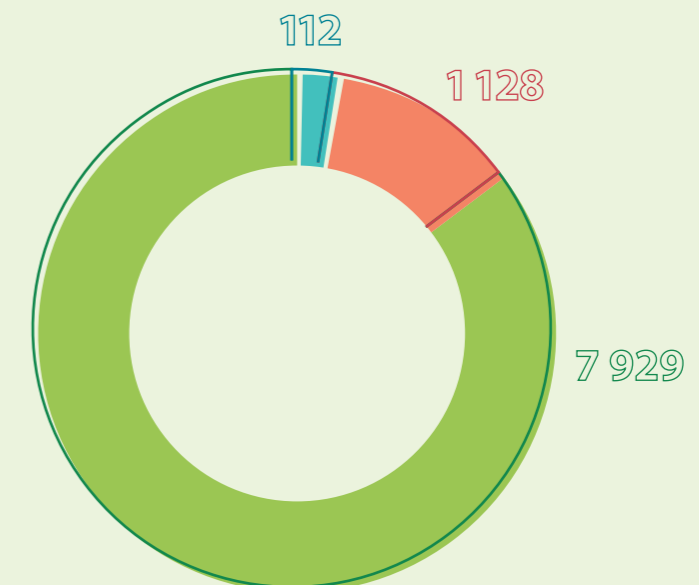
使用柴油及煤油的固定燃燒源的排放
Emissions from Stationary Source using Diesel and Kerosene



使用柴油及汽油的汽車的排放
Emissions from Mobile Vehicles using Diesel and Petrol



使用從電力公司購入的電力引致的排放
Emissions from Electricity Purchased from Power Companies





環保成效 Environmental Performance

綠化總部大樓

推廣綠色建築一直是機電工程營運基金的其中一個重點。機電工程署總部大樓於2016年成為首棟獲香港綠色建築議會頒發「綠建環評既有建築」最終鉑金級證書的政府大樓，並獲得「綠建環評社區」鉑金級證書。機電工程署總部大樓是首棟連接區域供冷系統及於大樓設計加入可再生能源特色的既有建築。例如，機電工程署總部大樓安裝的太陽能光伏系統自2005年至2017年3月下旬已產生198萬千瓦小時的能源，最高可產出350千瓦的再生能源。

Greening Our Headquarters

Promoting wider adoption of green building has been one of the priorities of EMSTF. EMSD Headquarters Building was the first existing government building awarded the Final Platinum Rating Certification under BEAM Plus Existing Buildings and Platinum Rating Certification under BEAM Plus Neighbourhood from the Hong Kong Green Building Council in 2016. It is the first existing building connected to District Cooling System and incorporated with renewable energy feature in the building design. For instance, the photovoltaic system installed in the EMSD Headquarters, with a maximum output of 350kW, has generated a total of 1.98 million kWh up to end of March 2017 since its inception in 2005.

機電工程署總部大樓獲得「綠建環評既有建築」最終鉑金級證書及「綠建環評社區」鉑金級證書。

EMSD Headquarters Building awarded the Final Platinum Rating Certification under BEAM Plus Existing Buildings and Platinum Rating Certification under BEAM Plus Neighbourhood.



運輸

基於營運需要，機電工程署有多架車輛，耗用不能再生的化石燃料，並排放溫室氣體。截至2017年3月31日，我們用作執行職務的車隊有225部車輛，包括貨車、客貨車、大型房車及電單車等。此外，我們亦為客戶部門的5 746部政府車輛提供維修服務。

Transport

Due to operational requirement, EMSD maintains a number of vehicles, which consumes non-renewable fossil fuels and generates air emissions. As of 31 March 2017, we have a fleet of 225 vehicles including lorries, vans, saloon cars and motorcycles. We are also responsible for maintaining 5 746 government vehicles for our client departments.

為減輕對全球暖化的影響，我們實行良好的內務管理、妥善保養車輛及減少使用運輸工具，盡力減少車輛運作及維修過程中的廢氣排放。我們亦正改用混能車及電動車，減低馬路空氣污染及碳排放。現時，我們擁有七部電動車及十一部混能車，所消耗的燃料較體積相近的傳統車輛少40%。基於其環保效益，我們將於未來數年，增加使用混能車和電動車。

To mitigate the risk of global warming, we strive to minimise emissions from transportation by good housekeeping, proper vehicle maintenance, and reduce use of vehicles. We are switching to use hybrid vehicles and electric vehicles to reduce roadside air pollution and carbon emissions. Currently, we have seven electric vehicles, and eleven hybrid vehicles which consume 40% less fuel than conventional vehicles of similar size. In view of the environmental benefits, we will increase the use of hybrid vehicles and electric vehicles progressively in the next few years.

可持續採購

為支持政府的環保採購政策，機電工程署已於日常的採購過程中納入環保要求。我們參考環境局第6/2015號通告的產品環保規格，並相應地更新我們的採購規格。我們亦密切監察供應商所宣稱的綠色產品特徵。於登記成為機電工程署供應商時，所有新的供應商均會被篩選及分類，以分辨出能夠提供環保產品的供應商。2016/17年度，機電工程署供應商名冊新增了151家可提供符合綠色產品規格的產品的供應商，使名冊中的環保供應商達1 000個。年內，部門亦共斥資4,326萬元購買環保產品，佔部門總採購金額4.1億元的10%以上。

Sustainable Procurement

In support of the government's green procurement policy, EMSD has been incorporating environmental requirements into our procurement practices. We make reference to the green specifications of products stipulated in the Environment Bureau Circular Memorandum No. 6/2015 and update our procurement specifications accordingly. We also closely monitor the green product features claimed by our suppliers. All new suppliers will be screened and categorised during EMSD supplier registration process to identify if they can provide environmental-friendly products. In 2016/17, the updated EMSD Suppliers Lists contained newly added 151 suppliers who are able to provide environment-friendly products complying with our green specifications, making up a total no. of 1 000 environment-friendly suppliers on our supplier list. During the year, we have spent a total of \$43.26 million (over 10%) purchasing green products out of our total purchase amount of \$410 million.



我們自2001年起使用再造紙。2016/17年度，我們使用的紙張全都是再造紙，共購入26 167令紙，比原訂限額低2.6%。

We have also adopted the use of recycled paper since 2001. In 2016/17, all our paper consumed was recycled paper and we purchased a total of 26 167 reams of paper, which was 2.6% below the set quota.

為了協助員工實施環保採購，我們已於機電工程署的內聯網，提供一個環保採購參考庫，收錄關於各種高能效產品和裝置的現行採購指引、實務守則和標準，以及綠色產品的一般規格等。為推廣於機電工程採用最新環保技術，我們於2010年成立環保採購工作小組，為各類機電工程選定符合環保要求的材料、產品、系統和建造方法。

To facilitate implementation of green procurement, we have maintained a reference library on EMSD's Intranet, which covers current guidelines, code of practices and standards relating to energy efficiency products and installations, as well as specifications of green products. In order to promote a wider adoption of latest green technologies in relation to E&M works, a Working Group on Green Procurement in E&M Works has been established since 2010 to oversee the identification of suitable green materials and products, systems and construction methodologies for E&M activities.



社會成效

Social Performance

我們一直重視在社會方面的表現，以及我們對員工、客戶、承辦商以及社會大眾的影響。作為視服務社會為主要承擔的政府機構，我們致力為員工提供持續發展的機會，堅守嚴謹的安全標準、提升客戶和承辦商的環保意識，及提高社區對正確及安全使用機電設備的意識。

我們的社會責任

我們擔當着主要政府機構和機電工程服務供應商的雙重角色，充分了解到員工的能力影響着我們所提供的服務品質和專業性。因此，我們致力為員工提供持續的培訓和實踐機會，並為他們提供一個安全可靠的工作環境。透過制訂人力資源發展政策和安全與健康政策，我們清楚地向各相關持份者闡明我們對保護員工安全以及為員工提供發展機會的承諾。除了關心我們的員工，我們亦透過不同措施和社區活動，積極拓展對承辦商、供應商和社會大眾的關懷和影響力。

自2014年起，機電工程署連續第三年榮獲香港社會服務聯會頒發的「同心展關懷」標誌，以表揚我們在實踐社會責任方面的努力。

關懷我們的員工

員工聘任

根據政府的公務員聘用條款和非公務員合約僱員計劃，我們向員工提供全面的薪酬待遇，包括醫療及牙科服務、住房津貼、約滿酬金等，具體取決於有關的僱傭條款。

年內，我們共聘用了5 283名僱員，包括521名新員工(9.9%)，而離職率則為8.9%。我們積極配合公務員事務局制訂的行為守則規範，全力支持社會共融和平等就業機會。我們繼續參與《有能者·聘之約章》及共融機構嘉許計劃的僱主機構，推動殘疾人士就業。年內，我們共僱用了199名輕度殘疾人士，約佔截至2017年3月31日止的員工總人數3.77%。我們努力確保不同背景及能力的員工都能融入我們友愛的工作環境。

We are always conscious of our social performance and the impact we have on our staff, clients, contractors, as well as the wider community. Grounded on our primary commitment as a government authority to serve the society, we strive to maximise our positive social impact by ensuring continuous development of staff, upholding a high standard of work and public safety, influencing our clients and contractors on environmental awareness, and raising the community's awareness towards proper and safe E&M applications.

