

# 社會及環保報告

## SOCIAL AND ENVIRONMENTAL REPORT





關於本報告  
ABOUT THIS REPORT

報告目的

香港特別行政區政府機電工程署欣然發表社會及環保報告2015/16(本報告)。本報告重點闡述我們於2015/16年度，在經濟、環境及社會方面的措施和表現。

透過出版本報告，我們展示在過去財政年度的成果，以及部門努力不懈改善可持續發展表現，從而為社會提供更佳服務的承諾。

匯報原則

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，以及環境保護署的《環境管制人員適用環保報告指引》而編製。

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內容對照以供參考。本報告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核心選項的要求。

報告範圍

本報告主要匯報機電工程署由2015年4月1日至2016年3月31日期間，在可持續發展方面的各項主要措施及績效。於報告期內，機電工程署的規模、架構、權責關係，及其供應鏈均無重大改變。除另外說明，報告中的數據乃據部門所知悉截至2016年3月31日止的實際數字。財務數據亦同樣是截至2016年3月31日止的財政年度匯報。所有金額均以港元為單位。

REPORTING OBJECTIVES

Electrical and Mechanical Services Department of the Government of the Hong Kong Special Administrative Region (HKSAR) is pleased to present our Social and Environmental Report 2015/16 (the Report). The Report highlights our initiatives and performance on economic, environmental and social aspects in 2015/16.

Through publishing the Report, we are able to demonstrate our achievement during the last fiscal year, and to assure you of our commitment to serving the society better with continuous efforts and improvement in sustainability.

REPORTING PRINCIPLES

The Report has been prepared in accordance with the Core option of the G4 Sustainability Reporting Guidelines, published by the Global Reporting Initiative (GRI), as well as the Environmental Protection Department’s A Guide to Environmental Reporting for Controlling Officers.

The GRI Content Index is provided at the end of the Report, which correlates GRI indicators with associated sections. An independent third-party assurance was conducted to verify the quality and accuracy of the Report and ensure its attainments to the Core option of the GRI G4 Sustainability Reporting Guidelines.

REPORTING SCOPE AND BOUNDARY

The Report focuses on EMSD’s key sustainability initiatives and achievement from 1 April 2015 to 31 March 2016. During the reporting period, there were no significant changes regarding EMSD’s size, structure, ownership, or its supply chain. Data in the Report are presented as absolute figures as of 31 March 2016 (unless otherwise stated) to the best of our knowledge. Financial data are reported for the financial year ended 31 March 2016. All monetary values are in Hong Kong Dollars.

作為本報告的編製過程一部分，我們會分階段邀請不同持份組別一同參與<sup>1</sup>，以探討他們對本署工作的關注。年內，我們推行了一項參與活動，透過問卷調查，收集機電工程署同事的意見。我們根據持份者參與活動的結果，得出一系列重要的議題。

As part of the report preparation process, we invite stakeholder groups in stages<sup>1</sup>, to explore their concerns about our work. This year, an engagement exercise was conducted to collect feedback from EMSD’s staff through questionnaire survey. A list of material aspects is identified based on the results of the stakeholder engagement.

類別 Category	方面 Aspect	範圍 Boundaries	
		機電工程署的運作 Operations of EMSD	主要供應商的運作 Operations of Our Major Suppliers
經濟 Economic	財務表現 Financial Performance	√	
	部門的採購政策 Departmental Procurement Practices	√	
環境 Environmental	物料使用 Use of Materials	√	
	節約能源 Energy Conservation	√	
	節約用水 Water Conservation	√	
	廢氣控制 Emissions Control	√	
	污水及廢物處理 Effluents and Waste Treatment	√	
	評估供應商/承辦商的環境表現 Supplier/Contractor Environmental Assessment	√	
社會 Social	員工政策 Employment	√	
	職業健康及安全 Occupational Health and Safety	√	√
	平等機會 Equal Opportunity	√	
	員工培訓 Employee Training	√	
	員工投訴機制 Grievance Mechanisms (Labour Practices)	√	
	避免對員工強迫勞動 Avoid Forced Labour	√	
	產品及服務標籤 Product and Service Labelling	√	

本報告的完整版本可於網上查閱，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。

The full version of the Report is published online. Readers are welcome to provide feedback on our sustainability performance or reporting approach by contacting us directly at bssd@emsd.gov.hk.

<sup>1</sup> 我們根據機電工程署的業務營運，邀請較相關的持份者組別參與發表意見。

<sup>1</sup> Stakeholder groups are engaged and invited to express their views with reference to their relevance to EMSD’s operations.

## 實現可持續發展 SUSTAINABILITY AT EMSD

為支持政府對可持續發展的承諾，及回應客戶對節省能源、提高能源效益日益殷切的需求，機電工程署在提供服務及邁向可持續發展的營運時，致力應對各種挑戰及機遇。

### 可持續發展對機構的影響

肩負起規管機構及工程服務供應商的雙重角色，部門深明推廣可持續發展，以及應對相關挑戰和機遇的重要性。

#### 對規管服務的影響

於2015年年底，聯合國制訂出一套明確的目標，旨在減低氣候變化的影響及促進全球的可持續發展。在此以前，香港特區政府已對氣候變化議題作出正面回應，發表了《香港氣候變化報告2015》，以及《香港都市節能藍圖2015~2025+》，當中更訂下十年內將能源強度減少四成的進取目標。為將能源強度減至最低，政府現擬擴大「強制性能源效益標籤計劃」，以涵蓋更多電器產品，並加強在社區推廣低碳生活。此外，政府將與電力公司商討新的「管制計劃協議」，進一步改善規管安排、提高能源效益，以及推動可再生能源的發展。

此外，機電工程署正面對着掌握國際及地區當前可持續發展的挑戰及機遇，以協助政府完善能源效益規管架構、履行國際碳排放與節能的責任，及達成相關的績效指標。我們在可持續發展方面，對公眾及企業就提高能源效益，及節約資源的教育上，成績令人欣慰。

#### 對營運服務的影響

為協助客戶的建築物及設施達至可持續營運，我們的營運服務團隊致力掌握最新的可持續發展技術及對客戶的建築物引入能源管理、節約能源和應用可再生能源等措施。近年，我們亦與其他政府部門緊密合作，安裝或更換一些效能較佳的工程系統。

To support the government's commitment to sustainable development and respond to the clients' increasing demands on energy saving and efficiency, EMSD has made every effort to address both challenges and opportunities when delivering our services and moving our operation towards sustainability.

### IMPACT OF SUSTAINABILITY ON THE ORGANISATION

Through our dual roles as regulatory body and engineering service provider, we understand the importance and need of promoting sustainability, and addressing the associated challenges and opportunities.

#### Impact on Regulatory Services

At the end of 2015, the United Nations endorsed a set of clear objectives with the aim of mitigating climate change and fostering global sustainability. Prior to this, the HKSAR Government has already responded positively by publishing the Hong Kong Climate Change Report 2015, as well as introducing the Energy Saving Plan for Hong Kong's Built Environment 2015~2025+ that sets an aggressive target to reduce energy intensity by 40% in ten years. To help minimise energy intensity, the Government is planning to expand the scope of the Mandatory Energy Efficiency Labelling Scheme to cover more electrical appliances and strengthen the promotion of low-carbon living in the community. In addition, the Government will discuss with the power companies to further enhance the regulatory arrangement, improve energy efficiency and promote the use of renewable energy under the Scheme of Control Agreements.

More than ever, EMSD faces the challenge and opportunity of keeping abreast of the latest development on sustainability in the world and in the region, in order to facilitate the Government to enhance its energy efficiency regulatory framework and to help achieve associated performance indicators to meet its international obligation on carbon emission and energy saving. However, it has been a rewarding undertaking for EMSD to continue educating and motivating the businesses and general public to increase energy efficiency and conserve resources.

#### Impact on Trading Services

To assist our clients' buildings and facilities in achieving sustainable operations, our Trading Services team strives to keep abreast of latest sustainable technologies and introduces best practices with regard to energy management, energy saving, and renewable energy application in clients' premises. We have worked closely with other government departments in recent years to install or replace a number of engineering systems with higher efficiency ratings.

有見於政府在節能計劃中所訂立的目標，很多政府部門及公營機構，都各自為其後數年制訂節能目標。我們會繼續與客戶合作，運用更多先進及高效率的新科技以提升設備的水平。

我們樂於與客戶分享與ISO 50001的國際標準相符的能源管理方法。我們亦會向客戶傳授節約能源技巧的知識及經驗，讓更多人都能實行節能措施，選擇低碳的生活方式。

### 機構對可持續發展的影響

機電工程署於日常運作中，着重透過不同方式為可持續發展帶來正面的影響，例如規管服務團隊一直執行相關法例，以及推廣各項公眾宣傳活動和計劃；而營運服務團隊則執行環境及社會可持續發展的最佳實務方法。

#### 規管服務

對於政府推廣節約能源和可再生能源的計劃及措施，機電工程署一向以來均全力支持。我們的規管服務協助推行《建築物能源效益條例》、香港建築物能源效益註冊計劃、電氣產品的自願性及強制性能源效益標籤計劃、空調系統使用淡水冷卻塔計劃，以及推廣使用電動車。

作為以上可持續發展計劃及措施的一部分，我們安排了公眾宣傳活動，如傳媒推廣、教育活動、公開演講、外展環節、出版刊物及舉辦展覽，以提高市民對節能生活方式的認識。我們希望透過這些活動，令更多人了解節能及保護自然資源的重要，為香港的可持續發展作出貢獻。

#### 營運服務

為更有效控制我們對品質、環境和職業安全健康的影響，我們建立了一套符合現行ISO 9001、ISO 14001，以及OHSAS 18001標準的綜合管理系統。這套系統讓我們能夠以系統化方式檢視各項程序、避免不合規行為的風險、從過往經驗學習及找出可改善之處，從而達至持續改進的目標。

In view of the target stipulated in the Government's energy saving plan, many government departments and public bodies have laid out their own energy saving objectives and targets for the coming years. We will continue to collaborate with our clients to deploy more advance and efficient technologies for equipment upgrading.

We are eager to share with our clients on energy management methodology in line with the international standard ISO 50001. We also pass on our knowledge and experience on energy saving techniques to our clients, empowering more people to exercise energy-conscious measures and live a low carbon lifestyle.

### ORGANISATION'S IMPACT TO SUSTAINABILITY

In day-to-day operations, EMSD continues to place great emphasis on driving positive impacts on sustainable development, by imposing legislative enforcement, promoting public campaigns and schemes through our Regulatory Services, and applying best practices for environmental and social sustainability through our Trading Services.

#### Regulatory Services

EMSD has been an active promoter for the Government's programmes and initiatives on energy saving and efficiency, and renewable energy. Our Regulatory Services have supported the implementation of the Buildings Energy Efficiency Ordinance, Hong Kong Energy Efficiency Registration Scheme for Buildings, Voluntary and Mandatory Energy Efficiency Labelling Schemes for electrical appliances, the Fresh Water Cooling Towers Scheme for air-conditioning systems and encouraged the adoption of electric vehicles.

As part of these programmes and initiatives, we have arranged public promotional activities such as media campaigns, educational events, public speeches, outreach sessions, publications and exhibitions to raise public awareness on energy saving. Through these activities, we hope to encourage more and more people to understand the importance of conserving energy and natural resources, and contribute to the sustainable development of Hong Kong.

#### Trading Services

In order to better control our impacts in relation to the quality, environmental and occupational health and safety aspects, we have established an integrated management system (IMS) in accordance with the prevalent standards ISO 9001, ISO 14001 and OHSAS 18001. Aiming to continual improvement, the IMS enables us to review various processes in a systematic manner, avoid non-compliance risks, learn from past experience, and identify areas for enhancement.



## 實現可持續發展 SUSTAINABILITY AT EMSD

為客戶提供機電服務時，我們對可持續發展的承諾，不僅體現於執行項目的階段。我們的能源效益及可再生能源項目，可為環境及社會帶來長遠的正面影響，並可制訂成功的個案，鼓勵其他業界作為借鑑。

就以《建築物能源效益條例》、「室內溫度節能約章」、「『不要鎢絲燈泡』節能約章」為例，我們樂於與環境局分享技術知識及行業心得，協助將這些重要的環保措施和計劃，推廣至全港的企業及市民。

### 獎項及嘉許

機電工程署一直尋求進一步提升服務水平的機會，我們鼓勵員工參與各項比賽和計劃，以更加了解最新科技及機電服務的最佳實務方法。

When delivering E&M services to clients, our commitment to sustainable development goes beyond merely the project execution phase. Our energy efficiency and renewable energy projects can often generate a long-term positive impact on the environment and society, creating successful cases to encourage more industrial players to follow suit.

