





社會及環保報告
**SOCIAL AND
ENVIRONMENTAL
REPORT**

持續發展 樂活宜人
**SUSTAINABLE
DEVELOPMENT AND
HARMONY FOR ALL**

關於本報告

ABOUT THIS REPORT

機電工程署欣然報告，部門在上財政年度於社會及環保方面的表現。我們採取這報告模式，既可時刻提點我們關心各個持份者的不同需要，也讓我們緊記必須預計及滿足不同持份者所需。通過這報告，我們希望與公眾及持份者分享一些看法，讓大家給我們更多意見，使我們的服務更確切滿足各方的需要。

範圍

本報告涵蓋機電工程署由2014年4月1日至2015年3月31日期間在本港的運作情況。報告內提供的數據均為實際數字，涉及機電工程署在全港各區的工作。在合適可行的情況下，各主要事項的數據已整合為可比較的數據。所有金額均以港元為單位。

原則

本報告參照《全球報告倡議組織 G3.1 指引》的應用等級 B+ 編寫。指標索引載於本報告最後部分，以供參考。

本報告的獨立核實聲明亦載於報告的最後部分。

The Electrical and Mechanical Services Department is delighted to report its performance in the past fiscal year in social and environmental aspects. The reporting model is a constant reminder of the diverse needs of our stakeholders and our responsibility to anticipate and satisfy those needs. This annual publication aims to share our insights with the public and our stakeholders, and help them give us feedback on how we can better serve their needs.

SCOPE

This report covers the operations of EMSD from 1 April 2014 to 31 March 2015. All data are presented as absolute figures and cover all the regions in which EMSD operates in Hong Kong. Data on priority issues have been normalised into comparable terms where appropriate and practical. All monetary terms are in Hong Kong dollars.

PRINCIPLE

This report makes reference to the Global Reporting Initiative (GRI) G3.1 Guidelines – Application Level B+. A GRI Content Index is provided at the end of this report for easy reference.

An independent verification statement of this report is also attached at the back.

可持續發展對機構的影響

這章闡釋可持續發展與我們機構的動態關係，及彼此如何互相影響。

作為政府部門，我們明白必須以身作則，在日常運作的每一層面，向社會示範如何善用可持續發展帶來的商機與機遇，及面對要走上可持續發展之路而遇到的挑戰。

對規管服務的影響

經濟增長、人口增加及氣候變化對自然資源造成的壓力，已促使多國領袖專注研究如何為經濟增長和發展創造更多可持續的模式，並為此制訂更嚴格的排放管制規例。我們的規管服務所面對的挑戰，是掌握當前的國際發展形勢，協助政府完善一套讓香港可順利轉型為具能源效益及低碳經濟體的能源效益規管架構。

作為本港的機電安全和能源效益規管機構，規管服務必須面對可持續發展帶來的挑戰，例如協助特區政府履行國際間的可持續發展責任，包括2011年的《亞太經濟合作會議檀香山宣言》，達至在2035年前將能源強度降低45%的承諾。我們也必須以環保及可持續發展的方式，履行我們的規管職責及進行日常工作。最新的挑戰，是協助特區政府根據其於2015年5月推出的香港首份都市節能藍圖《香港都市節能藍圖2015~2025+》，目標是要於2025年將本港的能源強度減少四成。

此外，作為推動本港能源效益和節能的先驅，我們也必須繼續發揮創意，以身作則，啟發及協助非政府機構、私營企業和市民大眾，在日常工作和生活中實踐可持續發展的精神。

IMPACT OF SUSTAINABILITY ON THE ORGANISATION

This section addresses the dynamic relationship between sustainability and our organisation, and how one impacts on the other.

As a government department, we are aware of the need to lead by example how to make the best use of opportunities afforded by sustainable development, and to manage the challenges it poses in every aspect of our operations.

Impact on Regulatory Services

The strain imposed on natural resources by economic growth, human population and climate change has prompted many leaders around the world to focus on ways to create more sustainable models for economic growth and development, which could lead to more stringent emission control regulations. The challenge for our Regulatory Services is to keep abreast of current international developments and help the Government continuously improve the city's energy efficiency regulatory framework that is conducive to the transformation of Hong Kong into an energy efficient and low carbon economy.

As Hong Kong's regulator in E&M safety and energy efficiency matters, our Regulatory Services must respond to the challenges of sustainable development, such as assisting the HKSAR Government in meeting its international sustainability obligations such as the 2011 Asia-Pacific Economic Cooperation (APEC) Honolulu Declaration which pledges to reduce 45% of energy intensity by 2035. We must also discharge our regulatory duties and daily operations in an environmental and sustainable manner. The latest challenge is to help the HKSAR Government meet its target of reducing Hong Kong's energy intensity by 40% by 2025 per the "Energy Saving Plan for Hong Kong's Built Environment 2015~2025+", the city's first energy-saving blueprint launched in May 2015.

In addition, as the pioneer of energy efficiency and conservation in Hong Kong, we must also continue to innovate and lead by example, so that we can inspire and facilitate non-governmental organisations, the private sector and the public to become more sustainable in how they work and live every day.



對營運服務的影響

隨著社會對可持續發展的意識逐漸提高，客戶部門對我們的能源管理、節約能源和可再生能源等服務項目的需求，近年也與日俱增。我們亦一直積極主動，在可行情況下盡量採用更綠化、更具能源效益和環保的實務做法。過去幾年，我們已為政府各政策局和部門安裝了能效較佳的工程系統和落實節能措施，協助他們節省能源。這方面的最新挑戰，是要幫助客戶滿足環境局要求所有政府建築物，在2019/20年節省5%用電量的指標（以2013/14年度為基準）。與此同時，我們也會繼續與客戶聯手處理其機電資產日漸老化的問題，包括更換硬件、採用更先進的操作和維修保養技術及更佳實務做法，並協助客戶部門為其重要的工程資產取得ISO 55001認證。

長遠來說，我們的挑戰，是如何協助客戶透過行為上的改變和其他途徑，實行各種節能措施，從而進一步提高政府的節能成效。我們會繼續引入先進節能科技，為客戶的工程系統進行適當的維修保養，務求系統在整個生命周期的能效表現都維持在最佳水準，令我們客戶時刻都處於本港綠色營運先鋒之列。

Impact on Trading Services

As general awareness of sustainability increases, client demand for our energy management, energy saving and renewable energy project services has risen in recent years. We have also been making proactive efforts to be green, energy efficient and environment-friendly wherever possible. Over the past years, we have helped government bureaux and departments achieve energy savings through the installation of more energy efficient engineering systems and the implementation of energy saving best practices. A new challenge in this regard is to help client departments satisfy the Environment Bureau's requirement for all government buildings to reduce electricity consumption by 5% by 2019/20 from a 2013/14 baseline. At the same time, we also continue to work with clients to tackle the issue of aging engineering assets via replacing hardware, deploying more advanced operation and maintenance technologies and better practices, as well as helping them obtain ISO 55001 certification for critical engineering assets.

In the long run, the challenge will be to help our clients implement best practices through behaviour changes and other means, in order to take Government's energy saving performance to a new height. We shall continue to bring in advanced energy saving technologies and maintain engineering systems at their best energy saving performance level during their life cycle, so that our clients are always at the forefront of green operations in Hong Kong.

機構對可持續發展的影響

規管服務

機電工程署致力為可持續發展帶來正面的影響，透過執行相關法例及各項宣傳活動和計劃，我們的規管服務全力支援政府推廣能源效益和可再生能源的政策。

重點例子包括《建築物能源效益條例》、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，以及推廣電動車的使用。

年內，我們對業界和公眾進行了廣泛的宣傳和教育工作，包括外展活動、印製刊物、舉辦展覽、講座和研討會等，以加強市民對節能生活方式的認識。

營運服務

我們的營運服務為本港各政府部門及公營機構提供機電工程服務，過程中涉及的辦公室運作及相關工程項目，無可避免會對環境造成影響。

為減少這些影響，我們實施了一套綜合管理系統，將品質、環境和職安健管理整合成一個流程框架，並找出未能符合要求的地方以作改善。與此同時，我們為客戶部門的節能及可再生能源計劃提供專業工程服務，協助他們減低能源消耗量和廢物產生量，亦對可持續發展帶來裨益。

此外，我們也為環境局提供專業意見和支援，推廣《建築物能源效益條例》、「室內溫度節能約章」和「『不要鎢絲燈泡』節能約章」，也時常為該局就其他環保與能源計劃和活動，提供技術支援。

ORGANISATION'S IMPACT ON SUSTAINABILITY

Regulatory Services

EMSD strives to make positive impacts on sustainability. Through legislation enforcement and various promotional campaigns and schemes, our Regulatory Services fully support the Government's initiatives to promote energy efficiency and the use of renewable energy.

Key examples include the Buildings Energy Efficiency Ordinance, 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 encouraging wider adoption of electric vehicles.

Throughout the year, we organised extensive education and promotional programmes, including outreach activities, publications, exhibitions as well as talks for the trades and general public, so as to raise public awareness towards the energy-efficient lifestyle.

Trading Services

Our Trading Services provide E&M engineering services to government departments and public bodies in Hong Kong, a process which inevitably impacts upon the environment through our office operations and engineering related works.

To mitigate the impact, we have adopted an Integrated Management System that combines quality, environmental, occupational health and safety management systems as an overall process framework and to identify non-compliances for improvement. At the same time, we also make a positive impact through providing professional engineering services in energy efficiency and renewable energy projects to client departments that reduce energy consumption and emissions.

Furthermore, we give professional advice and support to the Environment Bureau to promote the Buildings Energy Efficiency Ordinance, the two Energy Saving Charters on Indoor Temperature and No Incandescent Light Bulbs. We also give technical support to the Environment Bureau on other environment or energy related schemes and initiatives from time to time.

環保責任

我們相信，在創造公眾價值來提升市民生活質素的同時，我們不應破壞大自然，或以不合乎持續發展的方式去使用自然資源，以免剝削後世代使用這些資源的機會。其實，機電工程營運基金目前的五項策略之一，就是「持續綠色作業」。此外，機電工程營運基金及規管服務也要求所有活動都以保護環境方式進行。

我們的首要任務是避免製造任何環境污染。如環境污染真的無可避免，則會盡量減輕污染的影響。我們致力在業務營運過程中節省資源，減少製造廢物及避免污染。為此，我們已採取一切合理措施，恪守各種環保法例，作為我們營運的基本準則。與此同時，我們也鼓勵承辦商、供應商及其員工關注保護環境。

我們的環境管理歷程

我們為環保工作而推行的環境管理系統，多年來不斷改進。機電工程署的環境管理之旅始於九十年代中期，2000年我們成為首個取得ISO 14001企業認證的政府部門。2002年，營運基金把品質、環保和職業健康及安全管理等各套系統進行簡化，合併成一個綜合管理系統，至2006年更將環境管理系統提升至ISO 14001:2004版。2008年，整個規管服務也全面提升其環境管理系統至ISO 14001:2004版。至於最新進展，是機電工程署總部大樓於2015年2月取得ISO 50001能源管理系統認證，再次突顯了部門對定期檢討及更新環境管理系統、以符合最新標準的決心。

節約能源先驅

機電工程署自九十年代起，一直在本港率先推動能源效益和鼓勵更廣泛應用可再生能源。

亞太經合組織領導人於2011年11月在美國夏威夷舉行會議，發表了《檀香山宣言》，成員國決議在2035年或之前，期望將能源強度進一步降低45%。作為亞太經合組織的成員，香港已採納該宣言，並會致力達標。

ENVIRONMENTAL RESPONSIBILITIES

We believe that in creating public value in order to improve the community's quality of life, we must not damage nature or use natural resources in a way that will deprive future generations the benefit of using them. Indeed, one of EMSTF's current five strategies is to "sustain green operation". Both EMSTF and RS also require all their activities to be conducted in an environmental manner.

Our priority is to avoid creating any environmental pollution. Where pollution is inevitable, we reduce its impact as much as possible. We strive to conserve resources, minimise the generation of waste and prevent pollution in our business operation process. To achieve this goal, we have taken all reasonable measures to comply with green legislations as the baseline of our operation. We also encourage our contractors, suppliers and their staff to be equally friendly to the environment.

OUR ENVIRONMENTAL MANAGEMENT JOURNEY

Our environmental performance is mainly governed by our Environmental Management System (EMS) which has evolved over the years. EMSD's environmental management journey began in the mid-1990s and in 2000 we became the first government agency to attain the ISO 14001 Corporate Certificate. In 2002, EMSTF streamlined and combined its various management systems in quality, environment and occupational health and safety into an Integrated Management System. In 2006, EMSTF upgraded its EMS to ISO 14001:2004. In 2008, the entire RS also upgraded its EMS to ISO 14001:2004. The latest development took place in February 2015 when the entire EMSD Headquarters Building was certified to the ISO 50001 Energy Management System, a move that demonstrated the Department's commitment to regularly reviewing and upkeeping our management systems to conform to the most current standards.

ENERGY EFFICIENCY CONSERVATION INITIATIVES

Ever since the 1990s, EMSD has been playing a pioneering role in promoting energy efficiency and encouraging the wider use of renewable energy in Hong Kong.

The APEC's Honolulu Declaration was announced at the APEC Leaders' Meeting held in Hawaii, the United States in November 2011. Member Economies decided to raise the APEC-wide aspirational energy intensity reduction target to 45% by 2035. As a member economy of the APEC, Hong Kong has adopted the declaration and has been doing its best to meet the reduction target in energy intensity.

