



時刻與共
**Always
There**



部門簡介及架構

Organisational Profile and Structure

機電工程署提供兩大服務，分別是規管服務及營運服務，後者由機電工程營運基金（營運基金）負責執行。

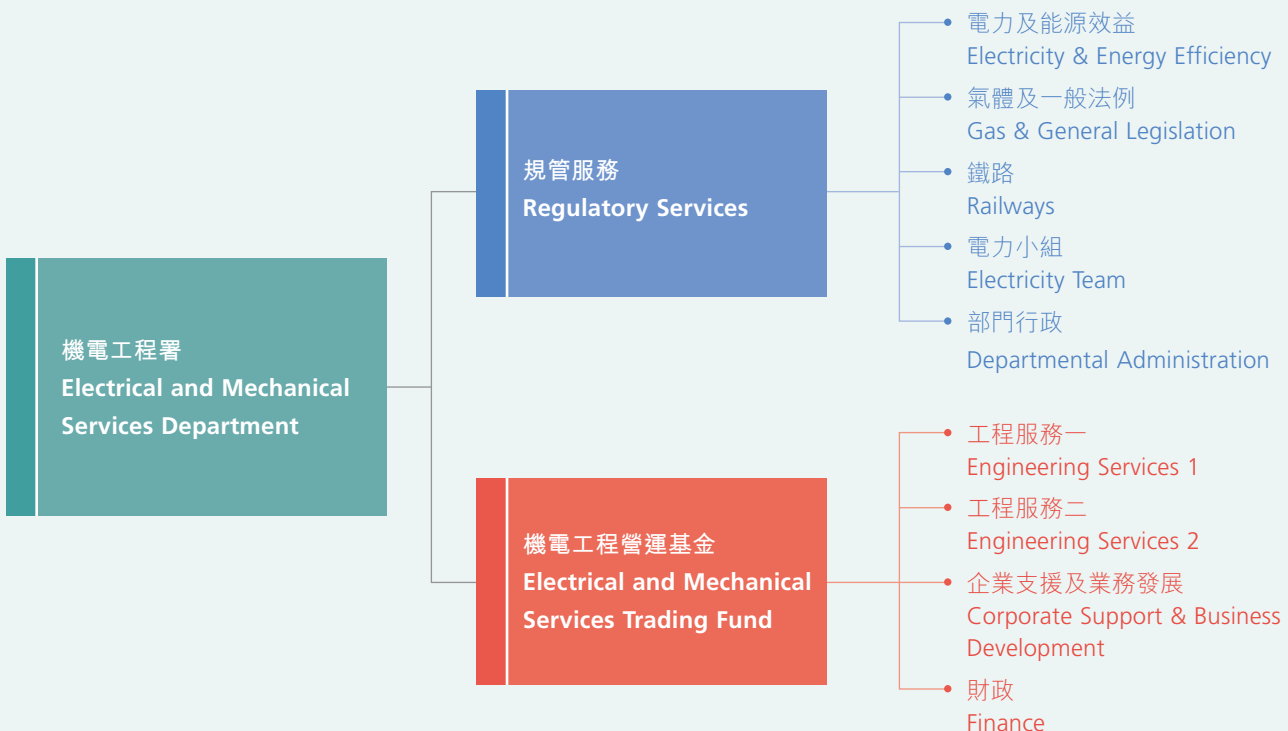
規管服務的職能，是以規管活動及服務，確保本港機電安全和推廣能源效益。具體工作是透過執行法例和推動公眾教育，以規管電氣、機械及氣體安全、鐵路安全及推廣能源效益。此外，規管服務也根據「管制計劃協議」，監管電力公司的技術表現及發展計劃。我們也時常為政府的多種安全和環保工作，提供專業及技術支援。

營運基金為本港政府部門及公營機構提供電氣、機械、電子工程及屋宇裝備服務。我們透過一站式的工程和維修增值服務，讓本港公營部門的電氣、機械、電子及屋宇裝備系統能暢順有效及節能環保地運作。我們的客戶包括為機場、醫院、學校、紀律部隊、運輸及公路、港口及海港、政府合署及法院大樓、公眾文娛康樂提供服務的政府部門和機構，所以我們的服務與市民息息相關，我們以提升全港市民的生活質素為最終目標。

The Electrical and Mechanical Services Department (EMSD) provides two distinct services: Regulatory Services (RS) and Trading Services (TS). The latter is delivered via the Electrical and Mechanical Services Trading Fund (EMSTF).

Our RS ensures E&M safety and promotes energy efficiency in the community via its regulatory activities and services. Specifically, RS regulates electrical, mechanical and gas safety, railway safety, as well as energy efficiency, via law enforcement and public education. It also monitors the technical performance and development plans of the electricity supply companies under the Scheme of Control Agreements, and gives professional and technical support to the Government's wide range of safety and environmental initiatives from time to time.

EMSTF delivers services in electrical and mechanical (EM), electronic engineering (EE) and building services (BS) to government departments and public institutions in Hong Kong. We provide one-stop value-added engineering and maintenance services for the EM, EE and BS systems in the public sector to operate effectively, efficiently and in an energy efficient and sustainable manner. We serve diverse customer departments and organisations which provide services covering the airport, hospitals, schools, security forces, transport and highways, port and harbour, government offices and law court buildings as well as public recreation and leisure, with the ultimate goal of improving the quality of life for everyone in Hong Kong.



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署長及總經理的話

Message from the Director and General Manager



陳帆太平紳士
Mr Chan Fan, Frank, JP

機電工程署署長

機電工程營運基金總經理

Director of Electrical and Mechanical Services

General Manager, Electrical and Mechanical Services Trading Fund

我們謹此欣然報告機電工程署規管服務和營運服務年內在經濟、社會及環保方面的表現和成績。本年報的目的，是讓持份者更了解我們的工作和重點優次，並藉此加強溝通，也歡迎大家提供寶貴意見。

規管服務

隨着近年各項新條例相繼實施，如《升降機及自動梯條例》及《建築物能源效益條例》，我們的同事已做了大量工作，確保業界與其他持份者都充分了解其法定責任，以在條例生效後即可妥善遵行。

措施透明

我們透過各項行政措施，協助業界改善表現和提高公眾對業界的信心，「註冊升降機及自動梯承辦商表現評級」制度就是一個好例子。評級制度於2013/14年度全面優化後，繼續保持高度透明，

讓傳媒和公眾可隨時在網上輕易查閱個別承辦商的安全和服務表現，而相關資料更會按季在機電工程署網站更新。

安全表現更佳

規管服務一直致力促進本港的機電安全和能源效益，務求市民安全安心。我們很高興指出，2013年內的氣體事故與第三者損毀供電電纜事故數目均創新低，分別為218宗及60宗，顯示我們的機電安全工作取得滿意成績。在目前各大基建工程進行得如火如荼之際，事故數目趨降尤其令人鼓舞，但我們不會自滿。未來數年，本港建造工程仍會十分興旺，事故風險亦會持續高企，故此我們務須繼續努力，盡量減低事故數字。

提高能效標準

推廣能源效益的工作去年有不少進展。我們的團隊在《建築物能源效益條例》及「強制性能源效益標籤計劃」的框架

下，不斷致力提升本港的能效表現，並為此展開新一階段的工作，即定期檢視現行各項計劃的評級標準，考慮最新科技發展及公眾期望不斷上升等因素，推出能效要求更高的新評級標準。

啟德發展區區域供冷系統年內也有重要進展。第一及二期工程均已完成，並如期於2013年6月，即啟德郵輪碼頭投入服務時，開始為郵輪碼頭供應冷水。第三期工程進展良好，到2015年，供冷系統將會接駁至啟德發展區內的其他樓宇和設施。

營運服務

機電工程營運基金的五年企業目標，是要做到「透過與客戶的伙伴關係，創造公眾價值利惠市民」，這目標仍舊不變，也是貫串營運基金一切活動的精神。財務方面，營運基金在2013/14年度表現持續穩定，完成所有目標。

We are pleased to report the performance of our Regulatory Services and Trading Services in terms of our economic, social and environmental responsibilities. The report aims to help our stakeholders better understand our work and priorities, and invite feedback and communication.

REGULATORY SERVICES

With the enactment of various new legislation in recent years, such as the Lifts and Escalators Ordinance and the Buildings Energy Efficiency Ordinance (BEEO), our colleagues put great effort into seeing to it that the trades and other stakeholders were fully aware of their statutory duties so as to facilitate a high level of compliance as soon as the laws came into operation.

Transparent Measures

We have deployed various administrative measures designed to help the trades enhance their performance and boost public confidence in them. A good example is the Registered Lift and Escalator Contractors' Performance Rating System. Newly revamped in 2013/14, it continues to be highly transparent and gives the media and the public easy online access to information about the safety and service performance of individual contractors, updated every quarter on the EMSD website.

Better Safety Performance

Our Regulatory Services strives to achieve "safety and peace of mind" for the public by enhancing E&M safety and energy efficiency. We are glad to report satisfactory performance in our work on E&M safety in the year 2013, as seen in the record low of 218 gas incidents and another record low of 60 incidents

of third-party damage to electricity supply lines. The downward trend is particularly encouraging as it coincides with an intensification of infrastructure works in Hong Kong. Even so, we are not complacent. With construction likely to continue to boom in coming years, the risk of incident remains high, and so we must continue to work to contain incident numbers.

Energy Efficiency Upgrades

Much progress was made last year in our energy efficiency drive. Our team has been working to upgrade Hong Kong's energy performance under the BEEO and the Mandatory Energy Efficiency Labelling Scheme. This ushers in a new phase of our work, namely the regular review and upgrade of energy efficiency grading standards in existing schemes, taking into account current technology developments and increasing public expectations.

The Kai Tak District Cooling System reached a milestone during the year. Phases I and II were completed and commenced supplying chilled water as scheduled to the Kai Tak Cruise Terminal upon its opening in June 2013. Phase III works are making good progress and will connect more buildings and facilities at Kai Tak Development to the system by 2015.

TRADING SERVICES

Our five-year goal for the Electrical and Mechanical Services Trading Fund is to "create public value for community betterment through partnership with our clients". This goal remains unchanged and is the common thread weaving through all EMSTF activities. In terms of financial performance, EMSTF continued to be stable and achieved all its targets in 2013/14.

Channelling Resources to the Community

Our revenue in 2013/14 was HK\$5,020 million which slightly increased over the preceding year, attributable to increased client service needs. In line with our aim to operate with minimal profit so as to enable clients to retain more funds and better their services for the community, our return on revenue was abated to 5.3%.

Becoming a Trade Model

I am grateful for the various accomplishments in becoming a trade model for the E&M industry – one of the five strategies to help us achieve our five-year corporate goal. Initiatives such as launching the TV series "Engineering, Life and Dreams" in collaboration with Radio Television Hong Kong, enhancing remuneration for our technician trainees and encouraging contractors to improve wages and working conditions for E&M engineering staff have worked well with the trade in promoting its status and attracting talent. We shall further our efforts on this front.

THE DEPARTMENT AS A WHOLE

EMSD has made impressive headway in stakeholder engagement. For EMSTF, engaging with customers is a key activity, and the best proof of success is the record high Customer Satisfaction Index of 6.22 on a scale of 8 in the latest EMSTF Customer Opinion Survey. The good rating is certainly the result of staff's increased understanding of service value and commitment to service excellence. For Regulatory Services, a focused and risk-based approach towards stakeholder communication, such as the stepping up of safety education for electrical workers, has already led to better safety performance.

把資源投向社會大眾

營運基金2013/14年度的收入是50.2億港元，較上年度略升，這是因為客戶的服務需求有所增加。另一方面，鑑於我們的目標是只以微利營運，好讓客戶保留更多資金以加強公共服務，營運基金2013/14年度的收入回報率因而下降至5.3%。

成為業界典範

年內，營運基金在致力成為業界典範方面，做出多項成績，謹此感謝同事的努力。成為業界典範，是我們貫徹五年企業目標的策略之一，具體工作包括協同香港電台推出電視連續劇《機電夢飛翔》，提高機電工程署見習技術員的薪酬，以及鼓勵承辦商改善機電工程人員的薪酬和工作環境等。這些措施對提高機電業的地位和吸引新血入行，都取得良好成效。我們會繼續推展這方面的工作。

部門縱覽

機電工程署在維繫持份者的工作方面取得極佳進展。對營運基金而言，與客戶保持聯繫溝通是十分重要的工作。根據最新的客戶意見調查，我們的客戶滿意指數，以8分為滿分計，創下6.22分的新高，這是營運基金成功維繫客戶的有力證明，也反映員工對服務價值的深刻了解，及對提供卓越服務的堅持。至於規管服務，由於以更聚焦和風險為本的方式與持份者聯繫溝通，例如加強電業工程人員的安全教育，安全表現也見提升。

維繫持份者的工作已見成效

內部方面，我們維繫員工的工作亦見成效。部門的團隊氣氛加強，合作精神也更好。以部門的員工康樂會為例，不但員工參與程度比以前高，推出的活動也更多元化，更緊貼時代潮流。作為管理高層，我們鼓勵同事除了工作和家庭，也應培養其他興趣，例如體育運動和參

加工會等。我們也欣見員工投訴數目減少，而年內員工濫用病假更錄得零個案。員工的各種問題，現時都能以既定渠道和機制去處理。感謝有關單位和同事的共同努力，部門維繫員工的工作已取得相當成績。

我們與本地傳媒的良好關係也值得一提。在處理傳媒關係方面，我們已更為敏銳及積極主動，務求做到更透明及與記者適時聯繫溝通。因此，公眾現時對我們在不同範疇上的規管責任與觀點，都有更清晰的了解，而部門公信力和聲譽也見提升。香港是個開放社會，我們明白傳媒捍衛公眾利益的重要性，正因如此，我們更有動力去持續改善部門的表現。

我們與受規管的業界，也主動進行有系統的溝通工作。我們與業界對具體問題的看法，雖然往往不同，但雙方已建立了交流意見的渠道和機制，可以坦率討論。最重要的，是大家都有共同目標，就是使公眾安全安心。

「公眾價值」觀念植根

我們樂見員工變得更有活力，不同層級的同事，現時在日常工作中都會不時談到「公眾價值」，足見「公眾價值」的觀念已在同事心中植根。這點至為重要。

所謂「公眾價值」，是指透過有創意的工作及卓越的工程服務，為提升市民的生活質素和福祉作出貢獻，並在過程中充分掌握提供服務的真義。為鞏固這企業文化，我們力求在部門內更佳闡釋「服務價值」的涵意，同時協助同事將其「服務價值」化為日常運作的一部分，以便每天都能透過具體工作落實「公眾價值」。長遠來說，希望這會變為部門服務文化的一部分。

前瞻

展望將來，為能緊貼時代和社會步伐，我們必須謀事以智，在下列範疇進行更多工作。

知識管理

我們目前的知識管理，主攻工程技術，軟技巧則較少。諸如批判思考、公關、溝通和危機處理等軟技巧，對處理重大事故其實十分重要。這類軟技巧現時在部門內只有幾位經驗豐富的同事拿捏得到，而非客觀地以文字記錄下來，這有礙知識的承傳與轉移。我們的挑戰，是如何更有系統地承傳與轉移知識。

我們的知識管理工作，將來也可能需要加入程序管理的部分，俾能更佳配合部門的運作需要。

預防與處理問題

部門同事必須對表面看似微不足道，但對社會可能有巨大影響的重要問題，提高敏感度。舉例說，當某個新工程系統投入服務時，或會引起公眾對安全問題或生活質素會否受影響的疑慮。如果我們先知先覺，把問題一早處理好，這些疑慮根本就不會出現。同事近年在處事上雖已更為靈活創新，但對重要問題的敏感度，及適時而有系統地對問題作出預防與處理的技巧，則仍有進一步改善的餘地。

致謝

機電工程署有幸身兼多重角色，並與不同的持份者聯繫溝通。多年來，各方持份者對部門高度信任、積極支持和提供意見，我們銘感於心。我們的員工是部門的骨幹，全因為員工的誠信、承擔和出色服務，我們才會有今天的成績。只要得到大家繼續支持，我深信部門的獨特價值和服務文化，必能更上層樓。



陳帆

機電工程署署長
機電工程營運基金總經理

Stakeholder Engagement Yields Results

Internally, staff engagement has also yielded results. There is a stronger sense of teamwork and spirit of cooperation. An example is the EMSD Staff Club, which now has a higher participation level and offers a wider range of activities that are more in tune with the times. As senior management, we also encourage staff to cultivate interests on top of work and family, such as sports or union activities. We are also delighted to report fewer staff complaints and zero abuse of sick leave this year, and to see that staff issues were resolved via existing channels and mechanisms. Thanks to the hard work of all parties concerned, staff engagement is in good shape.

Our good relationship with local media is also noteworthy. We have become more discerning in our media relations, making a proactive effort to be more transparent and to communicate with journalists in a timely manner. This means that the public now has a clearer picture of our responsibilities and perspectives on various issues. The department's goodwill has also improved. In an open society like Hong Kong, we are well aware of the importance of the media as a guardian of public interest, and this motivates us to improve continuously.

We also engage proactively and systematically with the regulated trades so that, although we may not always see eye to eye with them on specific issues, we have nonetheless established channels and mechanisms for the exchange of views and candid discussion. The key is that we share the common goal of ensuring safety and peace of mind for the public.

"Public Value" Sinking In

Above all else, we are happy to see a more energised workforce, where colleagues at every level of the organisation now talk about "public value" in the course of their work. This is a tell-tale sign that the concept of "public value" has sunk in.

By "public value", we mean to focus on contributing to people's quality of life and well-being through innovative work and best engineering practices, with an understanding of the true meaning of service. To reinforce the culture, we are working within the Department to better define and operationalise our staff's "service values", so that they can translate "public value" into action in the context of their day-to-day operations. Hopefully, this will evolve over time as part and parcel of our service culture.

LOOKING AHEAD

To keep pace with the times and social development, we need to work harder and smarter on the following fronts.