Taking the Buildings Energy Efficiency Ordinance, the two Energy Saving Charters on Indoor Temperature and No Incandescent Light Bulbs for example, we are pleased to share our technical know-how and industrial insights with the Environment Bureau to help promote these important green initiatives, which will impact the businesses and residents across Hong Kong.

### AWARDS AND RECOGNITION

EMSD always seeks opportunities to further enhance our service quality. We encourage staff to participate in external competitions and schemes to better understand the latest technologies and best practices related to electrical and mechanical services.

#### 2015年傑出學徒獎勵計劃

年內，參與技術員訓練計劃的兩位見習技術員，獲得職業訓練局舉辦的傑出學徒/見習員獎勵計劃嘉許。林卓祺先生及鄧偉倫先生分別獲頒「傑出學徒」及「優異學徒」獎項。林先生早前獲安排與其他得獎者到新加坡考察，到訪當地的工藝教育局中區學院，了解當地學徒制度的最新發展。

#### 2015 Outstanding Apprentice Awards

During the reporting year, two trainees of our Technician Training Scheme received recognition from the Outstanding Apprentice/Trainee Awards organised by the Vocational Training Council. Mr Lam Cheuk-ki and Mr Chow Wai-lun were conferred the Outstanding Apprentice award and the Apprentice of Excellent Performance award respectively. Mr Lam Cheuk-ki joined an exchange programme to Singapore with other awardees to visit the Institute of Technical Education College Central and learn about the latest development in apprenticeship training in the country.



#### 首次在公德地盤嘉許計劃中獲得金獎

為了在工地推廣注重公德的工作態度，發展局自1995年起舉辦公德地盤嘉許計劃。於2015年，我們其中四個承辦商分別獲得金獎、銅獎及兩個優異獎，在工地安全、健康和環境方面都展示了良好態度及做法。

#### First Gold Considerate Contractor Site Award

The Development Bureau has organised the Considerate Contractors Site Award Scheme since 1995 aiming to promote a considerate attitude for works sites. In 2015, four EMSD contracts were presented with a Gold Award, a Bronze Award and two Merit Awards. The four winning contractors were recognised for their highly considerate attitude as well as good work practices in site safety, health and environment.

#### 機場安全嘉許計劃

我們的機場工程分部，為機場飛行區助航燈系統設計的「便攜式電源櫃」提供有效安全的臨時電力。項目於2016年4月舉行的2015/16機場安全嘉許計劃頒獎典禮上，獲機場管理局頒發「優良安全建議」獎項。

#### Airport Safety Recognition Award

Our Airport Engineering Services Sub-division designed the “Portable Power Cubicle” for airfield ground lighting (AGL) system to provide temporary power supply for the AGL system efficiently and safely. The project was awarded the Good Safety Suggestion by Airport Authority in the 2015/16 Airport Safety Recognition Award Presentation Ceremony held in April 2016.

#### 國際鐵路安全議會一最佳論文

機電工程署的鐵路科於2015年，在國際鐵路安全議會舉辦的全球論壇上發表論文，獲選為最佳的鐵路安全論文。該文闡述鐵路科與港鐵公司的合作、鐵路科應對挑戰的經驗，以及如何解決月台空隙與現有訊號系統、列車及月台構造限制所帶來的相關安全風險。

#### International Railway Safety Council — Best Paper

The Railways Branch of EMSD presented a paper in the global forum organised by the International Railway Safety Council in 2015, and was awarded the best paper on railway safety of this international event. This paper described our collaboration with the MTR Corporation Limited, and the Railways Branch's experience in overcoming the challenges and resolving the safety risks associated with platform gaps and limitations of the existing signalling system, trains and platform structure.



## 實現可持續發展 SUSTAINABILITY AT EMSD

### 機電工程署的主要持份者 EMSD's Key Stakeholders



員工  
Staff



客戶  
Clients



受規管行業  
Regulated trades



公眾人士  
General public



供應商及承辦商  
Suppliers and contractors



培訓機構  
Training institutes



專業團體、行業公會  
Professional and trade associations



傳媒  
Media



各政策部門  
Policy bureaux

### 持份者的參與

我們與不同持份者維持緊密聯繫，獲取他們的寶貴意見，有助我們找出改進服務的空間。為使持份者及廣大市民了解我們的工作，我們也推行持份者參與活動。為達至這些目標，機電工程署在維繫持份者關係方面採取三管齊下的方法。

首先是策略性的客戶及業界參與計劃，以維持緊密的工作關係。第二方面，我們亦建立多個恆常溝通渠道，讓廣大市民充分了解機電安全和能源效益的知識。第三方面，我們於本年推行了一項持份者的參與活動，以掌握持份者對機電工程署可持續發展表現的關注重點。部門員工應邀對機電工程署營運的可持續發展，作出評價及提出意見。他們的意見經整合後，已用於決定此《社會及環保報告》的報告範圍。

此外，我們亦支持和鼓勵同事加入香港工程師學會的理事會、各個委員會和工作小組，以及參與國際性的工程組織，維持本港工程專業的高水準。

### 承辦商及供應商管理

承辦商、顧問公司和供應商都是我們的重要工作伙伴，與我們一起為客戶及社會大眾提供可靠的優質服務。機電工程署現時與大約2 200個供應商及承辦商合作，主要提供售賣和安裝機電系統服務、及維修保養支援服務。在甄選承辦商時，我們堅守公開和公平的基本原則，在合適情況下盡量採用競爭性投標。

我們主動與承辦商、顧問公司和供應商積極溝通，確保他們清楚知悉各項重要資訊及最新要求。我們也定期為有關員工安排合約管理、承辦商管理、合約安全及誠信管理的簡介會，加強他們對承辦商的管理技巧。

我們透過定期會議和實地視察，監察承辦商的工作，跟進工程進度，盡量減低工程對公眾及客戶造成的不便和滋擾。在整個工程期間，我們會定期評估及檢討承辦商的表現，直至完工為止。

本報告年度內，我們未有發現任何工程及供應商有重大的強迫勞動風險。

### STAKEHOLDER ENGAGEMENT

We engage various stakeholders to obtain valuable feedback and aid to identify room for improvement in our services. We also carry out engagement activities in order to introduce our work to stakeholders and the community at large. To achieve these goals, EMSD adopts a three-pronged stakeholder engagement approach.

Firstly, we have launched a strategic client and trade engagement programme to enable us to maintain close relationship with our clients and industry partners. Secondly, we have established various communication channels to engage the general public on a regular basis, so that the community at large is well informed about E&M safety and energy efficiency matters. Thirdly, we carried out an engagement exercise this year to understand stakeholders' concerns on EMSD's sustainability performance. Staff members were invited to evaluate and provide feedback on sustainability issues related to EMSD's operation. Their feedback was consolidated and used to determine the scope of this Social and Environmental Report.

Furthermore, we also support and encourage colleagues to join the Council, various Boards and Committees of the Hong Kong Institution of Engineers and participate in suitable international engineering organisations to uphold the high standards of the engineering profession in Hong Kong.

### CONTRACTOR AND SUPPLIER MANAGEMENT

Contractors, consultants and suppliers are our important partners to provide reliable and quality services for our clients and the community. Currently, EMSD engages around 2 200 suppliers and contractors who mainly sell and install electrical and mechanical systems, and provide operation and maintenance support. When selecting contractors, we follow an open and fair process, and adopt competitive tendering wherever applicable.

We proactively communicate with our contractors, consultants and suppliers to ensure that important messages and latest requirements are clearly conveyed to them. We also conduct briefings on contract management, contractor management, contract safety and integrity management for relevant staff to strengthen their contractor management skill.

We monitor the performance of our contractors by conducting regular meetings and site visits to keep track of the project progress as well as to minimise inconvenience or disturbance caused to the public and our clients. We also carry out regular reviews to assess contractors' performance throughout the project.

During the reporting period, we did not identify any operations and suppliers having significant risk of forced labour.



環保成效  
ENVIRONMENTAL PERFORMANCE

提升部門及社區的環保表現，是機電工程署秉承的基本原則之一。憑藉專業技能，我們致力減少總部及我們所保養的設施的環境足跡。我們亦負責實施主要的能源效益法例及政策措施，支持香港成為一個可持續發展的城市，並為氣候變化作好準備。

目標及方針

面對氣候變化及環境破壞所帶來的巨大挑戰，確保下一代繼續享有足夠資源和宜居的環境就非常重要。機電工程營運基金恪守「持續綠色作業」的承諾，並在提供規管服務的同時，我們亦盡可能考慮環境因素。

除卻在提供核心服務過程時考慮會帶來的環境影響外，我們透過於總部大樓落實各項環保措施，致力節約資源、減少廢棄物及預防於運作中產生污染問題。我們亦鼓勵承辦商、供應商及其員工共同努力，盡可能減少對環境的影響。

環境管理系統

自2000年起，我們制訂及實施環境管理系統，為部門運作提供管治框架，持續提升部門在環保方面的表現。機電工程署一直密切關注相關國際標準的發展，並相應地提升我們的管理系統。

Enhancing departmental and community-wide environmental performance is one of the underlying principles imprinted on EMSD. Taking advantage of our technical expertise, we strive to reduce the environmental footprint of our headquarters and facilities that we maintain. We are also responsible for implementing major energy efficiency legislations and policy initiatives, supporting Hong Kong to become a sustainable and climate-ready city.

OUR APPROACH

Facing the immense challenges arising from climate change and environmental degradation, it is important to ensure the availability of resources and secure a livable environment for future generations. Our EMSTF strictly follows the commitment of “Sustain Green Operation”. We also integrate environmental considerations as far as practicable when delivering our Regulatory Services.

Apart from considering environmental impacts in the course of delivering our core services, we have made every effort to conserve resources, minimise waste and prevent pollution in our own operation through implementing various green measures at our headquarters. We also encourage and work with our contractors, suppliers and their staff to minimise environmental impacts as far as practicable.

Environmental Management System

Since 2000, we have developed and implemented an Environmental Management System to govern our operations to improve the Department’s environmental performance continuously. EMSD has closely followed the development of relevant international standards and upgrade our management systems accordingly.



機電工程署採用環境管理系統的里程碑  
MILESTONES OF ADOPTING ENVIRONMENTAL MANAGEMENT SYSTEMS IN EMSD



發揮香港的節能潛力

作為亞太經合組織的成員，香港支持該組織進取地將亞太區內的能源強度目標，訂定為於2035年<sup>1</sup>或以前減少45%，並一同邁向目標。2015年，香港特區政府發表節能藍圖，為本港制訂於2025年之前減少40%能源強度的短期目標。

為了達至整體經濟的能源強度目標，並減輕城市對氣候變化的影響，我們需要發揮建築物及交通運輸等方面重大的節能潛力。在宣傳能源效益、推動香港更廣泛使用再生能源方面，機電工程署擔當其中一個重要角色。本文介紹我們於2015/16年度支持政府節能政策方面的重點工作。

REALISING ENERGY SAVING POTENTIALS IN THE CITY

As a member economy of the Asia-Pacific Economic Cooperation (APEC), Hong Kong supported APEC’s target to work toward an ambitious and aspirational goal of a 45% reduction in APEC-wide energy intensity by 2035<sup>1</sup>. In 2015, the HKSAR Government published the Energy Saving Plan which sets a local and near term target of reducing energy intensity by 40% by 2025.

To meet the economy-wide energy intensity target as well as to lessen the city’s contribution to climate change, significant energy saving potentials are to be realised in the buildings, transport sectors, etc. EMSD is one of the key players to promote energy efficiency and encourage the wider use of renewable energy in Hong Kong. Our key developments in 2015/16 in support of the Government’s energy saving policy are highlighted in this chapter.