OUR SOCIAL RESPONSIBILITY

Acting as a dual role of the government authority and a leading E&M engineering service provider, we fully understand that our delivery of professional and quality services is very much dependent on the competency of our people. Therefore, we are highly committed to providing continuous training and practice opportunities, as well as a safe and sound working environment for our staff. By stipulating our commitment in both the Human Resources Development Policy and Safety and Health Policy, we clearly communicate our expectation of protecting and developing our staff to relevant stakeholders. Apart from taking care of our staff, we also actively extend our sphere of influence and care to contractors, suppliers and the wider public through various initiatives and social activities.

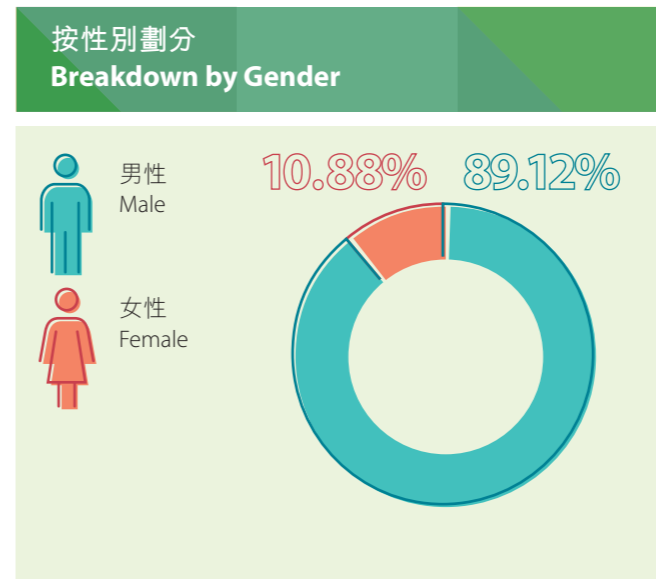
Since 2014, we have been awarded the Caring Organisation Logo by the Hong Kong Council of Social Service for the third consecutive year, as a recognition of our dedicated effort to exercise social responsibility.

CARING OUR STAFF

Employment

In line with the Government's civil service employment terms and the non-civil service contract staff scheme, we offer our staff a comprehensive remuneration package, including medical & dental service, housing benefit, gratuity, etc., as entitled depending on the relevant employment rules.

During the year, we have a total of 5 283 employees, with 521 new hires (9.9%) and a turnover rate of 8.9%. Following the Civil Service Bureau's codes of conduct, we fully support social integration and equal opportunities employment. We continued to take part in the Talent-Wise Employment Charter and Inclusive Organisations Recognition Scheme as an Employer Organisation to promote the employment of persons with disabilities. During the year, a total of 199 staff with minor disabilities were employed, representing about 3.77% of our total workforce as at 31 March 2017. Employees with different background and abilities are easy to blend in with our amicable workforce and environment.



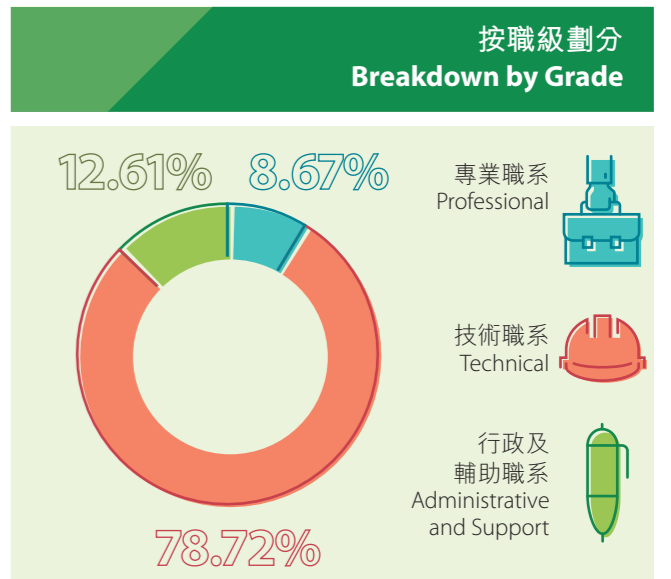
在2016/17年度，部門因員工放取病假共損失了22 544個工作天，相等於每位員工損失約4.27個工作天。

職業安全與健康

基於我們的業務性質，員工的職業安全與健康(職安健)尤其重要。作為機電工程署的安全管理系統的其中一環，我們的安全與健康政策重申了我們對職安健的承擔，訂明在提供機電服務時必須以安全作為優先考慮，以減少工作場所的危險，確保內部員工及承辦商員工的健康。

我們亦設有部門職業安全及健康委員會，並由職業安全及健康策導委員會監督，負責確保我們對職安健的承諾得以切實地執行。各級員工皆有代表參加部門職業安全及健康委員會，定期討論和審查與職安健相關的事項和措施。截至2017年3月31日，全體員工均在部門職業安全及健康委員會中設有代表。

除了部門職業安全及健康委員會外，我們亦鼓勵每位員工在日常工作中盡力採取最佳的職安健措施，營造安全的工作環境。在2016/17年度，我們針對高空工作的風險，制訂了《加強高處工作安全措施工作指引》。為了加強我們的員工及承辦商對機電工程署職安健的政策、目標及管理方法的認識，今年度我們亦出版了《機電工程署安全及健康手冊》。為了避免員工於叢林及辦公室範圍工作時染病，我們亦於內聯網內張貼有關預防斑疹傷寒及其他立克次體病，及預防呼吸道感染的健康貼士。



In 2016/17, a total of 22 544 working days were lost due to sick leave. This is equivalent to around 4.27 working days lost per employee.

Occupational Health and Safety

In view of the nature of our operations, we consider occupational safety and health (OSH) of our workers as utmost importance. As part of our safety management system, EMSD Safety and Health Policy affirms our commitment to OSH, putting safety as the first priority in the course of delivering our E&M services, so as to minimise workplace hazards, and ensure the health and well-being of our in-house staff and employees of our contractors.

Overseen by the Steering Committee on OSH, the Departmental Occupational Safety and Health Committee (DOSHC) is in place to ensure our commitment to OSH is firmly adhered and put into practice. Staff representatives from all levels of workforce is presented in the DOSHC to regularly discuss and review on OSH-related issues and initiatives. All workforce is represented in the DOSHC as at 31 March 2017.

Apart from the DOSHC, every individual staff is encouraged to create a safe working environment by adopting best OSH practices wherever practicable in day-to-day operation. In 2016/17, we identified the risk for working-at-height and thus issued the Guidelines on Enhanced Safety Measures for Work-at-Height. To strengthen our staff's as well as our contractor's awareness on EMSD OSH policy, objectives and management approach, the EMSD Safety and Health Handbook was also published this year. To prevent our staff from getting diseases when working in shrubby area and office area, health tips on prevention of typhus and other rickettsial diseases and respiratory infections were posted on our intranet.



社會成效 Social Performance



Steering Committee on OSH
職業安全及健康策導委員會

- 由高層管理人員組成
comprises senior management staff
- 制訂政策及監察部門執行職安健措施的情況，持續改進安全表現
formulate policies and monitor implementation of OSH initiatives for continuous improvement in safety performance
- 檢討內部及承辦商的意外事件
review in-house and contractor accidents
- 督導部門職業安全及健康委員會
steer DOSHC



Departmental OSH Committee
部門職業安全及健康委員會

- 由各科/部別的管理層和員工代表，及部門的協商委員會組成
comprises senior management and staff representatives from branches/divisions as well as departmental consultative committees
- 監察部門安全與健康政策的實施情況
monitor implementation of the department safety and health policy
- 向員工推廣職安健
promote occupational safety and health among staff
- 有需要時為特別工作成立臨時工作小組及委任小組成員
set up ad-hoc working groups for specific tasks and co-opt working group members where needed
- 為其他職安健議題提供討論平台
serve as a forum for other safety and health matters

我們對職安健的關注亦大大感染了我們的年輕新一代。當中三名見習屋宇裝備工程師參加了由職業安全健康局和勞工處合辦的「職安健常識問答比賽2016」。該團隊成功從超過200多支企業機構團隊中脫穎而出，獲得「企業機構組碟賽」中的亞軍。

Our attention to OSH has also substantially influenced our young talents. Three of our engineering graduates participated in the Safety Quiz 2016 co-organised by the Occupational Safety and Health Council and the Labour Department. The team successfully out-competed over 200 teams from different corporations, and was awarded 1st runner-up in the Corporate Category.



三名見習工程師於「職安健常識問答比賽2016」中獲得了亞軍。
Three engineering graduates awarded 1st runner-up in the Safety Quiz 2016.



員工發展

多年來，我們通過各種培訓計劃培育在職和新入職的員工。這些培訓計劃均經過精心設計，用以加強員工的知識及專業水平。

學習及發展

為了增強員工的能力，我們每年均會制訂一個部門培訓發展計劃。通過識別培訓需求、訂立目標培訓時數，並分配資源設立培訓優先次序，該計劃為員工的培訓和發展定下了明確的方向。在此大方向下，我們繼續推出相應的學習及發展計劃，不但讓我們的員工有所得益，同時亦提升我們的服務質素。

Staff Development

Over the years, we have trained and nurtured our existing staff and newcomers through various training programmes which were carefully designed to strengthen their knowledge and professionalism in delivering services to our clients.