以下是我們在 2014/15 年度，為配合政府推動能源效益和節約能源政策而進行的主要工作。

強制性能源效益標籤計劃

強制性能源效益標籤計劃第一及第二階段已全面實施，涵蓋五類產品，即空調機、冷凍器具、慳電膽、洗衣機和抽濕機，這五類產品必須附有能源標籤，讓消費者知悉有關能源效益表現。至 2015 年 3 月底，計劃已有約 6 700 個表列產品型號。

為進一步鼓勵供應商引進高能效的產品讓消費者挑選，在《產品能源標籤實務守則 2014》內的空調機、冷凍器具及洗衣機能源效益級別的計算方法經已修訂，由 2015 年 11 月 25 日起，進口商供應的該三類訂明產品須貼有新能源效益級別的標籤。

《建築物能源效益條例》

《建築物能源效益條例》自 2012 年 9 月起已全面實施。條例管制新建築物及進行「主要裝修工程」的現有建築物內的四類主要屋宇裝備裝置，即空調、照明、電力、升降機及自動梯裝置等須符合基本能源效益標準；商業建築物須為建築物內的主要屋宇裝備裝置每十年進行一次能源審核。機電工程署現正積極跟進第三批建築物進行首次能源審核。

建築物能源效益資助計劃

機電工程營運基金自 2009 年 4 月起，一直為環境局提供專業技術支援，以實施環境及自然保育基金撥款 4.5 億元推展建築物能源效益資助計劃，並協助評審有關的撥款申請。計劃旨在資助私人建築物業主為其樓宇進行能源及碳排放綜合審計，制訂能源效益改善方案，並改善大廈的屋宇裝備設施，以提升能源效益表現。計劃已於 2012 年 4 月 7 日結束。機電工程營運基金仍繼續提供支援，協助監察獲撥款項目的進度，直至完工。

Highlighted below are key developments in 2014/15 to support Government's policy to step up energy efficiency and conservation.

Mandatory Energy Efficiency Labelling Scheme

The initial and second phases of the Mandatory Energy Efficiency Labelling Scheme have been fully implemented, covering five products types: room air-conditioners, refrigerating appliances, compact fluorescent lamps, washing machines and dehumidifiers. All these five product types are required to bear energy labels to inform consumers of their energy efficiency performance. As at the end of March 2015, around 6 700 product models have been listed under the Scheme.

To further encourage suppliers to provide more energy efficient products for consumers, the calculation methods of the energy efficiency grading of room air-conditioners, refrigerating appliances and washing machines have been revised in the Code of Practice on Energy Labelling of Products 2014. Starting from 25 November 2015, these three prescribed products supplied by importers shall bear the energy labels of new energy efficiency grading.

Buildings Energy Efficiency Ordinance

The Buildings Energy Efficiency Ordinance has come into full operation since September 2012. The Ordinance governs the minimum energy efficiency standards of four key types of building services installation including air-conditioning, lighting, electrical as well as lift and escalator in newly constructed buildings and "major retrofitting works" of existing buildings; and requires commercial buildings to carry out energy audit for the central building services installation every ten years. EMSD is currently following up the third batch of buildings to carry out the first energy audit.

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 of a total sum of \$450 million under the Environment and Conservation Fund. The Schemes aim to help building owners conduct energy-cum-carbon audits of their buildings to identify areas for improvement, and implement projects to upgrade the energy efficiency performance of building services installations. The Schemes closed on 7 April 2012. The EMSTF continued to assist in monitoring progress of approved projects until their completion.

區域供冷系統

啟德發展區的區域供冷系統第一及第二期工程已於2013及2014年完成，並開始提供服務，餘下工程亦正在進行。一般而言，區域供冷系統較傳統氣冷式空調系統的用电量，可減省多達35%。據估計，當啟德發展計劃全面完成後，區域供冷系統每年可減省用电量達8 500萬千瓦小時，即每年減少排放59 500公噸二氧化碳。近期立法的區域供冷服務條例（第624章）已於2015年3月27日起生效，條例明文授權政府向啟德發展區區域供冷服務的用戶收費，並以此收費抵銷機電工程署的相關營運開支。目前於啟德發展區有三幢用戶建築物使用區域供冷服務，包括啟德郵輪碼頭、晴朗商場及工業貿易大樓，預期用戶數量會於未來數年增加。

為主要政府建築物進行能源審核

受環境局的委託，機電工程營運基金會於2015/16財政年度，協助首150座在2013/14財政年度為最高用电量的政府建築物進行能源審核，我們會因應每座建築物在運作上及技術上的特色，發掘能源管理機會。新措施能協助政策局及部門實踐節能目標，即在未來由2015/16至2019/20的五個財政年度，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%的用电量。我們將於2015年4月進行能源審核服務的採購。

環保採購

環保採購是我們的主要政策之一，以達至減少廢物、鼓勵廢物回收及循環再造。政府早於2000年已修訂採購規定，要求所有政策局與部門在採購物料和服務時必須考慮環保因素。為此，機電工程署已在日常運作中奉行環保採購的原則，根據環境保護署的環保產品規格進行採購，並在產品和服務採購政策中加入環保要求。

我們積極採納了環境局第2/2011號通告（綠色採購通告）內有關103種產品的綠色採購規定，並在部門採購工作中盡量遵循。在2014/15年度，在機電工程署3.6297億元直接採購的貨品中，有3 604萬元的貨品是綠色採購單上的貨品。

District Cooling System

Phases I and II of the District Cooling System (DCS) at the Kai Tak Development (KTD) were completed and began supplying chilled water in 2013 and 2014 while the remaining works are under construction. 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 Kai Tak Development, the DCS will save up to 85 million kWh of electricity annually, equivalent to a reduction of 59 500 tonnes of carbon dioxide emission per annum. The newly enacted District Cooling Services Ordinance (Cap. 624) has been in effect since 27 March 2015 and the Ordinance bestows the Government with the necessary statutory authority to collect district cooling services charges from users of the district cooling services at KTD, so that the revenue can offset the operating costs incurred by EMSD. At the moment the district cooling services at KTD have three users, namely the Kai Tak Cruise Terminal, Ching Long Shopping Centre and the Trade and Industry Tower. The number of users is expected to increase in the coming years.

Conducting Energy Audit at Major Government Buildings

The EMSTF was entrusted by the Environment Bureau to assist in conducting energy audit in 2015/16 for the top 150 government buildings that have the highest level of annual electricity consumption in 2013/14, and to identify energy management opportunities specific to the operational and technical characteristics of individual buildings. The new initiative aims to facilitate bureaux and departments to implement electricity saving measures and projects to achieve the overall target of 5% saving in the 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. Procurement of the energy audit services will be initiated in April 2015.

GREEN PROCUREMENT

Green procurement is one of our key policies to encourage waste reduction, recovery and recycling. The Government amended its procurement regulations as early as 2000 to require all bureaux and departments to take into account environmental considerations when procuring goods and services. In this regard, we have been doing our part by incorporating green requirements into our procurement policy for products and services, and in accordance with the Environmental Protection Department's "green product specifications".

We play an active role in green procurement by adopting the green product specifications of 103 products provided in the Environment Bureau Circular Memorandum No. 2/2011 (Green Procurement Circular) as far as possible in our purchases. In 2014/15, from the total amount of \$362.97 million for direct purchase of goods in EMSD, \$36.04 million was spent on purchases for the products on the green procurement list.

我們也密切留意供應商提供的綠色產品和服務。如市場可普遍地提供綠色產品，我們會把有關綠色要求列為強制性的採購要求，以鼓勵供應商製造更多綠色產品。在2014/15年度，額外有158家供應商提供環保產品，機電工程署也相應更新了供應商名冊，令該名冊增至有1 169個供應商的資料。

同時，我們亦支援客戶落實能源效益及可再生能源項目，以及採購混合動力車和電動車等環保車輛。

我們於2010年3月成立環保採購工作小組，目的是為各類機電工程選取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，研究能否在機電工程中推廣使用，以令客戶和公眾受惠。

為了使部門同事能更有效地分享環保採購的資訊和項目經驗，我們自2010年7月已在部門內聯網推出環保採購參考庫，收錄了現行各項環保採購指引、實務守則與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。我們更根據2014/15年度部門所有的投標和報價單資料，制訂了「部門綠色產品名單」，並上載至部門內聯網供所有同事參考。

客戶的環保工程項目

機電工程署的營運服務一直協助客戶發掘節省能源的機會及推行環保工程項目，以提高節能效益及更多使用可再生能源。我們年內為政府各政策局及部門完成了五個節能項目，例如燈光改善工程及安裝高效能製冷機組等。預計這些新設備可每年減省用電量達19萬千瓦小時。

民航處總部大樓於2014/15年度也開始推出兩項綠色措施，即改變升降機及照明的操作時間。升降機方面，我們把部分升降機在非繁忙時段關掉，以節省能源。照明方面，我們把大樓中庭75%的照明關掉，採用日光照明。

此外，我們協助建築署為建業中心進行能源管理工作，並於2014年10月取得ISO 50001認證，達至節約能源的目的。

We keep track of the offers from suppliers for the green contents of their products. We shall change the green requirements to mandatory requirements in the related procurement specifications as soon as the green products are commonly available in the market to encourage suppliers to produce more green items. In 2014/15, the updated EMSD Suppliers Lists contained an addition of 158 suppliers who were able to provide environment-friendly products for procurement, making up a total number of 1 169 environment-friendly suppliers on the supplier list.

At the same time, we also supported our clients by helping them to implement energy efficiency and renewable energy projects, as well as procure environment-friendly vehicles such as hybrid vehicles and electric vehicles.

A Working Group on Green Procurement in E&M Works was set up in March 2010 with an objective 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.

To facilitate effective sharing of green procurement information and project experiences within the Department, a green procurement reference library was launched on EMSD's Intranet in July 2010. 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. A Departmental Green Products List was compiled, using data from various tender and quotation results in 2014/15. It is available on our Intranet for reference by all colleagues.

Green Projects for Clients

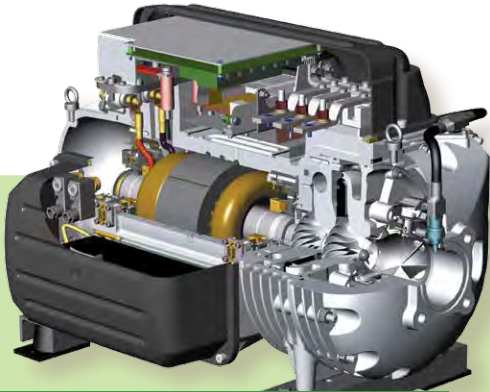
EMSD's Trading Services has been assisting clients in identifying energy saving opportunities and implementing green projects to enhance energy efficiency and the use of renewable energy. During the year, we have planned and executed five energy efficiency projects for government bureaux and departments, such as lighting improvement works and installation of high efficiency chillers. It is expected that these new installations will generate an annual energy saving of around 190 thousand kWh upon completion.

Two green initiatives at the Civil Aviation Department Headquarters Building began implementation in 2014/15, namely, rescheduling of lift and rescheduling of lighting. Rescheduling of lift means that some of the lifts are switched off during off-peak hours to save energy. Rescheduling of lighting means that 75% of lights in the atrium of that building are switched off, to make better use of sunlight for illumination.

Also, we have implemented energy management works in APB Centre for Architectural Services Department to obtain ISO 50001 certification in October 2014 to achieve energy saving.

環保成效

Environmental Performance



無油磁浮式製冷機採用最新的無油磁浮軸承壓縮機(上圖)技術，能大幅節省能源耗量。
Oil-free Chiller, using the latest technologies in oil-free magnetic levitation bearing type compressor (above), can reduce energy consumption significantly.



我們的同事在美國DTC Inc.完成無油磁浮軸承壓縮機的技術培訓。
Our colleagues completed an oil-free compressor technology training at DTC Inc. in the United States.

為客戶加強無油磁浮式製冷機支援服務

REINFORCE SUPPORT FOR OIL-FREE CHILLERS FOR CLIENTS

無油磁浮式製冷機採用最新的無油磁浮軸承壓縮機技術，能大幅節省能源耗量，是空調技術的發展趨勢，惟對合資格維修人員和技術支援的需求亦甚為殷切。

機電工程署全力支持新節能技術的應用以協助客戶邁向更環保作業。為此，我們在2014年9月派出六位同事遠赴無油磁浮軸承壓縮機製造商Danfoss Turbocor Compressor (DTC) Inc. 位於美國的基地學習有關重點技術，並與製造商建立聯繫，為日後的支援和培訓鋪路。

醫院管理局將於2015年冬季開始安裝第一批共27台全新的無油磁浮式製冷機，故此，我們有需要加強在保養維修技術方面的技術支援及訓練。

機電署將是本港首個客戶與DTC Inc.合作推出培訓員訓練先導計劃。我們會安排有潛質的同事參加計劃，當他們成為先驅導師後，將會有效加強我們長遠的技術人員培訓，以滿足無油磁浮式製冷機的維修保養服務需求。

無油磁浮軸承壓縮機結合磁浮軸承和內置電腦控制，這項創新設計取代了傳統製冷機使用的潤滑油系統，並可按不同製冷要求調節壓縮機轉速，以達節能之效。

Oil-free Chillers (OFCs), using the latest technologies in oil-free magnetic levitation bearing type compressors, can save significant energy consumption. This trend of air-conditioning is generating high demand for competent servicing personnel and technical support.

EMSD supports the application of new energy saving technologies to facilitate our clients for more environment-friendly operation. As such, we sent a team of six colleagues in September 2014 to Danfoss Turbocor Compressor (DTC) Inc. in the United States, the manufacturer of oil-free compressors, to learn the key technologies as well as to establish connection with the manufacturer to pave the way for future support and training.

The Hospital Authority will be installing the first batch of 27 new OFCs in the winter of 2015. Therefore, it is essential for us to reinforce our servicing skills and training.

EMSD will be the first user client to cooperate with DTC Inc. to launch a pilot Train-the-Trainer programme in Hong Kong. We will train up potential colleagues to become pioneer mentor and they will effectively enhance our long term training to meet the servicing demand of OFC in near future.