<sup>1</sup> 2005 年為基準

<sup>1</sup> 2005 as baseline



## 環保成效

### ENVIRONMENTAL PERFORMANCE

#### 《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。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》所訂明的最低能源效益標準：

- (i) 四個針對新建屋宇的主要屋宇裝備安裝工程類別，包括空調、照明、電器、升降機及電梯；及
- (ii) 現存建築物的大型改建工程。

《建築物能源效益條例》亦規定商業大廈須根據《能源審核守則》，每十年進行一次能源審核。機電工程署現時正跟進第四批進行首次能源審核的建築物。

機電工程署會每三年對《建築物能源效益守則》進行一次檢討，以配合技術發展和新的業界作業模式，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。

#### 強制性能源效益標籤計劃

「強制性能源效益標籤計劃」已於2009年11月及2011年9月，分兩階段實施。計劃要求製造商及進口商在指定的電器上貼上能源標籤，更清楚地為消費者提供產品的能源效益表現。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。截至2016年3月，約有7 700款產品型號被列入計劃名單中。

為進一步鼓勵供應商為顧客推出更多具能源效益產品，我們已於2015年11月25日開始，向冷氣機、冷凍器具及洗衣機，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。第三階段標籤計劃估計可達至的額外節能量，每年約1.5億千瓦小時，相當於每年減少105 000噸碳排放量。

#### Buildings Energy Efficiency Ordinance

The Buildings Energy Efficiency Ordinance (BEEO) was enforced in September 2012. Under the BEEO, the following areas are abided by the minimum energy efficiency standards stipulated in the Building Energy Code (BEC):

- (i) four key types of building services installations, including air-conditioning, lighting, electrical as well as lift and escalator in newly constructed buildings; and
- (ii) major retrofitting works of existing buildings.

The BEEO also requires commercial buildings to carry out energy audit in accordance with the Energy Audit Code every ten years. EMSD is currently following up the fourth batch of buildings to carry out the first energy audit.

EMSD shall review the BEC every three years to cope with technological advancement and evolving trade practices, 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 emissions of about 3.5 million tonnes.

#### Mandatory Energy Efficiency Labelling Scheme

The Mandatory Energy Efficiency Labelling Scheme (MEELS) has been implemented in two phases since November 2009 and September 2011 respectively. MEELS requires manufacturers or importers to affix prescribed electrical appliances with energy labels, 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. As of March 2016, around 7 700 product models have been listed under the Scheme.

To further encourage suppliers to provide more energy efficient products for consumers, 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 currently 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 at around 150 million kWh per year, equivalent to reduction in carbon emissions of 105 000 tonnes per year.



#### 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專業技術支援，以實施由自然保育基金撥款資助的「建築物能源效益資助計劃」。該資助計劃於2009年至2012年期間接受申請，合共為建築物業主提供約4.5億元資助，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。機電工程營運基金一直協助撥款機構，監察涉及超過6 400座建築物獲批准計劃的進度，直至計劃完成為止。據估計，獲批准計劃每年將節省約共1.8億千瓦小時的能源，相等於減少約120 600噸碳排放量。

#### 啟德發展計劃區域供冷系統

政府實施啟德發展區的區域供冷系統，為新發展區域建築物的中央冷氣提供冷水。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。

#### Buildings Energy Efficiency Funding Schemes

The EMSTF has been providing professional support to the Environment Bureau since April 2009 on implementing the Buildings Energy Efficiency Funding Schemes (BEEFS) with the funding support from the Environment and Conservation Fund. The BEEFS were open for application during 2009 to 2012, which provided about \$450-million-worth subsidies for building owners to conduct energy-cum-carbon audits and carry out energy efficiency improvement works. The EMSTF continues to assist the funding agent in monitoring progress of all the approved projects, involving over 6 400 buildings, until their completion. It is estimated that the approved projects would yield a total energy saving of around 180 million kWh per annum, equivalent to about 120 600 tonnes reduction in carbon emissions.

#### District Cooling System at the Kai Tak Development

The Government has implemented a district cooling system (DCS) at the Kai Tak Development (KTD) to supply chilled water to buildings in the new development area for centralised air-conditioning. The Phase I & II of this project were completed and the Phase IIIA is underway.

### 啟德發展計劃區域供冷系統用戶(2016年中期)

### USERS OF DCS AT KTD (AS OF MID-2016)



啟德郵輪碼頭  
Kai Tak Cruise Terminal



工業貿易大樓  
Trade and Industry Tower

晴朗商場  
Ching Long Shopping Centre



保良局何壽南小學  
Po Leung Kuk Stanley  
Ho Sau Nan Primary School

聖公會聖十架小學  
S.K.H. Holy Cross Primary School



環保成效  
ENVIRONMENTAL PERFORMANCE

隨着啟德地區的新發展，預計區域供冷系統的用戶，將會在未來數年陸續增加。《區域供冷服務條例》(第624章)已於2015年3月27日實施，賦予政府法定權力，向啟德發展計劃區域供冷系統用戶收費，服務費可於不久將來抵銷營運成本。

一般情況下，區域供冷系統較傳統製冷空調系統的耗電量低35%。據估計，在啟德發展計劃完成後，區域供冷系統每年可節省高達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。

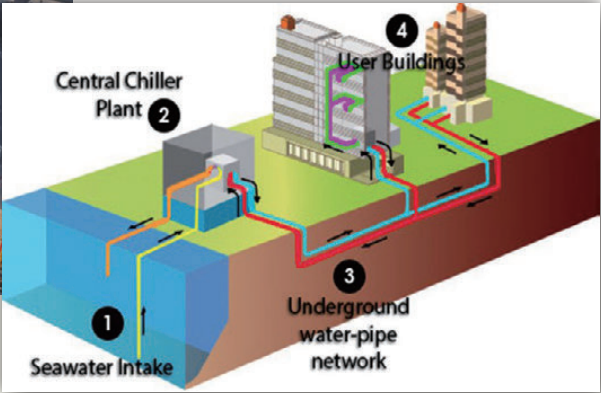
Along with the new development in Kai Tak, it is anticipated that the number of DCS users will increase in coming years. Following the enforcement of the District Cooling Services Ordinance (Cap. 624) on 27 March 2015, which bestows the government with the statutory authority to collect charges from DCS users at KTD, the service fees can offset the operating costs in the near future.

In general, a DCS will consume up to 35% less electricity than traditional air-cooled air-conditioning systems. It is estimated that upon completion of the KTD, the DCS will save up to 85 million kWh of electricity annually, equivalent to a reduction of 59 500 tonnes of carbon dioxide emissions per annum.

啟德發展區  
Kai Tak Development



區域供冷系統  
District Cooling System



為主要政府建築物進行能源審核

機電工程營運基金受環境局委託，在2017/18財政年度或之前，為大約340座主要的政府建築物進行能源審核，並根據每座建築物的運作和技術特性，尋找能源管理機會。新措施旨在協助政府決策局及部門實踐節能目標，即由2015/16至2019/20的五個財政年度內，於相若的運作環境下，以2013/14財政年度的操作環境為基礎，為政府建築物節省5%的用電量。

Conducting Energy Audit at Major Government Buildings

The EMSTF was entrusted by the Environment Bureau to conduct energy audit for about 340 major government buildings by 2017/18, and to identify energy management opportunities specific to the operational and technical characteristics for each of these buildings. The new initiative aims to facilitate government bureaux and departments to achieve the overall target of 5% saving in electricity consumption of government buildings in the coming five years from 2015/16 to 2019/20 under comparable operating conditions, using 2013/14 as the baseline.

綠化總部大樓

我們於總部大樓採用了一系列有效的環保措施，以提升機電工程署的整體環保表現，提高員工的環保意識，並宣揚綠色文化。

節約環境資源

機電工程署總部大樓於2015/16年度的電力、水及煤氣使用量列表如下。總用電量包括建築物(例如：總部大樓、工場、租用辦公室和數據中心)及基建設施(例如：連接總部的行人天橋和無線電站)，但不包括第三方營運的員工食堂。

GREENING OUR HEADQUARTERS

We have adopted a number of effective green measures in our headquarters to improve our overall environmental performance, raise the environmental awareness amongst our staff and promote a green culture at EMSD.

Conservation of Environmental Resources

Electricity, water and towngas consumption at EMSD in 2015/16 is shown in the table below. The total electricity consumption shown below includes buildings (e.g. the headquarters, depots, rented offices and data centres) and infrastructure (e.g. the footbridge connecting to headquarters, and radio stations) but excludes the staff canteen operated by the third party.

機電工程署的電力、水及煤氣用量

ELECTRICITY, WATER AND TOWNGAS CONSUMPTION AT EMSD

	2013/14	2014/15	2015/16
電力 (‘000 千瓦小時) Electricity (‘000 kWh)	14 785	14 974	15 060
水 (立方米) Water (m <sup>3</sup> )	49 912	42 547	40 226
煤氣 (兆焦耳) Towngas (MJ)	223 728	19 392	0 <sup>1</sup>

<sup>1</sup> 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，在2015/16年度，該工場沒有使用煤氣。  
The Caroline Hill workshop, which used towngas for water heating, was closed in 2014/15. Hence there has been no towngas consumption in 2015/16.



環保成效

ENVIRONMENTAL PERFORMANCE

紙張及碳粉盒是辦公室的主要耗材。我們於2015/16年度耗材量的節約成效和措施如下：

- 用紙量較原定上限減少1.8%；
  - 環保紙佔部門總用紙量100%；及
  - 回收所有舊碳粉盒。
- paper consumption was 1.8% below the set quota;
  - 100% of our total paper consumed was recycled paper; and
  - recycled all the used toner cartridges.



節省政府建築物用電

我們的政府建築物由2013/14至2015/16財政年度的用電量列表如下：

Electricity Saving in Government Buildings

Electricity consumption of our government buildings from 2013/14 to 2015/16 is tabulated below:

	用電量 Electricity consumption (百萬千瓦小時) (million kWh)	於相若運作情況下的用電量 Electricity consumption under comparable operating conditions (百萬千瓦小時) (million kWh)
2013/14 (基準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%)

我們的政府建築物用電量，於2013/14至2015/16年度增加了1.8%，主要原因包括工場的新增設備和部門數據中心的新增伺服器機架。實施各種內務節能措施後，包括使用LED照明設備，以及檢討通風系統的運作時間等，在2013/14年度相若的運作情況下，2015/16年度節省的用電量達1.1%。

The electricity consumption of our government buildings from 2013/14 to 2015/16 was increased by 1.8%, taking into consideration the major factors including additional equipment in workshops and additional server racks in the Corporate Data Centre. Under comparable operating conditions of 2013/14, the saving in electricity consumption in 2015/16 was 1.1%, after implementing the housekeeping electricity saving measures including the use of LED lightings, review of operation schedule of the ventilation system, etc.

減少廢棄物及循環再用

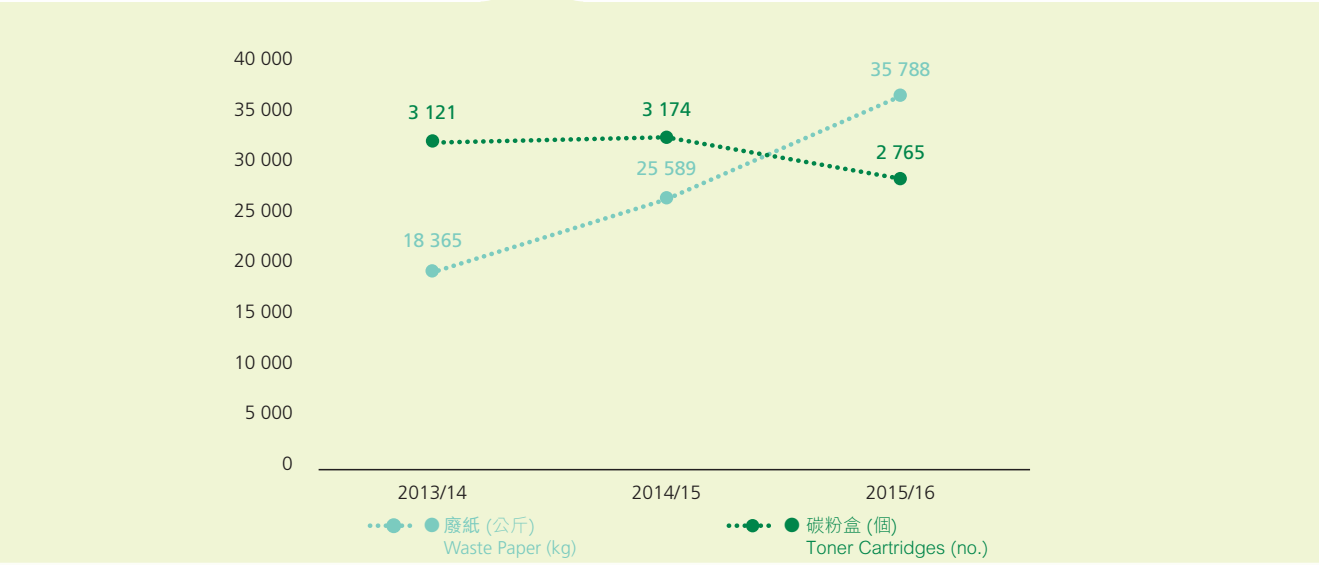
我們的主要廢物管理策略，是盡量減少或避免產生廢棄物，並盡可能回收可再造物料。我們的廢棄物主要來自兩大源頭，分別為辦公室和工場。辦公室廢棄物主要是紙張及碳粉盒，而工場的廢棄物則以舊水銀燈、舊充電電池、金屬廢料、舊車胎及舊光管為主。

Reducing and Recycling of Waste

Our prime waste management strategies are to minimise waste generation and maximise material recycling. Wastes are primarily generated from two streams — our offices and workshops. Major wastes from offices include paper and toner cartridges, while spent mercury lamps, rechargeable batteries, metal scraps, vehicle tyres and spent fluorescent tubes are major wastes from workshops.