Learning and Development

To build up the capability of our staff, we have devised a Departmental Training and Development Plan (DTDP) on an annual basis. The DTDP sets out EMSD's staff training and development directions by identifying training needs, determining number of target training hours, and setting training priorities for resource allocation. With the clear direction defined by the DTDP, we continue to initiate and launch suitable learning and development programmes that benefit our staff and strengthen our service profile.

機電工程署2016/17年度的員工發展數據

EMSD Staff Development Statistics in 2016/17



隨着我們不斷推出回應行業趨勢的培訓項目，我們在2016/17年度共組織了3 300多次培訓及發展活動，共有超過37 000人參加。每名員工每年平均受訓日數達到5.41天，超越了我們2016/17年度4.5天¹的目標。

With our continuous effort to develop new training initiatives in respond to latest industry trends, we have organised over 3 300 numbers of training and development activities in 2016/17 and successfully attracted over 37 000 attendees. The average number of training days per staff member per year reached 5.41 days, exceeding our 2016/17 target of 4.5 days¹.

訓練計劃

為向年輕工程師提供實習機會，我們自六十年代起推行見習工程師訓練計劃。多年來，此計劃已成功培訓了超過700位見習工程師，被公認為香港工程界的最佳在職培訓計劃之一。計劃透過實際訓練及實習機會，讓見習工程師學習到實用技能和行業知識，滿足本地行業的人才需求。在2016/17年度，我們挑選了共24位來自電氣、機械、電子、屋宇裝備、資訊科技和生物醫學等範疇的工程系畢業生，參加此計劃。

Training Schemes

Taking the responsibility to nurture new talents in the engineering field, we have been organising the Engineering Graduate Training Programme since 1960s. Over the years, the programme has successfully trained up more than 700 graduates and has been recognised as one of the best on-the-job training schemes in the engineering profession in Hong Kong. Through hands-on training and practice opportunities offered in the programme, engineering graduates are equipped with necessary skills and industry know-how to meet the needs of the local profession. In 2016/17, we have recruited 24 engineering graduates from the field of electrical, mechanical, electronics, building services, information technology and biomedical engineering through the programme.

¹ 僱用人員包括部門/一般/共通職系/非公務員合約僱員，不包括見習技術員及見習工程師。

¹ Employees include Departmental/General/Common Grade/Non-Civil Service Contract staff, excluding all technician trainees and engineering graduates.



社會成效 Social Performance

機電工程署的另一重點培訓計劃為技術員訓練計劃，計劃旨在提供系統化和高水平的訓練，以滿足專業行業對技術方面的需求。該計劃已推行了60多年，成功為業界培訓了接近6 000名學徒。今年的招募人數更達到新高，共招募了260名見習員，其中包括96名見習二級技術員（三年訓練制）、105名見習二級技術員（四年訓練制）、46名見習一級技術員（三年訓練制）和13名見習一級技術員（四年訓練制）。每年，技術員訓練計劃中表現出色的見習技術員亦會被提名參加由職業訓練局舉辦的傑出學徒獎勵計劃，以進一步擴闊他們的視野。

今年更新增了合作培訓技術員先導計劃，共有75名從事電氣、機械和空調範疇的二級技術員（四年訓練制）參與其中。該計劃為學員提供在不同合作機構和公司工作的機會，當中包括水務署、渠務署，及其他工程公司等，以擴闊學員的眼界，並深化他們的行業知識。

員工溝通

要達致更有效和可持續的運作，員工是我們最大的智囊團。因此，我們建立了多個溝通渠道，與員工進行定期的交流和對話，收集意見以不斷改進，以及回應他們的關注事項。

員工滿意度調查

了解員工對工作和部門的滿意程度對維持一個積極和穩定的團隊十分重要。為此，我們委託獨立的專業調查公司，每兩年進行一次員工滿意度調查，收集所有非首長級員工的意見。在2016/17年度，員工整體滿意度達到了6.8分（10分為滿分），創下紀錄新高。調查結果使我們能夠確定需要改善的範疇，從而建立穩定及具熱誠的團隊。

員工諮詢途徑

在機電工程署內，我們設有四個部門協商委員會和五個部別協商委員會，擔負向管理層表達員工意見及關注事項的重要角色。此外，員工還可以自由參加部門11個工會和一般政府人員工會組織所進行的集體談判。除了與工會的定期會議外，管理層還會不時組織輕鬆的聚會，如午餐會和茶會，就員工相關的問題交流意見。

為了讓我們的員工能就任何不善對待或不滿發表意見，我們還制訂了員工投訴程序，以確保所有員工的投訴都得到妥善處理。報告年度內沒有收到員工的投訴個案。

The Technician Training Scheme is another key training programme offered by EMSD, with an aim to provide systematic and high standard training to meet the requirements on technical aspects of the profession. This scheme has been running for over 60 years and successfully trained up about 6 000 apprentices for the profession. This year, the recruitment has reached a recent new high with a total of 260 trainees, including 96 technician trainees II (three-year training programme), 105 technician trainees II (four-year training programme), 46 technician trainees I (three-year training programme) and 13 technician trainees I (four-year training programme). Every year, high-flying technician trainees from the Technician Training Scheme would also be nominated to the Outstanding Apprentices Award organised by the Vocational Training Council to further their exposure.

As a new initiative this year, 75 of the technician trainees II (four-year training programme) specialised in electrical, mechanical, and air-conditioning were selected to participate in the Pilot Cooperative Apprentice Training Scheme. This programme offered candidates an opportunity to rotate to other co-operating authorities and corporates including the Water Supplies Department, Drainage Services Department, other engineering companies, etc. to widen their exposure and deepen their industry knowledge.

Staff Communication

We see our staff as our biggest think tank for striving towards more efficient and sustainable operation. In this regard, we have established several communication channels to engage them in regular exchange and conversation, so as to collect ideas for continual improvement and respond to their concerns.

Staff Satisfaction Survey

It is important to understand the level of staff satisfaction towards their job and the department, in order to maintain a motivated and stable workforce. To this end, we have appointed an independent research specialist to conduct staff satisfaction surveys on a biennial basis. The questionnaire survey collects feedback and opinion from all employees except directorate grade officers. In 2016/17, the overall staff satisfaction result achieved a record high rating of 6.8 on a scale of 10. Results of the survey enable us to identify improvement areas to establish a long-term and passionate workforce.

Staff Consultation Channels

Within EMSD, four departmental consultative committees and five divisional consultative committees take up the major role in expressing views and communicating concerns to the management. Besides, staff members are also free to join the 11 staff unions of the department, as well as general government staff unions for collective negotiations. In addition to regular joint meetings with staff unions, the management organises light-hearted occasions, like luncheon and tea gatherings, with unions to exchange views on staff related issues.

In case of any mistreatment or dissatisfaction expressed by our staff member, we have also established the Staff Complaints Procedures to ensure all staff complaints are properly dealt with. No complaint case was received from staff in the reporting year.

員工建議計劃

為了鼓勵員工提出創新意見以提高部門的生產力和表現，我們定期舉辦不同的員工建議計劃，例如工作改善計劃、員工建議書計劃及業務流程改善計劃，以表彰員工的貢獻和努力。該計劃鼓勵員工提交操作、職安健及節約資源等方面的建議書，以提升機電署的營運表現。於2016/17年度，我們共收到113項建議書。這些獲獎計劃的概念亦上傳到我們的內聯網，讓同事互相分享和交流。

員工活動

在報告年度，我們舉辦了多項員工活動。部分列表如下：



規管服務於2016年12月9日和2017年2月21日舉行了本年度的管理工作坊。

Held the Regulatory Services' annual Management Workshops on 9 December 2016 and 21 February 2017.



機電工程營運基金於2016年11月11日及12月1日舉行了本年度的策略工作坊。

Organised two EMSTF's annual Strategy Formulation Workshops on 11 November and 1 December 2016.



機電工程營運基金於本年度舉行了五次針對內部客戶意見調查的焦點小組會議，收集前線業務單位的意見。

Held five sessions of EMSTF Internal Customer Opinion Survey – Focus Group Meeting to collect opinion from frontline business units.



於2016年12月舉行三場署長簡報會。

Arranged three sessions of Director's Briefing in December 2016.



首長級人員到訪了186個場地，進行員工親善探訪。

Carried out 186 ambassador visits by directorate officers at various venues.



於2016年8月和2017年3月與部門11個工會舉行兩次聯席會議。

Conducted two joint meetings with 11 staff unions of EMSD in August 2016 and March 2017.



於2017年1月至3月為部門的專業員工、外調的督察級、技術級及初級員工舉行六次周年論壇。

Ran six sessions of the Yearly Forums for professional staff, seconded inspectorate, technical and junior staff from January to March 2017.



員工福利組為抱恙或住院員工進行了4次家訪、39次醫院探訪、42次工作間探訪、474次電話問候及49次吊唁探訪。

Conducted 4 home visits, 39 hospital visits, 42 workplace visits, 474 goodwill phone calls and 49 condolence visits to sick or hospitalised staff, by the Staff Welfare Unit.