The OFC compressor is made use of a magnetic levitation bearing and built-in computerised control. Such design can eliminate the oil lubricating circuit in conventional refrigeration systems. The built-in control can also operate the compressor at variable speeds so as to suit different cooling demand, thereby saving significant energy.

國際交流活動

作為香港推動能源效益的先鋒，我們積極參與國際交流活動，以掌握世界各地的節能新趨勢和發展。2014/15年度，機電工程署派員參加了多個地區性和國際性會議，其中比較重要的會議包括：

- 2014年4月在美國夏威夷檀香山舉行「亞太經合組織新能源及可再生能源技術專家小組第42次會議」及「亞太經合組織能源及節能專家小組第43次會議」。
- 2014年5月在中國昆明舉行的「亞太經合組織能源工作小組第47次會議」。
- 2014年9月在中國北京舉行的「亞太經合組織第十一次能源部長會議」。
- 2015年3月在新加坡舉行的「亞太經合組織能源效益及節能專家小組第45次會議」。

節約營運資源

公用事業

下頁用量表載列機電工程署的電、水和煤氣使用情況。2014/15年度的總用電量較2013/14年度上升1.1%，主要因為數據中心客戶的用電量增加。至於用水量，則較2013/14年度大幅減少55.5%，原因是年內在機電工程署總部大樓進行的活動減少以及九龍汽車服務站和加路連山工場關閉。此外，由於加路連山工場關閉，故此年內煤氣用量大幅減少。

INTERNATIONAL EXCHANGE

As a pioneer in promoting energy efficiency in Hong Kong, we have been active in international exchange work so as to keep ourselves abreast of the latest trends and developments worldwide. During 2014/15, EMSD representatives attended a variety of regional and international conferences and meetings, with key ones as follow:

- The 42nd Meeting of APEC Expert Group on New and Renewable Energy Technologies and the 43rd Meeting of APEC Expert Group, April 2014, Honolulu, Hawaii, USA.
- The 47th Meeting of APEC Energy Working Group, May 2014, Kunming, China.
- The 11th APEC Energy Ministerial Meeting, September 2014, Beijing, China.
- The 45th Meeting of APEC Expert Group on Energy Efficiency and Conservation, March 2015, Singapore.

CONSERVATION OF OPERATIONAL RESOURCES

Public Utilities

Electricity, water and town gas consumption at EMSD is shown in the table on next page. Total electricity consumption in 2014/15 increased by 1.1% compared to 2013/14 due to increased consumption of clients in Data Centre. Water consumption decreased significantly by 55.5% compared to 2013/14 due to the decrease in activities in EMSD Headquarters, and the closure of vehicle services station in Kowloon and Caroline Hill workshop. There was a significant reduction in town gas consumption in 2014/15 due to the closure of Caroline Hill workshop.



機電工程署的電力、水及煤氣用量

Electricity, Water and Towngas Consumption at EMSD

	12/13	13/14	14/15
電力 ('000 千瓦小時) [#] Electricity ('000 kWh) [#]	14 533 ^Δ	14 785	14 974
水 (立方米) Water (m ³)	46 168	49 912	22 215
煤氣 (兆焦耳) Towngas (MJ)	131 760	223 728	19 392

總用電量包括建築物 (例如：總部、工場、租用辦公室和數據中心) 及基建 (例如：總部行人天橋和無線電站)，但不包括第三者營運的員工食堂。
Total electricity consumption 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.

Δ 不包括小蠔灣數據中心的用電量。
Electricity consumption of Siu Ho Wan Data Centre is not included.

節省政府建築物用電

2013/14 及 2014/15 年度我們的政府建築物用電量表列如下：

Electricity Saving in Government Buildings

Electricity consumption of our government buildings in 2013/14 and 2014/15 is tabulated below:

	用電量 (百萬千瓦小時) Electricity consumption (million kWh)	在相若運作情況下的用電量 (百萬千瓦小時) Electricity consumption under comparable operating conditions (million kWh)
2013/14 (基準 baseline)	14.738	不適用 Not Applicable
2014/15	14.920 (+1.2%)	14.578 (-1.1%)

根據上表所述，我們的政府建築物用電量由 2013/14 至 2014/15 年度增加了 1.2%，主要因企業數據中心新增的伺服器及工場新增的設備等。

As set out above, the electricity consumption of our government buildings increased by 1.2% from 2013/14 to 2014/15 due to additional servers in the Corporate Data Centre and additional equipment in the workshops, etc.

實施了各種內務節能措施後，包括使用 LED 照明設備及檢討空調系統的運作時間等項目，在 2013/14 年度相若的運作情況下，2014/15 年度的用電量節省了 1.1%。

Under comparable operating conditions of 2013/14, the saving in electricity consumption in 2014/15 was 1.1% after implementing the housekeeping electricity saving measures including the use of LED lightings, review of operation schedule of the air-conditioning system, etc.

水

主要用於空調、園藝灌溉、飲用和清潔等。年內用水量較2013/14年度大幅減少55.5%，原因是機電工程署總部大樓進行的活動減少以及九龍汽車服務站和加路連山工場關閉，導致用水量下降。

煤氣

加路連山工場是使用煤氣供應熱水的主要場地。由於工場關閉，故此年內煤氣用量大幅減少。

物料

辦公室使用的物料

紙張及碳粉盒是辦公室使用的主要耗材，我們已盡量減少用紙量。2014/15年度的用紙量較原定上限少3.3%。由2001年起，我們已廣泛採用由循環再造纖維製成的環保紙。2014/15年度，環保紙佔部門總用紙量99.8%。原木紙只用於對外文件，而且盡量少用。我們在2014/15年度採購了3 300個碳粉盒，並且自2005/06年度，我們已遵循政府措施，將用過的碳粉盒回收循環再用。

工場使用的物料

我們在日常運作中使用的物料、部件和產品，在其生產、使用和最終棄置的過程中，都會對環境造成不同的影響。因此，機電工程署致力減少物料的使用量，並盡量翻新和循環再用這些物料，讓我們在長遠的將來仍能享用天然資源。

廢氣、污水及廢物

減少廢物及循環再用

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

Water

Water is mainly consumed for air-conditioning, gardening, drinking and cleaning. Water consumption decreased significantly by 55.5% compared to 2013/14, which was due to decreased activities in EMSD Headquarters in the year, the closure of vehicle services station in Kowloon and Caroline Hill workshop.

Towngas

Towngas is mainly consumed in the Caroline Hill workshop for water heating. Since the Caroline Hill workshop was closed, there was a significant reduction in towngas consumption in 2014/15.

MATERIALS

Materials Used in Offices

Paper and toner cartridges are the main consumables used in offices. We make every effort to reduce our paper consumption. In 2014/15, paper consumption was 3.3% below the set quota. Since 2001, we have adopted the extensive use of environment-friendly recycled paper made from recycled fibre. In 2014/15, 99.8% of our total paper consumed was recycled paper. Use of virgin paper was limited to external documents only and is avoided as far as practicable. We purchased some 3 300 toner cartridges in 2014/15 and have followed government initiatives to recycle used toner cartridges since 2005/06.

Materials Used in Workshops

We recognise that materials, parts and products used in our everyday operations impact the environment in different ways through their production, use and ultimate disposal. EMSD endeavours to reduce the consumption of materials wherever possible, and to recondition and reuse them whenever practical in order to sustain natural resources in the long run.

EMISSIONS, EFFLUENTS AND WASTES

Reducing and Recycling of Waste

Our waste management strategy is to minimise unavoidable waste generation and maximise material recycling. Wastes are primarily generated in two streams – from our offices and from our 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.

廢氣

溫室氣體排放

溫室氣體排放已公認為導致全球暖化和氣候改變的原因。因此，減少排放溫室氣體，例如二氧化碳，是我們其中一項最大的挑戰。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。2014/15年度，我們的運輸工具直接產生的二氧化碳約為1 091公噸，而使用電力間接排放的二氧化碳則約為9 554公噸。

運輸

機電工程署日常營運所使用的運輸工具耗用不能再生的化石燃料，並排放溫室氣體。截至2015年3月31日，我們用作執行職務的車隊有220部車輛，包括貨車、客貨車、大型房車和電單車。此外，我們也為客戶部門的5 590部政府車輛提供維修服務。為確保車輛在運作及維修過程中的廢氣排放減至最少，我們實行良好的內務管理措施、妥善保養車輛、減少使用運輸工具，以及改用混合動力或電動車輛等。我們現有六部混合動力車，消耗的燃料比體積相近的傳統車輛少40%。我們還有六部電動車。在未來數年，電動車和混合動力車的數量將會增加。

其他資源耗用詳情及廢氣、排放物及廢物的數字，請參考「統計資料摘要」。

機電工程署總部大樓太陽能光伏系統

機電工程署總部大樓的太陽能光伏系統是大樓的示範項目，利用天然能源可生產高達350千瓦電量。自2005年完成裝置以來，一直為總部大樓提供清潔的可再生能源。至2015年3月底，該系統已累積生產196萬千瓦小時的能源。

EMISSIONS

Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions are widely acknowledged as a cause of global warming and climate change. Reducing emissions such as CO₂ is one of our biggest challenges. EMSD's GHG emissions are mainly attributed to the consumption of electricity in our offices, workshops and transport. In 2014/15, direct emissions from our transport activities amounted to about 1 091 tonnes of CO₂ and our electricity consumption gave rise to about 9 554 tonnes of CO₂.

Transport

The use of vehicles in EMSD operations consumes non-renewable fossil fuels and generates GHG emissions. As of 31 March 2015, we have a fleet of 220 vehicles including lorries, vans, saloon cars and motorcycles to deliver our services, and at the same time maintain 5 590 government vehicles for our client departments. We have to ensure that emissions from such activities are reduced to a minimum by good housekeeping, proper vehicle maintenance, and reduced use of vehicles or switching to hybrid or electric vehicles. We now have six hybrid vehicles, which consume 40% less fuel than conventional cars of similar size, and six electric vehicles. The number of hybrid vehicles and electric vehicles will be increased in the next few years.

For details of our performance in other resources consumption, as well as emissions, effluents and wastes, please refer to the section "Summary of Statistics".

Photovoltaic System at EMSD Headquarters

The photovoltaic system is the signature feature of energy generated from nature in the EMSD Headquarters, with a maximum output of 350kW. Since its inception in 2005, it has been generating clean renewable energy for use at our headquarters. The total output of the system up to end March 2015 was 1.96 million kWh.

重點與前瞻

HIGHLIGHTS AND WAY FORWARD

重點

- 為推動全民節能，環境局及機電工程署推出「室內溫度節能約章」，鼓勵社會減少空調用電量。
- 於2014/15年度推出第四及第五期《能源標籤快訊》，宣傳強制性與自願性能源效益標籤計劃的最新資訊。
- 於2014年12月18日推出為微波爐而設的自願性能源效益標籤計劃。
- 截至2014/15年度，自淡水冷卻塔計劃於2000年推出以來，一共收到916宗申請。當中1 912座淡水冷卻塔經已完成安裝並已投入運作。估計這些裝置每年可節省用電量3億8千1百萬千瓦小時，相當於每年減少二氧化碳排放量約26萬6千公噸。
- 機電工程署由2011/12年度起，根據《公眾衛生及市政條例》授予的權力，就受污染的淡水冷卻塔作出規管。我們於2014/15年度抽取共910個淡水冷卻塔的水樣本，並要求淡水冷卻塔擁有人採取防治措施，以減低退伍軍人病對公眾衛生潛在的風險。

前瞻

- 檢討《建築物能源效益守則》及《能源審核守則》。
- 根據《公眾衛生及市政條例》，於2015/16年度繼續抽驗約800個淡水冷卻塔的水樣本作檢驗，就受污染的淡水冷卻塔作出規管。

Highlights

- Launched with the Environment Bureau the Energy Saving Charter on Indoor Temperature, aiming to reduce electricity consumption for air-conditioning.
- Published the fourth and the fifth issues of the Energy Label Newsletter in 2014/15 to update readers about the Voluntary Energy Efficiency Labelling Scheme and Mandatory Energy Efficiency Labelling Scheme.
- Launched a new Voluntary Energy Efficiency Labelling Scheme for Microwave Oven on 18 December 2014.
- Up to 2014/15, 916 applications have been received since the launch of the Fresh Water Cooling Towers Scheme in 2000. Among them, 1 912 fresh water cooling towers (FWCTs) have been completed and put in operation. It is estimated that these completed installations could save up to 381 million kWh electricity consumption annually, which is equivalent to the reduction of carbon dioxide emission by around 266 000 tonnes annually.
- EMSD has begun implementing measures since 2011/12 to regulate contaminated FWCTs, with delegated powers under the Public Health and Municipal Services Ordinance (PHMSO). In 2014/15, 910 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.

Way Forward

- Review the Building Energy Code and Energy Audit Code.
- Continue to conduct annual water sampling for testing of about 800 FWCTs in 2015/16 and implement regulatory control of contaminated FWCTs under the PHMSO.