辦公室廢物循環再用量

AMOUNT OF RECYCLED OFFICE WASTE



附註 如欲了解更多關於廢物棄置及回收循環再用的資料，請參考統計資料摘要。

NOTE For more information on waste disposal and recycling, please refer to Summary of Statistics.

溫室氣體排放

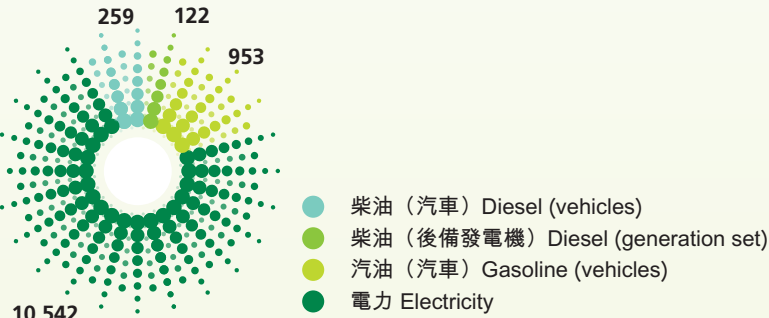
溫室氣體排放已被公認為全球暖化和氣候變化的原因，機電工程署排放的溫室氣體，主要由辦公室和工場的用電及運輸工具產生。

Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions are widely acknowledged as a cause of global warming and climate change. EMSD's GHG emissions are mainly attributed to the consumption of electricity in our offices and workshops, and transport.

2015/16年度的碳足跡(公噸)

Carbon Footprint in 2015/16 (tonnes)



## 環保成效

## ENVIRONMENTAL PERFORMANCE



機電工程署總部大樓連接電網的太陽能光伏系統  
Grid-connected photovoltaic system at EMSD Headquarters

在總部大樓所安裝的太陽能光伏系統，是機電工程署總部大樓減低碳足跡的標誌性項目。自2005年起，該系統已產生最高輸出達350千瓦的再生能源。

### 運輸

機電工程署日常營運所使用的傳統運輸工具，耗用不能再生的化石燃料，並排放溫室氣體。截至2016年3月31日，我們用作執行職務的車隊有219部車輛，包括貨車、客貨車、大型房車、電單車等。此外，我們亦為客戶部門的5 761部政府車輛提供維修服務。我們實行良好的內務管理措施、妥善保養車輛及減少使用運輸工具，並改用混合動力或電動車輛，盡力減少車輛運作及維修過程中的廢氣排放。現時，我們擁有九部電動車輛，及七部混合動力車輛，所消耗的燃料，較體積相近的傳統車輛少40%。基於環保效益，我們將於未來數年，增加使用混合動力車和電動車。

### 環保採購

環保採購是我們的主要政策之一，以達至減少廢棄物、鼓勵廢物回收及循環再造。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。

As a signature initiative to reduce the carbon footprint of EMSD Headquarters, the photovoltaic system installed in the EMSD Headquarters has been generating renewable energy with a maximum output of 350kW since 2005.

### Transport

The use of conventional vehicles consumes non-renewable fossil fuels and generates GHG emissions. As of 31 March 2016, we have a fleet of 219 vehicles including lorries, vans, saloon cars and motorcycles, and at the same time, we are responsible for maintaining 5 761 government vehicles for our client departments. We have made every effort to minimise emissions from such activities by good housekeeping, proper vehicle maintenance and reduced use of vehicles. As an alternative, we now switch to use hybrid vehicles and electric vehicles. Currently, we have nine electric vehicles, and seven hybrid vehicles which consume 40% less fuel than conventional cars of similar size. In view of the environmental benefits, we will increase the use of hybrid vehicles and electric vehicles in the next few years.

### Green Procurement

Green procurement is one of our key policies to encourage waste reduction, recovery and recycling. To support the Government's green procurement policy, EMSD has been incorporating environmental requirements into our procurement practices.

我們遵從環境局第6/2015號通告的綠色採購規定，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規格。為了更進一步推展綠色採購，我們正與相關供應商聯絡，以採用其他目前未包括在通告內的綠色規定。2015/16年度，機電工程署供應商名冊新增了167家可提供環保產品的供應商，使名冊中的環保供應商增至1 083個。此外，部門亦共斥資4,068萬元購買環保產品，佔部門總採購金額4.1461億元的9.8%。

我們已於機電工程署的內聯網，提供一個環保採購參考庫，收錄現行各項環保採購指引、實務守則、各種高能效產品和裝置的標準，以及綠色產品的一般規格等，協助實施環保採購。

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。工作小組也審視各項環保新科技，研究在機電工程中推廣使用，從而令客戶和公眾受惠。

### 綠建環評社區先導計劃

「綠建環評社區」先導計劃已於2016年完成。此計劃旨在促進建築群的集體成效，以及建立綠色社區。在實際運作上，先導計劃會邀請建築物的發展商和業主，在其建築邊界的500米範圍外，規劃更好的配套設施，如巴士站和花園等。完成評核後，機電工程署總部大樓獲得鉑金級評級。另外，總部大樓更獲香港綠色建築議會頒發「綠建環評既有建築1.2版」最終鉑金級證書。

### 客戶的環保工程項目

根據2015年的《施政報告》，行政長官承諾在未來五個財政年度，將政府建築物的用電量，在運作環境相若的基礎上減少5%（以2013/14財政年度用電量為基準），以繼續推展綠色運動，在本港加強推動低碳的居住環境。

We adhere 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. To make a step forward, we are liaising with relevant suppliers to adopt other green specifications which are currently not covered in the circular. In 2015/16, the updated EMSD Suppliers Lists contained an additional of 167 suppliers who are able to provide environment-friendly products, making up a total no. of 1 083 environment-friendly suppliers on the supplier list, and spent a total of \$40.68 million (9.8%) purchasing green products out of our total purchase amount of \$414.61 million.

To facilitate implementation of green procurement, we have maintained a reference library on EMSD's Intranet. The library covers current guidelines, codes of practice and standards relating to energy efficiency products and installations, as well as general specifications for green products.

Since 2010, a Working Group on Green Procurement in Electrical & Mechanical Works has been established to oversee the identification of green materials and products, systems and construction methodologies in E&M works. The Working Group also examines the implications of new green technologies with a view to promoting them in E&M works, so as to benefit our clients and the public.

### BEAM Plus Neighbourhood Pilot Scheme

In 2016, the BEAM Plus Neighbourhood Pilot-assessment was completed. The scheme aims at promoting collective performance of building clusters that forms a neighbourhood. In practical terms, it asks building developers and owners to look 500 metres beyond their building boundary to better plan supporting facilities such as bus stops and gardens. Upon completing the assessment, the EMSD Headquarters Building has achieved Platinum rating. As a high-quality green building, EMSD Headquarters Buildings was also awarded BEAM Plus Existing Building V1.2 Final Platinum Rating from the Hong Kong Green Building Council in 2016.

### GREEN PROJECTS FOR CLIENTS

In 2015 Policy Address, the Chief Executive pledged to achieve a target of 5% saving in electricity consumption for government buildings under comparable operating conditions (based on the electricity consumption in the financial year 2013/14) in the next five financial years. This is a continuous green drive to foster a low-carbon built environment in Hong Kong.



## 環保成效

## ENVIRONMENTAL PERFORMANCE

粉嶺和興體育館  
空調系統改進工程IMPROVEMENT WORKS ON THE AIR-CONDITIONING  
SYSTEM AT WO HING SPORTS CENTRE, FANLING

**客戶：**康樂及文化事務署  
**年期：**2015–2016

**Client:** Leisure and Cultural Services Department (LCSD)  
**Period:** 2015–2016

機電工程營運基金受委託，為粉嶺和興體育館進行空調系統改善工程，以風冷製式無油磁浮式製冷機（無油製冷機），取代兩個350千瓦的傳統風冷式製冷機。

The EMSTF was entrusted to conduct an improvement works on the air-conditioning system at Wo Hing Sports Centre located at Fanling. Two 350kW conventional air-cooled chillers were replaced with air-cooled packaged oil-free chillers.

相比傳統風冷式製冷機，無油製冷機有較高的性能系數，特別是在冷凍要求不高時，可達至節能效果。此外，無油製冷機的體積，比其他高效節能的製冷機（例如：水冷式製冷機）更小，因此，可設置於現有的機房。

Oil-free chillers have a higher coefficient of performance over conventional air-cooled chillers, especially when the cooling demand is not high, thus can achieve energy saving. Moreover, oil-free chillers are smaller in size than other high energy efficient chillers (e.g. water-cooled chillers) and they can be housed in existing plant room.

為民航處總部的  
空調系統實施  
能源優化方案IMPLEMENTATION OF ENERGY OPTIMISATION  
SYSTEM FOR AIR-CONDITIONING SYSTEM  
OF CAD HEADQUARTERS

**客戶：**民航處  
**年期：**自2015年10月開始

**Client:** Civil Aviation Department (CAD)  
**Period:** Since October 2015

機電工程署與民航處合作，嘗試為民航處總部大樓現有的中央冷氣系統進行能源優化方案。能源優化方案是一項先進的控制系統，能因應現行系統的負載及天氣狀況的變化，監察和控制空調系統。能源優化方案可改進能源消耗狀況，提升中央空調系統的日常運作，從而產生顯著的節能潛力，預計能源優化方案能為民航處達至5%的節能目標。

EMSD has been working with CAD on a trial application of the Energy Optimisation System (EOS) to the existing central air-conditioning system at the CAD Headquarters. The EOS is an advanced control system which monitors and controls the air-conditioning system in response to the prevailing system loads and changes in weather conditions. The EOS optimises energy consumption and enhances daily operations of the central air-conditioning system and thus creates significant energy saving potentials. It is anticipated that the EOS would enable CAD to achieve the 5% energy saving target.

於2015年10月，我們為能源優化方案主要組件進行安裝、測試及啟用。自2015年11月起，能源優化方案已投入測試運作，現正進行全年的成效監察及評估工作。

Installation of major EOS components as well as testing and commissioning of the EOS were completed in October 2015. The EOS has been put into trial operations since November 2015 and a full year performance monitoring and evaluation is being conducted.

為建業中心取得綠建  
環評室內建築評級ACHIEVED BEAM PLUS INTERIORS  
PLATINUM RATING FOR APB CENTRE

**客戶：**建築署  
**年期：**2015

**Client:** Architectural Services Department  
**Period:** 2015

機電工程營運基金為建業中心文樓一樓的辦公室翻新工程提供技術建議。在2015/16年度，該項目取得香港綠色建築議會頒發「綠建環評室內建築」鉑金級評級證書，是首個香港政府辦公室獲頒有關殊榮。

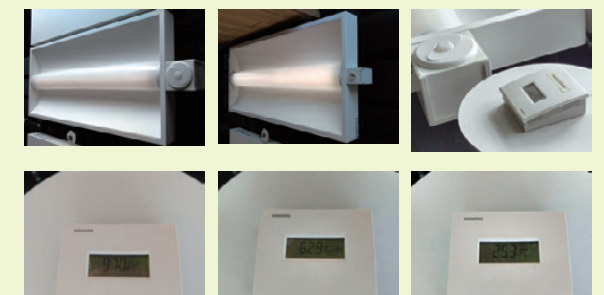
EMSTF offered technical advice in the fitting-out of office accommodation at 1/F Main Block of APB Centre. In 2015/16, the project is the first government office in Hong Kong to achieve the Platinum Rating under Hong Kong Green Building Council BEAM Plus Interiors Accreditation.