社會成效 Social Performance

聯繫我們的客戶

為向政府部門及公共機構提供優質和專業的機電服務，我們致力與客戶溝通及收集意見，持續改進機電工程營運基金的表現。自1997年起，我們每兩年均會委託獨立市場研究公司進行客戶意見調查。

在2016年進行的最新一輪客戶意見調查中，我們的客戶滿意指數達到6.45分（8分為滿分），創出歷史新高，足證我們過去持續推行多項改善措施的成效。透過是次調查，我們亦制訂出優化客戶服務的計劃，力求提供卓越的服務。

為了優化機電工程營運基金的日常工程項目及工作管理，我們正準備推出一個名為「顧客為本電子平台」的項目，再配合將來的客戶服務中心，將成為我們在五年策略計劃中加強客戶服務的重要措施。該平台將為我們的策略業務單位和客戶提供更有效及透明的溝通渠道，有助交流工作資訊及跟進項目進度。

針對面向公眾的規管服務，我們的客戶聯絡小組及各個安全諮詢委員會會定期與公眾代表見面，聽取他們對規管工作推廣活動的看法和建議。我們亦會進行公眾意見調查，了解市民對機電安全和能源效益的認知，並進行業界調查，探討業界對規管服務的看法。

管理我們的供應鏈

在確保提供安全和優質的機電服務上，承辦商是我們的重要合作伙伴。在選擇承辦商時，我們會檢視他們過去的表現，並確保他們擁有一個完整的安全管理系統。我們亦鼓勵承辦商提供創新的想法，以提升他們在工地的表現。

ENGAGING OUR CLIENTS

As the service provider delivering high quality and professional E&M services to government departments and public bodies, we are devoted to communicating with our clients, with a view to solicit inputs for EMSTF's continuous improvement. We have engaged an independent market research company in conducting a Customer Opinion Survey (COS) every two years since the first COS in 1997.

In the latest round of COS conducted in 2016, survey results registered another record high Customer Satisfaction Index of 6.45 out of 8, which greatly affirmed our effort to enhance our services continuously. Based on the engagement results, we have formulated customer service improvement plans to strive for service excellence.

For EMSTF's daily course of engineering project and job management, we are in preparation to launch a "Customer Centric e-Platform", together with the future Customer Service Centre, forming important initiatives to enhance customer service in our five-year strategic plan. The platform will be able to provide our Strategic Business Units and clients with a more efficient and transparent communication channel for job information exchange and project progress tracking.

For our Regulatory Services targeting at the general public, our Customer Liaison Group and various safety advisory committees meet regularly with stakeholders from the general public to listen to their thoughts and comments on our regulatory promotion activities. We also conduct surveys to gauge the public's rising awareness towards E&M safety and energy efficiency, and trade surveys to obtain feedback on Regulatory Services.

MANAGING OUR SUPPLY CHAIN

Contractors are our important partners to ensure the delivery of safe and quality E&M services. When selecting contractors, we will review their past performance and ensure that they have a robust safety management system in place. We also encourage our contractors to generate innovative ideas for uplifting their performance on-site.

於報告年內，我們共四項維修、保養、改建及加建工程合約於發展局及建造業議會合辦的第22屆公德地盤嘉許計劃中獲得銅獎/優異獎，肯定了承辦商在協助業界實現「零意外」上所作出的貢獻。

聯繫社區

除致力提供專業的機電和規管服務外，我們亦積極參與行業知識分享活動及公眾活動，努力改善社區。

In the reporting year, four of our repair, maintenance, alteration and addition works contracts were granted Bronze/Merit Award in the 22nd Considerate Contractors Site Award Scheme, jointly organised by the Development Bureau and the Construction Industry Council. Contractors were acknowledged for their contribution towards achieving "Zero Accidents" in the industry.

CONNECTING WITH THE COMMUNITY

Other than dedicating our professional knowledge through E&M and regulatory services, we strive for the betterment of the community by actively participating in industry knowledge sharing events and public engagement activities.



科技交流研討會2016促進先進工程科技發展的交流，從而提高業界的服務質素。

The Technology Sharing Seminars 2016 promoted exchange of advanced engineering technology developments so as to improve service quality.



業界知識分享活動

科技交流研討會系列及創科論壇

為慶祝機電工程營運基金成立二十周年，機電工程署在本年度舉辦了一系列的科技交流研討會及一場創科論壇。科技交流研討會共包括11場創新科技交流會和業界科技研討會，邀請學者就「新世代科技」、「電力科技」和「智能城市」等新興主題作出分享。而作為二十周年誌慶的壓軸活動，創科論壇以「想像∞創新∞香港」為主題，成功齊集了海外及本地專家、行業領袖及客戶代表，從建築物、交通、能源及可持續發展等多個範疇交流城市發展的最新趨勢。在業界和公眾的大力支持下，一連串的活動成功吸引了超過二千名參加者，與我們一同分享過去二十年的工作成果，並開啟未來。

Knowledge Sharing Events with Trades

Technology Sharing Seminars Series and EMSD Summit

Forming part of the EMSTF 20th Anniversary celebration, EMSD has organised a series of technology sharing seminars and the EMSD Summit in the reporting year. Comprising Innovation Technology Sharing and Trade Technology Seminars, 11 technology sharing seminars have been held to introduce on rising themes such as "Next-Gen Solutions", "Power Technologies" and "Smart City", where scholars were invited to deliver talks on innovative technological theories and concepts. As the grand finale event of the series of celebratory activities, the EMSD Summit with a theme of "Imaginovate Hong Kong" successfully gathered overseas and local experts, industry leaders and representatives from our clients to exchange on the latest trends of city development, from perspectives of buildings, transportation, energy and sustainability. With full support from the trade and the public, these events attracted over 2 000 attendants to join us in celebrating the fruits of our hard work in the previous 20 years and the way forward.

機電工程署代表及我們的承辦商參與第22屆公德地盤嘉許計劃。
EMSD representatives and our contractors participating in the 22nd Considerate Contractors Site Award Scheme.





社會成效 Social Performance

淡水冷卻塔和建築物能源效益技術研討會

能源效益事務處的年度活動焦點 — 淡水冷卻塔和建築物能源效益技術研討會已於2016年12月16日圓滿舉行。一如往年，研討會吸引了600多名參加者。在研討會的第一部分，政府和業界代表就淡水冷卻塔的正确連接和淡水處理方法分享了他們的成功例子，以提升行業在正確安裝和管理淡水冷卻塔方面的知識。在研討會第二部分，我們與參加者分享了關於「建築物重新校驗」的實用建議，以說明根據《建築物能源效益條例》進行裝修工程時需注意的重點。

Technical Forum on Fresh Water Cooling Towers and Buildings Energy Efficiency

Our Energy Efficiency Office's annual highlight – Technical Forum on Fresh Water Cooling Towers (FWCT) and Buildings Energy Efficiency, was successfully held on 16 December 2016. Similar to previous years, the forum attracted over 600 attendees to participate in the event. In the first part of the forum, representatives from the government and the industry were invited to speak at the event and share their successful stories on topics related to proper water connection and water treatment methods, so as to enhance industry's knowledge on proper installation and management of FWCTs. At the second part of the forum, practical advice on the topic of "Building Retro-commissioning" was shared with the audience to highlight major points to note when conducting retrofitting works in accordance with the Buildings Energy Efficiency Ordinance.



環境局、香港貿易發展局及機電工程署代表於國際環保博覽2016合照留影。

Representatives from Environment Bureau, HKTDC and EMSD at Eco Expo Asia 2016.



國際環保博覽2016

國際環保博覽是由香港貿易發展局主辦、環境局協辦的年度活動。今年，能源效益事務處繼續獲邀參與展覽。在展覽上，我們向參觀者介紹「強制性能源效益標籤計劃」、「自願性能源效益標籤計劃」、《建築物能源效益條例》、電動車的最新發展，以及一些節省能源的貼士。另外，我們還介紹了「強制性能源效益標籤計劃」的優化方案，以及最新推出的「建築物能源效益守則」和「能源審核守則」網站。

Eco Expo Asia 2016

This year, EMSD Energy Efficiency Office continued to be invited as one of the exhibitors at the Eco Expo Asia, which was organised by the Hong Kong Trade Development Council (HKTDC) and supported by the Environment Bureau. At the exhibition, we introduced the Mandatory Energy Efficiency Labelling Scheme (MEELS), the Voluntary Energy Efficiency Labelling Scheme, the Buildings Energy Efficiency Ordinance, latest development in electric vehicles as well as some energy saving tips to our visitors. Besides, the enhancement of the MEELS and the newly released Building Energy Code and Energy Audit Code website were also highlighted during the event.

公眾參與活動

我們致力提高公眾對能源效益、機電安全和機電工程應用的意識，以達致可持續發展。以下是部分於報告年內進行的公眾參與活動。

Public Engagement Initiatives

With achieving sustainable development as our ultimate goal, we are dedicated to raising the public's awareness towards energy efficiency, E&M safety, and E&M engineering application. Some of our public engagement activities during the reporting year are highlighted below.