Knowledge Management

Our current knowledge management tends to focus on engineering skills rather than soft skills. Soft skills, such as critical thinking, public relations and communication as well as crisis management, are essential for handling a major incident. Currently these soft skills often reside in a few experienced officers, rather than in an objective, documented form, which impedes the transfer of knowledge. Our challenge is to make knowledge transfer more systematic.

Our knowledge management may also have to evolve in due course to add a process management dimension, so that it can better align with our operational needs.

Pre-empting and Managing Issues

It is important that our colleagues become more sensitive to seemingly small but critical issues that may have major impact on the community. For instance, the approval or operation of a new system may trigger fears that the public's safety or quality of life could be compromised, when such concerns need not have arisen if the issues had been foreseen and managed in good time. Despite the fact that our staff have become more innovative in recent years, we can still enhance our sensitivity to critical issues, and our skills, to pre-empt and manage issues in a timely and systematic manner.

VOTE OF THANKS

EMSD is privileged to have many roles and to be connected to diverse stakeholders. We are grateful to all of them for giving us trust, support and advice over the years. Our staff, of course, are the backbone of our operations, and our achievements are only possible through their integrity, commitment and outstanding service. With their support, we have no doubt the Department's unique value and service culture will scale new heights.



Chan Fan, Frank

Director of Electrical and Mechanical Services

General Manager, Electrical and Mechanical Services Trading Fund

規管服務業務概覽

Regulatory Services Achievements Overview

抱負 Vision

我們的抱負，是要成為促使香港在機電安全及善用能源方面，都達到世界首要都會水平的政府機構。

Our vision is to be the government agency that makes Hong Kong a top-ranking city in E&M safety and in the utilisation of energy.

使命 Mission

我們的使命，是確保機電及能源科技均以安全、可靠、經濟及環保的方式得以善用，並藉此促進社會的安全及提升生活質素。

Our mission is to enhance the safety and the quality of life of our community by ensuring that E&M and energy technologies are harnessed in a safe, reliable, economical and environment-friendly manner.

信念 Values

- 專業才能
Expertise
- 誠信
Integrity
- 可靠
Reliability
- 承擔
Commitment

關顧安民
**Always
There to
Care**



高層管理人員 Senior Management



陳帆太平紳士
Mr Chan Fan, Frank, JP

署長 Director

機電工程署署長

Director of Electrical and Mechanical Services

- * 薛永恆太平紳士出任機電工程署副署長/規管服務至2013年12月20日
Mr Sit Wing-hang, Alfred, JP was Deputy Director/Regulatory Services, EMSD up to 20 December 2013
- * 李國強先生出任機電工程署助理署長/電力及能源效益至2013年8月7日
Mr Li Kwok-keung was Assistant Director/Electricity and Energy Efficiency, EMSD up to 7 August 2013
- * 賴漢忠太平紳士出任機電工程署助理署長/氣體及一般法例至2013年8月7日
Mr Lai Hon-chung, Harry, JP was Assistant Director/Gas and General Legislation, EMSD up to 7 August 2013
- * 林志賢先生出任機電工程署部門會計師至2013年5月1日
Mr Lam Chi-yin was Departmental Accountant, EMSD up to 1 May 2013



胡建明太平紳士
Mr Woo Kin-ming, JP

副署長 Deputy Director

副署長 / 規管服務

Deputy Director/Regulatory Services



梁建民
Mr Leung Kin-man

助理署長 Assistant Director

助理署長 / 鐵路

Assistant Director/Railways



張國輝
Mr Cheung Kwok-fai

助理署長 Assistant Director

助理署長 / 氣體及一般法例

Assistant Director/Gas and General Legislation



賴漢忠太平紳士
Mr Lai Hon-chung, Harry, JP

助理署長 Assistant Director

助理署長 / 電力及能源效益

Assistant Director/Electricity and Energy Efficiency



嚴國豪
Mr Yim Kwok-ho

會計師 Accountant

部門會計師

Departmental Accountant



周楚添
Mr Chow Chor-tim

秘書 Secretary

主任秘書

Departmental Secretary

業務回顧 Operations Review



胡建明太平紳士
Mr Woo Kin-ming, JP

機電工程署副署長/規管服務

Deputy Director/Regulatory Services, EMSD

規管服務承接上一年的工作動力，在2013/14年度繼續加強各項機電安全及能源效益工作，精益求精，朝着使全港市民安全安心的目標邁進。

推動業界參與 加強機電安全

推動各方持份者參與並進行有效溝通，是我們的首要工作之一，因為這是讓持份者充分理解和履行其法定與其他責任的最佳辦法。恆常與持份者保持聯繫，也是我們凝聚各方人士，攜手加強公眾安全和能源效益的關鍵。

在2013/14年度，我們與持份者同心協作的突出例子，包括於2013年6月成立升降機及自動梯安全諮詢委員會，以配合和促進《升降機及自動梯條例》(第618章)的實施。

升降機及自動梯安全諮詢委員會有17位成員，廣泛代表不同的持份者，包括升降機及自動梯業界、物業管理公司、專業團體、培訓機構及市民大眾。委員

會首先進行的工作之一，就是全面改善「註冊升降機及自動梯承辦商表現評級」制度，除了原有的安全要求外，更加入對服務表現的要求。

革新後的評級制度評分，會按季在機電工程署網頁公布，以綠色的「安全之星」及藍色的「質素之星」代表承辦商的表現，幫助升降機及自動梯負責人挑選表現良好的承辦商。由於評級制高度透明，承辦商有更大動力提供優質服務。在優化評級制度的同時，我們也推出連串宣傳活動，包括為業主立案法團及物業管理公司舉行講座，讓他們了解本身的法定責任，確保升降機及自動梯安全。

我們年內與持份者同心協作的又一成功例子，是與提升車輛維修服務水平有關。我們現有兩個相關的自願性計劃，即2007年推出的「車輛維修技工自願註冊計劃」以及2013年推出的「車輛維修工場約章計劃」。雖然技工自願註冊計劃推出初期反應踴躍，註冊技工人數近

年卻見下降趨勢；至於工場約章計劃，則暫時尚未吸引到大量工場簽署加入。

車輛維修技術諮詢委員會已就此檢視有關情況，並議定全力探討及加入各種新元素，把「車輛維修工場約章計劃」發展為一個自願性的車輛維修工場註冊計劃，吸引各大小規模的工場參與。此外，車輛維修技術諮詢委員會也會探討各種方法，以期在2014/15年度吸引更多車輛維修技工申請註冊。事實上，車輛維修業有眾多代表不同利益的持份者，車輛維修技術諮詢委員會正是一個合適的平台，讓各方交流討論，為行業打造亮麗前景。

積極推動受規管業界的持份者參與，對提高從業員的安全知識十分重要。這方面的工作可透過多種形式進行，比如與業界合辦活動，例子之一是與電業界合辦的2013年「傑出註冊電業工程人員選舉」。這比賽已是第二年舉行，並新添了實務測試環節，考驗參賽者的實務工作表現。

Building on last year's momentum and with a goal of providing safety and peace of mind for all in Hong Kong, Regulatory Services continued to improve its work in enhancing E&M safety and promoting energy efficiency in 2013/14.

ENGAGE STAKEHOLDERS FOR E&M SAFETY

Stakeholder engagement is a priority in our work as it is the best way to make sure our stakeholders understand and properly discharge their statutory and other duties. Regular dialogue with stakeholders is also the key to bringing different parties together to jointly enhance public safety and energy efficiency.

Several instances of stakeholder engagement in 2013/14 merit special mention, including the Lift and Escalator Safety Advisory Committee (LESAC) set up in June 2013 to facilitate the implementation of the Lifts and Escalators Ordinance (Cap 618).

The 17-member LESAC comprises representatives of a wide range of stakeholders, including the lift and escalator trade, property management companies, professional institutes and training bodies as well as the public at large. One of its first tasks was to overhaul the Registered Lift and Escalator Contractors' Performance Rating (CPR) System to include service performance elements as well as safety.

Contractor ratings under the revamped CPR, with the green star for safety and blue star for service performance attributes, are posted on a quarterly basis on the EMSD website, helping owners to select high-performing contractors. The transparency of CPR also motivates contractors to deliver quality service. Alongside the revamp, we also implemented a publicity programme, including talks for Incorporated Owners and property management companies to make sure they understand their statutory duty to

keep lifts and escalators safe.

Another example of successful stakeholder engagement relates to enhancement of vehicle maintenance. EMSD currently operates two associated voluntary schemes: the Voluntary Registration Scheme for Vehicle Mechanics, launched in 2007, and the Vehicle Maintenance Workshop Charter Scheme, launched in 2013. Although the former got off to a good start, the number of registered vehicle mechanics has dropped in recent years, while the Charter has yet to attract a sizeable number of signatories.

The Vehicle Maintenance Technical Advisory Committee has reviewed the situation and agreed on going full steam in developing new parameters to turn the Vehicle Maintenance Workshop Charter into a voluntary workshop registration scheme and to attracting more workshops of all sizes to join. It will also explore ways to boost registration of vehicle mechanics in 2014/15. Indeed, the vehicle maintenance trade has many stakeholders with diverse interests, and the Committee provides a good forum for exchanging views and forging a bright future for the trade.

Engaging stakeholders in all our regulated trades is vital to promoting safety knowledge among practitioners. Engagement takes many forms, such as organising joint events. An example was the Outstanding Registered Electrical Worker Awards 2013, which we held in collaboration with the electrical trade. Now in its second year, the competition has evolved to include a trade test to assess participants' practical work performance.

FURTHER PROMOTE ENERGY EFFICIENCY

The Buildings Energy Efficiency Ordinance (Cap 610) came into full operation on 21 September, 2012. A new development in 2013/14 was the review and upgrade of the

"lighting power density" requirement in the Building Energy Code (BEC) undertaken by the Technical Taskforce for Mandatory Implementation of the BEC in late 2013. The tightened BEC standards will contribute in general to a 10% to 15% improvement in lighting energy performance when implementation begins later in 2014.

The BEC Taskforce will also review other BEC standards of lighting, air-conditioning, electrical and lift and escalator installations every three years to ensure continuous energy performance improvement. As such, a consultation with the trade will take place in 2014/15 for the comprehensive review.

During the year, we also completed the installation of 100 medium-speed electric vehicle charging points at government car parks, as part of our work to support the Government's initiative to encourage wider adoption of electric vehicles. The new charging points are up to 60% faster than standard ones.

GEAR UP STAFF EXPERTISE

In regulatory work, nothing is more important than staff expertise, which is essential to discharging our duties as gatekeepers for the community's safety and well being. The public rightly expects us to be equipped with the knowledge and skills to meet their expectations, not to mention being aware of technology developments and other relevant trends. Gearing up staff expertise has always been our focus.

To support the Government's initiative to increase housing land supply, our Gas Standards Office has been conducting prima facie risk assessments of land use proposals to identify and address any potentially insurmountable problems before development work begins. If sites of potential developments may be affected by nearby gas installations, developers of the sites are required to substantiate their development

進一步推廣能源效益

《建築物能源效益條例》(第610章)已於2012年9月21日全面實施。2013/14年度的新發展，是強制實施《建築物能源效益守則》技術工作小組在2013年年底檢討和提高了《建築物能源效益守則》的照明功率密度要求。經修訂的《建築物能源效益守則》標準會在2014年稍後時間實施，屆時，照明能效表現一般會提高10至15%。

上述工作小組也會每隔三年，定期就《建築物能源效益守則》內有關照明、空調、電力、升降機和自動梯裝置的標準進行檢討，確保可持續提升能源效益表現。與業界就下一輪檢討的諮詢工作，會在2014/15年度進行。

年內，我們在各政府停車場安裝了100個電動車中速充電器，這是我們對政府鼓勵市民更多使用電動車的其中一項支援工作。中速充電器的速度，可較標準充電器快達60%。

提升員工專業才能

對規管工作來說，沒甚麼比員工的專業才能更為重要，因為只有能幹的員工，方可讓我們充分發揮保障公眾安全和福祉的角色。市民期望我們具備豐富的專業知識和技能以配合社會需要，同時又能緊貼科技發展與其他相關趨勢。這些都是市民的合理期望。因此，提升員工的專業才能，一直是我們的工作重點。

為支援政府增加建屋用地的政策，我們的氣體標準事務處正就個別建議用地進行初步風險評估，務求在發展工作尚未開展前，找出並處理任何可能無法解決的問題。建議發展地段如因鄰近的氣體裝置而出現潛在風險，發展商必須就有關發展計劃向氣體標準事務處呈交詳盡的「定量風險評估報告」，以供我們作獨立評估。由於有關工作預計會大幅增



加，我們已強化員工在定量風險評估方面的專業才能，並會繼續透過海外培訓、實務練習和同事間的經驗分享，不斷提升員工這方面的專業才能。我們並已成立「氣體工程系統」知識區和「定量風險評估睿智小組」，促進同事間的知識交流。

信號技術的不斷進步，讓我們能採用無需司機駕駛的全自動列車控制系統。這種操作模式在世界各地日趨普遍。興建中的南港島綫(東段)，在設計上也是採用全自動列車控制模式操作。由於全自動列車控制系統，是以一套發展成熟的列車運作技術為基礎，而世界多個主要城市，例如巴黎、倫敦、溫哥華和哥本哈根，也正廣泛應用這系統於部份鐵路綫，我們已積極安排專業人員到上述城市取經，向營運者借鑑有關操作安全的經驗。

前瞻與未來工作

規管服務的目標是讓公眾安全安心，我們來年會致力於三個重點工作範疇：推動持份者參與、提升員工專業才能、探討訂立「預警指標」。

推動受規管行業的持份者參與，對推進規管服務的各项措施十分重要。舉個例說，私營市場的升降機維修保養服務的割喉式減價競爭情況，會有機會導致惡劣保養質素及事故發生，然而，由於缺乏現成數據，令升降機擁有人難以從眾多承辦商中作出選擇。因此，我們已委託進行獨立調查，搜集私人樓宇升降機的維修保養價格。調查結果會在2014年年底開始陸續公布，屆時將可為升降機擁有人提供有用參考，挑選合適的承辦商。

projects with detailed Quantitative Risk Assessments (QRA) to our Gas Standards Office for independent reviews. As we anticipate a surge in QRA work, we have already strengthened and will continue to enhance our staff expertise in QRA via overseas training, hands-on practice and peer experience sharing in use of QRA modelling. We have also set up a Gas Engineering System Knowledge Area and QRA Interest Group for knowledge sharing among colleagues.

Advancement of signalling technology has resulted in fully automatic train operation (FAO) being achievable, without a driver in the cab. This operational practice has become increasingly common in the world. The South Island Line (East) under construction is also designed to be FAO capable. As FAO is based on a set of mature and well developed railway operation technologies and is being commonly adopted in some railway lines in many major cities such as Paris, London, Vancouver and Copenhagen, we have begun to pro-actively send our professional staff to those cities to learn from the experience of operators in respect of operational safety.

OUTLOOK AND TASKS AHEAD

With “safety and peace of mind for the public” as our objective, we shall focus on three areas in the next year, namely engaging stakeholders, raising staff competence and developing “precursors”.

Engaging key stakeholders in the regulated trades is vital to taking many initiatives forward. For example, cut-throat prices in lift maintenance contracts in the private sector could lead to poor maintenance and incidents, but the lack of available data makes it difficult for lift owners to choose among

potential contractors. We have thus commissioned an independent survey to collect the maintenance price for lifts in private buildings. The findings, available progressively from late 2014, will provide a useful reference for lift owners in selecting their contractors.

We also commissioned an independent survey of registered lift workers, engineers and contractors to identify issues of importance to the trade and to gather data such as concerns faced by the trade and salaries of trade practitioners. The results of this survey, to be available by late 2014, will help us identify and address stakeholder problems.

The trade will also be invited to contribute ideas and participate in initiatives in the coming year, such as the proposed Voluntary Vehicle Maintenance Workshop Registration Scheme. As to the Mandatory Energy Efficiency Labelling Scheme, work to upgrade its energy efficiency grading standards is in full swing. We shall continue to count on communication with manufacturers, importers and retailers, as well as feedback from the stakeholders, when we launch the new energy efficiency grading standards for air-conditioners, refrigerators and washing machines.

The challenges we face in Regulatory Services are diverse and dynamic. To help staff perform more effectively, we shall conduct a review of staff competencies in the coming year, with a view to rolling out a structured staff competency development exercise that is aligned with EMSD’s knowledge management initiatives. We shall also reinforce the concept of “service value” at all levels so that Divisions are clear about the value they aim to create.

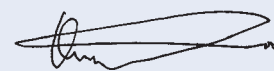
The final point is about “precursors”.

Similar to leading indices in economic forecasts, we believe certain patterns or phenomena could signal the possibility of incidents. Some examples are the age profile of workers, maintenance pricing levels and pace of increase in the number of E&M installations. Certain patterns in these and other precursors can signal heightened risk of incidents and other issues, such as labour shortage or declining standards of maintenance quality. At the same time, some precursors may indicate improvement opportunities, such as technology developments that open up opportunities for an energy standard upgrade. We will establish precursors in 2014/15 for better strategic planning.

APPRECIATION

Regulators are only effective if regulatees cooperate and discharge their duties. We are grateful to the trades and other stakeholders for their support in implementing various ordinances and schemes. We also appreciate their candour in raising concerns, which helps us improve our work.

Our dedicated colleagues deserve a big thank-you for their excellent work, integrity, professionalism and positive attitude. They are fully aware of the public’s high expectations, which they have spared no effort to satisfy. I thank everyone in Regulatory Services and wish them great success in the years to come.