該項目結合各種創新的建築技術，例如天花空調系統和發光二極管照明板，亦採用日光及動作感應器、二氧化碳感應器、區域管制等。辦公室亦配置能源分項計量設備，監察不同屋宇裝備系統的能源消耗量，包括機械通風及空調、電力、照明及小功率器件，以鑑別改善能源管理的機會。我們亦在鄰近主要入口的位置安裝環保顯示屏，讓職員能更了解他們的實時用電量。該項目成功地展示了可持續辦公室的裝修配置，標誌着我們實踐可持續建築，及促進香港綠色發展的承諾。

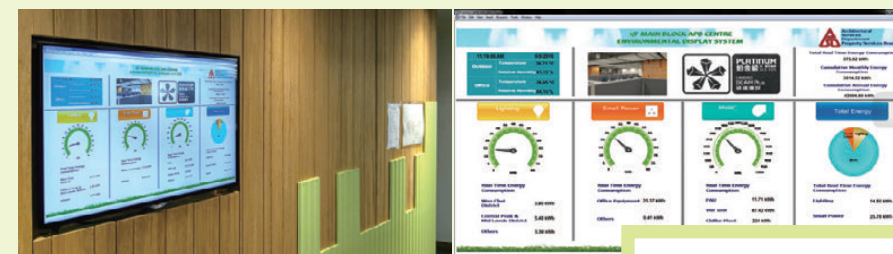
This project incorporated various innovative building technologies such as chilled ceiling system and LED lighting panels. Daylight and motion sensors, CO<sub>2</sub> sensors, zoning control have also been adopted. The office is also equipped with energy sub-metering to better monitor the energy consumption of different building services systems including Mechanical Ventilation and Air-conditioning (MVAC), electrical, lighting and small power, with an aim to identify energy management opportunities for further improvement. An environmental display panel has been installed near the main entrance for the staff to learn more about their real time energy consumption. This project has successfully demonstrated a best practice of a sustainable office renovation, which symbolises our commitment in promoting sustainable building practices and green development in HKSAR.



天花空調系統及發光二極管照明板  
Chilled ceiling system and LED lighting panels



裝設於燈光系統的日光及動作感應器、  
裝設於機械通風及空調系統的二氧化碳、  
溫度及濕度感應器  
Daylight and motion sensors for lighting,  
CO<sub>2</sub>, temperature and relative humidity sensors for MVAC



能源監察系統及實時能源顯示屏  
Energy monitoring system and real time energy display panel



## 環保成效

### ENVIRONMENTAL PERFORMANCE

#### 重點與前瞻

##### 重點

- 由2000年推出淡水冷卻塔計劃起，截至2015/16年度，已收到995份申請表。當中2 096座淡水冷卻塔已經落成並投入運作。預計完成安裝後，每年可節省4.12億千瓦小時用電量，相當於每年減少約290 000噸二氧化碳排放量。
- 自2011/12年度起，機電工程署根據《公眾衛生及市政條例》授予的權力，針對污染的淡水冷卻塔作出規管。於2015/16年度，我們從多個淡水冷卻塔抽取932個水樣本進行測試。如水樣本含有的退伍軍人桿菌含量超過其上限值，我們會要求冷卻塔的業主採取行動，以減低傳播退伍軍人症的潛在公眾衛生風險。
- 2015年，機電工程署對在香港未經批准的淡水冷卻塔進行研究(即在淡水冷卻塔使用的水源來自未經水務署批准的供水裝置)。研究發現未經批准的淡水冷卻塔，由2010年的9 700座，大幅減少至2015年的5 600座；由2010年至2015年期間，超過40%未獲批准的淡水冷卻塔已被拆除。這項研究結果令人鼓舞，並能大幅減少傳播退伍軍人症的潛在公眾衛生風險。

##### 前瞻

- 根據《公眾衛生及市政條例》，將於2016/17年度繼續抽驗800個淡水冷卻塔的水樣本，並就受污染的淡水冷卻塔作出規管。
- 新版本的水冷式空調系統及淡水冷卻塔計劃工作守則小冊子，將於2016年年底出版。
- 新版本的預防退伍軍人症工作守則小冊子，將於2016年年底出版。

#### HIGHLIGHTS AND WAY FORWARD

##### Highlights

- Up to 2015/16, 995 applications have been received since the launch of the Fresh Water Cooling Towers Scheme in 2000. Among them, 2 096 fresh water cooling towers (FWCTs) have been completed and put in operation. It is estimated that these completed installations could save up to 412 million kWh electricity consumption annually, which is equivalent to the reduction of carbon dioxide emissions by around 290 000 tonnes annually.
- EMSD has been implementing measures since 2011/12 to regulate contaminated FWCTs with delegated powers under the Public Health and Municipal Services Ordinance (PHMSO). In 2015/16, 932 water samples were taken from FWCTs, and the owners of the FWCTs were requested to carry out abatement action to reduce the potential public health risk of spread of Legionnaires' disease if water samples with total legionella count at or above the upper threshold value.
- In 2015, EMSD conducted surveys on the unauthorised FWCTs (UFWCTs, the use of water from the waterworks that have not been approved by the Water Authority for using in FWCT system) in Hong Kong. The findings of the survey indicated that the number of UFWCTs has greatly decreased from about 9 700 in 2010 to about 5 600 in 2015 with more than 40% UFWCTs demolished during the period from 2010 to 2015. The findings were encouraging and the potential public health risk of spreading of Legionnaires' disease could be greatly reduced.

##### Way Forward

- EMSD would continue to conduct annual water sampling for testing of about 800 FWCTs in 2016/17 and implement regulatory control of contaminated FWCTs under the PHMSO.
- New edition of Code of Practice for Water-cooled Air Conditioning System and FWCT Scheme brochure will be published by the end of 2016.
- New edition of Code of Practice for Prevention of Legionnaires' Disease will be published by the end of 2016.

## 社會成效

### SOCIAL PERFORMANCE

機電工程署致力與員工、客戶、社會大眾建立和諧關係。多年來，我們竭盡企業公民的本分，確保員工的福祉和發展、追求達至高安全水平、為客戶提供優質服務，並深入社區，建設更美好的社會。

#### 目標及方針

員工是我們最寶貴的資產，是我們履行職責和社會責任的基石。根據我們的人力資源發展政策，我們致力為員工提供安全和健康的工作環境，並提供全面的培訓機會，提升他們的專門知識和專業水平。除了關顧員工外，我們亦積極參與社會活動，將我們的關懷延伸至社區。

機電工程署連續第二年榮獲香港社會服務聯會頒發的「同心展關懷」標誌，表揚我們在實踐社會責任方面的努力。未來，我們將繼續履行我們的社會責任，並與其他持份者攜手服務有需要人士。

#### 我們的員工

##### 聘任

我們遵循公務員事務局的行為守則規範，確保提供一個公平的工作環境，以及平等的就業機會。作為一個對社會負責任的僱主，我們竭力令所有員工樂於在機電工程署工作，以維持穩定的工作團隊。

年內，我們共有5 144名僱員。截至2015/16年底，我們僱用了209名輕度殘疾人士，佔員工總人數約4.06%，全力支持社會共融。

EMSD strives to establish a harmonious relationship with staff, clients and the community at large. Throughout the years, we demonstrate strong corporate citizenship through ensuring the well-being and development of staff, pursuing a high standard of safety, providing quality service to our clients and reaching out to the community to build a better society.

#### OUR APPROACH

Staff are our most valuable asset and the cornerstone to discharge our duties and social responsibilities. As stipulated in our Human Resources Development Policy, we are committed to providing a safe and healthy working environment for our staff, and offering all-round training opportunities to them in order to develop their expertise and professionalism. Apart from taking care of our staff, we also actively participate in social activities to extend our care to the community.

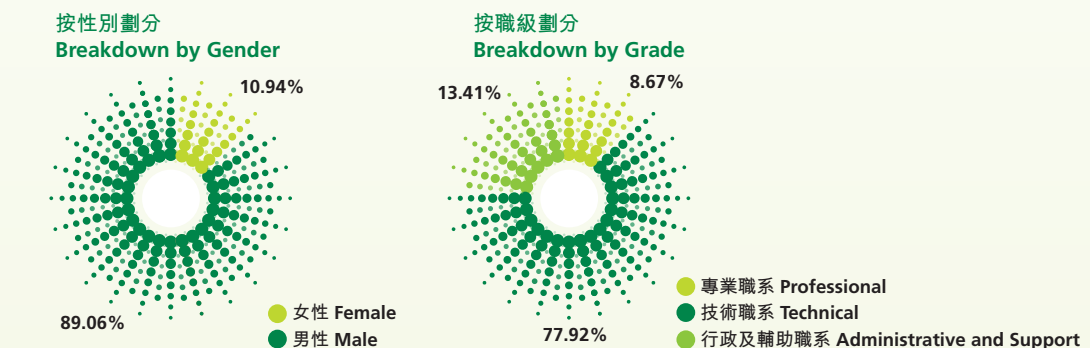
In recognition of our dedicated effort to practice social responsibility, we are awarded the Caring Organisation Logo by the Hong Kong Council of Social Service for the second consecutive year. We will continue to uphold our social responsibilities and join hands with other stakeholders to serve people in need.

#### OUR STAFF

##### Employment

We follow the Civil Service Bureau's codes of conduct to ensure a fair workplace and offer equal opportunities employment. As a socially responsible employer, we strive to ensure all staff enjoys their services at EMSD in order to maintain a stable workforce.

During the year, we have a total of 5 144 employees. We fully support social integration and have employed 209 staff with minor disabilities, representing about 4.06% of our total workforce as at the end of 2015/16.



僱用人員 Strength : 5 144名  
\* 截至2016年3月31日 As at 31 March 2016



## 社會成效

### SOCIAL PERFORMANCE

我們繼續參與《有能者・聘之約章》及共融機構嘉許計劃，成為推動殘疾人士就業的僱主機構。

在2015/16年度，部門因員工放取病假共損失19 837個工作天，即相等於每名員工損失約3.86個工作天。

#### 員工發展

我們通過對員工提供全面的培訓和培育人才，致力建立一支有能力的工作團隊。多年來，我們定期為員工訂定和檢討培訓和發展需要，以加強他們的專業水平。

#### 學習及發展

鑑於我們的服務涉及多個範疇，包括電力、機械、燃氣及鐵路安全，以及能源效益等，因此提升員工能力和競爭優勢，讓他們務實地履行職責至為重要。

我們的人力資源管理委員會，由機電工程署署長擔任主席，並由各職系首長級及一般和共通職系的高級管理人員組成，負責檢討部門的培訓計劃和活動。由委員會訂立明確方向後，我們持續為員工訂合適的學習和發展機會，為他們提供最新的知識和促進個人成長。

為了促進部門之間的知識交流和分享良好作業模式，我們提升了「知識管理網站」，鼓勵透過互動模式分享知識。未來一年，我們會就各種專門的工程知識及管理技能範疇，計劃進一步發展部門的「知識群體」，讓同事有更多機會深入分享和積累知識。

#### 見習工程師訓練計劃

為了向年輕工程師提供實習機會，我們自六十年代開始推行見習工程師訓練計劃。多年來，此計劃已培訓了超過700位見習工程師，亦被公認為香港工程界的最佳在職培訓計劃之一。計劃旨在培育人才，讓他們學習實用技能和行業知識，以滿足本地行業的人才需求。在2015/16年度，我們挑選了共24位來自電機、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。

We continue 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.

In 2015/16, a total of 19 837 working days were lost due to sick leave. This is equivalent to around 3.86 working days lost per employee.

#### Staff Development

We are committed to delivering comprehensive training to our staff and nurturing new talents in building up a competent workforce. Over the years, we have identified and reviewed the training and development needs regularly for our staff to strengthen their professionalism.

#### Learning and Development

In light of our multi-functional services involved in the areas of electrical, mechanical, gas and railway safety, and energy efficient aspects, it is crucial to enhance the capabilities and competitive strengths of our staff to discharge their duties pragmatically.

Chaired by the Director of Electrical and Mechanical Services, and composed of representatives of Heads of Departmental Grades and senior managers of General and Common Grades, a Human Resources Management Committee is in place to review the training programmes and initiatives of the Department. With the clear direction defined by the Committee, we offer continuous support in devising suitable learning and development opportunities to equip our staff with latest knowledge and foster personal growth.

To facilitate knowledge exchange and share good practices within the Department, we have enhanced our Knowledge Management Portal to encourage knowledge sharing in an interactive mode. We are planning to further develop a departmental “Knowledge Communities” in the coming year in specialised areas of engineering knowledge and management soft skills, so as to strengthen in-depth sharing and development of knowledge.

#### Graduate Training Scheme

To offer practical training to young engineers, we launched the Engineering Graduate Training Programme in the 1960s. Over the years, the programme has trained more than 700 graduates and has been recognised as one of the best on-the-job training schemes in the field of engineering in Hong Kong. The programme aims to nurture new talents and equip them with practical skills and industry know-how to meet the needs of the local profession. In 2015/16, 24 engineering graduates from the field of electrical, mechanical, electronics, building services, information technology and biomedical engineering have been selected to join the programme.