慳電熄一熄青年獎

為了教育年輕一代關於節能的重要性，在環境局的支持下，我們於2015年推出了「慳電熄一熄青年獎」。比賽分成三個組別，開放予25歲或以下的學生和青少年參加。參加者需要為其家庭或相關機構提出具創意的計劃書，並附上實際可行的行動計劃以減少能源消耗。於2016年7月，小學組白金得獎隊伍獲邀參加零碳野外樂活體驗營，讓參加者體驗低碳生活理念及節能的重要性。至於中學組及公開組白金獎的得獎隊伍，則被邀請參加了低碳城市學習團，於2016年8月訪問了瑞典和丹麥的地方政府和環保組織，了解如何將環境考慮納入城市規劃當中。

Youth Energy Saving Award

Aiming at educating the younger generation about the importance of energy saving, we launched the Youth Energy Saving Award with support from the Environment Bureau in 2015. Comprising three categories, the competition is open to students and young people up to the age of 25. Competitors are invited to come up with creative proposals supplemented with pragmatic action plans to reduce energy consumption for their home or associated organisation. In July 2016, platinum award winning teams of the primary school category were invited to a zero carbon environmental camp, where participants experienced concepts of low carbon living and importance of energy conservation. For the platinum award winning teams of open group and secondary school categories, a low-carbon city study mission was organised in August 2016 for them to visit local authorities and various environmental organisations in Sweden and Denmark to understand how environmental considerations could be strategically incorporated into urban planning.

參與零碳野外樂活體驗營(右)和低碳城市學習團(下)的獲勝隊伍。

Winning teams at the zero carbon environmental camp (right) and low-carbon city study mission (bottom).





社會成效 Social Performance

機電安全健步嘉年華 2016

「機電安全健步嘉年華 2016」由香港機電工程商聯會與香港機電業工會聯合會合辦，於2016年12月4日在屯門大欖涌舉行，旨在團結及加強業界的伙伴關係。機電工程署約有30多位員工及家屬齊齊參與。

E&M Safety Walk and Carnival Fair 2016

Jointly organised by the Hong Kong Federation of Electrical and Mechanical Contractors and the Federation of Hong Kong Electrical and Mechanical Industries Trade Unions, the E&M Safety Walk and Carnival Fair 2016 was held on 4 December 2016 in Tai Lam Chung, Tuen Mun. With the aim to unite and strengthen partnership within the E&M industry, the event engaged over 30 EMSD staff and their family members this year.

機電工程署員工及家屬齊齊參與健步嘉年華。
EMSD staff and their family members participated in the walk.



機電青少年大使計劃

機電青少年大使計劃的目的是讓一群年輕人成為機電工程署的大使，讓他們在日常生活中協助推廣機電安全、能源效益及機電工程發展。計劃於年內舉辦了各種活動，以擴闊大使們的視野。例如於2016年7月，我們為60位大使組織了一連串的考察活動，其中包括參觀機電工程署總部、零碳天地及工業貿易大樓。考察期間，大使親身接觸了綠色建築、環保科技及可再生能源的實際應用。通過提高他們對機電工程的興趣，我們希望培育出一班充滿活力的年輕人，透過推廣機電安全和能源效益為社區服務。

E&M Young Ambassador Scheme

The E&M Young Ambassador Scheme has been organised to empower a team of youngsters to become ambassadors of EMSD and help promote E&M safety, energy efficiency, and E&M engineering development in their daily lives. Various events and activities were organised throughout the year to enhance the ambassadors' exposure. For example, a series of visits was organised for over 60 ambassadors in July 2016, including visits to EMSD Headquarters, Zero Carbon Building, and the Trade and Industry Tower. During the visits, ambassadors were introduced to actual applications of green buildings, green technologies, and renewable energy. By raising their interests in E&M engineering, we hope to cultivate a team of dynamic young citizens to serve the community by promoting E&M Safety and energy efficiency.



機電青少年大使參觀機電工程署總部。
E&M Young Ambassadors visiting EMSD Headquarters.



參與「遊走機電大世界」城市定向賽的青少年。
Youngsters participating in the "Run! The E&M World!" City Orienteering Competition.



到訪教育及職業博覽2017的青少年。
Youths visiting the Education & Careers Expo 2017.



「遊走機電大世界」及2017年教育及職業博覽

為吸引更多年輕人加入機電行業，機電工程署和香港機電業推廣工作小組利用各種機會接觸目標群組。在2016年年底，我們組織了「遊走機電大世界」城市定向賽，吸引了超過450名參賽者，讓他們有機會以輕鬆的比賽形式到訪各種機電相關設施。我們亦參加了各種職業博覽，包括由貿發局組織的教育及職業博覽2017，以引起年輕人對機電行業的興趣。

"Run! The E&M World!" and Education & Careers Expo 2017

To attract more young people to join the E&M industry, EMSD and the Hong Kong E&M Trade Promotion Working Group had made use of various opportunities to reach out to the target group. In late 2016, we have organised the "Run! The E&M World!" City Orienteering Competition which attracted over 450 participants, giving them a chance to visit various E&M related facilities in form of a light-hearted race. We have also participated in various career expos, including the Education & Careers Expo 2017 organised by the HKTDC, so as to arouse young people's interest in the E&M industry.

「點菜易」手機應用程式

作為一群專業人員，我們的員工義工隊積極將技術知識應用於有利社會的措施上。團隊與香港失明人協進會合作開發出一款可以從網上資料庫中讀出菜單的手機應用程式，照顧視障人士的需要。該應用程式為社會帶來了正面影響，榮獲香港工程師學會青年會員創意獎2017（組別I）大獎。

"Tap My Dish" Mobile Application

As a group of professionals, our staff voluntary service team has proactively applied their technical knowledge into initiatives that benefit the society. The team partnered with the Hong Kong Blind Union to develop a mobile application which could read out menus from an online database, specially serving the needs of people with visual impairment. The application won the Hong Kong Institution of Engineers Innovation Awards for Young Members 2017 – Category I for its positive impact on the society.



我們的員工義工隊為視障人士開發了「點菜易」手機應用程式。
Our staff voluntary service team developed the mobile application "Tap my Dish" for people with visual impairment.



「點菜易」手機應用程式的版面。
Layout of the "Tap my Dish" mobile application.





社會成效

Social Performance

	其他社區活動 報告年內，我們與其他政府部門和公共機構密切合作，為公眾舉辦多項社區活動。主要活動的摘要如下：	Other Engagement Activities In the reporting year, we have worked closely with other government departments and public organisations to host a wide range of engagement activities for the public. A summary of the major events is highlighted below.
	逾3 000個團體簽署2016的「節約章」，包括約1 900家商場和商鋪、辦公大樓和辦公室，約800座屋苑和住宅大廈，約250個非政府機構旗下物業，以及約80所參與的學校和專上學院。他們承諾在2016年6月至9月期間，保持平均室內溫度在攝氏24至26度之間、關掉不需要使用的電器，並盡可能選購具能源效益的產品。	Over 3 000 participants have signed up for the Energy Saving Charter 2016, including around 1 900 shopping malls, shops and office premises, some 800 housing estates and residential buildings, some 250 properties of non-governmental organisations and about 80 schools and tertiary education institutions. They pledged to maintain an average indoor temperature of 24-26 degrees Celsius, switch off electrical appliances when not in use, and procure energy efficient appliances as far as possible, from June to September 2016.
	為機構或學校舉行154場講座或探訪，宣傳能源效益及節能。	Delivered or organised 154 talks and visits to organisations/schools to promote energy efficiency and conservation.
	為多個機構舉行25場簡報會，宣傳有關《建築物能源效益條例》下，《建築物能源效益守則》及《能源審核守則》的強制實施事宜。	Delivered 25 presentations to various organisations to promote the mandatory implementation of the Building Energy Code and Energy Audit Code under the Buildings Energy Efficiency Ordinance.
	於2016年6月前往第四批需進行第一次能源審核的商業建築物，以推廣《建築物能源效益條例》，並提醒業主有關的能源審核要求。	Visited the fourth batch of commercial buildings, which are required to carry out the first energy audits, in June 2016 to promote the Buildings Energy Efficiency Ordinance and to remind building owners of the relevant energy audit requirements.
	舉行81次外展講座，也接待了296個參觀團參觀機電工程署總部教育徑，共15 995位訪客，向各機構和學校宣傳能源效益和節能。	Organised 81 outreach talks and 296 visits to the Education Path of EMSD Headquarters for 15 995 visitors from different organisations and schools to promote energy efficiency and conservation.
	往全港幼稚園、小學、特殊學校、社區中心及老人中心進行271次外展講座，向約35 000位參加者宣傳電力安全。	Visited 271 kindergartens, primary schools, special schools, community centres and elderly centres, reaching about 35 000 participants to promote electrical safety.
	往全港幼稚園、青年中心及老人中心進行479次外展講座，向30 000多名參加者講解機動遊戲機、升降機和自動梯的安全使用方法。	Visited 479 kindergartens, youth centres and elderly centres, reaching over 30 000 participants to promote the safe use of amusement rides, lifts and escalators.