Woo Kin-ming

Deputy Director/Regulatory Services,
EMSD

此外，我們也委託進行了另一獨立調查，以註冊升降機工人、工程師和承辦商為對象，找出業界關注的事項，及搜集諸如業界所面對的問題與從業員薪酬等資料數據。調查結果將於2014年年底就緒，會有助我們具體了解持份者面對的事項，並作出處理。

我們來年也會廣邀業界人士，就不同計劃給予意見並參與籌劃，例如建議推行的「自願性車輛維修工場註冊計劃」。至於「強制性能源效益標籤計劃」，有關優化能源效益評級標準的工作現正全面進行。我們在推行涵蓋冷氣機、雪櫃和洗衣機的新能源效益標準時，將會一如以往，十分重視與製造商、進口商和零售商的溝通，以及持份者的意見反饋。

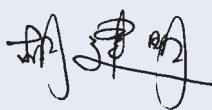
規管服務面對紛繁多樣、不斷變化的挑戰。為提高同事工作的成效，我們來年會檢視員工的技能，以便推行一個與機電工程署知識管理策略相互配合的系統性員工技能發展計劃。我們也會加強向規管服務各層員工傳達「服務價值」的概念，敦促各部別同事清楚掌握其應創造的公眾價值。

最後要說的是「預警指標」。一如預測經濟走勢的領先指標，我們相信某些事物的模式或現象可能是意外事故的預警先兆。工人的普遍年齡、維修保養價格，及機電裝置的增長速度等都是例子，這幾方面所出現的某些模式，甚至其他預警指標，都可能顯示發生意外事故或其他問題（如勞工短缺或維修保養水平下降等）的風險增加。與此同時，我們也可從某些預警指標得出一些改善工作的契機，例如科技新發展會帶來提升能效標準的契機。我們會在2014/15年度訂立各種預警指標，以改進規管服務的策略規劃。

致謝

規管工作要取得成效，實有賴受規管業界的通力合作並切實履行法定責任。我們很感謝各方業界及持份者的支持，讓我們得以落實各項條例和計劃，也感謝業界坦率提出各項問題，讓我們改善工作。

我們的同事盡忠職守、誠信不阿、表現出色專業並且積極主動。他們清楚知道市民的期望，努力不懈滿足市民的需要，我謹此向規管服務的每位同事致以深切謝意，並祝未來有更豐碩的成就。



胡建明

機電工程署副署長/規管服務

重要活動 Highlights



以風險為本的巡查工作，加上在工地講解安全守則，對減少第三者損毀供電電纜事故相當有效。
Risk-based inspection and on-site safety briefings have proved effective in lowering third party electricity supply line damage incidents.

供電電纜損毀事故創新低

2013年涉及第三者損毀供電電纜事故的數目，從2012年的85宗跌至60宗，創出新低。事故數目大減，反映我們的重點巡查和宣傳活動，包括透過講座和研討會向承辦商及其他政府工務部門闡述在供電電纜附近施工的安全守則和規管要求，都已收到成效。此外，針對曾多次發生事故的承辦商，頻密到訪其工地向工人現場講解安全要點，對減少事故發生也有明顯功效。

ELECTRICITY SUPPLY LINE DAMAGE INCIDENTS AT RECORD LOW

The year 2013 saw a record low of 60 incidents involving third party damage to electricity supply lines, compared to 85 in 2012. This reduction reflects the positive result of our focused inspection and publicity programme, which comprised talks and seminars for contractors and our fellow government works departments about the safety practices and regulatory requirements in works near electricity supply lines. Frequent worksite safety briefings, targeting contractors with a history of incidents, have also proved effective in lowering incident numbers.



年內我們的主要工作之一，是為政府就增加房屋供應而尋得的土地，進行初步風險評估。
One of our key tasks during the year was to conduct prima facie risk assessments for land identified by the Government to boost housing supply.

向政府就用地規劃提供氣體風險意見

作為政府的氣體風險顧問，我們支援政府積極尋找合適土地以增加本港的房屋供應。我們的職責，是根據已有的土地用途數據，在土地發展的早期階段，進行初步風險評估，以在發展工作尚未開展前，找出任何可能無法解決的問題。

有關地段如因鄰近的氣體裝置而出現潛在風險，發展商在敲定最終發展藍圖之前，必須呈交詳細的「定量風險評估報告」及各項緩解潛在風險的措施。作為公眾的氣體安全把關者，我們這項措施可確保新的住宅發展項目不會存在氣體風險。

GAS RISK ADVISOR TO GOVERNMENT ON LAND USE

As the Government's gas risk advisor, we support its ongoing drive to identify suitable land to boost the housing supply in Hong Kong. Our responsibility is to conduct prima facie risk assessments at the early stages of the development process, using available land use data to identify potentially insurmountable problems before any development work begins.

For sites that could potentially be affected by nearby gas installations, developers are required to submit a detailed Quantitative Risk Assessment (QRA), complete with risk mitigation measures, before finalising their master layout plan. As the gatekeeper of gas safety for the public, this ensures that new residential developments are free of gas safety hazards.

加強對升降機及自動梯負責人的宣傳

根據《升降機及自動梯條例》，擁有升降機及自動梯的人士及業主立案法團，以及物業管理公司，都是「負責人」，故此也是政府實施該條例的主要持份者。我們為此透過不同渠道，加強對負責人進行有關升降機及自動梯的安全宣傳和教育工作，例如舉行了20多場簡報會，講解如何挑選及管理升降機和自動梯承辦商，又在機電工程署網頁推出「負責人天地」，上載相關資訊和工具，同時全面改善「註冊升降機及自動梯承辦商表現評級」制度及評級的公布模式，以及在部門網頁提供政府場地的升降機保養價格數據和標準保養合約樣本等。此外，我們也透過單張、短片和常見答問等資訊，向市民宣傳保養升降機和自動梯的重要性。

ENHANCED PUBLICITY TO LIFT AND ESCALATOR RESPONSIBLE PERSONS

Owners and incorporated owners of lifts and escalators, as well as property management companies, are considered Responsible Persons (RPs) under the Lifts and Escalators Ordinance and, as such, are key stakeholders in its implementation. We have accordingly enhanced our lift and escalator safety publicity and education work for RPs through various channels. For example, we have organised more than 20 briefings on how to select and manage lift and escalator contractors; set up an RPs' corner on the EMSD website with pertinent tools and information; revamped the Lift and Escalator Contractors' Performance Rating system and presentation format; and made available maintenance price information of lifts at government premises as well as sample maintenance contracts. The public is also informed of the importance of lift and escalator maintenance via pamphlets, videos and FAQs.



機電工程署 EMSD 香港特別行政區政府 機電工程署

GovHK 香港政府一站通 简体版 ENGLISH 我的自訂色彩 AAA 搜尋 輸入查詢字串 網頁指南

主頁 > 策策公眾安全 > 升降機及自動梯 > 升降機及自動梯條例 (第618章) > 負責人天地

升降機及自動梯條例 (第618章) : 負責人天地

指南 / 指引

- 《升降機及自動梯條例》(第618章)小冊子 [PDF 格式 (1.06MB)]
- 升降機負責人手冊 (2012年版) [PDF 格式 (3.01MB)]
- 自動梯負責人手冊 (2012年版) [PDF 格式 (2.18MB)]
- 安全使用升降機及自動梯
- 升降機及扶手梯安全使用指引 [PDF 格式 (6.63MB)]
- 優化升降機指引 [PDF 格式 (3.23MB)]
- 如何選擇合規的註冊升降機及自動梯承辦商提供保養服務? [PDF 格式 (858KB)]
- 如何管理升降機和自動梯的維修保養工作? [PDF 格式 (3.49MB)]
- 物業管理人員日常巡視升降機及自動梯安全操作狀況核對項目表 [PDF 格式 (1.14MB)]
- 升降機工程安全指引 (第3卷—整版樓宇佔用期間) (2013年11月) [PDF 格式 (2.13MB)]

其他參考資料

機電工程署網站的「負責人天地」，提供資訊和工具，幫助負責人就升降機及自動梯安全履行其法定責任。

The Responsible Person's Corner on the EMSD website provides access to information and tools to help responsible persons discharge their statutory duties regarding lift and escalator safety.



我們密切監察港鐵公司的安全管理系統，並時常提出改善建議。
MTRCL's safety management system is monitored closely and improvement suggestions made from time to time.

鐵路安全事故續降

本港鐵路網的安全事故持續下降。2013年，因設備故障和員工行為引起的鐵路事故持續減少，較2012年下降6%。事故數目趨降，是鐵路科人員加強巡查及定期檢測，以及香港鐵路有限公司（港鐵）持續作出改善的結合成果。我們亦已加強監察港鐵的安全管理系統，敦促港鐵時刻注意安全措施上的任何紕漏，持續進行改善。

RAILWAY SAFETY INCIDENTS FALL FURTHER

Safety incidents in our railway network continued to fall. The number of railway incidents caused by equipment failure and staff behaviour decreased further during the year, falling by 6% in 2013 from the figure in 2012. The downward trend is the combined result of enhanced inspections and regular checks by our Railways Branch and on-going improvements by MTR Corporation Limited (MTRCL). We have also stepped up the monitoring of MTRCL's safety management system so that the Corporation is alerted from time to time to any gaps in its safety measures for improvement.



我們推出的節能約章，廣受業界和商界人士歡迎。
Our energy efficiency charters attracted enthusiastic response from the trade and business sector.

兩個節能約章得到積極支持

年內我們推出了「室內溫度節能約章」優化版和全新的「不要鎢絲燈泡節能約章」。「室內溫度節能約章」於2012年首次推出，鼓勵發展商和物業管理公司承諾在6月至9月期間，將商場、商舖、辦公大樓及辦公室的室內平均溫度維持在攝氏24至26度，以減少空調耗電量。

「不要鎢絲燈泡」節能約章旨在鼓勵供應商和零售商承諾不再補充指定的鎢絲燈泡，並由2013年12月底開始停售指定的鎢絲燈泡，從而終止使用能效較低的鎢絲燈泡。業界對兩個約章都相當支持，反應積極。

GOOD RESPONSE TO TWO ENERGY EFFICIENCY CHARTERS

An improved version of the Energy Saving Charter on Indoor Temperature, and a new Energy Saving Charter on No Incandescent Light Bulbs (also known as the "No ILB Charter"), were introduced during the year. The Indoor Temperature Charter, first introduced in 2012, urges developers and property management companies to pledge to maintain an average indoor temperature between 24 and 26 degrees Celsius in shopping malls, shops, office buildings and offices from June to September so as to use less electricity for air-conditioning.

The "No ILB Charter" aims to end the use of less energy efficient ILBs by urging suppliers and retailers to pledge not to replenish the targeted ILB stocks nor sell the targeted ILBs from the end of December 2013. Both Charters have enjoyed enthusiastic support from the respective trades.

區域供冷系統投入服務

區域供冷系統第一期和第二期工程已如期完成，並已開始為2013年6月啟用的啟德郵輪碼頭，以及附近一個商場的空調設施供應冷水。這是香港首個區域供冷系統，有關進展是區域供冷工程的一個重要里程碑。

第三期（A組）工程將於2016年完成，目前進展良好。第三期全部工程預計可於2022年左右完成，屆時整個區域供冷系統應可全面投入服務。系統落成後，預計每年可節省達8 500萬千瓦小時電力。

DISTRICT COOLING SYSTEM OPERATIONAL

Phases I and II of the District Cooling System (DCS) were completed on time and began supplying chilled water for air-conditioning facilities serving the Kai Tak Cruise Terminal, which opened in June 2013, and a nearby shopping centre. This was a milestone for the DCS project, the first of its kind in Hong Kong.

Phase III (Package A) works, scheduled for completion by 2016, is making good progress. The system should be fully operational around 2022, when Phase III is due to be completed. Upon completion, the DCS is expected to generate electricity savings of up to 85 million kWh per annum.



啟德發展區區域供冷系統北廠鳥瞰。該系統由2013年6月起，為郵輪碼頭和一個商場供應空調用冷水。

Aerial view of the Kai Tak District Cooling System North Plant. The System began supplying cold water for air-conditioning to the Cruise Terminal and a shopping centre in June 2013.

保障公眾安全
Safeguarding Public Safety





保障公眾安全 Safeguarding Public Safety

電力安全

供電電纜損毀事故創新低

2013年涉及第三者損毀供電電纜事故的數目跌至60宗，是《供電電纜（保護）規例》自2001年全面實施以來的新低。這類事故數目下降的主要原因，是電力法例部在年內推行了重點性巡查和宣傳活動，針對曾多次發生事故的承辦商，頻密到訪工地現場向工人講解安全要點。

第三者損毀供電電纜事故數目下降，不但讓工人可在更為安全的環境下工作，

也減少了對公眾造成的電力供應干擾。我們的目標，是進一步減低這類事故的數字。

註冊電業工程人員持續進修

「註冊電業工程人員持續進修計劃」進展順利，現時所有註冊電業工程人員都必須按照規定，完成「法例及安全規定」與「技術知識」兩個培訓單元，方可申請每三年一次的註冊續期。進修

計劃於2012年1月生效，因此，全港逾74 000名註冊電業工程人員都必須在2014年年底前，完成持續進修以辦理註冊續期。續期申請的處理工作也進行順利。



機電工程署員工到工地巡查，確保第三者工程不影響供電電纜安全。
EMSD staff inspect worksites to make sure electricity supply lines are safe from third party works.



透過推行註冊電業工程人員持續進修計劃，提升電業界的安全意識及技術水平。
Implementation of the CPD Scheme for REWs helps in enhancing the safety awareness and technical standard of the electrical trade.

ELECTRICAL SAFETY

Electricity Supply Line Damage Incidents at Record Low

The number of incidents involving third party damage to electricity supply lines fell to 60 in 2013, a record low since the Electricity Supply Lines (Protection) Regulation came into full operation in 2001. This reduction is largely attributable to a focused inspection and publicity campaign by the Electricity Legislation Division. Frequent worksite safety briefings targeting contractors with a history of incidents were a key part of the campaign.

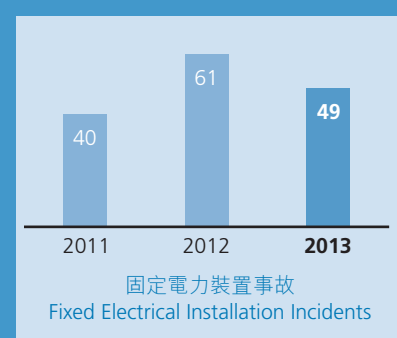
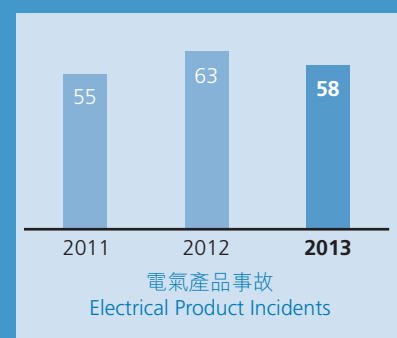
With fewer third party electricity supply line damage incidents, we provide a safer environment for workers and there is less power interruption for the public. We shall aim to further reduce such incidents.

Professional Development for REWs

The Continuing Professional Development (CPD) Scheme for Registered Electrical Workers (REWs) has progressed smoothly. REWs must now complete the requisite two-module training in “legislative and safety requirements” and “technical knowledge” before applying for renewal of registration every three years. The Scheme came into effect in January 2012 and thus all 74 000-plus REWs will need to renew their registration and therefore go through CPD training by the end of 2014. Processing of the renewals has been smooth.



電力事故數目 Electrical Incidents Figures





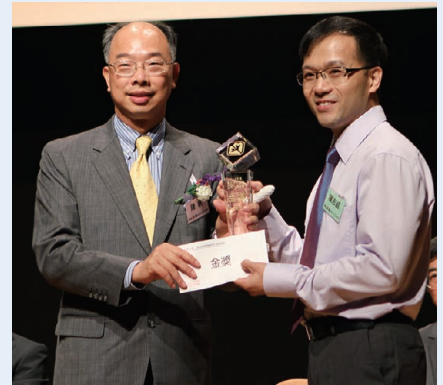
2013年「傑出註冊電業工程人員選舉優勝者」共慶獲獎。這類比賽有助業界提高安全意識和技術水平。
Winners of the Outstanding Registered Electrical Worker Awards 2013 shared a happy moment. These contests help raise the trade's safety awareness and skills.

傑出註冊電業工程人員選舉

為鼓勵電業界持續進修的風氣，我們於2013年聯同「港九電器工程電業器材職工會」及「香港電器工程商會」再次舉辦「傑出註冊電業工程人員選舉」，比賽宗旨是提升電業界的安全意識和專業水平。所有參賽者必須完成筆試，入圍者跟着接受今年新加入的實務測試考核，之後由評審小組進行面試。

巡查老化樓宇

老化樓宇由於狀況逐漸變壞，往往有安全風險。以固定電力裝置為例，部份樓宇（其中多為老化樓宇）在法例上獲得豁免，無須為固定電力裝置進行定期檢測及領取證明書，但這些樓宇仍會為住客及鄰近社區帶來電力事故風險。有見及此，我們採取了額外的行政措施，巡查這批老化樓宇，有需要時，則會敦促業主為樓宇的固定電力裝置安排檢測及領取證明書，及採取恰當的補救措施。我們相信，這額外的一步，對提高社區整體電力安全確有幫助。



機電工程署署長與「傑出註冊電業工程人員選舉」金獎得主。
Director of Electrical and Mechanical Services and the Gold Prize winner of the Outstanding Registered Electrical Worker Awards.

REW Awards

To promote continuous learning, we again organised the Outstanding Registered Electrical Worker Awards Scheme in 2013, in collaboration with the Hong Kong & Kowloon Electrical Engineering & Appliances Trade Workers Union and the Hong Kong Electrical Contractors' Association. The competition aims to raise the electrical trade's safety awareness and professionalism. All entrants were required to complete a written test, after which there was a practical trade

test for the finalists, which was new this year, before being interviewed by the adjudication panel.