#### 技術員訓練計劃

技術員訓練計劃是機電工程署舉辦的另一個重要培訓計劃，旨在提供有系統和高水準的訓練，以滿足相關行業目前及未來對技術員的需求。此計劃已推行60年，成功為業界培訓了接近6 000名學徒。

為提升訓練計劃的形象、吸引更多年輕人才報讀，我們已於2012/13年度將學徒這職位名稱改為見習技術員。為配合技術員訓練計劃的招聘活動，我們推出恆常的外展宣傳活動，吸引來自學校、業界及公眾的人才。

在2015/16年度，我們招募了64名見習二級技術員（三年訓練制）、34名見習二級技術員（四年訓練制）、44名見習一級技術員（三年訓練制）及14名見習一級技術員（四年訓練制）。除了提供在職訓練外，我們亦資助見習技術員修讀香港專業教育學院的工藝證書課程和高級文憑課程，以提升他們的知識和取得專業資格。

#### 培訓目標

為了不斷發展員工的能力和提升他們的技術，在報告年度我們舉辦超過2 000項培訓及發展活動，共有超過19 500位參加者參與。在2015/16年度，每名員工每年平均受訓日數為4.37天<sup>1</sup>。

#### 員工溝通

我們明白員工在支援部門發展上擔當重要角色。因此，我們建立了多個溝通渠道，定期與員工對話，聆聽並回應他們的意見及關注事項。

#### 員工滿意度調查

我們重視員工對部門作出的貢獻，亦會着重評估員工對部門的滿意度及了解他們對部門的看法，從而釐定部門的管理方針。為此，我們委託獨立的專業調查公司，定期進行員工滿意度調查，收集員工的意見，以衡量我們的表現及研究改善的空間。

#### Technician Training Scheme

The Technician Training Scheme is another key training programme offered by EMSD, with the aim to provide systematic and high standard training to satisfy the present and future needs in related fields. The long-standing scheme has been run for over 60 years and successfully trained up about 6 000 apprentices for the profession.

To enhance the image of the scheme and attract more young talents, the “apprentice” post title has been changed to “technician trainee” since 2012/13. To step up the recruitment for the scheme, we have arranged on-going outreach publicity programmes attracting new talents from schools, trades and the public.

In 2015/16, we recruited 64 technician trainees II (three-year training programme), 34 technician trainees II (four-year training programme) and 44 technician trainees I (three-year training programme) and 14 technician trainees I (four-year training programme) to join the scheme. Besides offering on-the-job training to the trainees, we have sponsored them to attend craft certificate courses and higher diploma courses in the Hong Kong Institute of Vocational Education to further enhance their knowledge and acquire professional qualification.

#### Training Targets

With our continuous commitment to develop staff competence and enhance their capabilities, over 2 000 numbers of training and development activities were arranged and attended by more than 19 500 participants during the reporting year. We achieved 4.37 training days per staff member per year on average<sup>1</sup> in 2015/16.

#### Staff Communication

We understand that staff play a critical role in supporting the development of the Department. We have established several communication channels to regularly engage them in dialogues, listening and responding to their feedback and concerns.

#### Staff Satisfaction Survey

We value our staff’s contribution, while it is important to assess staff satisfaction level and understand staff perception of the Department in order to shape our management approach. To this end, we have engaged an independent research specialist in conducting staff satisfaction surveys on a regular basis to obtain feedback from staff in order to gauge our performance and identify room for improvement.

<sup>1</sup> 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。

<sup>1</sup> Strength of the Departmental/General/Common Grade/Non-Civil Service Contract staff, excluding all technical trainees and engineering graduates.



社會成效  
SOCIAL PERFORMANCE

最近的調查於2014/15年度完成，透過問卷收集所有高級工程師及以下職級員工的意見。調查顯示，員工整體滿意度平均分數為6.4（10分為滿分），與過去數年的得分相若，一直維持在6.3至6.6之間。下一次調查將於2016/17年度進行。

員工諮詢途徑

機電工程署已建立多個不同的渠道，以加強員工之間的溝通。為促進管理層與特定員工組別的溝通，我們設有四個部門協商委員會和五個個別協商委員會。員工亦可自由參加部門11個工會和一般政府人員工會組織。此外，我們會定期與部門的員工協會會面和舉行會議，商討並回應員工關注的事項。

The last survey was conducted in 2014/15 to collect feedback from all employees at senior engineer rank or below through a questionnaire survey. The overall staff satisfaction rating was 6.4 on a scale of 10, which remained steady (from a range of about 6.3 to 6.6) in the past few years. The next survey will be conducted in 2016/17.

Staff Consultation Channels

EMSD has established different channels to enhance communication among our staff. To facilitate communication between particular groups of staff and management within EMSD, four departmental consultative committees and five divisional consultative committees are established. Staff members are also free to join the 11 staff unions of EMSD, as well as the general government staff unions. In addition, regular gatherings and meetings are held with the EMSD staff unions to discuss and address issues of staff concerns.

員工活動列表  
LIST OF ENGAGEMENT ACTIVITIES



在報告年度，我們舉辦了多項員工活動。部分列表如下：  
A number of staff engagement activities were organised during the reporting year. Some of them are listed below.

- 規管服務於2015年12月3日及2016年3月4日舉行了本年度的管理工作坊。  
Held the Regulatory Services' annual Management Workshops on 3 December 2015 and 4 March 2016.
- 機電工程營運基金於2015年10月13日舉行了本年度的策略工作坊。  
Organised the EMSTF's annual Strategy Formulation Workshops on 13 October 2015.
- 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 front-line business units.
- 於2015年11月至12月舉行兩場署長簡報會。  
Arranged two sessions of Director's Briefing in November and December 2015.
- 首長級人員到訪了188個場地，進行員工親善探訪。  
Carried out 188 ambassador visits by directorate officers at various venues.
- 2015年10月9日與部門11個工會舉行聯席會議。  
Conducted a joint meeting with 11 staff unions of EMSD on 9 October 2015.
- 於2016年2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 February to March 2016.
- 員工福利組為抱恙或住院員工進行了7次家訪、37次醫院探訪、12次工作間探訪、407次電話問候及64次吊唁探訪。  
Conducted 7 home visits, 37 hospital visits, 12 workplace visits, 407 goodwill phone calls and 64 condolence visits to sick or hospitalised staff, by the Staff Welfare Unit.

工作安全與健康政策

機電工程署高度重視職業安全與健康（職安健）。作為部門政策的一部分，我們的職安健政策，肯定了我們對職安健的承擔，訂明在提供機電服務時必須確保工作安全，以減少工作場所的危險，確保員工及承辦商的健康和福祉。我們亦採用職安健的最佳作業措施，在可行情況下持續提升工作安全。

部門內個別部別已設有安全管理系統，為規劃及實施安全措施、評估及持續改進安全表現，提供管理框架。我們亦建立了以下的委員會，監察部門的安全管理策略、措施及表現。

HEALTH AND SAFETY

EMSD attaches great importance to Occupational Safety and Health (OSH). As part of the corporate policies, the Safety and Health Policy of EMSD affirms our commitment to OSH, stipulating that work safety is of high importance in delivering our E&M services, in order to minimise workplace hazards, ensuring the health and well-being of our staff and contractors. We also adopt best OSH practices where practicable to achieve continual improvement in work safety.

Safety management systems established in various divisions have been in place as a framework which governs the planning and implementation of safety initiatives, as well as the evaluation and continual improvement of safety performance. We have also established the following committees to oversee safety strategies, initiatives and performance.

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

- 由高層管理人員組成  
comprise 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 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

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

- 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  
comprise management and staff representatives from branches/divisions as well as departmental consultative committees
- 監察部門職安健政策的實施情況  
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

部門職業安全及健康委員會設有員工代表。因應推行安全管理系統，我們不時檢討職安健方面的相關風險。於2015年，我們就叢林地方進行戶外工作方面識別相關風險，並為該類工作推出了一系列的安全指引。

Staff are represented in the Departmental Occupational Safety and Health Committee. Under the operation of safety management systems, we review the OSH-related risks from time to time. In 2015, we identified the risk of outdoor work in shrubby areas and implemented a series of safety guidelines for such work type.



## 社會成效

### SOCIAL PERFORMANCE



2015/16年度「品質、環境及生產力推廣計劃」推行三個比賽，其中包括新推出的「最佳環保個案比賽」。

We launched three competitions under the 2015/16 Quality, Environmental and Productivity Promotion Programme, including the Best Green Project Competition.

#### 最佳環保個案比賽

2015/16年度，我們推出名為「最佳環保個案比賽」的全新比賽，鼓勵員工提出新的企業措施。此比賽旨在通過收集員工的建議，從而改善機電工程署在職安健、節約資源及環境可持續發展等多方面的表現。比賽共有36名參加者、分成七個隊伍參賽，最後由提出雨水收集項目以節約水資源的隊伍勝出。

#### The Best Green Project Competition

In 2015/16, we launched a new competition, named the Best Green Project Competition, which encourages staff to come up with new corporate initiatives. The competition aims to improve EMSD's sustainability performance through collecting proposals from staff in areas including OSH, resources conservation, and environmental sustainability. A total of seven teams, consisted of 36 members, participated in the competition. The champion went to the team that proposed a rainwater collection project to conserve water resources.

#### 我們的客戶

營運服務方面，我們致力以合理價格，為客戶提供優質服務，同時確保自身業務營運的經濟效益。為了持續提升我們的服務質素，我們用心聆聽及了解客戶的意見。作為一項恆常做法，我們每兩年委託一家獨立的市場研究公司，進行客戶意見調查。於2016年的調查當中，我們的客戶滿意度指數是6.45分（8分為滿分），創歷史新高，足證我們過去兩年推行多項改善措施的成效。透過是次調查，我們收集了很多客戶寶貴的意見。我們已根據客戶的回應，制訂出優化客戶服務的計劃，進一步提高客戶的滿意度。

#### OUR CLIENTS

In delivering our Trading Services, we strive to provide our clients with quality E&M services at a fair price, while ensuring the economic viability of our business operation. We endeavor to listen to and learn from our clients, with a view to enhance our service quality continuously. As an on-going practice, we commission an independent market research company to conduct a Customer Opinion Survey (COS) every two years. In the COS conducted in 2016, the Customer Satisfaction Index has risen to a record high 6.45 (on an eight-point scale), which is a testimony of various improvement measures implemented in the past two years. Much valuable opinions have also been solicited from our clients through the survey. We have formulated customer service enhancement plans according to our clients' feedback, aiming to further enhance customer satisfaction.

規管服務方面，我們的客戶聯絡小組及各個安全諮詢委員會，會定期與公眾代表開會，就規管工作的推廣活動，直接與公眾交流意見，聽取他們的看法和建議。我們亦會進行意見調查，了解市民對機電安全和能源效益的認識，並進行業界調查，探討業界對規管服務的意見。

As for Regulatory Services, our Customer Liaison Group and various safety advisory committees meet regularly with representatives from the general public to exchange views and obtain feedback on our regulatory promotion activities. We also conduct surveys to assess public awareness of E&M safety and energy efficiency, as well as trade surveys to understand the trade's views of Regulatory Services.

#### 社區參與

除了致力於提供專業的機電服務外，我們亦積極參與社區活動以服務社會。我們透過成立機電工程署義工隊為社區服務，已超過十年。部門的專業人員亦熱衷於參與不同的本地及國際學會和協會，促進行業的發展。

#### COMMUNITY ENGAGEMENT

Other than dedicating our professional knowledge in E&M services, we serve the community by actively participating in public engagement activities. We have set up the EMSD Staff Voluntary Service Team to act as a focal point of our community services over a decade. Our professionals are also keen on serving in different local and international institutes and associations to foster the growth of the industry at large.

#### 社區活動

我們相信公眾教育對宣傳機電安全和能源效益十分重要。因此，我們與各政府部門及公營機構緊密合作，舉行不同的社區活動。

#### Engagement Activities

We believe public education is important to promote E&M safety and energy efficiency. We therefore work closely with other government departments and public organisations to conduct different community activities.