舉行70次學校展覽，宣傳「強制性能源效益標籤計劃」。	Conducted 70 school exhibitions on the Mandatory Energy Efficiency Labelling Scheme (MEELS).
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於2017年1月，就第三階段「強制性能源效益標籤計劃」而建議修訂的工作守則舉行簡介會。	Carried out briefing sessions in January 2017 on proposed revisions of the Code of Practice for the third phase of MEELS.
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為業界人士就《供電電纜（保護）規例》的要求，舉行44場安全講座及研討會，參加者包括政府工務部門、顧問公司、承辦商、合資格人士、一般工地員工等。	Delivered 44 safety talks and seminars on the requirements of Electricity Supply Lines (Protection) Regulation to the trades, including government works departments, consultants, contractors, competent persons, general site staff, etc.
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為業界代表、升降機/自動梯擁有人、業主立案法團成員，和物業管理公司員工，舉辦15場簡介會、技術及安全講座與研討會。	Conducted 15 briefing sessions, technical and safety talks and seminars for trade representatives, lift/escalator owners, members of incorporated owners and building management staff.
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舉辦了推廣日及走訪1 200間車輛維修工場，向車輛維修業界和公眾推廣「車輛維修工場自願註冊計劃」及「車輛維修技工自願註冊計劃」。	Organised a Promotion Day and visited over 1 200 vehicle maintenance workshops, to promote the Voluntary Registration Scheme for Vehicle Maintenance Workshops and the Voluntary Registration Scheme for Vehicle Mechanics to the vehicle maintenance trade and the general public.
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推行註冊電業工程人員持續進修計劃，為註冊電業工程人員舉行270場講座及研討會。	Conducted 270 talks and seminars on the implementation of the Continuing Professional Development Scheme for Registered Electrical Workers.
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與食物環境衛生署合辦了六場氣體安全講座，目標在提高食物業牌照申請人，對於在食肆及食物製備場所內，作供應飲食用途石油氣裝置規定的了解。	Conducted six seminars on gas safety with the Food and Environmental Hygiene Department, which target on applicants of food business licences to improve their understanding of the requirements of liquefied petroleum gas installations for catering purposes in restaurants and food preparation establishments.
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探訪了四個寮屋和村屋區的居民，講解家居氣體安全。	Visited four squatter areas and villages to promote domestic gas safety to the residents.
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為氣體業界及不同的工程承辦商，舉辦了17場氣體安全講座，並進行了198個工地巡查，宣傳有關避免損毀氣體喉管的方法。	Conducted 17 gas safety seminars for gas traders and different contractors, and 198 trench inspections to construction sites to promote safety practices on avoiding damage to gas pipes.
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全球報告倡議組織內容索引

GRI Content Index



一般標準披露 General Standard Disclosures	描述 Description	互相參照 / 註釋 / 省略資料的原因 Cross-reference/Comments/ Reasons for Omissions	外部認證 External Assurance
策略及分析 STRATEGY AND ANALYSIS			
G4-1	機構最高決策人的聲明 Statement from the most senior decision-maker of the organisation	機電工程署二零一六至一七年年報 EMSD Annual Report 2016/17	✓
機構簡介 ORGANISATIONAL PROFILE			
G4-3	機構名稱 Name of the organisation	關於本報告 About this Report	✓
G4-4	主要品牌、產品及服務 Primary brands, products, and services	實現可持續發展 Sustainability at EMSD	✓
G4-5	機構總部位置 Location of the organisation's headquarters	香港 Hong Kong	✓
G4-6	機構營運所在地之數目 Number of countries where the organisation operates	只在香港 Only in Hong Kong	✓
G4-7	擁有權的性質及法律形式 Nature of ownership and legal form	屬於香港特區政府的一部分 Part of the Hong Kong SAR Government	✓
G4-8	所服務的市場 Markets served	香港 Hong Kong	✓
G4-9	機構規模 Scale of the organisation	社會成效 Social Performance	✓
G4-10	僱員總數 Number of total employees	社會成效 Social Performance 數據摘要 Summary of Statistics	✓
G4-11	受集體協商協議保障的總僱員百分比 Percentage of total employees covered by collective bargaining agreements	共有 11 個機電工程署工會由員工以自願性質參與，另有 9 個員工協商委員會代表不同職級的機電工程署員工就員工福利與部門溝通。 There are 11 EMSD staff unions joined on voluntary basis. There are also 9 Departmental Consultative Committees who are representatives of all grades and ranks of EMSD staff to liaise with the Department for the well-being of the staff.	✓
G4-12	機構的供應鏈 Organisation's supply chain	機電工程署聘請了 2 448 名供應商，他們大多負責提供機電安裝、運作及保養相關的配件 / 設備及服務。 There are 2 448 suppliers engaged by EMSD. They are mainly involved in provision of parts/equipment and services related to E&M installation, operation and maintenance.	✓
G4-13	於報告期內機構規模、架構、擁有權或供應鏈的重大改變 Significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain	關於本報告 About this Report	✓
G4-14	機構是否及如何按預警方針及原則行事 Report whether and how the precautionary approach or principle is addressed by the organisation	實現可持續發展 Sustainability at EMSD	✓
G4-15	機構對外界發起的經濟、環境及社會約章、原則或其他倡議的參與或支持 Externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses	實現可持續發展 Sustainability at EMSD	✓
G4-16	機構參與的聯會及 (或) 本地 / 國際倡議組織 Memberships of associations and/or national/international advocacy organisations	機電工程署屬於以下協會的成員： EMSD holds membership in the following associations. 1) 能源工程師學會 Association of Energy Engineers 2) 香港綠色建築議會 Hong Kong Green Building Council 3) 香港照明學會 CIE (Hong Kong) Limited 4) 國際鐵路安全議會 International Railway Safety Council	✓
已確定的重要議題 IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-17	機構綜合財務報表或同等文件內包含的實體 Entities included in the organisation's consolidated financial statements	關於本報告 About this Report	✓
G4-18	界定報告內容及議題界限的過程，以及機構如何於已界定的報告內容實行報告原則 Process for defining the report content and the Aspect Boundaries and how the organisation has implemented the Reporting Principles for Defining Report Content	關於本報告 About this Report	✓
G4-19	決定報告內容過程中界定的重要議題 Material Aspects identified in the process for defining report content	關於本報告 About this Report	✓

已確定的重要議題 IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-20	機構內各重要議題的界限 Aspect Boundary of each Material Aspect within the organisation	關於本報告 About this Report	✓
G4-21	機構外各重要議題的界限 Aspect Boundary of each Material Aspect outside the organisation	關於本報告 About this Report	✓
G4-22	解釋重整舊報告所載信息的結果及原因 Effect of any restatements of information provided in previous reports, and the reasons for such restatements	為了保持匯報用電量數據的一致性，我們於本年度統一了計算方法，以匯報往年的用電量結果。 To maintain the consistency of the electricity consumption data reported, we chose to report the previous years' results based on a same calculation method this year.	✓
G4-23	報告的範圍及議題界限與以往報告的重大分別 Report significant changes from previous reporting periods in the Scope and Aspect Boundaries	關於本報告 About this Report	✓
持份者之參與 STAKEHOLDER ENGAGEMENT			
G4-24	機構的持份者群組清單 List of stakeholder groups engaged by the organisation	關於本報告 About this Report 實現可持續發展 Sustainability at EMSD	✓
G4-25	界定及挑選相關持份者之基準 Basis for identification and selection of stakeholders with whom to engage	關於本報告 About this Report	✓
G4-26	與持份者溝通的方式 Approach to stakeholder engagement	關於本報告 About this Report 實現可持續發展 Sustainability at EMSD	✓
G4-27	於持份者參與的過程中提出的主要項目及關注事項，以及機構的應對 Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns	關於本報告 About this Report	✓
報告概況 REPORT PROFILE			
G4-28	匯報期 Reporting period for information provided	關於本報告 About this Report	✓
G4-29	上一份報告的日期 Date of most recent previous report	2016 年 12 月 December 2016	✓
G4-30	匯報周期 Reporting cycle	關於本報告 About this Report	✓
G4-31	查詢報告或報告內容的聯絡方式 Contact point for questions regarding the report or its contents	關於本報告 About this Report	✓
G4-32	GRI 內容索引，包括揀選的「符合」選項及外部認證參考 (如有) GRI Content Index, the 'in accordance' option the organisation has chosen and the reference to the external assurance (if any)	關於本報告 About this Report 全球報告倡議組織內容索引 GRI Content Index	✓
G4-33	為報告尋求外部認證的政策及現行措施 Policy and current practice with regard to seeking external assurance for the report	關於本報告 About this Report	✓
管治 GOVERNANCE			
G4-34	機構的管治架構 Governance structure of the organisation	機電工程署二零一六至一七年年報 EMSD Annual Report 2016/17	✓
G4-36	機構有否任命管理層負責檢視經濟、環境和社會議題 Appointment of executive-level position(s) with responsibility for economic, environmental and social topics	我們的高級管理層參與了品質、環境及生產力策導委員會以及內部環保採購工作小組。 Our senior management staff participates in Quality, Environmental & Productivity Steering Committee and internal working group on green procurement.	✓
道德與誠信 ETHICS AND INTEGRITY			
G4-56	機構的價值觀、原則、標準和行為規範 Organisation's values, principles, standards and norms of behaviour	機電工程署二零一六至一七年年報 EMSD Annual Report 2016/17	✓