社會成效

SOCIAL PERFORMANCE

社會責任

我們透過關懷員工與服務社群，去履行部門的社會責任。具體來說，我們竭力為員工及承辦商提供安全及健康的工作環境，並符合一切相關的法例要求和規定。作為優秀的企業公民，我們也緊遵公務員事務局的行為守則規範，並確保提供平等就業機會。至於服務社群方面，部門鼓勵員工參加各種慈善活動和社會服務項目，以及多參與專業工程學會的活動，為提升本地工程專業的水準及發展作出貢獻。

我們於2015年3月榮獲由香港社會服務聯會所頒發的2014/15年度「同心展關懷」標誌，以嘉許我們持續履行企業社會責任。我們未來將會繼續致力關懷我們的社會、員工和環境。

員工之僱用和發展

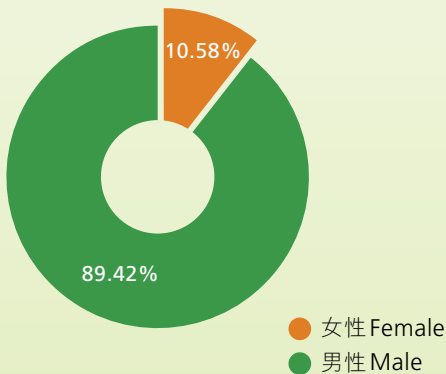
僱用

截至2014/15年底，我們共有5 103名僱員。我們承諾維護平等就業政策，目前有208名員工為輕度殘疾人士，佔員工總人數約4.08%。

年內，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。

按性別劃分

Breakdown by Gender



僱用人員 Strength : 5 103名

* 截至2015年3月31日 As at 31 March 2015

SOCIAL RESPONSIBILITIES

We discharge our social responsibilities via caring for staff and the community. Specifically, we strive to ensure that we provide a safe and healthy environment for our employees and contractors, and to comply with the relevant laws and regulations. As a good corporate citizen, we also abide by the Civil Service Bureau's codes of conduct and see to it that we provide equal employment opportunities. As to caring for the community, we encourage our staff to participate in charitable and social service activities, as well as taking part in activities of professional engineering bodies to help contribute to the standards and development of the engineering profession.

We are proud to be awarded the 2014/15 Caring Organisation Logo by the Hong Kong Council of Social Service in March 2015, in recognition of our continuous commitment in corporate social responsibility. We will step up our efforts to care for our community, employees and the environment in the coming years.

STAFF EMPLOYMENT AND DEVELOPMENT

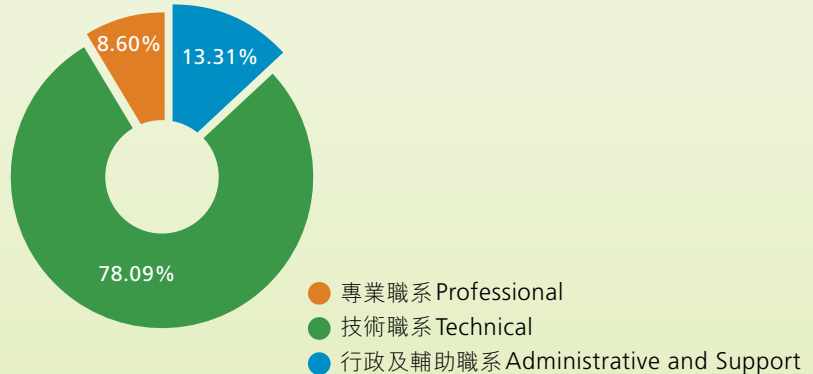
Employment

At the end of 2014/15, we have 5 103 employees. As a commitment to upholding the equal opportunity employment policy, we currently have 208 employees with minor disabilities, representing about 4.08% of our total workforce.

During the year, 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.

按職級劃分

Breakdown by Grade



員工病假

在2014/15年度，部門因員工放取病假而失去的工作天共19 852.5天，即相等於每名員工失去約3.89工作天。

學習及發展

機電工程署深知，要維持一支能幹及與時並進的團隊，就必須不斷提升員工的能力和競爭力。因此，我們全力支持員工不斷學習，發展技能，為部門作出更大貢獻及個人有所成長。我們於2014/15年度檢視了「知識管理網站」，並計劃於明年推出優化版本，讓員工在網上分享知識的經驗變得更有趣更互動。未來兩年，我們也會就各種專門的工程知識及管理軟技巧範疇，進一步發展部門「知識群體」，讓同事有更多機會深入分享和積累知識。

我們也通過有效管理和不斷改進人力資源工作，致力建立一支勤奮向上、才識技能兼備的員工隊伍。我們的人力資源管理委員會由機電工程署署長擔任主席，並由各職系的首長及一般和共通職系的高級管理人員組成。委員會定期舉行會議，檢討部門的培訓計劃及活動。

見習工程師訓練計劃

我們的見習工程師訓練計劃自六十年代推行以來，已培訓了700多位見習工程師。這計劃一向公認為香港工程界的最佳在職培訓計劃之一，多年來已為本地工程專業培訓了不少工程師，滿足業界需要。在2014/15年度，我們在電機、機械、電子、屋宇裝備、資訊科技和生物醫學等範疇共招募了21位見習工程師。

Sick Leave

In 2014/15, a total of 19 852.5 working days were lost due to sick leave. This is equivalent to around 3.89 working days lost per employee.

Learning and Development

At EMSD, we recognise the need to continually enhance the capabilities and competitive strengths of our staff in order to build a capable and progressive workforce. As such, we fully support our employees in pursuing learning and development opportunities that will eventually enhance their contribution to the organisation and personal growth. During 2014/15, we reviewed our Knowledge Management Portal and planned to launch an enhanced portal in the coming year to make online knowledge sharing more fun and interactive. We shall further develop departmental "Knowledge Communities" in the next two years in specialised areas of engineering knowledge and management soft skills, so as to facilitate in-depth sharing and development of knowledge.

We are also committed to developing a motivated and competent workforce through effective management and continuous development of our human resources. Our Human Resources Management Committee, chaired by the Director of Electrical and Mechanical Services, and comprising Heads of Departmental Grades as well as senior managers of General and Common Grades, meets regularly to review our training programmes and initiatives.

Graduate Training Scheme

Since its inception in the 1960s, our Engineering Graduate Training Programme has attracted more than 700 graduate participants. The programme has long been considered one of the best on-the-job training schemes in the engineering profession in Hong Kong and has contributed to the provision of trained engineers to meet the needs of the local profession. In 2014/15, we recruited 21 engineering graduates from the field of electrical, mechanical, electronics, building services, information technology and biomedical engineering.

技術員訓練計劃

技術員訓練計劃是我們另一項主要培訓計劃，目的是提供有系統及高水準的訓練，以滿足機電工程署和社會目前及未來對技術員的需求。計劃推行已有60年，為業界培訓了接近6 000名學徒。為了提高訓練計劃的形象、吸引更多年青人報讀，我們於2012/13年將學徒這職位名稱改為見習技術員，並推出長期進行的外展宣傳活動，以學校、業界及公眾為對象，務求配合每年的技術員訓練計劃招聘活動。

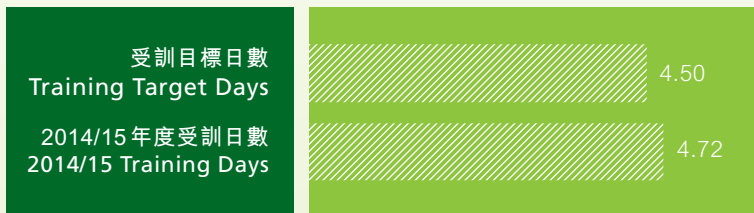
在2014/15年度，我們招募了62名見習二級技術員（三年訓練制）、50名見習二級技術員（四年訓練制）和52名見習一級技術員。除提供在職訓練外，我們亦資助見習技術員修讀香港專業教育學院的工藝證書課程和高級文憑課程。

培訓目標

在2014/15年度，每名員工的每年平均受訓日數為4.72天，高於原定4.5天的目標。我們會繼續鼓勵員工進修及提供所需的培訓，以改善服務、開拓新業務，以及促進員工的個人發展。

每名員工每年平均受訓日數

Training Days Per Staff Per Year on Average



健康安全的工作環境

職業健康及安全

機電工程署對職業安全及健康（職安健）十分重視，並承諾部門在提供機電服務的過程中，會達至及維持高的職安健水平。我們於2014年11月修訂了部門的「職安健政策」文件，強調員工在提供服務時必須以工作安全為首要考慮，而對承辦商也有同樣要求。部門也會在可行的情況下盡量採取最佳的職安健實務做法，務求在工作安全方面做到持續改善。

Technician Training Scheme

Another key training programme is our Technician Training Scheme which aims to provide systematic and high standard training to satisfy the present and future needs of EMSD as well as the community. The long-standing scheme has been running for 60 years, successfully trained close to 6 000 apprentices for the profession. To enhance the image of the Scheme and attract more young people to join it, the “apprentice” post title changed to “technician trainee” in 2012/13. We also launched an ongoing outreach publicity programme targeting schools, the trades and the public to step up annual recruitment for the Scheme.

In 2014/15, we recruited 62 technician trainees II (three-year training programme), 50 technician trainees II (four-year training programme) and 52 technician trainees I. Besides on-the-job training, we sponsored the trainees to attend craft certificate courses and higher diploma courses in the Hong Kong Institute of Vocational Education.

Training Targets

In 2014/15, we achieved 4.72 training days per staff member per year on average, exceeding the 4.5 days target set for the year. We will continue to encourage and provide relevant training to enhance our services and develop new services, and to facilitate employees’ career development.

A HEALTHY AND SAFE WORKING ENVIRONMENT

Occupational Health and Safety

EMSD accords the utmost importance to Occupational Safety and Health (OSH) and commits to achieving and maintaining a high standard of OSH in our E&M services. We revised our Safety and Health Policy in November 2014, stressing that work safety is of first priority in the course of delivering our services and that equally applies to work carried out by our contractors. We also adopt best OSH practices where practicable to achieve continual improvement in work safety.

由2001年起，機電工程署已建立了OHSAS 18001安全管理系統，以支援部門對維持工作環境安全健康的承諾。我們的「職業安全及健康策導委員會」，由高層管理人員組成，持續督導及監察部門在職安健方面的表現，並制訂持續改善的策略。至於「部門職業安全及健康委員會」，則由管理層及來自各科/部別及部門協商委員會的員工代表組成。委員會定期開會，落實部門的職安健宣傳活動和措施，例如定期進行各種職安健比賽、安全培訓、巡查工地及員工簡介會等。

年內新猷

2014/15年度，我們豐富了現有的「綠咭」重溫課程，並把本來半天的課程延長至一天，以加強員工的安全知識和提高安全意識。年內我們也就在高處工作及相關的電力工作，推出全新的指引；並推出一個新的「團隊工作安全」比賽，以鼓勵員工在日常工作中更多使用「指差呼稱」方法，以提高安全意識。

年內另一新猷，是為每天早操引入氣功，給同事多一個強身健體的活動選項，並提供氣功培訓班，及於部門內聯網提供示範圖片和短片。至於合約安全方面，我們現已要求承辦商在假天花內進行工程時，必須實施工作許可證制度，以更有效管理相關的風險。每年一次的「科技週」，則已於2015年1月舉行，強調透過科技應用以實踐最佳職安健實務做法。

Ever since 2001, EMSD has established OHSAS 18001 safety management systems to support our commitment to maintaining a safe and healthy working environment. The Steering Committee on Occupational Safety and Health, which comprises senior management staff, continues to steer and monitor the Department's performance in safety and health and formulates strategies for continuous improvement. As to our Departmental Occupational Safety and Health Committee which comprises management and staff representatives from branches/divisions as well as departmental consultative committees, it meets regularly and implements our departmental OSH promotional activities and initiatives. Examples are various occupational safety and health competitions, safety trainings, site inspections and staff briefings that are regularly arranged.

New Initiatives

During 2014/15, we enriched our existing "green card" revalidation course and extended the half-day course to full day, so as to enhance staff safety knowledge and awareness. New guidelines on undertaking work at height and related electrical work were also issued and a new safety competition "Work Safety in Teamwork" launched. The competition promoted the use of "pointing and calling" in daily work to raise staff awareness of safety.

Another new measure in the past year was introducing "Qigong" as a new option for staff morning exercise to promote their health and well-being. "Qigong" training sessions were offered, together with pictorial and video demos on the departmental Intranet. As far as contract safety is concerned, we now require contractors to set up a permit-to-work system for ceiling void works to more effectively manage the associated hazards. The annual Technology Week was held in January 2015 to promote best OSH practices in E&M works through technology applications.



機電工程署舉行氣功班，提倡健康生活方式及加強工作安全。
"Qigong" training sessions were conducted in EMSD to promote a healthy lifestyle and help enhance work safety.

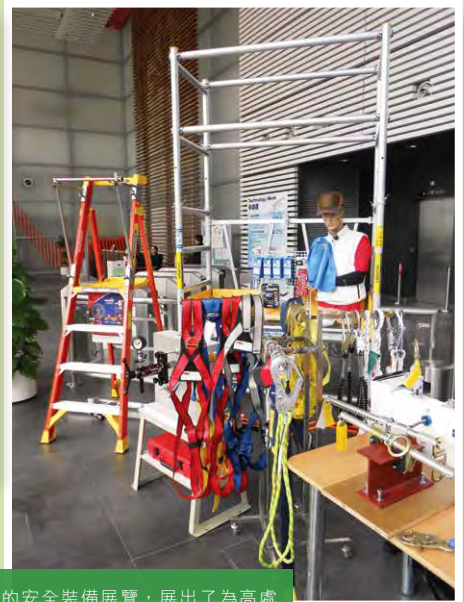
「科技週」的「工作安全科技研討會」，強調透過科技應用以實踐最佳職安健實務做法的重要性。
The Work Safety Technology Seminar of the Technology Week emphasised the importance of best OSH practices in E&M work safety through the application of technology.



「科技週」研討機電工作安全 TECHNOLOGY WEEK ON E&M WORK SAFETY

部門的「科技週」已於2015年1月20至23日舉行，主題為機電工作安全，並得香港機電工程師商聯會全力支持。活動的亮點，是「工作安全科技研討會」，同場並舉辦安全裝備展覽，展出最新的機電安全裝備。研討會的講者均強調，採取最佳職安健實務做法，對持續改善機電工作的安全至為重要。「科技週」維期四天，吸引了很多業界人士及部門同事出席參與。

The Technology Week on E&M Work Safety was held from 20 to 23 January 2015, with full support from the Hong Kong Federation of Electrical and Mechanical Contractors. Highlights included a Work Safety Technology Seminar and a safety equipment exhibition that showcased the latest E&M safety equipment. Seminar speakers emphasised the critical importance of adopting best OSH practices in continual improvement of E&M work safety. The four-day event was well attended by participants from the trade and our staff.