#### 國際環保博覽2015 — 邁向可持續發展的綠色未來

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，展示來自世界各地環保產業的創新產品。一如往年，部門的能源效益事務處繼續參與展覽。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」、電動車的最近發展，以及一些節省能源的貼士。活動期間，我們還介紹了「強制性能源效益標籤計劃」的更強方案，以及最新推出的「全民節能」網站。

#### Embracing a Green and Sustainable Future at Eco Expo Asia 2015

Eco Expo Asia is an annual event organised by the Hong Kong Trade Council and supported by the Environment Bureau to showcase the latest innovations in environmental industries from around the world. This year, our Energy Efficiency Office continued to participate in 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. The enhancement of the MEELS and the newly released "Energy Saving for All" website were also introduced during the event.

行政長官梁振英先生及環境局局長黃錦星先生在我們的攤位留影。

The Chief Executive, Mr C Y Leung, and Secretary for the Environment, Mr Wong Kam-sing, at our booth.





## 社會成效

### SOCIAL PERFORMANCE

#### 創新科技嘉年華2015

在2015年，創新科技署舉辦了以「創新・科技・邁向無限未來」為主題的創新科技嘉年華2015。我們的生物醫學工程師和見習工程師，聯同香港工程師學會的生物醫學工程學科，於嘉年華設立展覽攤位，向公眾介紹組織工程、復康儀器，到人體力學等最新的生物醫學科技。該活動的其中一個焦點，是現場演示手術用的內窺鏡及智能互動「機械腳托」。這些裝置採用頂級的工程技術協助病人康復，並改善醫療服務。參觀者對生物醫學工程的最新發展，以至本地工程師的貢獻留下深刻印象。

#### InnoCarnival 2015

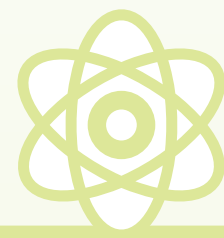
The InnoCarnival 2015 themed “InnoTech – Key to a Boundless Future” was organised by the Innovation and Technology Commission. Our biomedical engineers and engineer trainees joined hands with the Biomedical Discipline of the Hong Kong Institution of Engineers to set up and host a booth in the Carnival to introduce the latest biomedical science and technology to the public, from tissue engineering, rehabilitation devices, to biomechanics. One of our highlights in this event was the live demonstration of an endoscope for surgery and an interactive exoskeleton ankle robot. These devices apply top engineering techniques to assist patients in recovery and improving healthcare services. Visitors were impressed by the recent development of biomedical engineering and the contribution of local engineers.



我們在「創新科技嘉年華2015」為香港工程師學會生物醫學分部架設展覽攤位。Setting up the exhibition booth of the Biomedical Division, Hong Kong Institution of Engineers, at InnoCarnival 2015.



攤位同事向參觀者介紹最新醫療儀器的使用方法。Our staff introducing new biomedical device to visitors.



#### 淡水冷卻塔和建築物能源效益技術研討會

技術研討會是部門能源效益事務處的年度活動焦點。本年度，我們在2015年12月4日舉行技術研討會，吸引超過600位人士參加。

研討會分兩部分舉行。在研討會的第一部分，講者分享了「淡水冷卻塔計劃」的最新發展和成功個案，並介紹有關淡水冷卻塔的水質規管工作，淡水冷卻塔的正确設計和安裝，以提升業界對計劃的認識。該場次亦令參加者對《水務設施條例》及《水務設施規例》中，就淡水冷卻塔供水的相關法定要求有更深入了解。在研討會的第二部分，講者闡述《建築物能源效益條例》及相關實務守則的最新發展，包括2015年版的《建築物能源效益守則》及《能源審核守則》。會上並討論五宗與拖延首次能源審核相關的檢控個案，重申準時為建築物進行能源審核的重要性。

研討會接近尾聲時，我們亦安排了關於電動車的分享環節。我們的講者闡述於香港採用的最新電動車及充電器規格，並討論電動車的未來發展及更廣泛使用電動車的挑戰。

#### Technical Forum on Fresh Water Cooling Towers and Buildings Energy Efficiency

The technical forum is an annual highlight of the EMSD Energy Efficiency Office. This year, we organised the forum on 4 December 2015, which attracted over 600 participants.

The forum comprised two sessions. During the first session, speakers shared the latest developments and successful cases in the Fresh Water Cooling Towers (FWCTs) Scheme and regulatory control of water quality of FWCTs to enhance industry knowledge of the scheme and the proper design and installation of FWCTs. This session also provided attendees with better understanding of the statutory requirements for using fresh water for FWCTs under Waterworks Ordinance and Waterworks Regulations. In the second session, speakers explained the latest development of the Buildings Energy Efficiency Ordinance and relevant codes of practice, including Building Energy Code and Energy Audit Code 2015 Edition. Five cases leading to prosecution in relation to the delay of the first energy audits were discussed to emphasise the importance of conducting energy audits for buildings on time.

Near the end of the forum, we also arranged a sharing on electric vehicle. Our speaker explained the latest specifications of electric vehicles and chargers that could be adopted in Hong Kong. The direction for future development and challenges in promoting the use of electric vehicles were also discussed.



技術研討會吸引了超過600位業界人士參加。Over 600 industry practitioners joined the forum.



機電工程署代表與嘉賓講者於研討會上合照。Guest speakers and EMSD representatives at the technical forum.





## 社會成效

### SOCIAL PERFORMANCE

#### 機電安全健步嘉年華2015

「機電安全健步嘉年華2015」由香港機電工程師商聯會與香港機電業工會聯合會合辦，於2015年12月6日在屯門虎地舉行，獲得機電工程署60多位員工及家屬齊齊參與。活動旨在團結及加強業界的伙伴關係。署長陳帆先生在開步禮致辭時，提到基建對香港經濟發展的重要性，並呼籲業界注意工業安全。



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.

#### E&M Safety Walk and Carnival Fair 2015

The E&M Safety Walk and Carnival Fair 2015 was jointly organised by the Hong Kong Federation of Electrical and Mechanical Contractors and the Federation of Hong Kong Electrical and Mechanical Industries Trade Unions on 6 December 2015 in Fu Tei, Tuen Mun, with over 60 EMSD staff and their family members participated. The event aims to unite and strengthen partnership within the E&M industry. Mr Chan Fan, Frank, Director of Electrical and Mechanical Services, delivered the opening speech and pointed out the importance of the infrastructure development to the local economy. He also urged the industry practitioners to pay attention to safety management.

#### 東區醫院日2015

東區醫院日是由東區尤德夫人那打素醫院舉辦的一年一度籌款活動，旨在促進醫院和社區的伙伴合作。活動所籌得的善款會用於改善病人服務及醫院設備。重點活動包括「慈善步行」及「正向生活嘉年華」。今年，機電工程署獲院方頒發「最踴躍參與獎」，表揚我們的支持和捐獻。

#### Pamela Youde Nethersole Eastern Hospital Day 2015

The Pamela Youde Nethersole Eastern Hospital (PYNEH) Day is an annual fund raising event that aims to promote community partnership. All fund raised will be used to improve the services and facilities of PYNEH. Main activities of the Day include Charity Walkathon and Positive Living Carnival. This year, EMSD was presented the Best Participatory Award for our active participation and donation.



參與東區醫院日2015的部門義工。  
EMSD volunteers at the PYNEH Day 2015.

#### 其他社區活動 (公眾人士)

我們亦舉辦以公眾人士為目標的多項社區活動。2015/16年度的主要活動如下：

- 共有35家發展商及管理公司(代表150家商場)、620家零售店、260座商業大廈、1 200家機構的辦公室、420幢住宅樓宇及屋苑，以及360個非政府組織場地，簽署了2015年的「室內溫度節能約章」，承諾在2015年6月至9月期間，維持平均室內溫度在攝氏24至26度之間。
- 為機構或學校舉行144場講座或探訪，宣傳能源效益及節能。
- 為多個機構舉行29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。
- 舉行73次外展講座，也接待了458個參觀團參觀機電工程署教育徑，共17 286位訪客，向各機構和學校宣傳能源效益和節能。
- 往全港幼稚園、小學及老人中心進行264次外展講座，向約35 000位參加者宣傳電力安全。
- 往全港幼稚園、青年中心及老人中心進行453次外展講座，向29 000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。
- 舉行68次學校展覽，宣傳「強制性能源效益標籤計劃」。
- 於2015年8月全面走訪全港有關的零售商，宣傳「強制性能源效益標籤計劃」。

#### Other Engagement Activities (Public at Large)

We also organises a wide range of engagement activities that target the public at large. Major events took place in 2015/16 are listed below.

- 35 developers and property management companies (representing 150 shopping malls), 620 retail shops, 260 office buildings, offices of 1 200 organisations, 420 residential buildings and housing estates and 360 premises of non-governmental organisations signed the Energy Saving Charter on Indoor Temperature in 2015. They pledged to maintain an average indoor temperature of 24 – 26 degrees Celsius from June to September 2015.
- Delivered or organised 144 talks and visits to organisations/schools to promote energy efficiency and conservation.
- Delivered 29 presentations to various organisations to promote the mandatory implementation of the Building Energy Code and Energy Audit Code under the Buildings Energy Efficiency Ordinance.
- Organised 73 outreach talks and 458 visits to the Education Path of EMSD Headquarters for a total of 17 286 visitors from different organisations and schools to promote energy efficiency and conservation.
- Visited 264 kindergartens, primary schools and elderly centres, reaching about 35 000 participants to promote electrical safety.
- Visited 453 kindergartens, youth centres and elderly centres, reaching over 29 000 participants to promote the safe use of amusement rides, lifts and escalators.
- Conducted 68 school exhibitions on the Mandatory Energy Efficiency Labelling Scheme (MEELS).
- Held a full-scale publicity visit to relevant retailers in August 2015 to promote MEELS.

社會成效  
SOCIAL PERFORMANCE

- 於2015年9月，就「強制性能源效益標籤計劃」的新能源效益級別舉行簡介會。
  - 為業界人士就《供電電纜（保護）規例》的要求，舉行36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。
  - 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14場簡介會、技術及安全講座與研討會。
  - 舉行九場研討會及走訪1 600車輛維修工場，向車輛維修業界推廣車輛維修技工自願註冊計劃及車輛維修工場自願註冊計劃。
  - 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147場講座及研討會。
  - 截至2015年12月已走訪5 000多個已識別的淡水冷卻塔，並提醒淡水冷卻塔持有人有關正確設計、安裝及使用淡水冷卻塔的規定。
  - 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。
  - 探訪了21個寮屋和村屋區的居民，講解家居氣體安全。
  - 為氣體業界及不同的工程承辦商，舉辦了22場氣體安全講座，並進行了207個工地巡查，宣傳有關避免損毀氣體喉管的方法。
- Carried out briefing sessions in September 2015 on the new energy efficiency grading of MEELS.
  - Delivered 36 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.
  - Conducted 14 briefing sessions, technical and safety talks and seminars for trade representatives, lift/escalator owners, members of incorporated owners and building management staff.
  - Organised nine briefing sessions and visited over 1 600 vehicle maintenance workshops to promote the two Voluntary Registration Schemes for Vehicle Mechanics and Vehicle Maintenance Workshops to the vehicle maintenance trade.
  - Conducted 147 talks and seminars on the implementation of the Continuing Professional Development Scheme for Registered Electrical Workers.
  - Visited about 5 000 identified fresh water cooling towers (FWCTs) as of December 2015 to remind FWCTs owners of the requirements for proper design, installation and adaptation of FWCTs.
  - Conducted six seminars on gas safety with the Food and Environmental Hygiene Department, targeting 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.
  - Visited 21 squatter areas and villages to promote domestic gas safety to the residents.
  - Conducted 22 gas safety seminars for gas traders and different contractors, and 207 trench inspections to construction sites to promote safety practices on avoiding damage to gas pipes.