全球報告倡議組織內容索引

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特定標準披露 Specific Standard Disclosures	描述 Description	互相參照 / 註釋 / 省略資料的原因 Cross-reference/Comments/ Reasons for Omissions	外部認證 External Assurance
類別：經濟 CATEGORY: ECONOMIC			
財務表現 ECONOMIC PERFORMANCE			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	機電工程署二零一六至一七年年報 EMSD Annual Report 2016/17	✓
G4-EC1	機構產生和分配的直接經濟價值 Direct economic value generated and distributed	機電工程署二零一六至一七年年報 EMSD Annual Report 2016/17	✓
間接經濟影響 INDIRECT ECONOMIC IMPACTS			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	機電工程署二零一六至一七年年報 EMSD Annual Report 2016/17	✓
G4-EC7	開展基礎設施投資與支援性服務的情況及其影響 Development and impact of infrastructure investments and services supported	機電工程署二零一六至一七年年報 EMSD Annual Report 2016/17	✓
部門的採購政策 PROCUREMENT PRACTICES			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EC9	在重要運營地點，向當地供應商採購支出的比例 Proportion of spending on local suppliers at significant locations of operation	物料供應分部的服務及產品主要購自本地供應商 / 承辦商或分銷商。海外供應商於2016/17年度只佔大約2%。 Acquisition of services and goods handled by Suppliers sub-division are mainly from local suppliers/contractors or local agents. Only around 2% of suppliers are from overseas in 2016/17.	✓
類別：環境 CATEGORY: ENVIRONMENTAL			
物料 MATERIALS			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EN1	所用物料的重量或體積 Materials used by weight or volume	數據摘要 Summary of Statistics	✓
能源 ENERGY			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EN3	機構內部的能源消耗量 Energy consumption within the organisation	環保成效 Environmental Performance 數據摘要 Summary of Statistics	✓
水 WATER			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EN8	按源頭說明的總耗水量 Total water withdrawal by source	環保成效 Environmental Performance 數據摘要 Summary of Statistics	✓
生物多樣性 BIODIVERSITY			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EN11	機構在環境保護區或其他具有重要生物多樣性價值的地區或其毗鄰地區，擁有、租賃或管理的運營點 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	所有運營點均不在環境保護區或其他具有重要生物多樣性價值的地區或其毗鄰地區。 No operation sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	✓
排放 EMISSIONS			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EN15	直接溫室氣體排放量 (範疇一) Direct greenhouse gas (GHG) emissions (Scope 1)	數據摘要 Summary of Statistics	✓
G4-EN16	能源間接溫室氣體排放量 (範疇二) Energy indirect greenhouse gas (GHG) emissions (Scope 2)	數據摘要 Summary of Statistics	✓
污水和廢物 EFFLUENTS AND WASTE			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EN23	按類別及處理方法分類的廢棄物總重量 Total weight of waste by type and disposal method	環保成效 Environmental Performance 數據摘要 Summary of Statistics	✓
運輸 TRANSPORT			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EN30	為機構運營而運輸產品、其他貨物及物料以及員工交通所產生的重大環境影響 Significant environmental impacts of transporting products and other goods and materials for the organisation's operations, and transporting members of the workforce	環保成效 Environmental Performance	✓
供應商的環境評估 SUPPLIER ENVIRONMENTAL ASSESSMENT			
G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	環保成效 Environmental Performance	✓
G4-EN32	使用環境標準篩選的新供應商的比例 Percentage of new suppliers that were screened using environmental criteria	環保成效 Environmental Performance	✓

類別：社會 CATEGORY: SOCIAL

勞工措施和工作 LABOUR PRACTICES AND DECENT WORK

僱員關係 EMPLOYMENT

G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	社會成效 Social Performance	✓
G4-LA1	按年齡組別、性別及地區劃分的新進員工和離職員工總數及比例 Total number and rates of new employee hires and employee turnover by age group, gender and region	數據摘要 Summary of Statistics	✓
G4-LA2	按重要運營地點劃分，不提供給臨時或兼職員工，只提供給全職員工的福利 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	公務員及非公務員僱員如符合相關規定及守則要求，均享有醫療及牙醫服務、教育津貼、年假、房屋津貼等。 Employees appointed on civil service and non-civil service terms are entitled with medical and dental services, education allowance, leave and passage, housing benefit, etc. if they meet the eligibility criteria as stipulated in the relevant rules and regulations.	✓

職業健康與安全 OCCUPATIONAL HEALTH AND SAFETY

G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	社會成效 Social Performance	✓
G4-LA5	由勞資雙方組建的職工健康與安全委員會中，能幫助員工監督和評價健康與安全相關專案的員工代表所佔的百分比 Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programmes	社會成效 Social Performance	✓
G4-LA7	從事職業病高發職業或高職業病風險職業的工人 Workers with high incidence or high risk of diseases related to their occupation	社會成效 Social Performance	✓

培訓與教育 TRAINING AND EDUCATION

G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	社會成效 Social Performance	✓
G4-LA10	為加強員工持續就業能力及協助員工管理職業生涯終止的技能管理及終生學習計畫 Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	社會成效 Social Performance	✓

多元化與平等機會 DIVERSITY AND EQUAL OPPORTUNITY

G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	社會成效 Social Performance	✓
G4-LA12	按性別、年齡組別、少數族裔成員及其他多元化指標劃分，治理機構成員和各類員工的組成 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	社會成效 Social Performance 數據摘要 Summary of Statistics	✓

員工申訴機制 LABOUR PRACTICES GRIEVANCE MECHANISMS

G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	員工可根據部門通告訂明的投訴指引，為員工政策及人事等相關問題作出投訴。 Staff may lodge a complaint on employment related issues in accordance with our departmental circular on staff complaints.	✓
G4-LA16	經由正式申訴機制提交、處理和解決的勞工問題申訴的數量 Number of grievances about labour practices filed, addressed, and resolved through formal grievance mechanisms	沒有 Nil	✓

人權 HUMAN RIGHTS

強迫與強制性勞工 FORCED OR COMPULSORY LABOUR

G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	實現可持續發展 Sustainability at EMSD	✓
G4-HR6	已發現具有嚴重強迫或強制勞動事件風險的運營點和供應商，以及有助於消除一切形式的強迫或強制勞動的措施 Operations and suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	沒有發現任何運營點和供應商具有嚴重強迫或強制勞動事件風險。 No operations and suppliers were identified to have high risk of force or compulsory labour.	✓

產品責任 PRODUCT RESPONSIBILITY

產品及服務標籤 PRODUCT AND SERVICE LABELLING

G4-DMA	通用管理方法披露 (DMA) Generic Disclosures on Management Approach	社會成效 Social Performance	✓
G4-PR5	客戶滿意度調查的結果 Results of surveys measuring customer satisfaction	社會成效 Social Performance	✓



統計資料摘要

Summary of Statistics

環境 Environment

	單位 Unit	2014/15	2015/16	2016/17
物料 Material (G4-EN1)				
紙張 Paper	令 ream	26 344	26 645	26 167
油漆及溶劑 Paint & Solvent	升 L	17 289	13 371	14 449
潤滑油 Lubrication Oil	升 L	66 339	75 621	84 742
油脂 Grease	公斤 kg	1 457	2 161	1 200
製冷劑 Refrigerant	公斤 kg	14 988	11 963	13 376
工業用氣體 Industrial Gas	立方米 m ³	418	410	454
蓄電池電解液 Battery Electrolyte	升 L	219	185	185
原子車胎 Tubeless Tyre	條 No.	10 982	9 569	9 153
外車胎 Outer Cover Tyre	條 No.	2 435	1 444	1 320
車胎內膽 Inner Tube	條 No.	1 773	524	460
能源 Energy (G4-EN3)				
柴油 Diesel	升 L	131 762	139 926	133 184
汽油 Gasoline	升 L	373 451	351 939	324 864
電力 ¹ Electricity ¹	'000 千瓦小時 '000 kWh	14 920	14 998	14 521
煤氣 Towngas	兆焦耳 MJ	19 392	0	0
水 Water (G4-EN8)				
水 Water	立方米 m ³	42 547	40 226	36 422
溫室氣體排放 GHG Emissions (G4-EN15, G4-EN16)²				
直接排放 (範疇一) ³ Direct Emissions (Scope 1) ³	噸 tonnes	未能提供數據 Figure not available	1 333.7	1 240.6
能源間接排放 (範疇二) Energy Indirect Emissions (Scope 2)	噸 tonnes	10 482	10 542	7 929.1
污水及廢物 Effluent and Wastes (G4-EN23)				
廢紙 Waste Paper	公斤 kg	25 589	35 788	35 557
碳粉盒 Toner Cartridges	個 No.	3 174	2 765	3 020
即棄電池 Disposable Batteries	公斤 kg	18 697	17 204	18 440
可充電電池 Rechargeable Batteries	公斤 kg	未能提供數據 Figure not available	未能提供數據 Figure not available	18 561 ⁴
金屬廢料 Metal Scraps	公斤 kg	22 974	21 907	20 583
廢油 Waste Oil	升 L	99 876	91 970	101 303
舊車胎 Used Vehicle Tyre	條 No.	13 323	10 464	10 516
含水銀照明燈 Spent Mercury Lamp	盞 No.	136 535	154 624	134 552

¹ 為了保持匯報用電量數據的一致性，我們於本年度統一了計算方法，以匯報往年的用電量結果。
To maintain the consistency of the electricity consumption data reported, we chose to report the previous years' results based on a same calculation method this year.