Aging Buildings Inspection

Aging buildings are a challenge to safety as their conditions deteriorate. Take fixed electrical installations for example. Certain buildings, mostly aging buildings, are exempt from the statutory requirement of periodic inspection, testing and certification (PITC), but

they still present electrical incident risks to occupiers and the neighbourhood. We have hence deployed extra administrative measures to inspect these old buildings, and where necessary urge their owners to arrange for PITC and take remedial measures. We believe the extra step has helped raise electrical safety for our community as a whole.



為確保社區的電力安全，我們主動巡查老化樓宇，如有需要，會敦促業主就大廈固定電力裝置進行檢測。

To ensure electrical safety in the community, we pro-actively inspect aging buildings and urge owners to conduct inspection and testing of their fixed electrical installations where necessary.

監察零售網站出售不合規格電氣產品

全球化電子商貿快速發展，越來越多本地消費者跨國界上網購物，對我們的電氣產品安全執法工作帶來挑戰，特別是遇上交易實質上不在香港進行，而貨物也非在香港境內供應的情況，令我們難以作出檢控。

為保障消費者，我們定期監察各個流行零售網站，查找不合規格的電氣產品。一旦發現此類產品，我們會通知網站在香港的負責人或代表，提醒他們該產品會對顧客及市民大眾帶來的風險和觸犯有關規例的罰則。我們的主動監察，有助從源頭阻截有潛在危險的電氣產品流上市面。

未來重點

電力法例部未來的工作重點，是繼續減低事故、與業界保持聯繫並推展安全教育工作，同時推動市民留意電力安全及加強這方面的認識。我們也會密切注意科技發展，對可能影響電力安全的各種新趨勢及新挑戰作出回應，並繼續監察和處理老化樓宇的潛在電力安全風險。



確保老化樓宇的電力安全

老化樓宇的維修保養一向令人關注。在缺乏適當維修保養下，這類樓宇可能會出現電力安全問題。特別是那些固定電力裝置允許負載量低於100安培，故此可無須按法例規定安排電力裝置定期檢測及領取證明書的老化樓宇。我們認為有必要透過行政手段處理這個問題。

由2008/09年度開始，我們已主動對全港這類老化樓宇作出巡查，至今已完成巡查約2 300幢舊樓。我們委託承辦商先就目標老化樓宇進行首輪目視檢查，鎖定固定電力裝置狀況欠佳的老化樓宇，再由電力法例部的督察進行跟進巡查以了解情況；如有需要，會聯絡樓宇的業主，敦促他們為樓宇的固定電力裝置安排一次檢測及領取證明書。

我們認為這措施對保障公眾安全有重大意義，因為老化樓宇一個小小的電力問題，都有可能釀成重大事故，後果可以相當嚴重。為確保社區電力安全，我們很樂意多走一步。

特寫 Profile

Ensuring Electrical Safety in Old Buildings

Building maintenance is always a concern for old buildings. Lack of proper maintenance for these buildings may lead to problems of electrical safety. This is especially so because some of these old buildings may not be subject to the requirement of periodic inspection, testing and certification (PITC) under the law, as the approved loading of fixed electrical installation is below 100 amperes. It is important that we deploy some administrative measures to address the issue.

Starting in 2008/09, we have taken the pro-active initiative to inspect such buildings and to date have covered about 2 300 old buildings throughout the territory. Our contractors undertake the initial visual screening of the target old buildings, and identify those with unsatisfactory conditions. Inspectors from our Electricity Legislation Division then make follow-up inspections of those buildings and, where necessary, will contact the property owners and request them to arrange PITC work.

We believe this initiative has brought major safety benefits to the public, as a minor fault in an old building could turn into a major incident with serious consequences. We are happy to have gone the extra mile to ensure electrical safety for the community.



香港與內地的電氣產品業界代表，於2013年8月在本港舉行的業界研討會上，與國家質檢總局官員交流意見。
Representatives of the Hong Kong and Mainland electrical products trades exchanged views with AQSIQ officials at a trade seminar in Hong Kong in August 2013.

Retail Portals Monitored for Substandard Appliances

The rapid development of global e-commerce means that more local consumers are purchasing electrical appliances online across national borders. This poses challenges to our enforcement of electrical product safety regulations. In particular, prosecution is difficult when the transaction does not physically take place in Hong Kong, nor are the goods supplied here.

To protect consumers, we now monitor popular retail portals to identify substandard electrical products. If such goods are found, we alert the website operator in Hong Kong or its local representative to the risks to their customers and the community, and remind them the penalty for contravention of the relevant regulation. This proactive action helps curtail the supply of potentially hazardous appliances at source.

Future Focus

Looking ahead, the Electricity Legislation Division will continue to focus on incident reduction, trade education and communication, and engaging with the community to promote safety knowledge and awareness. We shall also keep a close eye on technology developments and respond to new trends and challenges that may impact electrical safety, while monitoring and managing potential safety risks in the city's aging buildings.

氣體安全

氣體事故持續下降

根據氣體標準事務處統計，2013年的氣體事故降至218宗，較2011的275宗及2012年的226宗為低。氣體事故數目持續下降，是有效的氣體安全宣傳教育與風險為本巡查工作的結合成果。

年內，我們繼續為業界及市民進行多渠道的安全宣傳活動，包括會面商談和簡報會，透過網站、電郵進行聯繫溝通，以及為承辦商或顧問公司舉行安全講座。後者旨在防止第三者損毀地下氣體喉管事故發生，通常與涉及重大建造工程項目的政府部門或公營機構聯手舉辦。此外，為方便持份者更易取得氣體安全資訊，我們於2013年5月推出新的一站式「氣體安全網站」，提供全面的

氣體安全知識，包括各種資訊工具和遊戲，滿足公眾和業界需要。

向政府就用地規劃提供氣體風險意見

政府近年致力尋找合適土地及推出賣地計劃以增加房屋供應。在宏觀層面，我們於2013/14年的一項貢獻，就是協助政府就各項土地用途建議進行初步風險評估。

作為政府的氣體風險顧問，氣體標準事務處根據已有的土地用途數據，在規劃早期階段即對土地進行初步風險評估，以在發展工作尚未開展前，找出任何可

能無法解決的問題。我們的評估工作，對需要就鄰近設有氣體裝置的土地進行安全有效的用途規劃和發展的政府部門，提供了十分重要的支援。

有關地段如因鄰近的氣體裝置而出現潛在風險，發展商在敲定最終發展藍圖之前，必須向作為氣體安全監督的氣體標準事務處，呈交詳盡的「定量風險評估報告」及各項緩解潛在風險的措施。我們是公眾的氣體安全把關者，而政府也會繼續致力選覓土地以增加房屋供應，因此，預計我們為支援土地用途規劃而進行的風險評估工作，將會不斷增加。



作為政府的氣體風險顧問，我們就鄰近設有氣體裝置而又需要發展的土地進行風險評估。這方面的工作將陸續增加。
As Government's gas risk adviser, our risk assessment work in support of land use planning in the vicinity of gas installations is likely to increase.



我們常與涉及重大建造工程項目的政府部門和公營機構，聯手為承辦商及顧問公司舉辦氣體安全簡報會，防止發生第三者損毀地下氣喉事故。
Gas safety briefings for contractors and consultants, often held in collaboration with other departments and public bodies with major construction projects, to avoid third party damage to underground gas pipes.

GAS SAFETY

Gas Incidents Decreasing Trend

The Gas Standards Office reports that the number of gas incidents fell to 218 in 2013, down from 226 in 2012 and 275 in 2011. This decreasing trend is attributed to a combination of effective gas safety publicity and risk-based inspections.

During the year, we pressed ahead with our multi-channel safety publicity campaign for the trade and the general public. It included face-to-face meetings and briefings, communication via websites and emails, and safety briefings for contractors and consultants. The latter, which were intended to help avoid third party damage to underground gas pipes, were often conducted in collaboration with other departments and public bodies with major construction projects. To help our stakeholders access information easily, a new one-stop Gas Safety Portal was launched in May

2013. Catering to the needs of both the public and the trade, it presents comprehensive gas safety knowledge and includes tools and games.

Gas Risk Advisor to Government on Land Use

The Government in recent years was keen to identify suitable land and mount land sales for boosting housing supply. On a macro level, our contribution in 2013/14 was to help the Government to carry out prima facie risk assessments on land use proposals.

As Government's gas risk adviser, the Gas Standards Office uses available land use data to conduct prima facie risk assessments at an early stage, identifying potentially insurmountable problems before any development work begins. Our work provides crucial support to departments that need to

safely and efficiently conduct land use planning and development in the vicinity of gas installations.

For sites that are potentially affected by nearby gas installations, developers are required to submit a detailed Quantitative Risk Assessment (QRA), complete with risk mitigation measures, to us as the Gas Authority, before finalising their master layout plan. We are the gatekeeper of gas safety for the public, and our risk assessment work in support of land use planning is likely to increase as the search for land to boost housing supply continues.



法例規定，石油氣車輛燃料缸必須每五年最少檢驗一次。
Auto-LPG cylinders must be tested and revalidated at least once every five years as required by the law.

車用石油氣品質檢定測試及燃料缸覆檢工作

年內，我們繼續定期監察車用石油氣品質，以確保符合指定要求，並將每周的石油氣樣本化驗結果上載至機電工程署網頁。與此同時，我們也密切監察石油氣車輛燃料缸的覆檢情況。根據《氣體安全（氣體供應）規例》，石油氣燃料缸必須每五年最少檢測一次。鑑於目前本港有21 000多部石油氣車輛，而下一個燃料缸覆檢高峰將於2015至2016年出現，我們正密切留意市場上的覆檢服務提供情況，確保有足夠設備充足的工場為車主覆檢燃料缸，讓業界能安全妥善地符合法例要求。

新發展

上給供氣分喉銹蝕可引致氣體事故，因此，確保上給供氣分喉安全是我們的重點工作之一。我們不但鼓勵住宅用戶每18個月為上給供氣分喉安排至少一次定期安全檢查，更安排進行針對性的風險為本巡查計劃，以監察全港樓宇上給供氣分喉的狀況。我們樂見煤氣公司正進行一項試驗計劃，藉着科技的協助，讓工作人員無須入屋也可檢測到上給供氣分喉的狀況。

根據該項試驗計劃，工作人員在大廈外牆接近上給供氣分喉的位置安裝一個直立金屬架，再將一個包含攝錄機和氣體探測器的儀器安裝在金屬架上，儀器會順着金屬架滑下，近距離攝錄上給供氣分喉的狀況，並同時檢測有否氣體洩漏。這方法較只憑目視進行檢測優勝。試驗計劃目前已在兩個私人屋苑推行，明年可能會應用於其他老化樓宇。新方法有助提高上給供氣分喉檢測工作的效率和可靠性，並提醒業主氣體洩漏的風險和及早處理問題的需要，從而加強社區的氣體安全。

至於為新建屋用地提供的氣體風險評估及顧問工作，我們會加強員工對各類氣體裝置進行「量化風險評估」的培訓，提高他們這方面的能力和知識。同時，石油氣車輛燃料缸覆檢服務的需求也會在2015/16年度達至周期性高峰，屆時會有9 000個燃料缸需要覆檢。為滿足此項預計需求，我們已着手與其他政府部門聯繫，籌備在元朗增設一個覆檢工場的招標工作。



Auto-LPG Quality Tests and Cylinder Revalidation

Monitoring of the quality of auto-LPG and weekly posting of sample test results on our website has continued, with the aim to ensure that the quality of LPG complies with the specified requirements. Besides, we have been closely monitoring the situation of auto-LPG cylinder revalidation. According to the Gas Safety (Gas Supply) Regulations, LPG cylinders must be tested and examined at least once every five years. There are more than 21 000 LPG vehicles in Hong Kong. The next revalidation peak will appear from 2015 to 2016. As such, we have been closely monitoring the revalidation service market to ensure that there are adequate well-equipped workshops to facilitate the trade to comply with the statutory requirements in a safe and smooth manner.

New Developments

Riser safety is one of our top priorities, since riser corrosion can lead to incidents. We encourage households to arrange Regular Safety Inspections at least once every 18 months, and have a targeted risk-based inspection programme to address riser condition in buildings. We are happy to note that Towngas is conducting a pilot programme using technology to inspect risers without having to enter flats.

Under this programme, a device fitted with a video camera and gas detector is mounted onto a vertical metal frame is affixed to the outer wall of a building near the riser. The device moves along the frame and takes close-up footage of the riser while simultaneously detecting any gas leakage, a method superior to mere visual inspection. The pilot is being conducted in two private residential

estates and is likely to be ready for rollout at other aging buildings next year. This will make riser inspection more effective and reliable and help alert building owners to gas leakage risks and the need for mitigating measures, thereby enhancing gas safety for the community.

With regard to our gas risk assessment and advisory work on new land for housing development, we shall step up staff training in QRA for different types of gas installations so as to enhance the team's capacity and knowledge. At the same time, demand for auto-LPG cylinder revalidation is set to surge in 2015/16 when the cyclical peak hits 9 000 cylinders. We have therefore begun liaising with other departments to invite tenders for a new revalidation workshop on a site in Yuen Long to satisfy this coming demand.



技術人員檢測車用石油氣燃料缸，以滿足有關覆檢的法例要求。
Technician examines an auto-LPG cylinder to comply with statutory testing and revalidation requirements.



特寫 Profile

王立漢督察榮獲申訴專員嘉許獎

氣體標準事務處機械督察王立漢先生最近榮獲「2014年申訴專員嘉許獎－公職人員獎」，表揚他處理市民查詢和投訴的出色表現。

他說：「我們必須細心聆聽，找出市民心中真正的問題，而且對市民和被投訴者雙方都要持平。」他更指出：「面對面溝通也很重要，最好是親自去到現場，看看真正發生了甚麼問題。」

王督察今次得獎，是由於他為投訴人與氣體供應公司進行調解的過程中，表現專業，同時秉持公正和積極的態度，最終找出雙方都樂於接受的解決方案。在幾個較突出的個案中，他持平地在投訴人及氣體供應公司之間進行溝通，找出問題的根源，最終不但將問題解決，還成功把投訴轉化為嘉許。

王督察認為今次得獎是對整個團隊的表揚，他的工作能夠發揮效力，全賴同事和上司的支持。



氣體安全督察王立漢先生（左二）表現專業，並秉持公正和積極態度，有效處理市民查詢和投訴，贏得獎項。
Gas safety inspector Wang Lap-hon (2nd from left) wins award for his professionalism, fairness and positive attitude in effectively handling enquiries and complaints from the community.

Inspector Mr Wang Lap-hon Wins Ombudsman's Awards

Mr Wang Lap-hon, mechanical inspector with the Gas Standards Office, was recently honoured in the Ombudsman's Awards 2014 for Officers of Public Organisations for his excellent performance in handling enquiries and complaints from the community.

"One must listen carefully in order to identify the complainant's real issues, and be fair to both parties," Mr Wang says. "It is also important to meet face to face and go on-site to see what the real problem is," he adds.

He was recognised for his professionalism, fairness and positive attitude in mediating between the complainant and the gas supply company to eventually find a solution accepted by both parties. In several standout instances, he liaised impartially between a complainant and gas supply companies, identified and resolved the root cause of the problem, turning complaints into appreciation.

Mr Wang said the award was a recognition for his entire team, as his work would not have been possible without the support of his colleagues and supervisors.



特寫 Profile

車用石油氣品質高度透明

確保車用石油氣維持高品質，是我們支援石油氣車輛計劃的有效方法。為此，我們由2010年1月起，已主動每周定期監察和化驗車用石油氣。

我們每星期會以電腦隨機抽出兩個各屬不同氣體公司的石油氣加氣站，抽取石油氣樣本送往化驗所進行品質化驗。此外，我們也會每月從兩家不同氣體公司的青衣石油氣儲藏庫抽取樣本化驗。這機制確保車用石油氣由上游至下游的品質，都受到恆常監察。

化驗結果每星期都會上載至機電工程署網頁，並附有公司名稱、加氣站位置及品質化驗分析詳情等。這制度自推行以來，為本港車用石油氣品質帶來極高透明度，成功建立公眾信心。

Auto-LPG Quality Highly Transparent



工作人員於石油氣加氣站定期抽取車用石油氣樣本，送往化驗所進行檢測。

Taking auto-LPG samples regularly from LPG filling stations for laboratory testing.

Maintaining the high quality of auto-LPG is an effective way to support LPG vehicle scheme. Accordingly, we began to proactively conduct weekly monitoring and testing of auto-LPG since January 2010.

Every week, two LPG filling stations, each from a different gas company, are randomly selected by computer for auto-LPG sampling tests. Auto-LPG samples are taken from the stations and sent to laboratories for quality tests. Every month, auto-LPG samples from two gas companies' Tsing Yi terminal are also collected and tested. The mechanism ensures that the quality of both upstream and downstream auto-LPG is regularly monitored.

Weekly test results are posted on the EMSD website, complete with company names, station locations and detailed quality analysis results. The system has achieved a high level of transparency that maintains public confidence in the city's auto-LPG quality.

機械安全

一般法例部於2013/14年度推出了三項新措施，配合《升降機及自動梯條例》(第618章)的實施工作，進一步提升了升降機及自動梯的安全水平。

升降機及自動梯安全諮詢委員會

首先，我們於2013年7月成立升降機及自動梯安全諮詢委員會，成員包括專業團體、升降機及自動梯業界、培訓機構、物業管理公司、區議會及市民代表，目的是就《升降機及自動梯條例》的行政和執行事宜向機電工程署署長提供意見。自成立以來，委員會已成為一個讓我們與業界及主要持份者同心協力、搜集不同意見與建立共識的平台。

改善承辦商表現評級制度

第二項措施，是我們改善了2009年推出的註冊升降機及自動梯承辦商表現評級制度。新評級制度反映了註冊升降機及自動梯承辦商的安全表現和服務質素，並特別着重承辦商的工作及服務是否符合法例與實務守則及國際標準的要求。

我們每季都為承辦商進行評級，表現優秀者會獲頒一顆綠色「安全之星」，及最多五顆藍色「質素之星」，而評級結果會在機電工程署網站公布。改良後的評級制度不但高度透明，提供大量最新資訊，還可激勵註冊承辦商採用更為安全及可持續的質素為本營商手法提供服務，造福市民。

「負責人天地」

第三項措施，是在機電工程署網站成立一個專為升降機及自動梯擁有人、管業公司及其員工而設的「負責人天地」，目的是提供實用的管理工具及資訊，讓負責人能更妥善地履行《升降機及自動梯條例》訂明的法定責任。負責人現可於「負責人天地」隨時閱覽標準合約、政府場地升降機保養價格數據、註冊升降機及自動梯承辦商表現評級結果、各種指引、短片及小冊子，以能更有效地挑選承辦商及監察他們的表現。



近期引入香港的傾斜式升降機，安裝於愉景灣，是新類型的升降機。
An "inclined" lift in Discovery Bay, a new lift type recently introduced into Hong Kong.