與「科技週」同時舉行的安全裝備展覽，展出了為高處工作而設的安全平台、防跌裝置、電力安全裝備及個人保護裝備和工具。
The safety equipment exhibition held in conjunction with Technology Week showcased safety platforms for working-at-height, fall protection devices, electrical safety equipment as well as personal protection equipment and tools.

得獎團隊「哥連臣一號」憑「遙控剷灰車」項目，以創意和
安全措施獲得嘉許。
Award-winning project team "Collinson No. 1" is
credited for its creativity and safety measures in its
remote-control bone ash collector.



「品質及安全日」誘發無窮創意

QUALITY AND SAFETY DAY LURES INNOVATION AND CREATIVITY

我們的「品質及安全日2014」獲獎項目再次印證了同事在應用科技方面的無窮創意，為協助客戶部門提供更佳服務，發揮「多走一步」的精神。這些創新項目充分表現出同事精益求精和追求優質服務的熱誠。

得獎團隊「哥連臣一號」為哥連臣角火葬場而研發的「遙控剷灰車」就是一個好例子。剷灰車能清理火化爐煙道內的爐灰，大量減少人手清理的工作。「遙控剷灰車」大幅度減低我們的同事在狹窄、高溫的煙道內逗留的時間，改善了工作環境。這項發明更榮獲部門的「最佳改善個案比賽（營運服務）」冠軍和「最佳增值個案金獎」。

部門的高層管理在「品質及安全日2014」開幕禮上，鼓勵所有與會者在工作安全和優質工作方面繼續發揮創意，實現工地「零意外」的長遠目標。另一講者為昂坪360有限公司安全及品質經理謝福財先生，在會上分享了他在品質和安全管理方面的寶貴經驗。

The award-winning projects of our Quality and Safety Day 2014 once again demonstrated our colleagues' creativity in applied technology and their eagerness to go that extra mile to help client departments better serve the general public. Their commitment to striving for improvement and quality work was well reflected in their innovative projects.

A notable example is the remote-control bone ash collector, invented by the project team "Collinson No. 1" for the Cape Collinson Crematorium. The new machine can collect bone ashes in the cremator flue, with minimal effort of manual collection. The Collector has greatly reduced the time our staff members have to stay inside the cramped and hot flue, thus improving their working environment. This invention won the championship of the Best Improvement Project Award for Trading Fund and the Best Service Delivery Enhancement Award.

Officiating the opening ceremony of the Quality and Safety Day 2014, EMSD senior management encouraged all participants to continue with their innovative work in safety and excellence, in order to achieve the long-term goal of "zero accident" in work sites. Also addressing participants was guest speaker Mr Joey Tse, Safety and Quality Manager of Ngong Ping 360 who shared his valuable experiences in quality management and work safety.



安全海報設計比賽中奪冠的海報設計，也是我們同事的作品。Championship of the Safety Poster Design Competition goes to this design by our colleague.



得獎同事出席機管局頒獎禮。同事的出色安全表現獲機管局高度讚賞。Our award-winning colleagues at the AA prize presentation ceremony. Their good performance in safety has won the praise of AA.

機場團隊獲機場安全運動比賽多個獎項

AIRPORT TEAM WINS AIRPORT SAFETY CAMPAIGN AWARDS

機場管理局（機管局）每年均舉辦「飛行區及行李處理大堂安全運動」，包含多項安全比賽。該運動的宗旨，是提高行李處理大堂工作人員的安全意識，從而達至零意外。作為機管局的長期機電工程伙伴，我們的機場工程分部多年來都十分支持這運動，並曾贏得多個獎項，最新的例子，是我們行李處理組同事孫璋泰先生和何漢輝先生，均獲頒「模範安全員工」獎，而另一位同事余文廣先生，則在安全海報設計比賽中奪冠。機管局已於2015年1月8日舉行頒獎禮，嘉許所有得獎者。

香港國際機場去年又刷新客運紀錄，錄得6 340萬人次的新高，因此，維持機場高度安全的工作文化更形重要。我們一直都積極參與機管局各種安全措施和運動，未來也會繼續大力支持。

The Airport Authority (AA) holds an annual Airfield and Baggage Hall Safety Campaign comprising various award competitions. The Campaign aims to promote a safety culture among baggage handling staff in order to achieve zero incident. As AA's long-standing E&M engineering partner, our Airport Engineering Services Sub-division has always been highly supportive of the Campaign and has won various awards. The latest examples were Mr Suen Wai-tai and Mr Ho Hon-fai, both from our baggage handling system team, who were awarded the Safety Role Model Award in the Campaign. Mr Yu Man-kwong, also from EMSD, won the championship of the Safety Poster Design Competition. All winners were honoured at AA's prize presentation ceremony held on 8 January 2015.

The Hong Kong International Airport handled a record passenger traffic of 63.4 million passengers last year, highlighting the importance of a strong safety culture at the airport. We have always been supportive of AA's safety measures and campaigns and shall continue to do so in future.

員工

員工滿意度調查

我們認為，定期量度及了解員工的滿意度極為重要。掌握員工的滿意程度以便進行架構改善，是我們關顧員工其中的一項承擔。我們委託獨立專業調查公司定期進行員工滿意度調查。在最近的2014/15年度調查，所有高級工程師及以下職級的員工，均獲邀透過問卷表達他們的意見。調查顯示，員工整體滿意度平均分數，以10分為滿分，得分是6.4（上次調查：6.5），這個指數在過去數年一直維持在6.3至6.6分之間，可見員工整體滿意度穩定。下一次調查將於2016/17年度進行。

員工諮詢途徑

我們設有四個部門協商委員會和五個部別協商委員會，以促進管理層與個別員工組別的溝通。員工也可自由參加部門11個員工協會和一般政府人員工會組織。我們定期與員工協會會面和舉行會議，商討員工關注的事項。

承辦商及供應商

承辦商及供應商管理

我們致力為客戶和市民提供優質可靠的服務，而承辦商、顧問公司和供應商是我們達成這目標的重要伙伴。我們不時邀請這些工作伙伴競投公共工程合約。在挑選承辦商時，我們堅守公開和公平的基本原則，並按照政府的指引，在合適情況下盡量採用競爭性投標。我們與承辦商、顧問和供應商建立和保持緊密聯繫，確保他們清楚知悉各項重要資訊，例如客戶關注的事項及工作安全，使問題及時得到妥善處理。

為了監察承辦商的工作，我們定期舉行會議和進行實地視察，跟進工程的進度，並盡量避免工程對公眾及客戶造成不便或滋擾。在工程進行時，我們會定期評估及檢討承辦商的表現，直到工程竣工。此外，我們定期為負責合約管理的員工安排有關合約管理、承辦商管理、合約安全及誠信管理的簡介會。

STAFF

Staff Satisfaction Survey

We believe that it is important to measure and track staff satisfaction regularly. To gauge staff perception in order to facilitate organisational improvement is part of our commitment to caring for staff. Independent research specialists are appointed to conduct staff satisfaction surveys on a regular basis. In the latest 2014/15 survey, every employee at senior engineer rank or below was invited to express his/her views through a survey questionnaire. The overall staff satisfaction rating from the survey was 6.4 on a scale of 10 (previous survey: 6.5). This index has held steady within a range of about 6.3 to 6.6 for the past few years. Overall satisfaction levels have shown a steady trend. The next survey will be conducted in 2016/17.

Staff Consultation Channels

There are four departmental consultative committees and five divisional consultative committees to facilitate communication between particular groups of staff and management within EMSD. Staff members are also free to join the 11 staff unions of EMSD, as well as the general government staff unions. Regular gatherings and meetings are held with the EMSD staff unions to discuss issues of staff concern.

CONTRACTORS AND SUPPLIERS

Contractor and Supplier Management

Our contractors, consultants and suppliers are our important partners in the provision of reliable and quality services to our clients and the community. We invite these working partners to tender for public works contracts from time to time. In selecting contractors, we adhere to the basic principles of openness and fairness, and adopt competitive tendering wherever applicable in compliance with government guidelines. We have established and maintained close communication with our contractors, consultants and suppliers to ensure that critical information, such as client concerns and work safety, is clearly conveyed to them and relevant issues are addressed properly and in a timely manner.

To monitor the work of contractors, we conduct regular meetings and site visits to keep track of project progress as well as to minimise any inconvenience or disturbance caused to the public and our client. Regular reviews on contractors' performance are carried out to assess contractor performance throughout the project. Also, briefings on contract management, contractor management, contract safety and integrity management were arranged for staff responsible for contract management.

客戶

我們的營運服務，為客戶提供優質服務之餘，同時致力以微利營運，讓客戶保留更多資源優化社會服務。

我們致力吸取客戶意見。為了更全面了解客戶的需要及期望，我們每兩年委託一家獨立的市場研究公司進行一次客戶意見調查。於2014年的調查當中，我們的客戶滿意度指數達到了6.22分（8分為滿分），是自營運基金成立以來的最高分數。透過是次客戶意見調查，我們收集了很多寶貴的客戶意見。我們已根據客戶的回應制訂出優化客戶服務的計劃，務求令客戶更稱心滿意。

規管服務方面，我們的客戶聯絡小組及各安全諮詢委員會也定期與公眾代表開會，就規管工作及各種機電安全推廣活動與公眾直接交流意見，聽取公眾的看法和建議，從而定出改善措施。我們也定期進行公眾意見調查，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看法，以找出規管服務需要改善的地方。我們也經常主動與業界舉行研討會，討論交流。如有需要，規管服務也會聯同其他政府部門、業界及公用事業公司，為受意外事故影響的市民盡快恢復電力及氣體供應。

社區

我們的員工一向積極服務社會。他們除執行職務，透過客戶部門提供機電服務及向市民傳達機電安全和能源效益的資訊外，還在公餘時間參與義工服務，回饋社會。我們的義工隊在多方面服務社會已超過十年。部門許多專業工程師也積極參與本地和國際的專業工程學會，為業界的發展出力，維持業界的高專業水準。

公眾教育活動

我們一直與其他政府部門和社會各界緊密協作，致力向市民推廣機電安全和節約能源。這是機電工程署規管服務的重要一環。我們通過不同渠道進行公眾教育工作，包括傳媒、互聯網、刊物、推廣及廣告宣傳活動、海報及郵件、嘉年華會、巡迴展覽、表演、遊戲、問答比賽、講座及研討會，以滿足不同社會群組的需要。

CLIENTS

Our Trading Services continue to strive to operate with sustainable profit in delivering quality services, hence taking less and allowing our clients to retain more to better their services for the community.

We endeavor to listen to and learn from our clients. With a view to fully appreciating our clients' needs and expectation, we commissioned an independent market research company to conduct a Customer Opinion Survey (COS) every two years. In the COS conducted in 2014, the Customer Satisfaction Index has increased to 6.22 (on an eight-point scale), which is a record high since the establishment of EMSTF. 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.

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 face-to-face feedback on our regulatory and safety promotion activities, and how they can be improved. Public opinion surveys to gauge public awareness of E&M safety and energy efficiency, as well as trade surveys to measure the trade's views of Regulatory Services, are also conducted regularly to identify improvement areas for Regulatory Services. Pro-active communication with the trades via seminars and discussions are also frequent. Where appropriate, Regulatory Services also works jointly with other government departments, the trades and utility companies to promptly restore electricity supply and gas supply to citizens affected by major incidents.

COMMUNITY

Our staff have long been active in serving the community, both in their work duties to provide E&M services for client departments and to reach out to the public to disseminate E&M safety and energy efficiency messages, and in voluntary service beyond their work duties to give back to the community. Our Staff Voluntary Service Team, for example, has served the community in numerous initiatives for more than a decade. Many of our professional engineers also play active roles in local and international professional engineering institutes to contribute to the growth of the profession and help maintain its high standards.

Public Education Activities

We work closely with other government departments and the community to promote E&M safety and energy efficiency to the public, an important aspect of the work of our Regulatory Services. Public education is conducted through a variety of channels, including mass media and the Internet, publications, promotional and advertising campaigns, posters and mail-outs, carnivals, roadshows, performances, games, quizzes, talks and seminars tailored to meet the needs of different segments of the public.

「創新科技嘉年華 2014」醫學工程研討會

BIOMEDICAL ENGINEERING SEMINAR AT INNOCARNIVAL 2014

「創新科技嘉年華」是由創新科技署主辦的年度大型活動，主旨是讓市民能親身體驗創新科技對人類生活所帶來的方便與樂趣。總工程師/衛生工程潘國英先生獲邀在 11 月 8 日的「創新科技嘉年華 2014」活動中，就「醫學工程的創新成果及應用」作出專題演講。

潘先生向與會者展示工程技術與醫學應用的無縫結合，並介紹尖端醫療技術如何為治療、診斷及其他醫學範疇帶來革命性的發展。潘先生除扼要剖析物理現象在醫療儀器上的應用外，亦闡述了三維打印技術、遙距生理監控及仿生技術等嶄新醫療科技，如何改善我們的生活質素。此外，潘先生也向與會者簡介了生物醫學工程師的工作範疇與職業前景。

當天的觀眾反應熱烈，在答問環節中踴躍提問。他們表示從這次研討會得到不少啟發，不但對工程技術如何惠及醫療行業有更深了解，而對醫療科技及香港生物醫學工程行業的發展，亦提高了認識。

InnoCarnival is an annual event organised by the Innovation and Technology Commission that aims to enable members of the public to experience for themselves the convenience and fun innovation and technology brought to their daily lives. Mr Raymond Poon, Chief Engineer/Health Sector, was invited to deliver a speech at InnoCarnival 2014 on "Engineering Excellence for Medical Technology Innovation and Application" on 8 November 2014.