一般標準披露  
GENERAL STANDARD DISCLOSURES

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	機電工程署二零一五至一六年年報 EMSD Annual Report 2015/16	√
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	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	沒有 None	√
G4-12	機構的供應鏈 Organisation's supply chain	實現可持續發展 Sustainability at EMSD 主要來自香港 A majority of our suppliers are based in Hong Kong	√
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) 國際大型電力系統組織 International Council on Large Electric Systems (CIGRE)	√
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	√



一般標準披露

GENERAL STANDARD DISCLOSURES

已確定的重要議題 IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
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	√
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	為更準確呈現數據，更新了2014/15年度用水量 Water consumption figure in 2014/15 updated for better accuracy	√
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	實現可持續發展 Sustainability at EMSD 社會成效 Social Performance	√
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 社會成效 Social Performance	√
G4-26	與持份者溝通的方式 Approach to stakeholder engagement	關於本報告 About this Report 社會成效 Social Performance	√
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	2015年12月 December 2015	√
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	機電工程署二零一五至一六年年報 EMSD Annual Report 2015/16	√
G4-36	機構有否任命管理階層負責檢視經濟、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 behavior	機電工程署二零一五至一六年年報 EMSD Annual Report 2015/16	√

特定標準披露

SPECIFIC STANDARD DISCLOSURES

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	管理方法披露(DMA) Disclosures on Management Approach	機電工程營運基金二零一五至一六年報告 <sup>1</sup> EMSTF Report 2015/16 <sup>1</sup>	√
G4-EC1	機構產生和分配的直接經濟價值 Direct economic value generated and distributed	機電工程營運基金二零一五至一六年報告 <sup>1</sup> EMSTF Report 2015/16 <sup>1</sup>	√
部門的採購政策 PROCUREMENT PRACTICES			
G4-DMA	管理方法披露(DMA) Disclosures on Management Approach	實現可持續發展 Sustainability at EMSD	√
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 Acquisition of services and goods handled by Supplies Sub-division are mainly from local suppliers/contractors or local agents	√
類別：環境 CATEGORY: ENVIRONMENTAL			
物料 MATERIALS			
G4-DMA	管理方法披露(DMA) 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	管理方法披露(DMA) 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	數據摘要 Summary of Statistics	√
水 WATER			
G4-DMA	管理方法披露(DMA) 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	數據摘要 Summary of Statistics	√

<sup>1</sup> 請參閱《機電工程營運基金二零一五至一六年報告》單行本內之財務報告，該報告已上載至機電工程署網站。  
Please refer to the Financial Report in the separately published Electrical and Mechanical Services Trading Fund Report 2015/16 which is available on EMSD website.

特定標準披露

SPECIFIC STANDARD DISCLOSURES

排放 EMISSIONS			
G4–DMA	管理方法披露(DMA) 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	管理方法披露(DMA) 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	數據摘要 Summary of Statistics	√
供應商的環境評估 SUPPLIER ENVIRONMENTAL ASSESSMENT			
G4–DMA	管理方法披露(DMA) 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	管理方法披露(DMA) 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	署內的臨時員工乃經由人力資源中介所聘請，而該些中介所均經過嚴謹的甄選過程方會獲得任命，確保臨時員工能得到合理的報酬。 Our temporary employees are employed by a human resources agency, and such agency is appointed through a stringent procedure to ensure reasonable remuneration for temporary employees.	√

職業健康與安全 OCCUPATIONAL HEALTH AND SAFETY			
G4–DMA	管理方法披露(DMA) 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	管理方法披露(DMA) 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劃 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	管理方法披露(DMA) 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	√



特定標準披露

SPECIFIC STANDARD DISCLOSURES

員工申訴機制			
LABOUR PRACTICES GRIEVANCE MECHANISMS			
G4–DMA	管理方法披露(DMA) 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	部門處理了一宗由臨時員工提出的申訴個案。  The Department resolved one complaint case raised by a temporary worker.	√
人權			
HUMAN RIGHTS			
強迫與強制性勞工			
FORCED OR COMPULSORY LABOUR			
G4–DMA	管理方法披露(DMA) 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	實現可持續發展  Sustainability at EMSD	√
產品責任			
PRODUCT RESPONSIBILITY			
產品及服務標籤			
PRODUCT AND SERVICE LABELLING			
G4–DMA	管理方法披露(DMA) 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	2013/14	2014/15	2015/16
物料Material (G4-EN1)				
紙張 Paper	令 ream	26 992	26 344	26 645
油漆及溶劑 Paint & Solvent	升 L	20 057	17 289	13 371
潤滑油 Lubrication Oil	升 L	100 169	66 339	75 621
油脂 Grease	公斤 kg	1 708	1 457	2 161
製冷劑 Refrigerant	公斤 kg	13 302	14 988	11 963
工業用氣體 Industrial Gas	立方米 m³	751	418	410
蓄電池電解液 Battery Electrolyte	升 L	201	219	185
原子車胎 Tubeless Tyre	條 No.	10 656	10 982	9 569
外車胎 Outer Cover Tyre	條 No.	3 108	2 435	1 444
車胎內膽 Inner Tube	條 No.	1 975	1 773	524
能源Energy (G4-EN3)				
柴油 Diesel	升 L	285 444	131 762	139 926
汽油 Gasoline	升 L	370 354	373 451	351 939
電力 Electricity	‘000千瓦小時 ‘000 kWh	14 785	14 974	15 060
煤氣 Towngas	兆焦耳 MJ	223 728	19 392	0
水Water (G4-EN8)				
水 Water	立方米 m³	49 912	42 547	40 226
溫室氣體排放GHG Emissions (G4-EN15, G4-EN16) <sup>1</sup>				
直接排放(範疇一) <sup>2</sup> Direct Emissions (Scope 1) <sup>2</sup>	噸 tonnes	Figure not available 未能提供數據		1 333.7
能源間接排放(範疇二) Energy Indirect Emissions (Scope 2)	噸 tonnes	10 352	10 482	10 542
污水及廢物Effluent and Wastes (G4-EN23)				
廢紙 Waste Paper	公斤 kg	18 365	25 589	35 788
碳粉盒 Toner Cartridges	個 No.	3 121	3 174	2 765
用罄電池 Batteries	公斤 kg	16 040	18 697	17 204
金屬廢料 Metal Scraps	公斤 kg	27 484	22 974	21 907
廢油 Waste Oil	升 L	93 216	99 876	91 970
舊車胎 Used Vehicle Tyre	條 No.	11 862	13 323	10 464
含水銀照明燈 Spent Mercury Lamp	盞 No.	126 146	136 535	154 624

<sup>1</sup> 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 EPD & EMSD)

<sup>2</sup> 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

統計資料摘要

SUMMARY OF STATISTICS

社會 Social

僱員人數 Employees Statistics (G4-10, G4-LA12)<sup>3, 4</sup>

	截至2016年3月31日 As of 31 March 2016
總人數 Total number	5 191
男女分佈 By Gender	
男性 Male	4 621
女性 Female	570
合約類型分佈 By Employment Type	
公務員 Civil Servants	3 819
其他 Other terms	1 372
年齡分佈 By Age Group	
50歲或以上 Aged over 50	1 721
30 – 49歲 Aged 30 – 49	2 598
29歲或以下 Aged under 29	872

2015/16 新入職員工 2015/16 New Hires (G4-LA1)

	截至2016年3月31日 As of 31 March 2016
總人數 Total number	507
年齡分佈 By Age Group	
50歲或以上 Aged over 50	7
30 – 49歲 Aged 30 – 49	177
29歲或以下 Aged under 29	323
男女分佈 By Gender	
男性 Male	444
女性 Female	63

<sup>3</sup> 不包括承辦商的員工  
Contractors’ employees are not included

<sup>4</sup> 所有員工均在香港工作  
All staff are based in Hong Kong

離職員工 Turnover (G4-LA1)

	截至2016年3月31日 As of 31 March 2016
總人數 Total number	599
年齡分佈 By Age Group	
50歲或以上 Aged over 50	231
30 – 49歲 Aged 30 – 49	183
29歲或以下 Aged under 29	185
男女分佈 By Gender	
男性 Male	528
女性 Female	71

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

	截至2016年3月31日 As of 31 March 2016
總人數 Total number	136
年齡分佈 By Age Group	
50歲或以上 Aged over 50	100
30 – 49歲 Aged 30 – 49	36
29歲或以下 Aged under 29	0
男女分佈 By Gender	
男性 Male	128
女性 Female	8

其他社會指標 Other Social Indicators

	單位 Unit	2013/14	2014/15	2015/16
須予呈報意外宗數 Reportable Accidents	宗/千名員工 No./1 000 staff	5.59	4.5	4.09
員工滿意度 Staff Satisfaction	分(滿分為10分) Score (out of 10)	不適用 Not Applicable	6.4	不適用 Not Applicable
平均培訓日數(目標：4.5) Average Training Days (Target: 4.5)	日/員工 Days/staff	4.74	4.72	4.37



# 核實聲明

## VERIFICATION STATEMENT



香港品質保證局

### 範圍及目的 SCOPE AND OBJECTIVE

香港品質保證局已對機電工程署二零一五/一六年社會及環保報告(以下簡稱「報告」)內容進行獨立驗證。報告陳述了機電工程署在2015年4月1日至2016年3月31日於社會及環保方面的承諾和表現。

此核實聲明的目的是對報告內容的完整性及準確性提供合理保證。機電工程署社會及環保報告依循全球報告倡議組織(GRI)的第4代可持續發展報告指南(下稱G4)的核心選項進行報告。

Hong Kong Quality Assurance Agency (“HKQAA”) conducted an independent verification of the Social and Environmental Report 2015/16 (hereinafter referred to as “the Report”) of Electrical & Mechanical Services Department, HKSAR (hereinafter referred to as “EMSD”). The Report states EMSD’s commitments and progress in social and environmental aspects for the period of 1st April 2015 to 31st March 2016.

The aim of this verification was to provide a reasonable assurance on the completeness and accuracy of the information stated in the Report which was prepared in accordance with the Core Option of the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines.

### 核實方法 ASSURANCE METHODOLOGY

核實的程序包括審閱相關之文件、與負責編製報告內容的代表面談及選取報告內具有代表性的數據和資料進行查核。對所選樣本的數據及證據已進行徹底審查。

The verification process included reviewing of relevant documentation, interviewing responsible personnel with accountability for preparing the reporting contents and verifying the selected representative sample of data and information. Raw data and supporting evidence of the selected samples were thoroughly examined.

### 獨立性 INDEPENDENCE

香港品質保證局不涉及收集和計算此報告內容的數據或參與編撰此報告。香港品質保證局的核實過程是獨立於機電工程署。

HKQAA was not involved in collecting and calculating the reporting data, or in the development of the Report. HKQAA’s activities are independent from EMSD.

### 結論 CONCLUSION

是次的核實結果肯定了機電工程署用作管理和報告其可持續發展表現資料的系統和流程為有效。我們確定報告內所陳述的資料可靠和準確。可持續發展報告G4框架和環境、社會及管治報告指引中載述的要求、元素和關鍵績效指標得到適切地涵蓋。報告的內容結構完整合理，能平衡及一致地反映有關機電工程署重要可持續發展範疇於2015/16年的實踐表現。

機電工程署一直積極地主動與持份者保持良好溝通。持份者的意見極受重視並且成為機電工程署建立可持續發展策略和編製報告內容的基礎。同時，機電工程署亦能及時回應持份者的關注及期望，報告也記載了有關例子。總括而言，報告清楚載述了有關機電工程署在重要可持續發展範疇的承諾，實踐及表現。

The results of our verification provided confidence in the systems and processes used by EMSD for managing and reporting sustainability performance information. It is confirmed that the contents stated in of the Report are accurate and reliable. The requirements, aspects and key performance indicators specified in the G4 Sustainability Reporting Guidelines have been adequately addressed. The information presented in the reporting contents articulate a balanced account of EMSD’s sustainability performance during the reporting period.

EMSD has established effective mechanism to proactively engage with its stakeholders. Feedbacks from stakeholders were taken into account very seriously for incorporating into the company’s sustainability strategies and for preparing the reporting contents. Also, EMSD has been responsive to stakeholder concerns and expectations with a number of examples shown in the Report. Overall, the material sustainability issues of EMSD’s commitments, progress and achievement were included in the Report.

香港品質保證局

Signed on behalf of Hong Kong Quality Assurance Agency

譚玉秀  
企業業務總監  
2016年11月

Jorine Tam  
Director, Corporate Business  
November 2016

# 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).

香港機場管理局

Airport Authority Hong Kong

建築署

Architectural Services Department

民航處

Civil Aviation Department

律政司

Department of Justice

環境保護署

Environmental Protection Department

食物環境衛生署

Food and Environmental Hygiene Department

政府產業署

Government Property Agency

路政署

Highways Department

香港消防處

Hong Kong Fire Services Department

香港天文台

Hong Kong Observatory

香港警務處

Hong Kong Police Force

香港郵政

Hongkong Post

醫院管理局

Hospital Authority

房屋署

Housing Department

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

海洋公園公司

Ocean Park Corporation

三和車房

San Woo Garage

香港中華煤氣有限公司

The Hong Kong and China Gas Company Limited

旅遊事務署

Tourism Commission

運輸署

Transport Department

黃銳汽車服務有限公司

Wong Yui Automobiles Service Company Limited

Design And Produced By: EDICO Financial Press Services Limited  
設計及製作：鉅京財經印刷服務有限公司



採用無氯氣漂染紙漿製造的環保紙印刷  
Printed on environmentally friendly paper manufactured from totally chlorine-free pulp