升降機及自動梯安全諮詢委員會，定期開會討論如何支援《升降機及自動梯條例》的行政和執行事宜。

The Lift and Escalator Safety Advisory Committee meets regularly to discuss ways to support the administration and enforcement of the Lifts and Escalators Ordinance.

MECHANICAL SAFETY

The General Legislation Division implemented three initiatives in 2013/14 to complement the Lifts and Escalators Ordinance (Cap 618) and take lift and escalator safety to a new level.

Lift and Escalator Safety Advisory Committee

First, we set up the Lift and Escalator Safety Advisory Committee in July 2013. With representatives from professional bodies, the lift and escalator trade, training institutions, property management companies, District Councils and the general community, its purpose is to advise the Director of Electrical and Mechanical Services on matters relating to the administration and enforcement of the Lifts and Escalators Ordinance. As such, it has become a key platform to engage with the trade and key stakeholders, solicit different viewpoints and build consensus.

Revamped Contractors' Performance Rating System

Second, we revamped the Registered Lift and Escalator Contractors' Performance Rating (CPR) system, first launched in 2009. The new system reflects the performance of registered lift and escalator contractors in terms of both safety and service quality. It specifically considers whether a contractor's work and services comply with requirements stipulated in the Ordinance and the Code of Practice and international standards.

Contractors are rated on a quarterly basis and those with high ratings are awarded a green Safety Star and up to five blue Quality Stars, with results publicised on the EMSD website. Highly transparent, informative and up-to-date, the revamped CPR system will encourage registered contractors to adopt safer and sustainable quality-focused trade practices for the benefit of the general public.

Responsible Persons' Corner

The third measure was setting up a Responsible Persons' (RPs) Corner on the EMSD website for lift owners, management companies and their staff. It provides useful tools and information to facilitate RPs to better discharge their statutory duties under the Ordinance. RPs may now easily access online pro-forma contracts, maintenance price information of lifts at government premises, CPR assessment results, guidelines, videos and pamphlets to help them select contractors and monitor their performance more effectively.

提升公眾信心

與此同時，全港5 000多名升降機及自動梯工程人員在一年過渡期內順利完成註冊手續，而以業界、負責人及市民為對象的宣傳活動亦持續進行，相信可進一步提升公眾對升降機及自動梯安全的信心。我們也不斷鼓勵升降機負責人和

擁有人為老化的升降機進行優化工程，而政府目前也正為其現有的升降機推行優化計劃，預計可於三至五年內完成。

昂坪360及中環海濱摩天輪

我們正與昂坪360合作，在現行目視檢查的基礎上，引進新技術以加強纜車系

統牽引纜的檢查方法。我們正測試一套新的「牽引纜自動檢查系統」，利用360度攝影機配合電腦軟件監察牽引纜的狀況。新系統全面推行後，牽引纜檢查工作的準確度及效率將大大提高。



新委員會肩負重任

政府於2013年7月成立升降機及自動梯安全諮詢委員會，由潘樂陶先生出任主席，共有17位成員，分別代表業界、升降機及自動梯負責人、學識淵博的專業人士、培訓機構、機電工程署及市民。

委員會就《升降機及自動梯條例》的行政和執行事宜向機電工程署提供意見，下設兩個工作小組，分別以負責人及業界事宜為工作重點。委員會也是一個讓持份者交流意見和建立共識的平台。

潘主席指出：「委員的背景多元化，代表不同利益，這對委員會其實有積極意義。」而「要建立共識，我們必須讓每個委員暢所欲言，容許廣闊光譜的各種不同意見都獲得充分表達，再以大眾利益為依歸，尋找共同立場，化解彼此矛盾，為社會謀求更大利益。」

升降機及自動梯安全諮詢委員會成立以來，已就多項事務提供意見，例如改善承辦商表現評級制度、公布政府樓宇的升降機保養價格，以及提醒各個持份者其法定責任的宣傳工作。委員會兩個工作小組會繼續專注的事務，包括持份者宣傳教育、支援負責人挑選和管理承辦商、就業界面對的問題進行調查及檢討、關注業內職安健情況及升降機與自動梯保養的技術等。

New Committee, Important Work

The Government set up the new Lift and Escalator Safety Advisory Committee (LESAC) in July 2013. Chaired by Mr Otto Poon, it has 17 members, representing the trade, RPs, learned professionals, training organisations, EMSD and the public.

LESAC advises EMSD on matters relating to the administration and enforcement of the Lifts and Escalators Ordinance. It has two working groups, focusing on issues relating to RPs and the Trade respectively. It also functions as a platform for stakeholders to exchange views and foster consensus.

“Diverse membership with different backgrounds and from different interest groups is essential for LESAC to be constructive and meaningful,” says Mr Poon. “To reach consensus, all members should be given the opportunity to speak their mind so that a wide spectrum of opinions is fully expressed. Then it would be necessary to identify common grounds and conciliate the differences in the interest of achieving the greater good for the community.”

Since its establishment, LESAC has provided input on a wide range of matters, such as the refinement of the Contractors’ Performance Rating Scheme, the release of lift maintenance prices for government buildings, and publicity of statutory duties of various stakeholders. Its two working groups will continue to focus on issues such as educating stakeholders, supporting RPs on the selection and management of contractors, various surveys and reviews on issues faced by the trade, occupational health and safety, and maintenance technologies.

特寫 Profile

Reinforcing Public Confidence

Meanwhile, the smooth registration of the 5 000-plus lift and escalator workers in Hong Kong within the one-year transition period, together with on-going publicity programmes for the trade, RPs and the general public, is expected to further raise public confidence in lift and escalator safety. We have also been encouraging RPs and lift owners to modernise aging lifts, as the Government is now implementing a modernisation programme for its lifts that is expected to be completed in three to five years.

NP360 and Hong Kong Observation Wheel

In cooperation with Ngong Ping 360, we are working to introduce new technology to enhance the cable car system's haul rope examination process and improve upon current visual inspections. We are now testing a new Automatic Haul Rope Examination System, which uses 360-degree cameras and software to monitor the condition of haul ropes. When fully operational, the system will greatly enhance the accuracy and efficiency of the haul rope inspection process.



(上下兩圖) 機電工程署人員測試昂坪360的新「牽引纜自動檢查系統」：系統會使牽引纜檢查工作更準確、更有效率。
(Both photos) EMSD officers testing the new Automatic Haul Rope Examination System in Ngong Ping 360. The system will make the haul rope inspection process more accurate and efficient.





(上下兩圖) 機電工程署與民政事務總署合辦有關《升降機及自動梯條例》及如何安全使用升降機與自動梯的簡介會，供全港各區根據該條例為「負責人」的人士參加。
(Both photos) EMSD co-organised briefings with the Home Affairs Department on the Lifts and Escalators Ordinance and safe use of lifts and escalators for RPs in various districts in Hong Kong.

中環海濱摩天輪項目也進展良好。摩天輪位於中環海旁附近，高60米，有42個車廂，每個車廂可載八人，預計於2014年10月啟用。我們已審核摩天輪的設計以確保安全，並會先進行各項檢查和測試，然後才向摩天輪發出使用批准。摩天輪上可飽覽維港美景，勢將成為本港的新旅遊景點。

提升車輛維修服務水平

我們現有兩個提升車輛維修服務水平的自願性計劃。其一是「車輛維修技工自願註冊計劃」，該計劃在2007年推出，現已註冊的車輛維修技工約有6 900名，佔總行業人數約74%。其二是「車輛維修工場約章計劃」，在2013年年初推出，至今已有約400家工場簽署約章，承諾遵守一套優良實務守則以經營業務。

我們的下一步工作，是提高車輛維修技工和維修工場對有關兩個計劃的參與

率，進一步提升車輛維修服務水平。就維修工場而言，我們會修訂實務守則，以更佳反映大、中、小型工場的運作情況。車輛維修技術諮詢委員會會就此研究各種可行改善方案。若得到業界支持，我們會考慮提出立法建議，把車輛維修技工及維修工場同時納入規管，以提升車輛維修服務水平。

未來的升降機及自動梯安全工作

我們為促進升降機及自動梯安全而進行的工作雖已見成效，但仍要繼續努力。我們未來的工作重點，是教育和協助升降機負責人履行其法定責任。為方便升降機負責人取得更多市場資訊以在挑選承辦商時可作參考，我們已委託進行獨立調查，探討私人樓宇的升降機保養價格。我們亦正研究採用遙距狀態監測技術對升降機進行監察的可行性。此外並會檢視承辦商表現評級制度的表現評估方法，俾能對註冊承辦商的表現作出更準確和全面的評估。



機電工程署就《升降機及自動梯條例》中有關「負責人」的責任問題，為屋宇設備運行及維修行政人員學會會員作簡介會。
EMSD held a briefing for the Building Services Operation and Maintenance Executives Society members on RPs' duties under the Lifts and Escalators Ordinance.



中環海濱摩天輪項目逐漸成形。我們會先進行各項檢查和測試，才發出使用批准。
The Hong Kong Observation Wheel by the Central waterfront is taking shape. We shall conduct inspections and tests before granting approval for its opening.



「車輛維修工場約章」旗幟，鼓勵車主使用已參加約章的維修車場，會有較佳維修品質和服務。
A banner urging car owners to use maintenance workshops in the Vehicle Maintenance Workshop Charter, for better quality and service.

The Hong Kong Observation Wheel project is also making good progress. The system, 60 metres high with 42 eight-passenger cabins, is scheduled to open on a site near the Central waterfront in October 2014. We have vetted the design to ensure safety. We shall conduct inspections and tests before granting approval for its opening. Offering spectacular harbour views, it is expected to become a new attraction in Hong Kong.

Enhancing Vehicle Maintenance Service Standards

We currently operate two voluntary schemes to enhance vehicle maintenance service standards. First is the Voluntary Registration Scheme for Vehicle Mechanics. Since its launch in 2007, some 6 900 vehicle mechanics are now registered, or about 74% of

the total in the trade. Second is the Vehicle Maintenance Workshop Charter Scheme, which was launched in early 2013. About 400 workshops have already subscribed to the Charter to abide by a set of good trade practice.

Our next step is to increase the participation rate for both mechanics and maintenance workshops in order to enhance vehicle maintenance service standards. For maintenance workshops, we shall review the Practice Guidelines to better reflect the operation of large, medium and small workshops. The Vehicle Maintenance Technical Advisory Committee will be looking at various improvement options. Subject to support from the trade, we shall also consider legislative proposals to regulate both vehicle mechanics and maintenance workshops in parallel to raise their service standards.

Coming Work on Lift and Escalator Safety

Despite what has been achieved to enhance lift and escalator safety, much more can still be done. The focus of our future work is on educating and assisting RPs in discharging their statutory obligations. With a view to obtaining more market information for reference by lift RPs when selecting contractors, we have commissioned an independent survey to look at lift maintenance contract prices in the private sector. We are also exploring the use of remote condition monitoring for lifts. The performance assessment scheme forming the basis of the CPR will also be reviewed to give a better and comprehensive assessment of registered contractors' performance.

鐵路安全

事故持續減少

2013年因設備故障和員工行為導致的鐵路事故持續減少，較2012年下降6%。為確保鐵路安全，鐵路科會竭盡所能採取一切措施，密切監察鐵路事故的趨勢，並與香港鐵路有限公司（港鐵）不斷檢討有關情況，務求持續改進鐵路安全。

與此同時，我們正全速審核其他新鐵路綫各個安全系統的相關文件，當中包括南港島綫（東段）、觀塘綫延綫、廣深港高速鐵路香港段和沙中綫。

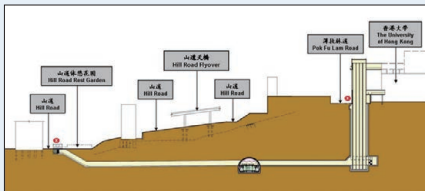
大型緊急事故演習

港鐵應我們的建議，於2013年11月30日凌晨在旺角站舉行緊急事故演習，約有1 700人參與，包括港鐵員工、自願參與的市民及來自各個政府部門的觀察員。演習模擬旺角站發生火警時的疏散乘客過程。選擇旺角站，是因為它是市區最舊的鐵路綫上最繁忙的轉車站。是次演習使用了無線射頻識別技術和其他科技，以不斷監察站內每個特定地點的乘客流量及計算疏散時間。演習所得的量化數據，證明旺角站的乘客疏散程序令人滿意。

這是港鐵首次舉行如此大型的緊急事故演習，類似演習日後可能在其他港鐵站進行。

西港島綫安全測試

年內另一成就，是我們在緊迫的時間內，如期為西港島綫的安全系統及設施，進行各項審核和測試。我們的任務，是與其他相關政府部門聯繫，監察新鐵路綫的安全及保安事宜。我們會繼續進行各種安全檢查，待完全滿意後，才會確認新鐵路綫可為乘客提供安全服務。西港島綫將於2014年年底或2015年年初啟用，將會是香港鐵路發展的一個重要里程碑。



（上下兩圖）我們為港島西綫的安全系統及設施進行審核和測試，在緊迫的時間內如期完成測試工作。

(Both photos) We completed the vetting and testing of the safety-related systems of the West Island Line on time against a tight schedule.



港鐵公司於2013年11月於旺角站舉行大型緊急事故演習，以測試該站的緊急疏散程序。
MTRCL held a large-scale emergency drill at Mong Kok station in November 2013 to test the evacuation procedure of the station.



港鐵公司管理層向參與旺角站大型緊急事故演習的人士，簡介有關安排。
MTRCL management briefed participants of the large-scale emergency drill at Mong Kok Station about arrangements.

RAILWAY SAFETY

Incidents Continued to Decrease

The number of railway incidents caused by equipment failure and staff behaviour continued to decrease during the year, falling by 6% in 2013 compared with the figure in 2012. To ensure railway safety, the Railways Branch will make every endeavour to closely monitor the incident trend and review the situation with the MTR Corporation Limited (MTRCL) for continuous improvements.

West Island Line Safety Tests

Another achievement was our vetting and testing of the safety-related systems and facilities of the West Island Line, working to a tight schedule. Our role is to coordinate with other relevant government departments in overseeing the safety and security aspects of the new line. We shall continue to perform various safety inspections before certifying it as safe for passenger service. The opening of the new line by

the end of 2014 or early 2015 will be a key milestone in Hong Kong's railway development.

Meanwhile, vetting of safety-related submissions for other new railway lines, including the South Island Line (East), Kwun Tong Line Extension, Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link and Shatin-to-Central Link, are in full swing.

Large-Scale Emergency Drill

Per our suggestion, the MTRCL conducted an emergency drill at Mong Kok Station in the early hours of 30 November 2013, involving about 1 700 MTRCL staff, public volunteers and observers from government departments. The drill simulated a fire evacuation in Mong Kok Station, the busiest interchange station on the oldest MTR urban line. In the drill, RFID and other technologies were deployed



因設備故障及員工行為引起的鐵路事故數目
Annual Railway Incidents Caused by Equipment Failure and Staff Behaviour



事故調查

作為安全規管者，我們對所有鐵路事故都十分重視，並會盡全力調查事故的根本成因，提出改善及預防建議，同時監察港鐵切實遵行有關建議，防止同類事故再次發生。

陸續更換信號系統

展望將來，港鐵的一項重大工作，是更換及優化市區綫、東涌綫、機場快綫及迪士尼綫現有的鐵路信號系統，讓載客量幾近飽和的鐵路網能增加列車班次。港鐵建議將現有信號系統更換為以先進通訊科技為基礎的列車操控信號系統。我們已詳細評估有關建議，並支持此項計劃。

荃灣綫將會是第一條進行信號系統更換工程的鐵路綫，有關工程將按計劃於2018年完成。其他現有鐵路綫的信號系統全面更換工程則需較長時間才能完成，但長遠而言必可大大提高本港鐵路網的載客量和效率。



旺角站緊急事故演習

為測試旺角站的疏散程序，港鐵於2013年11月30日凌晨於該站舉行了一次演習。是次演習由機電工程署建議進行，並督導籌劃過程，是同類演習規模最大的，約有1 700人參與，包括港鐵員工、自願參與的市民及來自消防處、香港警務處和機電工程署的觀察員。

演習模擬觀塘綫一列由太子站開往旺角站的列車在途中突然起火，目的是測試旺角站疏散乘客的程序。演習過程使用了無線射頻識別技術和其他科技，以不斷監察站內每個特定地點的乘客流量及計算疏散時間。旺角站是全港鐵路網最繁忙的轉車站之一，演習結果評價正面，證明旺角站的疏散程序令人滿意。

我們已向港鐵建議日後在其他地鐵站進行類似演習。



參加2013年11月緊急事故演習的，共有1 700多名港鐵公司員工、自願參與的市民和來自各個政府部門的觀察員。
More than 1 700 MTRCL staff, public volunteers and observers from government departments took part in the emergency drill in November 2013.

特寫 Profile

Mong Kok Station Emergency Drill

To test the Mong Kok Station evacuation procedure, a drill was held in the early hours of 30 November 2013. EMSD suggested the drill and steered its planning. The drill was one of the largest of its kind, involving about 1 700 MTR staff and public volunteers, as well as observers from the Fire Services Department, Hong Kong Police Force and Electrical and Mechanical Services Department.