Mr Poon demonstrated to the audience the seamless integration of engineering know-how and medical applications, and the revolution brought on by cutting-edge medical technologies to therapy, diagnosis and other aspects of medicine. He introduced the application of physical phenomena to medical devices and illustrated how novel medical technologies such as 3D printing, tele-medicine and bionics could improve our quality of life. Mr Poon also briefed the audience on the work and prospects of a professional biomedical engineer.

The audience responded enthusiastically to his talk with a lively Q&A session. They felt that they had gained more insights into the contribution of engineering in healthcare services, as well as advancements in medical technologies and the biomedical engineering industry in Hong Kong.



我們的同事潘國英先生於「創新科技嘉年華 2014」研討會，就「醫學工程的創新成果及應用」作專題演講。
Our colleague Mr Raymond Poon speaking on the topic of "Engineering Excellence for Medical Technology Innovation and Application" at a seminar in InnoCarnival 2014.

我們在「創新科技嘉年華 2014」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 2014.





機電工程署代表與嘉賓講者，於2014年12月的淡水冷卻塔和建築物能源效益周年技術研討會上合照。
Guest speakers and EMSD representatives at the annual technical forum on Fresh Water Cooling Towers and Buildings Energy Efficiency, held in December 2014.



研討會吸引了約700名人士參加，反應熱烈。
The forum met with enthusiastic response and attracted about 700 participants.

淡水冷卻塔和建築物能源效益的技術研討會

TECHNICAL FORUM ON FRESH WATER COOLING TOWERS AND BUILDINGS ENERGY EFFICIENCY

能源效益事務處於2014年12月12日舉辦了一年一度的「淡水冷卻塔和建築物能源效益的規管及實務」技術研討會。是次活動反應十分熱烈，兩場研討會共吸引了約700位人士。

有關淡水冷卻塔的規管工作，講者除了介紹淡水冷卻塔的正確設計、操作、維修及水處理科技應用等事宜，亦闡述了《水務設施規例》有關供水予淡水冷卻塔的要求，並呼籲業界不要以違規的淡水冷卻塔，取代舊的淡水冷卻塔。

至於建築物能源效益的規管工作，講者闡述了《建築物能源效益條例》的要求及須要注意的事項，並簡介全港首宗根據該條例作出的檢控個案。個案是基於被告拖延進行能源審核，被告一方已被判罪名成立及判處罰款。這案例提醒所有建築物業主，必須在法例規定的時限內進行能源審核，以免犯法。

The Energy Efficiency Office held its annual technical forum “Control and Practice of Fresh Water Cooling Towers and Buildings Energy Efficiency” on 12 December 2014. Two sessions of the forum attracted a total of about 700 participants.

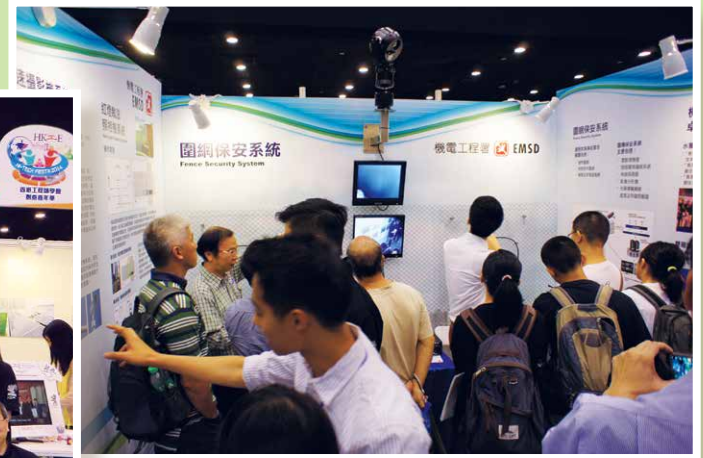
On the topic of regulatory control of fresh water cooling towers (FWCTs), speakers not only shared good practices on design, operation, maintenance and water treatment technologies, but also stressed the importance of proper water supply to FWCTs under the Waterworks Regulations. They also appealed to the trades that they should never install or replace FWCTs with unauthorised hardware.

As to regulating energy efficiency in buildings, the speaker explained the requirements of the Buildings Energy Efficiency Ordinance and briefed participants on the first prosecution case under the Ordinance, which was related to a belated energy audit. The accused was convicted of contravening the relevant requirements and fined. The case sent a strong message to remind all building owners that they must conduct energy audits within the statutory timeframe.

社區活動 Community Activities

展示創新工程方案

Showcasing Innovative Engineering Solutions



2014年6月，我們於由香港工程師學會舉辦的「創意嘉年華2014」，展示了我們為客戶發展的最新電子和資訊及通訊科技項目，包括邊境圍網保安系統、流動X光車輛掃描系統、衝紅燈攝影機系統、偵察平均車速攝影機系統、爆炸及毒品痕量檢測器等技術。展品吸引了不少對高科技有興趣的市民參觀。

We showcased our latest electronic and Information and Communications Technology projects for client departments at the Hi-Tech Fiesta 2014, organised by the Hong Kong Institution of Engineers in June 2014. The projects included a border fence protection system, X-ray vehicular scanning system, red light camera system, speed enforcement camera system, explosives and narcotics trace detector. The booth attracted many hi-tech enthusiasts from the public.

參與環保博覽2014 彰顯能源效益

Booth Highlights Energy Efficiency at Eco Expo Asia 2014



一如往年，能源效益事務處參加了由香港貿易發展局主辦、環境局協辦的「國際環保博覽2014」。博覽會已於2014年10月29日至11月1日舉行，機電工程署的展館內容，涵蓋部門在可持續發展方面的工作，如推廣電動車及中速充電器，及部門就推動《建築物能源效益條例》、強制性能源效益標籤計劃和自願性能源效益標籤計劃的各種活動，還有節能小貼士等。環境局局長黃錦星先生亦親臨參觀我們的展覽攤位。

As in past years, our Energy Efficiency Office participated again in the Eco Expo Asia 2014, held from 29 October to 1 November 2014 organised by the Hong Kong Trade Council and supported by the Environment Bureau. The EMSD booth showcased its sustainability work in promoting electric vehicles and medium chargers, and various initiatives under the Buildings Energy Efficiency Ordinance, Mandatory Energy Efficiency Labelling Scheme, Voluntary Energy Efficiency Labelling Scheme as well as energy saving tips. Secretary for the Environment, Mr Wong Kam-sing, also visited our booth.

機電工程署開放日2014 吸引數千訪客 EMSD Open Day 2014 Attracts Thousands of Visitors



我們於2014年11月1日及2日在機電工程署總部舉辦了「機電工程署開放日2014」，讓市民在輕鬆的氣氛中了解部門的服務，和增進對機電安全與能源效益的知識。活動吸引了逾五千位市民參加，他們最感興趣的，就是參觀教育徑和毗鄰的啟德區域供冷系統，和於現場展出的電動車。開放日開幕禮由部門高層管理主持，並有不同年齡的學童表演。

We held the EMSD Open Day 2014 at our headquarters building on 1 and 2 November 2014, so that the public could know more about our services, E&M safety and energy efficiency in a relaxed atmosphere. The event attracted more than 5 000 participants who were particularly interested in our Education Path, the nearby Kai Tak District Cooling System and the electric vehicles on display. The opening ceremony was officiated by EMSD senior management, with stage performances by school children of different ages.



支持樂施毅行者2014 Supporting Oxfam Trailwalker 2014



機電工程署員工多年來都積極支持「樂施毅行者」，而於去年11月14日舉行的「樂施毅行者2014」，我們也有同事組隊參加，其中一隊更以20小時39分的佳績完成全程。「樂施毅行者」活動，是為樂施會各項扶貧救災和緊急救援工作籌募經費。

Our staff members have always been enthusiastic about the Oxfam Trailwalker. Various teams from EMSD took part in Oxfam Trailwalker 2014 held on 14 November, with one team completing the journey in only 20 hours 39 minutes. The event raises funds for Oxfam's poverty alleviation and emergency relief projects.

同心參與東區醫院日 Taking Part in PYNEH Day



一年一度的「東區醫院日」，讓我們有機會參與東區尤德夫人那打素醫院籌集善款，以改善病人服務、促進醫院和社區的伙伴合作並提升團隊精神。「東區醫院日」於2014年11月29日舉行，同事當天踴躍參與了慈善步行及正向生活嘉年華，更獲院方頒發「最踴躍參與獎（其他組織）」，表揚我們對活動的支持。

The annual PYNEH Day gives us a good opportunity to participate in the charitable events of Pamela Youde Nethersole Eastern Hospital (PYNEH) by helping it raise funds to improve services, promote community partnerships and boost team spirit. PYNEH Day 2014 was held on 29 November 2014, when our colleagues participated enthusiastically in the Charity Walkathon and Positive Living Carnival. Our team was presented with the Best Participatory (Others) Award by PYNEH in acknowledgment of our support to the event.

機電安全健步嘉年華 2014 E&M Safety Walk and Carnival Fair 2014



「機電安全健步嘉年華」由香港機電工程商聯會及香港機電業工會聯合會合辦，於2014年11月30日在大棠有機生態園舉行，機電工程署60多位員工及家屬齊齊參與。這周年活動的目的，是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，呼籲業界攜手面對機電業未來挑戰，並努力吸引更多年輕新血入行。

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 2014 was held on 30 November at Tai Tong Organic EcoPark and more than 60 EMSD staff and family members participated. The annual event aims to unite and strengthen partnership within the industry. Speaking on the occasion, the Director of Electrical and Mechanical Services Mr Frank Chan also urged the industry to work together to overcome challenges and attract new young blood to the trade.

見習工程師為傷殘人士安排遊園活動 Engineer Trainees Organised Garden Outing for People with Disabilities



機電工程署見習工程師於2014年12月，為路向四肢傷殘人士協會的成員，義務安排了往鑽石山南蓮園池遊玩的半天活動。事前的籌備工作包括悉心安排交通及物資運輸、準備小組遊戲和小禮物等。參加者既觀賞了園內的恬靜美景，更通過小組遊戲增進了機電安全和能源效益知識，並於園內餐廳享用齋菜午膳。

EMSD's engineer trainees volunteered to organise a half-day visit to Nan Lian Garden in Diamond Hill in December 2014 for members of the Direction Association for the Handicapped. Preparation work included careful planning of transportation and logistics, group games and souvenirs. Participants enjoyed the serene beauty of the Garden, gained more knowledge about E&M safety and energy efficiency via the group games, and were treated to a vegetarian lunch at the Garden restaurant.



樓宇安全週 2015 Building Safety Week 2015



我們於2015年3月14日在屋宇署舉辦的「樓宇安全週2015」擺設了攤位，以遊戲及展板，向公眾介紹如何選擇合適的註冊升降機及自動梯承辦商，並提倡優化舊式升降機。

We set up a booth at the Building Safety Week 2015 organised by the Buildings Department on 14 March 2015. Our aim was to educate the public via games and exhibit boards on how to choose appropriate registered lift and escalator contractors, and promote the modernisation of aging lifts.

與持份者溝通

持份者的鼎力支持，對我們的工作十分重要。我們的持份者包括部門的直接服務對象，即客戶部門、被規管的行業及市民大眾，此外也包括供應商、承辦商、培訓機構、專業團體、行業公會及傳媒。而各個政策局及我們部門的員工，也是重要的持份者。

一直以來，我們都採取雙管齊下的方法去維繫持份者。首先是以策略性的全盤溝通計劃，與客戶及業界這兩類持份者維持強健的工作關係。同時，我們也以豐富多元的宣傳內容和渠道，去維繫市民，讓市民充分掌握機電安全和能源效益知識，使社會大眾感到安全安心。

此外，我們也主動與傳媒合作，並提高部門的透明度，同時積極爭取專業團體、學會及學術界的支持，建立信任和尊重。而我們與政策局和機電工程署的員工也保持緊密溝通，建立互信友好的關係。

此外，我們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，及參與國際性的工程組織，維護本港工程專業的高水準。

我們於2014/15年度為下列主要持份者舉行了多項活動：

STAKEHOLDER ENGAGEMENT

Strong support and cooperation from stakeholders is essential to our work. They include the recipients of our services such as client departments, the regulated trades and the general public, as well as suppliers, contractors, training institutes, professional and trade associations and the media. Policy bureaux and our own staff are also key stakeholders.

All along, we have used a two-pronged approach towards engaging these varied stakeholders. First is a strategic and comprehensive client and trade engagement programme, so that we may continue to foster strong relations with these two stakeholder groups. At the same time we also deploy a rich variety of communication contents and channels to engage with the general public, so that the community at large is well informed in E&M safety and energy efficiency matters, which enables them to feel safe and enjoy peace of mind.

Supporting this two-pronged approach is our proactive effort to work with the media at a high level of transparency, and to solicit the support of professional bodies, learned societies and the academia so as to build trust and respect. There is also close communication with policy bureaux and our own staff to foster trust and good will.

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

The following major stakeholder engagement activities were held in 2014/15:

公眾人士

- 共有35家發展商及管理公司簽署了2014年的「室內溫度節能約章」，承諾在2014年6月至9月期間，在他們旗下145家商場的公用地方，維持平均室內溫度在攝氏24至26度之間。此外，亦有超過510家商舖、250座辦公室大樓、970家機構辦公室、80幢住宅樓宇和150個屋苑也簽署了約章，作出相同承諾。
- 為各類機構/學校舉行146場講座或探訪，宣傳能源效益及節能。
- 為多個機構舉行32場簡報會，宣傳《建築物能源效益條例》及有關《建築物能源實務守則》與能源審核的強制執行事宜。

Public at Large

- A total of 35 developers and property management companies signed up for the Energy Saving Charter on Indoor Temperature in 2014. They pledged to maintain an average indoor temperature of between 24 and 26 degrees Celsius at 145 shopping malls from June to September 2014. In addition, more than 510 retail shops, 250 office buildings, the offices of 970 organisations, 80 residential buildings and 150 housing estates also signed up the Charter and pledged to do the same.
- Delivered/Organised 146 talks and visits to organisations/schools to promote energy efficiency and conservation.
- Delivered 32 presentations to various organisations to promote the Buildings Energy Efficiency Ordinance on the mandatory implementation of the Building Energy Code and energy audits.