² 參考《香港建築物 (商業、住宅或公共用途) 的溫室氣體排放及減除的審計和報告指引》(由環境保護署及機電工程署發佈)。
Made reference to the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings of Commercial, Residential or Institutional Purposes in Hong Kong (by Environmental Protection Department & EMSD).

³ 包括柴油、汽油及煤氣的相關溫室氣體排放。
Including emissions associated with diesel, gasoline and towngas consumption.

⁴ 機電工程署於2016/17年度開始購置可充電電池，取代某些電器中的一次性電池。
EMSD started to purchase rechargeable batteries in 2016/17 to replace disposable batteries in some of the electrical appliances.

社會 Social

僱員人數 Employees Statistics (G4-10, G4-LA12)^{4,5}

	截至2017年3月31日 As of 31 March 2017	百分比 Percentage
總人數 Total number	5 283	–
男女分佈 By Gender		
男性 Male	4 708	89.1%
女性 Female	575	10.9%
合約類型分佈 By Employment Type		
常任制 Permanent	3 770	71.4%
合約制 Contract	1 513	28.6%
年齡分佈 By Age Group		
50歲或以上 Aged 50 and above	1 657	31.4%
30–49歲 Aged 30–49	2 590	49.0%
29歲或以下 Aged 29 and under	1 036	19.6%

2016/17 新入職員工 2016/17 New Hires (G4-LA1)

	截至2017年3月31日 As of 31 March 2017	百分比 Percentage
		佔總員工 9.9%
總人數 Total number	521	9.9% of total employee
年齡分佈 By Age Group		
50歲或以上 Aged 50 and above	34	6.5%
30–49歲 Aged 30–49	105	20.2%
29歲或以下 Aged 29 and under	382	73.3%
男女分佈 By Gender		
男性 Male	469	90.0%
女性 Female	52	10.0%

⁴ 沒有僱用非正式員工。
There is no informal staff employed by EMSD.

⁵ 所有員工均在香港工作。
All staff are based in Hong Kong.

統計資料摘要

Summary of Statistics

離職員工 Turnover (G4-LA1)

	截至 2017 年 3 月 31 日 As of 31 March 2017	百分比 Percentage
		佔總員工 8.9%
總人數 Total number	471	8.9% of total employee
年齡分佈 By Age Group		
50 歲或以上 Aged 50 and above	241	51.2%
30–49 歲 Aged 30–49	109	23.2%
29 歲或以下 Aged 29 and under	121	25.7%
男女分佈 By Gender		
男性 Male	407	86.4%
女性 Female	64	13.6%

管理層的結構 Composition of Senior Management (G4-LA12)

	截至 2017 年 3 月 31 日 As of 31 March 2017	百分比 Percentage
		佔總員工 2.4%
總管理層人數 Total number of senior management staff	128	2.4% of total employee
年齡分佈 By Age Group		
50 歲或以上 Aged 50 and above	80	62.5%
30–49 歲 Aged 30–49	48	37.5%
29 歲或以下 Aged 29 and under	0	0
男女分佈 By Gender		
男性 Male	119	93.0%
女性 Female	9	7.0%

其他社會指標 Other Social Indicators

	單位 Unit	2014/15	2015/16	2016/17
須予呈報意外宗數 Reportable Accidents	宗 / 千名員工 No./1 000 staff	4.5	4.09	4.9
員工滿意度 Staff Satisfaction	分 (滿分為 10 分) Score (out of 10)	6.4	不適用 Not Applicable	6.8
平均培訓日數 (目標 : 4.5) Average Training Days (Target: 4.5)	日 / 員工 Days/staff	4.72	4.37	5.41

核實聲明

Verification Statement



驗證聲明

香港通用檢測認證有限公司對
《社會及環保報告 2016/17》
驗證聲明

驗證的性質和範圍

香港通用檢測認證有限公司獲機電工程署(以下簡稱機電署)委託，對《社會及環保報告 2016/17》(以下簡稱報告)進行獨立驗證。根據 SGS 可持續發展報告驗證方法，驗證範圍包括機電署於 2016 年 4 月 1 日至 2017 年 3 月 31 日有關可持續發展的表現。

報告中的資訊及報告由機電署負責。香港通用檢測認證有限公司並未參與報告任何材料的準備工作。我們的責任是根據以下規定，對驗證範圍內提供的文本、數據、圖表和聲明表達意見，旨在告知機電署的所有持份者。

本報告以高級審查規格進行驗證，所用規章用於：

- 評估報告內容的真實性及
- 根據《全球報告倡議組織 (GRI) G4 可持續發展報告指南》「核心選項」來評估報告。

驗證方法包括驗證前調研、於公司總部採訪相關管理層及員工、進行文檔和記錄審查和確認。獨立審計的財務帳戶中的財務資料，並未作為本驗證流程的組成部分與來源資料進行核對。

獨立性與能力聲明

香港通用檢測認證有限公司確認我們相對於機電署的獨立性，對該機構、其附屬機構和持份者不存在偏見和利益衝突。驗證團隊是由具備與此項任務有關的知識、經驗和資質的人員組成，當中包括 ISO 14001 主任審核員、SA 8000 審核員、ISO 26000 審核員、OHSAS 18001 審核員及可持續發展報告培訓講師。

查證/驗證意見

基於描述的驗證方法和已進行的驗證，報告中包含的資訊和數據是準確的、可靠的，而且對機電署可持續發展的表現提供了客觀和中肯的陳述，使我們感到滿意。驗證團隊認為，報告符合《全球報告倡議組織 (GRI) G4 可持續發展報告指南》「核心選項」，可供機電署的持份者使用。

簽字：
代表香港通用檢測認證有限公司

曾偉明
高級總監，中國及香港
認證及企業優化

梁耀基
主任驗證員
認證及企業優化

2017 年 11 月 30 日
www.sgs.com



ASSURANCE STATEMENT

SGS STATEMENT ON ASSURANCE (Social and Environmental Report 2016/17)

NATURE AND SCOPE OF THE ASSURANCE

SGS Hong Kong Limited was commissioned by Electrical and Mechanical Services Department (thereafter as "EMSD") to conduct an independent assurance of the *Social and Environmental Report 2016/17* (thereafter as the "Report"). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the performance of EMSD from 1st April 2016 to 31st March 2017.

The information in the Report and its presentation are the responsibility of EMSD. SGS has not been involved in the preparation of any of the material included in the Report. Our responsibility is to express an opinion on the text, data, graphs and statements within the mentioned scope of assurance set out below with the intention to inform all EMSD's stakeholders.

The Report has been assured at a high level of scrutiny using our protocols for:

- Evaluation of content veracity and
- Evaluation of the Report in accordance with the Core option of the *Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines*.

The assurance methodology comprised a combination of pre-assurance research, interviews with the management and employees at headquarters, documentation and record review.

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

SGS affirms our independence from EMSD, being free from bias and conflicts of interest with organization, its subsidiaries and stakeholders. The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised lead auditors of ISO 14001, auditors of SA 8000, ISO 26000, OHSAS 18001 and Trainer in Sustainability Reporting.

ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within the Report verified is accurate, reliable and provides a fair and balanced representation of EMSD sustainability performance. The assurance team is of the opinion that the Report conforms to the Core option of the *GRI G4 Sustainability Reporting Guidelines*. It can be used by EMSD's stakeholders.

Signed:

For and on behalf of SGS Hong Kong Limited

Ben Tsang
Senior Director, China and Hong Kong
Certification and Business Enhancement

Patrick Leung
Lead Assuror
Certification and Business Enhancement

30 November 2017
www.sgs.com

鳴謝 Acknowledgments

在年報製作過程中，承蒙下列部門及機構提供協助，機電工程署特此鳴謝。

The EMSD would like to express its sincere thanks to the following departments and organisations for their support and cooperation in the course of preparing this annual report (list in alphabetical order).

懲教署	Correctional Services Department
衛生署	Department of Health
食物環境衛生署	Food and Environmental Hygiene Department
政府飛行服務隊	Government Flying Service
民政事務總署	Home Affairs Department
香港迪士尼樂園	Hong Kong Disneyland
香港消防處	Hong Kong Fire Services Department
香港警務處	Hong Kong Police Force
醫院管理局	Hospital Authority
司法機構	Judiciary
康樂及文化事務署	Leisure and Cultural Services Department
海事處	Marine Department
香港鐵路有限公司	MTR Corporation Limited
昂坪360有限公司	Ngong Ping 360 Limited
選舉事務處	Registration and Electoral Office
香港中華煤氣有限公司	The Hong Kong and China Gas Company Limited
天水圍醫院	Tin Shui Wai Hospital
運輸署	Transport Department
屯門醫院	Tuen Mun Hospital