The drill simulated a fire breaking out on board a Kwun Tong Line train running from Prince Edward Station to Mong Kok Station, putting the evacuation procedure to the test. RFID and other technologies were used in the drill to continuously monitor the flow of passengers at specific locations and measure the evacuation time. The results were positive and proved that the evacuation procedures for the Mong Kok Station, one of the busiest interchange stations, are satisfactory.

We have recommended to MTRCL to conduct similar emergency drills at other stations in future.



部門的助理署長/鐵路於港鐵公司「安全月」活動開幕禮上致辭。
Our Assistant Director/Railways addressing the opening ceremony of MTRCL's Safety Month activity.



to continuously monitor the flow of passengers at specific locations and measure the evacuation time. The results verified in quantitative terms that the evacuation procedure is satisfactory.

This was the first emergency drill held on such a large scale, and similar drills at other stations may follow.

Incident Investigation

As the safety regulator, we take all railway incidents very seriously. We spare no effort in investigating root causes, recommending remedial and preventive measures and monitoring MTRCL's compliance to avoid similar incidents recurring.

Future Replacement of Signalling System

Looking ahead, a major task for MTRCL will be replacing and upgrading the existing railway signalling systems in the Urban Lines, Tung Chung Line, Airport Express Line and Disney Resort Line to further increase train frequency as the rail network approaches the limit of its capacity. We have carried out a detailed assessment of its proposal to replace the existing signalling systems with a state-of-the-art communications-based train control signalling system, and we support the plan.

The replacement exercise will start on the Tsuen Wan Line, with completion of works on that line scheduled for 2018. Full replacement of the entire signalling system on other existing lines will take longer to complete, but will greatly boost our railway network's capacity and efficiency in the long run.

推廣能源效益及節能

Promoting Energy Efficiency and Conservation



推廣能源效益及節能 Promoting Energy Efficiency and Conservation



我們於2014年推出「室內溫度節能約章」優化版。
Launching an improved version of the Energy Saving Charter on Indoor Temperature in 2014.



「不要鎢絲燈泡節能約章」宣傳海報。
Poster promoting the No Incandescent Light Bulbs Charter.

室內溫度節能約章

能源效益事務處去年的一項重要成就，是推出兩個節能約章，分別針對室內溫度和鎢絲燈泡。

我們繼2012年夏天首次推出「室內溫度節能約章」後，已於2013及2014年先後推出約章的優化版。鑑於商業樓宇的空調耗用大量電力，也是溫室氣體排放的主要來源，我們以約章形式鼓勵發展商、物業管理公司、商舖和辦公室大樓作出承諾，在6月至9月的夏季月份，將室內溫度維持在攝氏24至26度。「室內溫度節能約章2013」獲得超過120個商場、190幢辦公大樓、630家商舖及600家辦公室簽署，而剛於2014年5月推出的「室內溫度節能約章2014」，參與情況更見踴躍。

「不要鎢絲燈泡」節能約章

至於2013年6月推出的「不要鎢絲燈泡」節能約章，目的是淘汰極不節能的鎢絲燈泡。我們鼓勵供應商和零售商參與，簽署約章者均須承諾停止補充指定的鎢絲燈泡，並由2013年12月底開始，完全停售該指定的鎢絲燈泡。業界反應非常正面，我們預期可順利逐步淘汰市場上的鎢絲燈泡。

安裝電動車中速充電設施

為鼓勵市民更多使用電動車，政府近年大力發展方便電動車充電的基礎設施。我們為支援政府這項政策，不但在各政府停車場安裝充電設施，也提供指引，方便發展商和管理公司在私人停車場安裝充電設施。行政長官於2014年的《施政綱領》中提出年內要設立100個中速充電器，我們已如期完成有關工作。中速充電器較標準充電器可縮短充電時間約達六成，用家倍感方便。

INDOOR TEMPERATURE CHARTER

The launch of two energy efficiency charters was a key achievement of the Energy Efficiency Office in the past year. One focused on indoor temperature, while the other targeted incandescent light bulbs (ILBs).

Improved versions of the Energy Saving Charter on Indoor Temperature, which was introduced in the summer of 2012, were launched in 2013 and 2014. The Charter urges developers, property management companies, shops and offices to pledge to maintain an average indoor temperature between 24 and 26 degrees Celsius during the summer months from June to September, as air-conditioning in commercial premises consumes considerable energy and is a source of greenhouse gas emissions.

The 2013 Charter saw more than 120 shopping malls, 190 office buildings, 630 shops and 600 offices signing up, with the 2014 Charter launched this past May attracting even higher participation.

NO INCANDESCENT LIGHT BULBS CHARTER

The other charter, introduced in June 2013, is the Energy Saving Charter on No Incandescent Light Bulbs (otherwise known as the "No ILB Charter"). It aims to phase out ILBs, which are highly energy inefficient. Suppliers and retailers are urged to take part, and signatories pledge not to replenish the targeted ILB stocks nor sell the targeted ILBs from the end of December 2013. The response from the trade has been positive and we expect a smooth phasing out of ILBs from the market.

MEDIUM-SPEED EV CHARGING POINTS INSTALLED

As part of the initiative to encourage the community to use more electric vehicles (EVs), we are supporting the Government's infrastructure-led approach by installing more charging points in government car parks while also facilitating developers and property management companies to install charging points in private car parks. In line with the Chief Executive's Policy Agenda 2014, we have already completed this year's goal of installing 100 medium-speed charging points. These can reduce charging time by up to 60% compared with standard charging points, offering added convenience to users.



中環某政府停車場的中速充電器。
A medium-speed charging point in a government car park in Central.



全港各政府停車場已安裝了約100個中速充電器，它們較標準充電器可縮短充電時間約達六成。
About 100 medium-speed charging points are now available in government car parks. They can reduce charging time by up to 60% compared with standard charging points.

推廣能源效益及節能 Promoting Energy Efficiency and Conservation

優化強制性能源效益標籤計劃

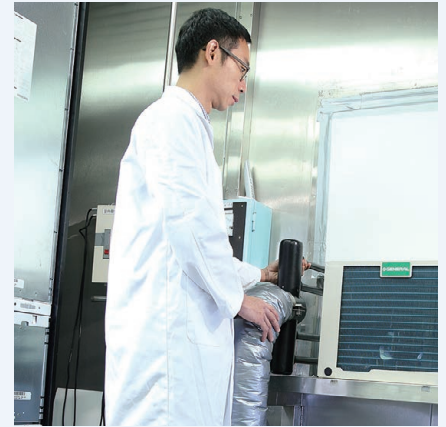
即將進行的一項重要工作，是優化「強制性能源效益標籤計劃」的能源效益評級標準。該計劃自2009年11月開始全面實施以來一直沿用現行的評級標準。我們相信現在是提升冷氣機、雪櫃和洗衣機能效評級標準的適當時機。這三類電器合共耗用全港家居約一半總用電量。提升能效評級標準將可改善這三類電器的能效表現。

我們於2014年1月就評級優化建議與業界展開諮詢工作，並將成立一個包含業界及消費者委員會代表的工作小組，共同製訂詳細安排及修訂現行的《實務守則》。只要業界及其他持份者能達成共識，我們預計可於2014年年底將《實務守則》修訂版刊憲，然後開始全面宣傳新能源效益評級標準，好讓公眾在新標準正式實施前已知悉有關詳情。

推行建議的新能源效益評級標準，預計每年可節省約3億千瓦小時電力，並可節省相應數目的電費。「強制性能源效益標籤計劃」第一及第二期自實施以來已節省大量電力，新標準將對環境及消費者帶來更大裨益。

區域供冷系統投入服務

作為啟德發展區區域供冷系統的項目經理，能源效益事務處欣然報告，該項目第一期和第二期均已如期完成，並已開始為2013年6月啟用的郵輪碼頭及位於啟晴邨與德朗邨的晴朗商場供應冷水。透過第三期（A組）工程，2016年會有一座政府大樓、兩家學校及香港兒科醫院與供冷系統連接，有關工程目前進展良好。第三期工程預計於2022年完成，屆時整個區域供冷系統將全面投入服務。



有關能效表現的實驗室測試正進行中。
Laboratory test of energy performance in progress.



我們就空調機、雪櫃和洗衣機的建議新能效評級標準安排了實驗室測試，目的是提高這三類產品在「強制性能源效益標籤計劃」的能效表現標準。
We have arranged laboratory tests on proposed new grading standards of air-conditioners, refrigerators and washing machines, with a view to raising their energy efficiency performance under the Mandatory Energy Efficiency Labelling Scheme.



啟德發展區區域供冷系統第一和第二期工程已如期完成，而第三期（A組）工程也進展良好。
Phases I and II of the Kai Tak District Cooling System were completed on time and Phase III (Package A) works are making good progress.

MEELS ENERGY LABELS UPGRADE

A major initiative in the near future is the upgrading of energy efficiency grading standards under the Mandatory Energy Efficiency Labelling Scheme (MEELS). The current grading standards have been in use ever since the MEELS was fully implemented in November 2009. We believe now is an opportune time to raise the grading standards of air-conditioners, refrigerators and washing machines, which together account for some 50% of domestic electricity consumption in Hong Kong, for better energy performance.

Consultation with the trade about our upgrading proposal commenced in January 2014, and a task force comprising representatives from trade

associations and the Consumer Council will be set up to work out detailed arrangements and revise the Code of Practice. Subject to consensus with the trade and other stakeholders, it is planned that the revised Code of Practice will be gazetted before the end of 2014, after which a comprehensive publicity campaign will be rolled out to inform the public about the new energy efficiency grading standards well before they are launched in the market.

The upgrading proposal is expected to generate some 300 million kWh electricity savings every year, with corresponding electricity bill savings. This will be of major benefit to the environment and to consumers, adding to the electricity savings already achieved under Phases 1 and 2 of MEELS.

DISTRICT COOLING SYSTEM OPERATIONAL

As project manager of the District Cooling System (DCS) at the Kai Tak Development, the Energy Efficiency Office is happy to report the timely completion of Phase I and Phase II works. Provision of chilled water supply has begun for the Cruise Terminal, which opened as scheduled in June 2013, as well as the Ching Long Shopping Centre in Kai Ching Estate and Tak Long Estate. Phase III (Package A) works, which will see a government building, two schools and the Hong Kong Children's Hospital connected to the system by 2016, are making good progress. The DCS is scheduled to be fully operational around 2022 when the entire Phase III is due to be completed.

推廣能源效益及節能 Promoting Energy Efficiency and Conservation

推廣能源效益及節能 Promoting Energy Efficiency and Conservation

規管服務業概覽 Regulatory Services Achievements Overview 2013/14



隧道鑽挖機是區域供冷系統工程的重要機器。
The tunnel boring machine is a key equipment to the District Cooling System works.



建築物完成能源審核後，須在主要入口處展示有效的能源審核表格。
A valid Energy Audit Form must be displayed at the main entrance of a building after completion of an energy audit.

啟德發展區區域供冷系統是全港首個同類型的供冷系統，由兩個中央製冷機組及一個覆蓋範圍極廣的水管網絡組成，作用是向區內的樓宇供應空調用的冷水。跟獨立的水冷空調系統比較，區域供冷系統可節省多至20%的能源；而跟獨立的氣冷空調系統比較，節能更多達35%。個別大廈也無需設置本身的供冷機房。整個區域供冷系統落成後，預料每年可節省多達8 500萬千瓦小時電力，相等於每年減少59 500噸二氧化碳排放。

提升《建築物能源效益守則》

《建築物能源效益條例》(第610章)自2012年9月21日全面實施以來，已取得相當進展。現時所有新建築物及進行「主要裝修工程」的現有建築物的屋宇裝備裝置，都必須符合《建築物能源效益守則》規定的設計標準，而現有商

業建築物及綜合用途建築物也必須根據《能源審核守則》的規定，每十年進行一次能源審核。如發現任何人士不遵守上述要求，我們將發出敦促改善通知書，有關人士如未能採取適當的補救措施，可能會被檢控。

為確保《建築物能源效益守則》能與時並進，能源效益事務處會定期檢討守則的設計標準。有關照明功率密度的檢討已經完成，而守則內其他設計標準的檢討工作會在2015年完成。

前瞻：不斷改善

未來工作的重點，是提升各個現有節能計劃及實務守則的標準，以促使業界持續改善能效表現。我們會進行充分前期諮詢，確保新的標準對業界可行、對公眾有利、對環境也有正面影響。

The DCS at Kai Tak Development is the first of its kind in Hong Kong, consisting of two centralised chiller plants and an extensive network of water pipes to distribute chilled water to buildings in the district for air-conditioning cooling. DCS can achieve energy savings of up to 20% when compared to stand-alone water-cooled systems and up to 35% when compared to stand-alone air-cooled systems. It also eliminates the need for individual buildings to install their own chiller plants. Upon completion, the DCS is estimated to achieve annual electricity savings of up to 85 million kWh, which is the equivalent of a reduction of 59 500 tonnes carbon dioxide emission per annum.

BUILDING ENERGY CODE UPGRADES

Considerable progress has been made since the Buildings Energy Efficiency Ordinance (Cap 610) came into full operation on 21 September 2012. Building services installations for new buildings and “major retrofitting works” in existing buildings must now comply with the design standards of the Building Energy Code (BEC), while existing commercial buildings and composite buildings must also carry out energy audits in accordance with the Energy Audit Code once every ten years. Those found not complying are issued improvement notices, and may face prosecution if they fail to take appropriate remedial measures.

To ensure that the BEC is up to date, the Energy Efficiency Office will review the BEC design standards regularly. The review of Lighting Power Density standards has been completed and that for other BEC design standards will be completed in 2015.

GOING FORWARD: CONTINUOUS IMPROVEMENT

A key focus going forward is to upgrade various standards in existing schemes and codes of practice, so that the trade will continue to improve its energy efficiency performance. We shall ensure that adequate consultation takes place early in the process, so that the new standards are feasible for the trade, beneficial to the public, and have a positive impact on the environment.



區域供冷系統是本港最先驅的工程項目之一，很多機構對該項目都深感興趣。

The District Cooling System is one of the pioneering works in Hong Kong, attracting interest from many organisations.



特寫 Profile

朗豪坊參與「室內溫度節能約章」

朗豪坊是旺角一個大型辦公大樓兼商場，由鷹君物業管理有限公司管理。自「室內溫度節能約章」於2012年推出以來，朗豪坊每年都有參與，鼎力支持這項活動。

朗豪坊總經理趙志堅先生談到朗豪坊在「室內溫度節能約章2013」活動中取得佳績，在6月至9月期間成功把室內溫度維持在約章指定的攝氏24至26度，是由於有周詳的事前計劃、良好的支援及與租戶保持緊密合作。

他說：「我們很高興見到這麼多辦公室及商鋪租戶參與約章，並維持約章要求的室內溫度。我們的目標，是響應政府呼籲，協助每個人共同建立節能習慣，而這也是大勢所趨。」

為籌備參加約章活動，趙先生於2013年年初成立工作小組，向所有辦公室和商鋪租戶發通告，介紹約章活動對環保方面的好處，邀請租戶參與，其後更派職員造訪個別租戶跟進。管業公司在整個活動過程中也對參與約章的租戶提供各種支援，比如特別製作了一批塑料展示板，讓參與租戶在其單位內展示約章標貼，以作宣傳及表揚。此外，管業公司更派技術人員每星期到租戶單位協助量度溫度兩次，並為辦公大樓和商場的公共地方定期量度室內溫度。活動完成後，管業公司更發出嘉許信，答謝參與租戶的支持。

趙先生對朗豪坊租戶的高參與率特別感到自豪。在2013年，有18.3%的辦公室租戶和22.2%的商鋪租戶參與約章；在2014年，參與約章的比率更分別上升至22.5%及26.9%。朗豪坊在2012及2013年為期四個月的約章活動期間，共節省了610 000千瓦小時電力，估計於2014年約章活動結束時，也會創出節能佳績。

Langham Place Joins Indoor Temperature Charter

Langham Place, a major office and retail complex in Mong Kok managed by The Great Eagle Properties Management Co Ltd, is a staunch supporter of the Indoor Temperature Charter and has been participating in the annual event since its launch in 2012.

Reflecting on Langham Place's participation in the 2013 Charter, Mr David Chiu, General Manager – Langham Place, attributes its good results to planning, a supportive environment and working closely with tenants to achieve the goal of maintaining indoor temperature at 24 to 26 degrees Celsius during June to September.

"We are glad to see so many office and retail tenants join the Charter and maintain their indoor temperature as pledged," he said. "Our aim is to help each other build an energy efficiency habit, as promoted by Government, which is the macro trend for everyone in due course."

Mr Chiu set up a Charter taskforce in early 2013. It sent circulars to all office and retail tenants to explain the Charter's environmental benefits and solicit support, following this up with visits to individual tenants. Participating tenants were well supported throughout the exercise. For example, each participating retailer received a special acrylic display stand, featuring the Charter logo, on which to recognise and publicise its efforts. Indoor temperature in participants' offices or shops was measured twice a week, with help from the management company's technical staff, while that in common areas was also monitored regularly. Appreciation letters were sent to all participants after the event.

Mr Chiu is particularly proud of Langham Place's high participation rate. In 2013, 18.3% of office tenants and 22.2% of retail tenants joined; in 2014 the rate climbed to 22.5% and 26.9% respectively. The development saved a total of 610 000 kWh of electricity during the four-month exercise in 2012 and 2013, with good results also expected at the close of the 2014 period.



特寫 Profile



我們於2013年10月舉行與本地傳媒周年聚會，高層管理人員並陪同25位記者和編輯參觀北廠。
Our senior management took 25 journalists and editors from the local media on a tour of the North Plant during our annual media gathering in October 2013.