公眾人士

- 於2014年12月走訪第三批須進行首次能源審核的商業建築物，宣傳《建築物能源效益條例》，並提醒建築物擁有人有關能源審核的規定。
- 舉行57次外展講座，而機電工程署教育徑也接待了259個參觀團，共約10 800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285次外展講座，向約40 000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391次外展講座，向27 000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54次學校展覽，宣傳強制性能源效益標籤計劃。
- 於2015年2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。
- 於2014年11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38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16場簡介會、技術及安全講座與研討會。
- 於2014年7月及9月與車輛維修業界就車輛維修技工自願註冊計劃及車輛維修工場約章計劃，舉行兩場研討會。
- 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162場講座及研討會。
- 我們透過食物環境衛生署舉辦了六場講座，讓食物業牌照申請人，了解食肆及食物製備場所內作供應飲食用途石油氣裝置的規定。我們也探訪了18個寮屋和村屋區的居民，講解家居氣體安全，並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。

Public at Large

- Visited the third batch of commercial buildings, which are required to carry out the first energy audits, in December 2014 to promote the Buildings Energy Efficiency Ordinance and to remind building owners of the relevant energy audit requirements.
- Organised 57 outreach talks and 259 visits to the Education Path of EMSD Headquarters for about 10 800 visitors from different organisations and schools to promote energy efficiency and conservation.
- Visited 285 kindergartens, primary schools and elderly centres, reaching about 40 000 participants to promote electrical safety.
- Visited 391 kindergartens, youth centres and elderly centres, reaching over 27 000 participants to promote the safe use of amusement rides, lifts and escalators.
- Conducted 54 school exhibitions on the Mandatory Energy Efficiency Labelling Scheme (MEELS).
- Conducted a full-scale publicity visit to relevant retailers in February 2015 to promote the MEELS.
- Conducted briefing sessions in November 2014 on the new energy efficiency grading of MEELS.
- Delivered 38 safety talks and seminars on the requirements of Electricity Supply Lines (Protection) Regulation to the trades, inclusive of government works departments, consultants, contractors, competent persons, general site staff, etc.
- Conducted 16 briefing sessions, technical and safety talks and seminars for trade representatives, lift/escalator owners, members of incorporated owners and building management staff.
- Conducted two seminars in July and September 2014 with the vehicle maintenance trade on the Voluntary Registration Scheme for Vehicle Mechanics and Vehicle Maintenance Workshops Charter Scheme.
- Conducted 162 talks and seminars on the implementation of the Continuing Professional Development Scheme for Registered Electrical Workers.
- We organised through the Food and Environmental Hygiene Department six seminars for applicants of food business licences to understand more about the requirements of LPG installations for catering purposes in restaurants and food preparation establishments. We also conducted visits to 18 squatter areas and villages to promote domestic gas safety to the residents. We also organised 22 gas safety seminars for gas traders and different contractors.

我們的員工

- 規管服務於2014年12月16日及2015年2月9日舉行了管理工作坊。
- 機電工程營運基金於2014年9月1日及10月13日舉行了策略工作坊。
- 於2014年12月舉行三場署長簡報會。
- 首長級人員到訪了184個場地，進行員工親善探訪。
- 於2014年11月27日與部門11個工會舉行聯席會議。
- 於2015年2月至3月為部門外調的督察級、技術級及初級員工舉行了四次周年論壇。
- 員工福利組為抱恙或住院員工進行了18次家訪、33次醫院探訪、52次工作間探訪、411次電話問候及49次吊唁探訪。

Our Staff

- Held the Regulatory Services' annual Management Workshops on 16 December 2014 and 9 February 2015.
- Held the EMSTF's annual Strategy Formulation Workshops on 1 September and 13 October 2014.
- Held three sessions of Director's Briefing in December 2014.
- Conducted 184 ambassador visits by directorate officers at various venues.
- Conducted a joint meeting with 11 staff unions of EMSD on 27 November 2014.
- Held four sessions of the Yearly Forums for seconded inspectorate, technical and junior staff from February to March 2015.
- Conducted 18 home visits, 33 hospital visits, 52 workplace visits, 411 goodwill phone calls and 49 condolence visits to sick or hospitalised staff, by the Staff Welfare Unit.

客戶

- 與香港警務處於2014年5月及12月舉行高層會議，檢討我們的服務表現。
- 與香港天文台於2014年5月、8月、11月及2015年2月舉工作層會議，檢討我們的服務表現。
- 與民航處於2014年7月及2015年1月舉工作層會議，檢討我們的服務表現。
- 與渠務署於2014年10月舉高層會議，檢討我們的服務表現。
- 與食物環境衛生署於2014年11月舉行有關火葬場和骨灰龕的工作層會議，檢討我們的服務表現。
- 與懲教署於2014年12月舉工作層會議，檢討我們的服務表現。
- 與路政署就港珠澳大橋工程項目，於2015年3月進行服務水平協議檢討會議。
- 與土木工程拓展署就將軍澳一藍田隧道工程項目，於2015年3月進行服務水平協議檢討會議。
- 安排往醫院管理局進行多次親善探訪，並舉行高層座談會及工作層座談會等。

Our Clients

- Held high level meetings with the Hong Kong Police Force in May and December 2014 to review our service performance.
- Held working level meetings with the Hong Kong Observatory in May, August and November 2014 and February 2015 to review our service performance.
- Held working level meetings with the Civil Aviation Department in July 2014 and January 2015 to review our service performance.
- Held high level meetings with the Drainage Services Department in October 2014 to review our service performance.
- Held a working level meeting with the Food and Environmental Hygiene Department in November 2014 to review our service performance on crematoria and columbaria.
- Held a working level meeting with the Correctional Services Department in December 2014 to review our service performance.
- Attended a Service Level Agreement (SLA) review meeting for the Hong Kong-Zhuhai-Macao Bridge project with the Highways Department in March 2015.
- Attended a SLA review meeting on the Tseung Kwan O-Lam Tin Tunnel project with the Civil Engineering and Development Department in March 2015.
- Conducted various courtesy visits, high level seminars and working level seminars for the Hospital Authority.

獎項及嘉許

獎項及嘉許能提升士氣，並激勵員工有更卓越的表現。我們鼓勵員工適當地參與各項活動、比賽和認證工作，以拓展眼界，並掌握本港、區內以至國際間的最新科技發展和最佳做法。

AWARDS AND RECOGNITION

Awards and recognition boost morale and motivate staff to perform with excellence. We encourage staff to take part in external events, competitions and certification exercises where appropriate to broaden their horizons, and to keep pace with the latest technologies and best practices locally as well as on a regional or international level.

機電工程署見習技術員奪得職訓局獎項 EMSD Technician Trainees Win VTC Awards

部門兩位見習技術員，在由職業訓練局舉辦的2014年度「傑出學徒/見習員獎勵計劃」贏得殊榮。見習一級技術員布永俊先生（中間）榮獲「傑出學徒」獎項，而見習一級技術員溫從智先生則獲「優異學徒」獎項。比賽共有200多人參加，競爭相當激烈。布先生與其他優勝者，更贏得前往新加坡進行交流學習的機會，了解當地的空調行業情況。

Two of our technician trainees won recognition at the 2014 Outstanding Apprentice/Trainee Awards organised by the Vocational Training Council (VTC). Mr Po Wing-chun, Technician Trainee I (middle), won the Outstanding Apprentice award while Mr Wan Chung-chi, Technician Trainee I won the Apprentice of Excellent Performance award. Competition was keen, with over 200 participants taking part. Mr Po and other winners won a study trip to Singapore to learn about the air-conditioning trade there.



建築信息模擬先導項目贏得業界獎項 BIM Pilot Project Wins Industry Award

我們在建造業議會舉辦的「2014卓越建築信息模擬獎」中，以在部門總部大樓推行的一項先導計劃贏得「BIM創新建造獎」，再次證明我們在創新思維和應用技術方面的領導地位。先導計劃的目的，是測試如何以BIM技術，把資產管理（AM）系統、流動平台與電子系統結合應用的可行性。這計劃是發展局委託我們的任務，藉以研究BIM-AM模型在建築物管理和維修保養方面的應用和潛在優點。

We have won the Construction Innovator by BIM award for a pilot project at our headquarters in the Building Information Modelling (BIM) Excellence Awards 2014, organised by the Construction Industry Council. The win demonstrates once again EMSD's leadership in innovative thinking and technology application. The pilot aimed to test the feasibility of integrating our asset management (AM) system, mobile platform and electronic system using BIM. The pilot was carried out as Development Bureau's commission for EMSD to study the feasibility and potential benefits of applying a BIM-AM model to the operation and maintenance of buildings.

公德地盤獲嘉許

Considerate Contractor Sites Win Awards



機電工程署五項合約，在由發展局及建造業議會聯合主辦的「第20屆公德地盤嘉許計劃」，獲得了一個銅獎和四個優異獎。其中一個獎項屬新建工程合約，其餘則屬維修、保養、改建及加建工程合約。獲銅獎的合約，是為不同的政府場地的升降機及自動梯，提供全面保養和維修服務。我們衷心恭賀各得獎承辦商，也感謝他們在工地作業時高度注重公德的态度。

Five EMSD contracts won a Bronze Award and four Merit Awards in the 20th Considerate Contractors Site Award Scheme, jointly organised by the Development Bureau and the Construction Industry Council. One of the five awards was for new works contracts while the rest were for repair, maintenance, alteration and addition works contracts. The Bronze Award went to a contract for the comprehensive maintenance and repair of lift and escalator installations at various government premises. We congratulate our contractors for the highly considerate attitude in their work site practices and for winning the awards.

同事獲選為「2014年亞太區能源管理經理」

Our Colleague Elected Energy Manager of the Year 2014 for Asia Pacific Rim



前運輸、保安及中央工程部工程師張敏婕女士（現為衛生工程部署理高級工程師），於2014年9月30日在美國華盛頓的「世界能源工程大會」，榮獲能源工程師協會頒發「2014年亞太區能源管理經理」獎項。張女士近年一直致力與多個客戶建立伙伴關係，推廣「高效率」、「高價值」、「低排放」及「低投資」二高二低的能源管理工作。她在能源管理方面的出色表現，廣獲認同。

Ms Jovian Cheung, former Engineer of our Transport, Security and Central Services Division (now Acting Senior Engineer of Health Sector Division) was elected Energy Manager of the Year 2014 (Asian Pacific Rim Region) by the Association of Energy Engineers at the World Energy Engineering Congress held in Washington D C on 30 September 2014. In recent years Ms Cheung has helped build close partnerships with clients to promote "high efficiency", "high-value", "low emission" and "low investment" in energy management, and is well recognised for her outstanding performance in such work.

「牢」不可破：無匙控出入項目獲獎 Award-winning Keyless Access Project Steps Up Security



機電工程署與懲教署共同設計了一套無匙「電鎖保安系統」，系統集監控、記錄和身份認證等多項功能於一身，且無需使用鎖匙。「電鎖保安系統」由2014年2月起於羅湖懲教所開始使用，大大提升了該懲教所的運作效率，並加強出入院所的監控工作。該系統更榮獲由政府資訊科技總監辦公室和香港工程師學會合辦的「2014香港資訊及通訊科技獎」之「最佳創新（企業創新）特別嘉許」獎。EMSD and the Correctional Services Department have jointly designed an Electric Locks Security System (ELSS), a keyless security system integrating different functions of monitoring, operation, recording and personnel authentication and eliminates the use of keys. Since its operation began in February 2014 at the Lo Wu Correctional Institution, ELSS has greatly improved operation efficiency and strengthened access control there. The system has also won the Best Innovation (Entrepreneurial Innovation) Special Mention of the Hong Kong ICT Awards 2014, organised by the Office of the Government Chief Information Officer and the Hong Kong Institution of Engineers.

工程快捷順暢 贏得醫院嘉許 Prompt and Smooth Works Win Hospital Award



衛生工程服務（香港西）分部於2014年6月，榮獲瑪麗醫院頒發「即時嘉許獎勵計劃」獎項，以表揚相關同事為該院手術室更換消防喉管時的出色表現。手術室的服務需求很大，但由於工程進行得快捷順暢，手術室因工程引致的停用時間也減至最低。今次獲獎，更鞏固了我們作為該院可靠伙伴的位置。

Our Health Sector Services (Hong Kong West) Sub-division won the Queen Mary Hospital Spot Award in June 2014 for its prompt and smooth replacement of fire services pipes in its operating theatres, thus reducing down time significantly for the operating theatres which were in great demand. The award reinforced our role as the hospital's trusted partner.

香港品質保證局表揚品質管理系統加強工作 HKQAA Recognises Quality System Improvement Efforts

香港品質保證局於2014年11月的25周年論壇暨慶祝酒會上，嘉許機電工程署為「多元體系管理機構」和「整全體系管理機構」。是次嘉許再次肯定了我們追求優質服務、愛護環境和注重安全工作的努力，並矢志精益求精及推動可持續發展。

EMSD was commended as the Outstanding Organisation with Comprehensive Management Systems and the Outstanding Organisation with Holistic Management Systems at the Hong Kong Quality Assurance Agency (HKQAA) 25th Anniversary Forum and Celebration Cocktail Reception in November 2014. The recognition reconfirms our commitment to quality service, care for the environment and safe operation, as well as service excellence and sustainable development.