傳媒參觀區域供冷系統北廠房

我們於2013年10月7日，即機電署高層與傳媒的年度聚會中，招待傳媒參觀區域供冷系統的北廠房。這也是部門傳媒關係活動的一部分。當天聚會的主題是能源效益，共有25位來自各大報章、電視台和電台的記者與編輯出席。

區域供冷系統北廠房位於九龍灣機電工程署總部大樓側，是系統兩個中央製冷機組之一。機電署高層管理團隊當日均在場介紹區域供冷系統的技術細節及對社會帶來的節能效益。傳媒對廠房的先進設施和項目的環保價值，都留下深刻印象，其後並作出不少正面報道。

Journalists Visit District Cooling System North Plant

Journalists visited the newly completed North Plant of the District Cooling System (DCS) in Kai Tak Development on 7 October 2013, during the annual media gathering with EMSD senior management, which is part of our media relations programme. The theme of the gathering was energy efficiency. A total of 25 journalists and editors from major dailies, TV and radio stations attended the site tour.

The North Plant, adjacent to the EMSD Headquarters in Kowloon Bay, is one of two centralised chiller plants in the DCS system. Members of the EMSD senior management team were on hand to provide technical explanations and outline the energy-saving benefits that DCS offers to the community. The media were impressed with the state-of-the-art facilities at the plant and the environmental benefits of the project. The event generated considerable positive coverage.





提高公眾安全及節能意識

Raising Public Awareness of Safety and Energy Conservation

提高公眾安全及節能意識

Raising Public Awareness of Safety and Energy Conservation

我們以雙管齊下的方式，積極推動業界和市民參與，以提高本港的機電安全及能源效益意識。除了採用網上及其他聯繫渠道外，我們也重視與持份者面對面直接交流，以取得最大成效。

推動業界參與

多年來，我們都主動透過多種不同的活動，與受規管的業界及其他持份者保持溝通，以協助他們符合法例要求，並採納最佳的作業方法。我們推動業界參與的方式，包括成立委員會和工作小組，推出各種約章、計劃和專項活動，以及舉辦研討會和會議等。我們作為規管者，與業界恆常保持直接溝通也是十分重要的，以便掌握市場實況並了解各種可能對機電安全具潛在影響的趨勢。

「機電安全及能源效益」2014研討會

「機電安全及能源效益」2014研討會於1月20及21日假香港科學園舉行，來自

本地及海外的著名講者，在會上就電氣、氣體、機械及鐵路安全與能源效益等課題進行了熱烈研討。2014年的研討會由機電工程署與香港工程師學會合辦，吸引了約350位本港、內地及海外專業人士參加。

研討會每兩年舉辦一次，為期兩天，是機電工程署的重頭活動之一，為本港及國際專家與管理人員，就機電安全與能源效益的規管及工程事宜，以至其他相關議題，提供一個定期的交流平台。研討會一直深受參與的本港、內地及海外專業人士歡迎，他們來自不同界別，包括公營機構、顧問公司、學術界、業界組織、環保團體及其他機構等。

與國家質檢總局合作十周年

2013年是機電工程署與國家質量監督檢驗檢疫總局（國家質檢總局）就機電安全和能源效益事宜建立合作關係的第十個年頭。我們最初與國家質檢總局簽訂一份有效期由2003年至2007年的《機電產品安全合作安排》四年協議，

繼後再續簽訂兩份合作協議，有效期分別為2007年至2011年及2011年至2015年。回顧過去十年，雙方在定期交流、培訓、網上資訊分享，及與總局人員每年於香港及內地交替舉行的年會方面，都取得豐碩的合作成果。過去幾年，我們更聯手推行通報機制，就不合規格的家用電氣產品與氣體用具，及關乎升降機和自動梯及能源效益的事項，相互作出通報。

2013年7月，我們與國家質檢總局代表在香港慶祝雙方合作十周年，並舉行了一個研討會，安排本地業界與總局代表交流意見。



與業界面對面溝通是最有效解決疑難的方法之一。
Face-to-face communication is one of the best ways to address the trades' concerns.



與業界聯手宣傳安全行為和做法，是我們公眾安全教育工作的要素之一。
Collaborating with the trade to publicise safe behaviour and practices is a key component of our public education programme.

We use a two-pronged approach to raise awareness of safety and energy efficiency in Hong Kong, namely by engaging the trade and the public. Both online and offline channels are used, while face-to-face interactions remain a key aspect of our various programmes to maximise impact.

ENGAGING THE TRADE

Year after year, we initiate and maintain myriad communications with the regulated trades and other stakeholders, aiming to help them comply with the law and adopt best practices. Such engagement comes via committees, task groups, charters, schemes, special events, forums and conferences, among others. Direct and frequent communication with the trade is also important for us as regulators to get a sense of market reality and to detect trends that might have safety implications.

Symposium on E&M Safety and Energy Efficiency 2014

Held on 20-21 January at the Hong Kong Science Park, the Symposium on E&M Safety and Energy Efficiency 2014 featured prominent local and overseas speakers in lively discussions on issues relating to electrical, gas, mechanical and railway safety and the efficient use of energy. The 2014 symposium was jointly hosted with the Hong Kong Institution of Engineers and attracted around 350 local, mainland and overseas professionals.

This biennial two-day seminar has been one of EMSD's signature events, providing a regular forum for local and international leaders and managers in E&M safety and energy efficiency to deliberate on regulatory and engineering issues and other pertinent topics. It has a history of being very well received by its target audience of local, mainland and overseas professionals from the public sector, consulting firms, academia, trade associations, green groups and other organisations.

10th Anniversary of AQSIQ Cooperation

The year 2013 marked the 10th anniversary of EMSD's cooperation with the mainland's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) on E&M safety and energy efficiency matters. We first signed a four-year "Cooperation Arrangement on Electrical and Mechanical Products Safety" with AQSIQ for 2003-2007, followed by two successive agreements for 2007-2011 and 2011-2015. The past decade has seen fruitful cooperation in terms of regular exchange, training and online information sharing, as well as annual meetings with AQSIQ officials, which were held alternately in Hong Kong and Mainland China. For several years, we have also jointly operated an alert mechanism with regard to non-compliant domestic electrical and gas appliances, as well as lifts and escalators and energy efficiency related issues.

The 10th anniversary was celebrated in Hong Kong with AQSIQ delegates in July 2013. A trade seminar was also held to provide a forum for AQSIQ delegates and the trades from Hong Kong to exchange views with each other.



我們已於機電工程署網站增添更多網上工具，協助業界符合法例要求。
More online tools on the EMSD website are now available to help the trade comply with the relevant laws.

與業界直接溝通

我們透過多種方式與持份者直接溝通，包括與受規管業界及公用事業機構進行定期會議；成立諮詢委員會及工作小組以凝聚共識及促進各項條例的實施工作；舉行業界簡報會及研討會以闡釋主要立法條文；並就各種實務守則的草擬內容及建議的新措施徵詢業界意見。此外，我們也經常為業界（例如電業界）舉辦比賽，推行持續進修計劃及其他培訓項目，藉以提倡着重持續進修、卓越技術和安全意識的文化。

與承辦商直接溝通也很重要，目的是確保承辦商清楚了解所有安全措施及作業方法，並在工地切實執行。舉例說，我們在2013年為氣體工程承辦商舉辦了28場安全簡報會和研討會，以及199次在工地現場進行的氣體安全推廣活動，講解在施工時如何避免損毀氣體喉管。

如有需要，我們也會派出安全大使及推廣人員到訪全港商舖及營運者，宣傳能源效益和機電安全信息。例如，我們的安全大使，已數次走訪全港3 700多個

家用電器零售商，務求加強他們對「強制性能源效益標籤計劃」的認識。我們的推廣人員亦曾到訪數以千計的車輛維修工場，鼓勵車場東主和營運者加入「車輛維修工場約章計劃」。

增加網上工具

為協助業界符合法例要求，我們已推出更多網上工具供業界使用。在2013/14年度，我們在機電工程署網站推出了「負責人天地」(http://www.emsd.gov.hk/emsd/chi/pps/leo_rpc.shtml)。這是一個網上資料庫，收集與升降機及自動梯相關的各類安全手冊和單張、升降機標準保養合約樣本、政府升降機保養價格資料及其他工具等，方便升降機及自動梯負責人履行《升降機及自動梯條例》下的法定責任。另一個新增的實用網上工具是「氣體安全網站」(<http://www.gsp.emsd.gov.hk>)，該網站在全面啟用後，將可滿足業界及公眾的需要。



Direct Communication with the Trade

We directly communicate with stakeholders through regular meetings with the regulated trades and utilities and via a variety of other means, including advisory committees and task groups set up to foster consensus and facilitate the implementation of ordinances; trade briefings and seminars to explain key legislative provisions; and consultations to solicit views on draft codes of practice and proposed new measures. Trade competitions and continuing professional development programmes and other training initiatives, such as those for the electrical trade, are organised from time to time to foster a culture of continuous learning, technical excellence and safety awareness.

It is also important for us to directly communicate with contractors so that they are aware of all safety precautions and practices and actually apply them on worksites. For example, during 2013 we hosted 28 safety briefings and seminars for gas contractors and held 199 on-site gas safety promotions on how to avoid damaging gas mains during works.

Where necessary, we also deploy ambassadors and promoters to visit individual shops and operators throughout the territory to convey our energy efficiency and safety messages. For example, our ambassadors have completed several rounds of visits to all 3 700-plus domestic electrical appliance retailers in Hong Kong to reinforce their knowledge of the Mandatory Energy Efficiency Labelling Scheme. Our advocates have also visited thousands

of vehicle maintenance workshops to urge owners and operators to join the Vehicle Maintenance Workshop Charter Scheme.

More Online Tools

To facilitate compliance with the law, we have made more online tools available to the trade. New additions in 2013/14 included a Responsible Persons' Corner on the EMSD website (http://www.emsd.gov.hk/emsd/eng/ppls/leo_rpc.shtml), which is an online repository of various explanatory handbooks and pamphlets, standard lift maintenance contracts, government lift maintenance pricing information and other tools to help RPs to discharge their statutory duties under the Lifts and Escalators Ordinance. Another useful new tool is the Gas Safety Portal (<http://www.gsp.emsd.gov.hk>), which will cater to the needs of both the trade and the public when completed.



機電工程署與港九電器工程電業器材職工會及香港電器工程商會代表，於2013電力規例研討會中大合照。

Representatives from EMSD, the Hong Kong & Kowloon Electrical Engineering & Appliances Trade Workers Union and the Hong Kong Electrical Contractors' Association in a group photo at the Electricity Regulations Seminar in 2013.

推動市民參與

我們每年都透過各項公眾教育計劃、專項活動、廣告及宣傳推廣，把機電安全知識傳達給市民，同時在家居及工作間提倡能源效益。由於我們規管服務的範圍相當多元化，服務對象也非單一群體，而是涵蓋多個特定目標社群，例如不同年齡的學生、家長、家庭主婦和長者等。我們會針對不同群體的需要，以最有效的渠道和他們聯繫溝通。

學校外展項目

我們多年來都派出安全大使走訪學校及社區，透過外展講座和展覽，推廣機電安全與能源效益訊息。由於各個學校和社區組織有不同需要，我們有三個不同重點內容的外展教育項目可供選擇，分別是能源效益與節能、電力安全、升降機與自動梯和遊戲機安全。每個單元由不同的部別負責，內容也會旁及相關的機電安全和能源效益課題。

2013/14年度，我們的能源效益事務處在全港各中小學校和社區中心，舉辦了52場講座和51個展覽，推廣能源效益和節能知識，接觸了約52 400名學生和參觀人士。同時，電力法例部也派出安全大使，走訪了287個機構，包括159家幼稚園、53家小學、75個老人中心和社區中心，共接觸了約42 000位參加者。而一般法例部的外展大使，則造訪了全港多家幼稚園、小學、青年中心和老人中心，舉行互動講座和展覽，全年進行了約400次外展訪問，接觸了約29 000位來自社會各階層的人。

鐵路安全手冊

年內，我們出版了一本名為《安全鐵路開心旅程Go Go Go!》的全面鐵路安全手冊，於港鐵站派發。手冊描述一個有趣的動畫家庭，在前赴演唱會途中的經歷，藉以表達在本港進行安全鐵路之旅的各個要點。手冊可在下列網址下載(http://www.emsd.gov.hk/emsd/c_download/pps/Handbook_Chi_web.pdf)。

推出更多新短片

在現今的網絡世代，市民隨時隨地都可從網上短片取得資訊。機電工程署也善用這渠道，去年在部門的YouTube頻道，新增了幾套電氣和升降機安全的短片，用有趣的動畫，例如「e家」一家人的故事來表達相關信息。其他為公眾拍攝的短片，也包括實況短劇，如描述兩位男孩困於一部老齡升降機內，需要救援，從而闡釋物業擁有人為何應為老齡升降機進行優化工程，及進行工程的方法。這批短片讓普羅市民，不論年齡，都能容易掌握重要的安全知識，並應用於日常生活中。



我們以有趣的動畫人物，例如「e家」一家人，製作電力安全短片，在部門的YouTube頻道頗受歡迎。

Using fun cartoon characters such as these in the “e-Family” to promote electrical safety via short videos has been well received on the EMSD YouTube channel.

ENGAGING THE PUBLIC

We run various public education programmes, special events and advertising and publicity campaigns each year to share E&M safety tips with the public and promote energy efficiency in homes and workplaces. As the range of our regulatory services is diverse, the public we serve is not a homogeneous group, but rather comprises laymen from many specific target groups, such as students of different ages, parents, housewives and elderly people, just to name a few. We seek to reach and interact with them via the most effective channels.

School Outreach Programme

We have the practice of deploying ambassadors to visit schools and the community to introduce and reinforce E&M safety and energy efficiency through outreach talks and exhibitions. As the needs of different schools and community organisations are varied, we offer three modules of outreach educational programmes, each conducted by a different Division with a distinct focus: energy efficiency and conservation, electrical safety, and lift and escalator as well as amusement ride safety. Each module also makes reference to related topics of E&M safety and energy efficiency.

In 2013/14, our Energy Efficiency Office organised 52 talks and 51 exhibitions on energy efficiency and conservation at various primary and secondary schools and community centres, reaching about 52 400 students and visitors. At the same time, safety ambassadors from the Electricity Legislation Division visited 287 institutions covering 159 kindergartens, 53 primary schools, 75 elderly and community centres, reaching about 42 000 participants. The General Legislation Division also sent its ambassadors to kindergartens, primary schools, youth centres and elderly centres to hold interactive talks and exhibitions. About 400 such visits were made during the year, reaching about 29 000 individuals from all strata of the community.

Railway Safety Handbook

A comprehensive Railway Safety Handbook called “Railway Safety – Happy Journey Go Go Go!” was published during the year for distribution at MTR stations. It covers key points for a safe journey on the city’s railway network, presented by a family of fun cartoon characters on the way to a superstar concert. The handbook can be accessed online at http://www.emsd.gov.hk/emsd/e_download/pps/Handbook_Eng_web.pdf.

More New Videos

In the Internet age, online videos are a popular means of accessing information anytime, anywhere. The EMSD YouTube channel featured new electrical and lift safety videos last year, in the form of animated stories using fun cartoon characters such as our “e-Family”. Other videos for the public include short dramas depicting real-life situations. One such video shows what happens when two boys have to be rescued from an aging lift, leading to an overview of why and how lift modernisation ought to be carried out by property owners. These short videos make it easy for laymen of all ages to grasp important safety knowledge applicable to daily life.



最新出版的鐵路安全手冊，可於網上下載或於港鐵站索取。

A recently published railway safety handbook that can be downloaded online or obtained from MTR stations.

機電工程營運基金報告

Electrical and Mechanical Services Trading Fund Report

抱負 VISION

致力提供優質機電工程服務，精益求精，以提升市民的生活質素。

To improve the quality of life for our community through continuous enhancement of our electrical and mechanical engineering services.

使命 MISSION

客戶Customer

提供優質的工程方案，以滿足客戶的需要。

Providing quality engineering solutions to satisfy our customers' needs.

員工Staff

建立一支卓越的員工隊伍，並維持和諧的工作環境。

Developing a competent workforce and maintaining a harmonious environment.

部門Organisation

掌握科技發展和流程改善，以提供更佳服務。

Keeping pace with technology development and process improvement for service enhancement.

信念 VALUES

誠信Integrity

我們秉持誠信，維持良好道德操守。

We uphold honesty and integrity to embrace an ethical culture.

出色服務Service Excellence

我們提供安全可靠、高效率、具成本效益和優質的服務。

We provide safe, reliable, efficient, cost-effective and quality services.

關懷Caring

我們關懷員工、客戶和市民大眾，並重視環保。

We care for our staff, customers, community and the environment.

以客為本Customer Focus

為滿足客戶的各種需要，我們盡心竭力，積極提供工程方案，以贏取客戶的信任和支持。

We focus on the needs of our customers and provide engineering solutions in a proactive and responsible manner to win their trust and support.

承擔Commitment

我們言行一致，信守承諾。

We do what we promise.