重點與前瞻

HIGHLIGHTS AND WAY FORWARD

重點

- 每名員工年內平均接受4.72日培訓。
- 為所有監工同事安排安全監工訓練，以加強工場安全。

前瞻

- 通過舉行各種促進職業安全及健康的活動，持續提高員工的安全意識。
- 努力達至每名員工平均每年接受最少4.5日培訓的目標。
- 爭取於2016/17年度的新一輪員工滿意度調查，進一步提高員工滿意度。

Highlights

- Achieved an average of 4.72 annual training days per staff member.
- Arranged safety supervisor training for all works supervisors to improve safety performance.

Way Forward

- Continue to improve staff safety awareness through various occupational safety and health promotional programmes.
- Aim to accomplish at least 4.5 training days per staff member per year on average.
- Strive to raise the Staff Satisfaction Index in the next Staff Satisfaction Survey, to be conducted in 2016/17.

全球報告倡議組織指標索引

GRI INDICATOR INDEX

指標 INDICATORS	全球報告倡議組織指標編號 GRI REFERENCE	頁數 PAGE REFERENCE
策略及分析 Strategy and Analysis	1.1, 1.2	02 – 07
機構簡介 Organisational Profile	2.1 – 2.10	09, 61, 114 – 116
報告規範 REPORT PARAMETERS		
報告概況 Report Profile	3.1 – 3.4	100
報告範圍及界限 Report Scope and Boundary	3.5 – 3.11	100, 136
全球報告倡議組織內容索引 GRI Content Index	3.12	136
認證 Assurance	3.13	138 – 139
管治、承諾及參與度 GOVERNANCE, COMMITMENTS AND ENGAGEMENT		
管治 Governance	4.1 – 4.2, 4.4 4.3, 4.5 – 4.10	08 – 15, 60 – 67 ☆
對外界倡議的承諾 Commitments to External Initiatives	4.11 – 4.13	☆
與持份者溝通 Stakeholder Engagement	4.14 – 4.16 4.17	122 – 131 ☆
管理方針及績效指標 MANAGEMENT APPROACH AND PERFORMANCE INDICATORS		
經濟 Economic	經濟績效 Economic Performance	
	EC1, EC3	▢
	EC7	☆
環境 Environmental	物料 Materials	EN1 111, 137
	能源 Energy	EN3, EN5, EN6 104 – 106, 109 – 110, 113
	水 Water	EN8 110, 137
	廢氣、污水及廢棄物 Emissions, Effluents and Wastes	EN16, EN18 111 – 112, 137
	產品及服務 Products and Services	EN26 104 – 109
	交通運輸 Transport	EN29 112
社會 Social	勞工措施及合理工作 Labour Practices and Decent Work	
	– 僱用 Employment	LA1 114 – 116
	– 職業健康與安全 Occupational Health & Safety	LA6 116 – 120
	– 培訓與教育 Training and Education	LA10, LA11 115 – 116, 132 – 134
	– 多元化與平等機會 Diversity & Equal Opportunity	LA13 114
	人權 Human Rights	
	– 非歧視 Non-discrimination	HR4 ☆
	– 結社自由與集體談判權 Freedom of Association & Collective Bargaining	HR5 121
	社會 Society	
	– 社區 Community	SO1 104 – 109, 122 – 128
	– 遵守法規 Compliance	SO8 ☆
	產品責任 Product Responsibility	
	– 產品及服務標籤 Product & Service Labelling	PR5 105

▢ 請參閱《機電工程營運基金二零一四至一五年報告》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 2014/15 which is available on EMSD website.

☆ 請參閱《二零一四至一五年社會及環保報告》的附加文件，該資料已上載至機電工程署網站。
Please refer to the Supplementary Information of the Social and Environmental Report 2014/15 which is available on EMSD website.

本報告是參照《全球報告倡議組織 G3.1 指引》的應用等級 B+ 編寫。
This report makes reference to the Global Reporting Initiative (GRI) G3.1 Guidelines – Application Level B+.

如欲取得更多關於全球報告倡議組織指標的資料，請瀏覽網站 www.globalreporting.org
For more information about the GRI indicators, please visit the website www.globalreporting.org

統計資料摘要

SUMMARY OF STATISTICS

資源 RESOURCE	2012/13	2013/14	2014/15
電力 ('000 千瓦小時) [#] Electricity ('000 kWh) [#]	14 533 ^Δ	14 785	14 974
煤氣 (兆焦耳) Towngas (MJ)	131 760	223 728	19 392
水 (立方米) Water (m ³)	46 168	49 912	22 215
柴油 (升) Diesel (l)	106 298	285 444	131 762
汽油 (升) Gasoline (l)	437 780	370 354	373 451
紙張 — A3、A4 (令) Paper – A3, A4 (ream)	27 245	26 992	26 344
油漆及溶劑 (升) Paint & Solvent (l)	20 273	20 057	17 289
潤滑油 (升) Lubrication Oil (l)	81 384	100 169	66 339
油脂 (公斤) Grease (kg)	1 464	1 708	1 457
製冷劑 (公斤) (例如 R22 及 R134a) Refrigerant (kg) (e.g. R22 & R134a)	14 993	13 302	14 988
工業用氣體 (立方米) (例如氧、氬及乙炔) Industrial Gas (m ³) (e.g. Oxygen, Argon & Acetylene)	844	751	418
蓄電池電解液 (升) Battery Electrolyte (l)	165	201	219
原子車胎 (條) Tubeless Tyre (no.)	10 361	10 656	10 982
外車胎 (條) Outer Cover Tyre (no.)	2 760	3 108	2 435
車胎內膽 (條) Inner Tube (no.)	1 663	1 975	1 773
廢氣、污水及廢物[®] EMISSIONS, EFFLUENTS AND WASTES[®]			
廢紙 (公斤) Waste Paper (kg)	24 475	18 365	25 589
碳粉盒 (個) Toner Cartridges (no.)	3 446	3 121	3 174
用罄電池 (公斤) Batteries (kg)	2 631	16 040	18 697
金屬廢料 (公斤) Metal Scraps (kg)	24 180	27 484	22 974
廢油 (升) Waste Oil (l)	94 576	93 216	99 876
舊車胎 (條) Used Vehicle Tyre (no.)	4 847	11 862	13 323
含水銀照明燈 (盞) Spent Mercury Lamp (no.)	119 359	126 146	136 535
員工 STAFF			
每千名員工的須予呈報意外宗數 Number of Accidents per 1 000 Staff (reportable)	4.77	5.59	4.5
員工滿意度 (以 10 分為滿分) Staff Satisfaction (out of a score of 10)	不適用 Not Applicable	不適用 Not Applicable	6.4
培訓 (平均培訓日數目標 : 4.5 日 / 每名員工) Training (average training targets : 4.5 days/staff)	5.44	4.74	4.72

[#] 總用電量包括建築物 (例如: 總部、工場、租用辦公室和數據中心) 及基建 (例如: 總部行人天橋和無線電站), 但不包括第三者營運的員工食堂。
Total electricity consumption 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.

^Δ 不包括小蠔灣數據中心的用電量。
Electricity consumption of Siu Ho Wan Data Centre is not included.

[®] 有關的廢物由持牌承辦商收集, 供物料循環再造或棄置。
The concerned wastes are collected by the licensed contractor for material recycling or disposal.



獨立保證意見聲明書



聲明書編號：SRA-HK-639857

2014/15 年度機電工程署社會及環保報告

英國標準協會與機電工程署為相互獨立的公司及組織，英國標準協會除了針對機電工程署 2014/15 年度社會及環保報告進行評估和核查外，與機電工程署並無任何財務上的關係。

本獨立保證意見聲明書的目的，僅作為對下列有關機電工程署社會及環保報告所界定範圍內的相關事項進行保證之結論，而不作為其他之用途。除對核查事實提出獨立保證意見聲明書外，對於關於其他目的之使用，或閱讀此獨立保證意見聲明書的任何人，英國標準協會並不負有或承擔任何有關法律或其他之責任。

本獨立保證意見聲明書基於機電工程署提供予英國標準協會之相關信息審查所作成之結論，因此審查範圍乃基於並局限在這些提供的信息內容之內，英國標準協會認為這些信息內容都是完整且準確的。

對於這份獨立保證意見聲明書所載內容或相關事項之任何疑問，將全部由機電工程署回覆。

核查範圍

機電工程署與英國標準協會協議的核查範圍包括：

1. 整份機電工程署 2014/15 年度社會及環保報告內容及機電工程署在 2014 年 4 月 1 日至 2015 年 3 月 31 日期間的所有業務及活動。
2. 依照包容性、重大性和回應性這三個原則對機電工程署進行本質和程度的評估。及對指定可持續性的信息/數據之可信賴程度作出核查。

本聲明書以英文作成並已翻譯為中文以供參考。

意見聲明

我們總結機電工程署 2014/15 年度社會及環保報告內容，對於機電工程署的相關運作與績效提供了一個公平的觀點。我們相信有關機電工程署 2014/15 年的經濟、社會及環境等績效指標是正確無誤地展現。報告所披露的績效指標展現了機電工程署對識別利益相關方的努力。

我們的工作是由一組具有可持續報告核查能力之團隊執行，以包容性、重大性和回應性作為原則。透過策劃和進行核查時所獲得的信息及說明，我們認為機電工程署已提供足夠證據表明他們的自我聲明符合 GRI G3.1 報告綱領是屬公允的。

核查方法

為了收集與作成結論有關的證據，我們執行了以下工作：

- 對來自外部團體的議題相關於機電工程署政策，進行高階管理層的審查，以確認本報告中聲明書的合適性
- 與機電工程署管理者討論有關利益相關方參與的方式，然而，我們並無直接接觸外部利益相關方
- 訪問與可持續發展管理、報告編制及信息提供有關的員工
- 審查有關組織的關鍵性發展
- 審查報告中所作宣告的支持性證據，及
- 針對公司報告及其有關包容性、實質性及回應性原則的流程管理進行審查

GRI 報告綱領

機電工程署提供有關符合 GRI G3.1 報告綱領（應用等級 B+）的自我宣告。從審查的結果，我們確認報告中參照 GRI 的可持續發展的相關指標已被報告。

責任

對於這份社會及環保報告內容及所提供予英國標準協會作審查用的信息之所屬責任，為機電工程署負責人所有。我們的責任為基於所描述的範圍與方法，提供專業意見並提供利益相關方一個獨立的保證意見聲明書。

能力與獨立性

英國標準協會於 1901 年成立，為全球標準與驗證的領導者。本核查團隊係由具專業背景，且接受過如 GRI G3.1、GRI G4、ISO 14001、OHSAS 18001 及 ISO 9001 之一系列可持續發展、環境及社會等管理標準的訓練，具有主導擔保核查員與碳足跡核查員資格之成員組成。本保證係依據 BSI 公平交易準則執行。

英國標準協會代表：

高毅民博士
BSI 亞太區可持續發展副總裁

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香港區營運總監

2015 年 11 月 2 日



INDEPENDENT ASSURANCE OPINION STATEMENT

Statement No.: SRA-HK-639857

Electrical & Mechanical Services Department, HKSAR Social & Environmental Report 2014/15

The British Standards Institution is independent to Electrical & Mechanical Services Department, HKSAR (hereafter referred to as EMSD in this statement) and has no financial interest in the operation of EMSD other than for the assessment and assurance of this report.

This Independent assurance opinion statement has been prepared for EMSD only for the purposes of assuring its statements relating to its sustainability report, more particularly described in the Scope, below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the Independent assurance opinion statement may be read.

This Independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by EMSD. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to EMSD only.

Scope

The scope of engagement agreed upon with EMSD includes the followings:

1. The assurance covers the whole S&E Report 2014/15 of EMSD's and foci on systems and activities during the period from 1st April 2014 to 31st March 2015.
2. The evaluation of the nature and extent of the EMSD's adherence to three principles - Inclusivity, Materiality and Responsiveness. The specified sustainability performance information/data disclosed in the report has been evaluated.

This statement was prepared in English and translated into Chinese for reference only.

Opinion Statement

We conclude that the EMSD Social & Environmental Report 2014/15 Review provides a fair view of the EMSD CSR programmes and performances during 2014-15. We believe that the 2014-15 economic, social and environment performance indicators are fairly represented. The sustainability performance indicators disclosed in the report demonstrate EMSD's efforts recognized by its stakeholders.

Our work was carried out by a team of sustainability report assurers in accordance with the principles of inclusivity, materiality and responsiveness. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that EMSD's description of their self-declaration of compliance with the GRI guidelines were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- A top level review of issues raised by external parties that could be relevant to EMSD's policies to provide a check on the appropriateness of statements made in the report
- Discussion with senior executives on EMSD's approach to stakeholder engagement. We had no direct contact with external stakeholders
- Interview with staff involved in sustainability management, report preparation and provision of report information were carried out
- Review of key organizational developments
- Review of supporting evidence for claims made in the reports
- An assessment of the company's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality and Responsiveness

GRI-reporting

EMSD provided us with their self-declaration of compliance GRI G3.1 Guidelines and the classification to align with 'Application Level B+'.

Based on our verification review, we are able to confirm that social responsibility and sustainable development indicators are reported with reference to the GRI G3.1 Guidelines.

Responsibility

It is the responsibility of EMSD's senior management to ensure the information being present in the Social & Environmental Report being accurate. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of Lead auditors and Carbon Footprint Verifiers experienced in industrial sector, and trained in a range of sustainability, environmental and social standards including GRI G3.1, GRI G4, ISO 14001, OHSAS 18001, and ISO 9001, etc. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:

Dr. Yi-Min Gao
Vice-President, Sustainability, BSI Asia Pacific

Mr. Wilfred Chan
Sustainability Portfolio Manager, BSI Asia Pacific
Operations Director, BSI Hong Kong

2 November 2015