摯誠服務
**Always
There to
Serve**



常務委員會 Executive Board

主席 Chairman



韋志成太平紳士
Mr Wai Chi-sing, JP

發展局常任秘書長(工務)
Permanent Secretary for Development (Works)

成員 Members



陳志明太平紳士
Mr Chan Chi-ming, JP

發展局副秘書長(工務) 2
Deputy Secretary for Development (Works) 2



陳帆太平紳士
Mr Chan Fan, Frank, JP

機電工程營運基金總經理(機電工程署署長)
General Manager, EMSTF (Director of Electrical
and Mechanical Services)



薛永恒太平紳士
Mr Sit Wing-hang, Alfred, JP

機電工程署副署長/營運服務
Deputy Director/Trading Services, EMSD

秘書 Secretary



周楚添先生
Mr Chow Chor-tim

機電工程署主任秘書
Departmental Secretary, EMSD

- * 林天星太平紳士出任發展局副秘書長(工務)2至2013年11月12日
Mr Lam Tin-sing, Enoch, JP was Deputy Secretary for Development (Works) 2
up to 12 November 2013
- * 胡建明太平紳士出任機電工程署副署長/營運服務至2013年12月20日
Mr Woo Kin-ming, JP was Deputy Director/Trading Services, EMSD up to
20 December 2013

管理委員會 Management Board



主席 Chairman

1 陳帆太平紳士 Mr Chan Fan, Frank, JP

機電工程營運基金總經理
(機電工程署署長)
General Manager, EMSTF
(Director of Electrical and Mechanical Services)

5 戴德謙太平紳士 Mr Tai Tak-him, JP

機電工程署助理署長/3
Assistant Director/3, EMSD

成員 Members

2 薛永恒太平紳士 Mr Sit Wing-hang, Alfred, JP

機電工程署副署長/營運服務
Deputy Director/Trading Services, EMSD

3 何世景太平紳士 Mr Ho Sai-king, JP

機電工程署助理署長/1
Assistant Director/1, EMSD

4 李英明先生 Mr Li Ying-ming, Larry

機電工程署助理署長/2
Assistant Director/2, EMSD

6 羅雪芬女士 Ms Law Suet-fan, Rebecca

機電工程署財政經理
Finance Manager, EMSD

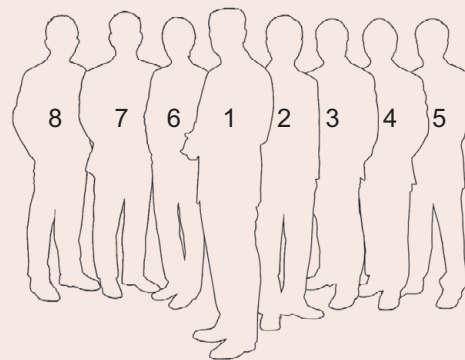
7 羅福基先生 Mr Law Fuk-ki

機電工程署員工關係主任
Staff Relations Officer, EMSD

秘書 Secretary

8 周楚添先生 Mr Chow Chor-tim

機電工程署主任秘書
Departmental Secretary, EMSD



* 胡建明太平紳士出任機電工程署副署長/營運服務至2013年12月20日
Mr Woo Kin-ming, JP was Deputy Director/Trading Services, EMSD up to 20 December 2013

* 張丙權太平紳士出任機電工程署助理署長/1至2013年12月29日
Mr Cheung Ping-ken, Michael, JP was Assistant Director/1, EMSD up to 29 December 2013

* 張國輝先生出任機電工程署助理署長/2至2013年8月7日
Mr Cheung Kwok-fai was Assistant Director/2, EMSD up to 7 August 2013

業務回顧與前瞻

Operations Review and Outlook



薛永恒太平紳士
Mr Sit Wing-hang, Alfred, JP
機電工程署副署長/營運服務
Deputy Director/Trading Services, EMSD

機電工程營運基金在2013/14年度表現良好，達到財務指標。2013/14年度也是我們為實踐新企業目標制訂的五年計劃的頭一年，相關工作在年內亦取得相當進展。

目標與進展

2013/14年度，營運基金收入為50.2億港元（2012/13年度為46.43億港元），收入回報率為5.3%（2012/13年度為6.9%）。收入輕微上升，反映客戶對我們的服務需求有所增長；而收入回報率下降，一方面是由於營運開支增加，另一方面也顯示我們履行承諾，以輕微利潤營運。我們相信，客戶多省一分錢，就會有多一分錢回饋社會。

我們去年為營運基金訂定新的企業目標，就是「透過與客戶的伙伴關係，創造公眾價值惠惠市民」，並計劃透過五個策略，在由2013/14年度起計五年內

達至上述目標。我們欣然報告，這五個策略，即提供優質服務、成為業界典範、建立員工才能與關懷文化、優化知識管理，及持續綠色作業，在2013/14年度的落實工作都取得良好進展。

成績與里程碑

客戶服務方面，每個策略業務單位年內除完成重要工程項目外，也有承接新的操作及維修保養服務，創造公眾價值。例子包括：我們承接了新落成的北大嶼山醫院的操作及維修保養服務，協助香港郵政把郵遞服務遷移至新的「中央郵件中心」，以及開展全港所有行人天橋的升降機和自動梯維修保養服務，為推行「人人暢道通行」計劃出一分力。

我們如期在啟德郵輪碼頭完成全球最大型活動乘客登船橋的安裝，為我們的工作奠下另一重要里程碑。郵輪碼頭已於2013年6月正式啟用，從2013/14年度

開始，我們為碼頭的工程系統提供維修保養服務。在所有這些工作中，我們的任務，是協助客戶部門提供新服務，或把現有服務提升至更高的水平。

正如去年的報告提到，我們透過五個策略去貫徹新的企業目標。而着重創新就是這五個策略的精神支柱，我們鼓勵同事在工作中發揮創意，採用科技或其他各種方法，務求以更少的資源，為客戶和公眾做得更多。

我們的機場團隊年內為跑道燈開發的「固定電流調節器測試平台」，就是一個很好的例子。這個已取得設計專利的儀器，可讓維修人員無懼天氣，隨時為跑道燈進行檢查，從而大大提高跑道燈的維修保養效率，減少對跑道運作的干擾。

The Electrical and Mechanical Services Trading Fund performed well in 2013/14, meeting its financial target while making good progress in the first year of its five-year plan to attain our new corporate goal.

TARGETS AND PROGRESS

Total revenue for 2013/14 was HK\$5,020 million (2012/13: HK\$4,643 million) and return on revenue (ROR) was 5.3% (2012/13: 6.9%). The slight increase in revenue reflected increasing client service needs. The drop in ROR reflected an increase in operating expenses and also our commitment to operate at a narrow profit margin, on the understanding that a dollar we save for the client is a dollar more it can spend on serving the community.

Last year we reported a new corporate goal for EMSTF of "creating public value for community betterment through partnership with our clients", with a plan to achieve it in five years from 2013/14 via five strategies. We are happy to note that good progress has been made in 2013/14 under each of the strategies, namely, delivering excellent service, becoming a trade model, building capacity and caring culture, enhancing knowledge management and sustaining green operation.

ACHIEVEMENTS AND MILESTONES

In terms of client work, each strategic business unit has accomplished major projects or taken on new operation and maintenance (O&M) services that created public value. For example, we took on O&M services at the newly built North Lantau Hospital, facilitated the relocation of Hongkong Post's postal

services to the new Central Mail Centre, and began providing maintenance service for all footbridge lifts and escalators in Hong Kong to help promote universal accessibility.

Another milestone was our timely completion of the installation of the world's largest movable Seaport Passenger Boarding Bridges at the Kai Tak Cruise Terminal, which officially opened in June 2013. We have also taken up the maintenance services of the Terminal's engineering systems since 2013/14. In all these instances, our role was either to facilitate clients' provision of new services or to help take existing services to a new level.

As we reported last year, we have adopted five strategies in order to achieve our new corporate goal. Underpinning these strategies is our emphasis on innovation, where staff are encouraged to work creatively, using technology or other means, so that more can be achieved for clients and the public with fewer resources.

A case in point is the patent-winning Constant Current Regulator Testing Platform created by our airport team during the year. It allows our maintenance staff to conduct tests of airfield ground lighting anytime, regardless of weather conditions, thus enhancing maintenance efficiency while reducing disruption to runway operations.

MANPOWER CHALLENGE

Despite what has been achieved, EMSTF is not without its challenges. Indeed, the key challenge currently facing the entire E&M industry in Hong Kong is tight manpower supply. Our Department, as



我們鼓勵同事在工作中發揮創意，採用科技或其他各種方法，務求以更少的資源，為客戶和公眾做得更多。

Staff are encouraged to work creatively, using technology or other means, so that more can be achieved for clients and the public with fewer resources.

“ 機電工程署去年為招攬更多年青人加入機電行業做了不少工作。

Our Department has made our contribution in the past year to promote the industry in a bid to lure more young people to it. ”

人手不足的挑戰

營運基金雖已做出成績，但也面臨不少挑戰。本港整個機電行業目前所面對的一個大難題，就是人手供應緊絀。機電工程署是機電業的主要持份者之一，去年為招攬更多年青人加入機電行業做了不少工作，例如與香港電台協作，於2014年1月推出電視連續劇《機電夢飛翔》；又與16家機電機構於2014年2月合辦一年一度的「機電業博覽—人才大招募」博覽會，這些工作都取得令人鼓舞的成果。

我們相信，有抱負的年輕人一定可以在機電業闖出美好的事業。機電業是一門專業，廣為大眾認識和接受，對社會有貢獻，同時較少受到經濟周期起伏的影響。再者，政府近年對機電項目的工程撥款有增無減，例如最近就史無前例地向醫院管理局（醫管局）批出130億港元的一次性撥款，資助醫管局未來十年的各項設施改善計劃。這筆撥款，再加上其他相關發展，勢將增加機電服務的需求，創造更多就業機會。我們期望見到更多年青人加入機電專業，將之發揚光大。

資產老化的威脅

我們也面對工程資產老化為全港帶來的挑戰，這是與樓宇和設施老化相關的問題。在上世紀六十和七十年代建成的樓宇和設施，現已有四十或五十年的歷史。為確保本港的基礎設施能持續暢順運作，提高對資產管理的重視和推廣良好的管理方法，實已刻不容緩。我們本着這份精神，已着手協助客戶為重要的工程資產進行ISO 55001認證。這項認證有助客戶妥善維修保養各種工程資產，盡量延長資產的壽命。

這點也配合我們要成為業界典範的策略。我們深信，作為政府部門，我們實有責任為一般的機電裝置確立一套維修保養基準與要求，供業界遵循。我們在ISO 55001方面為客戶所進行的工作，正是朝着這方向邁進。

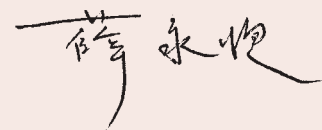
堅守環保之路

一直以來，機電工程營運基金都積極主動，在可行情況下盡量採用更綠化、更具能源效益和環保的作業方法。過去幾年，我們的團隊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。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，善用各種節能措施，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平，令作為我們客戶的各個政策局和部門，時刻都處於本港綠色營運先鋒之列。

員工：佳績的關鍵

營運基金得以在2013/14年度取得佳績，實有賴員工的努力，本人謹此向全體同事致謝。員工是我們所有成就背後的最大動力。我們年內收到近200封來自客戶部門各層員工的嘉許及致謝信，正好為同事的拼搏精神和專業才能作出證明。2014年的營運基金客戶滿意指數，在以8分為滿分的標準中，創下6.22分的新高。我們未來如要再創佳績，進一步提升客戶滿意度，肯定會是一個巨大的挑戰。儘管如此，憑藉各位同事一貫的堅毅不拔與盡忠職守的精神，我們定可為營運基金的客戶服務取得新的突破和成就，並為社會創造更大公眾價值。

我們由衷感謝客戶的信任，承辦商和顧問公司的努力，業界和持份者的支持，以及常務委員會的指引和寶貴意見。我們期望締造更大社會價值，讓香港成為更美好的地方。



薛永恒

機電工程署副署長/營運服務

one of the key stakeholders in the E&M industry, has made our contribution in the past year to promote the industry in a bid to lure more young people to it. For example, we collaborated with Radio Television Hong Kong in launching the TV series “Engineering, Life and Dreams” in January 2014 and joined 16 other E&M organisations to hold the annual “E&M Trades Expo – Manpower Recruitment” event in February 2014, with promising results.

We believe aspiring youngsters will find in the E&M industry a rewarding career that is professional, well recognised by the public at large, valuable to the community and less susceptible to the cyclical ups and downs of the economy. Also worth noting is the fact that capital funding for E&M work is on the rise, as in the Government’s unprecedented recent one-off grant of HK\$13 billion to the Hospital Authority (HA) to help fund improvement programmes at HA facilities over the next ten years. This and other developments will no doubt boost E&M service demand and create more career opportunities. We look forward to seeing more young people join our profession and take it to new horizons.

THREAT OF AGING ASSETS

We also face the territory-wide challenge of aging engineering assets, which is part and parcel of the issue of aging buildings and facilities. Those buildings and facilities built in the 1970s and 1960s are now in their fourth and fifth decade. To ensure the continued smooth functioning of the city’s infrastructure, we urgently need to raise awareness of the importance of asset management and promote good practices. It is in this spirit that we have begun helping clients to obtain ISO 55001 certification for critical engineering assets. This specification helps ensure that assets are properly maintained and that asset life is maximised.

This also dovetails with our strategy of becoming a trade model, as we believe it is our responsibility as a government department to establish, in due course, benchmarks of maintenance criteria and requirements for typical E&M installations, as a reference for the trade to follow. Our work in ISO 55001 for clients is a step in the right direction.

“ 我們深信，作為政府部門，我們實有責任為一般的機電裝置確立一套維修保養基準與要求，供業界遵循。

We believe that it is our responsibility as a government department to establish, in due course, benchmarks of maintenance criteria and requirements for typical E&M installations, as a reference for the trade to follow.”

GOING AND STAYING GREEN

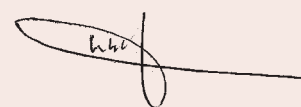
The EMSTF has made proactive efforts to be green, energy efficient and environment-friendly wherever possible. Over the past years, our colleagues have helped government bureaux and departments achieve energy savings through the installation of more energy efficient engineering systems and the implementation of energy saving best practices. In the long run, the challenge will be one of helping our clients to make good use of the best practices through behaviour changes and other means, in order to take the Government’s energy saving achievements 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 client bureaux and departments are always at the forefront of green operations in Hong Kong.

STAFF: MAKING THE ACHIEVEMENTS POSSIBLE

I would like to take this opportunity to thank all EMSTF staff for the good results in 2013/14. They are the key driving force behind all the organisation’s achievements. Their can-do spirit and professionalism are the reason for the near 200 appreciation letters we received from different levels of staff at client departments. As the EMSTF Customer Satisfaction Index 2014 hit a record high of 6.22 out of 8, further improvements in customer satisfaction will certainly be a big challenge to us in the coming years. Even so, with the usual resilience and commitment of our staff, we would strive for further breakthroughs in our services to our customers and to create more public value to the community.

Our gratitude also goes to our clients for their trust, to contractors and consultants for their service, to the trade and other stakeholders for their support, and to our Executive Board members for their guidance and advice. We look forward to delivering greater value to the community and making Hong Kong a better place for all.



Alfred W H Sit

Deputy Director/Trading Services, EMSD





關懷社會 Caring for Society

機電工程營運基金為本港公營機構提供機電工程服務，更銳意透過日常工作的每一方面，推動社會進步。因此，我們的專業服務，都聚焦於如何能讓每個香港市民都享有更好的生活質素。當我們滿足到客戶需要、照顧好員工，並在營運工作中能以符合持續發展的原則善用天然資源，我們就已達到關懷社會和創造「公眾價值」的目標。

As an E&M engineering service provider for the public sector, the Electrical and Mechanical Services Trading Fund aspires to make a difference for our society in everything it does. Our professional services are focused on improving the quality of life for everyone in Hong Kong. After all, when we serve our clients well, take good care of our staff, and make sustainable use of natural resources in the course of our work, then we are caring for society and creating the “public value” we aim to deliver.

關懷社會 Caring for Society

醫療與公共衛生是市民必需的服務。我們為公立醫院和醫療機構提供操作和維修保養服務，也為設立新醫院及管理醫療設備提供支援，目標是讓每位香港市民都能享有安全及高質素的醫療與公共衛生服務。

Health and public hygiene services are essential to the public. We provide operation and maintenance (O&M) services for public hospitals and institutions, assist in setting up new venues and medical equipment asset management, so as to facilitate the provision of safe and high-quality health and public hygiene services for everyone in Hong Kong.

醫療與公共衛生

2013/14年度，我們為醫院管理局（醫管局）和衛生署提供的服務均有穩定增長，足見我們在支援公共醫療方面的重要角色。

北大嶼山醫院已於2013年9月開始分段為病人提供服務，我們除了為這所醫院提供操作和維修保養服務外，也正積極籌備擴展對其他公立醫院所提供的服務，並已在雅麗氏何妙齡那打素醫院、靈實醫院、基督教聯合醫院和仁濟醫院開始提供操作和維修保養試點合約服務。

政府近年大幅增加對醫管局的經常性資助，又同時另行撥款予醫管局推展各項主要基建工程計劃，勢令醫院工程服務的需求大增。目前已展開的項目，包括幾所新大型醫院的興建工程，以及基督教聯合醫院、廣華醫院、瑪麗醫院及葵涌醫院的擴建或重建工程。

計劃中的新醫院包括香港兒童醫院，這將是全港第一所公立兒科專科醫院，還有啟德發展區的一所新醫院，以應付九

龍東市區持續發展以致人口日增帶來的需求。我們為這些新工程項目的前期規劃提供專業支援服務，也為將來提供操作和維修保養服務作好準備。

我們積極協助醫管局及衛生署為現有設備和場地進行更新與改建工程，例子包括為瑪嘉烈醫院建造無菌配藥部、為東區尤德夫人那打素醫院建立新腎科中心提供技術支援，為政府牙科診所購置數碼牙科X光造影系統提供技術協助等。

為提升工程服務的水平，令醫管局的醫療設備資產時刻處於最佳操作狀態，我們為醫管局推行ISO 55001資產管理系統，並挑選了腎科醫療儀器作為試點。其他設備資產如升降機及自動梯等，也將試行上述系統。我們的目標，是在評估及減低風險、制訂危機應變計劃及優化維修保養時序方面，有系統地為資產管理達至最適當和最有效的安排，以支援醫管局為市民提供更安全有效的高質素醫療服務。



我們為東區尤德夫人那打素醫院提供專業工程策劃服務的新腎科中心，於2013年12月開幕，標誌着新一代融合尖端科技及具防感染設計意念的大型腎科中心投入服務。

We provide professional project management services for setting up the new Renal Centre at Pamela Youde Nethersole Eastern Hospital which commenced service in December 2013. It signifies a new generation renal centre combined with cutting edge technologies and infection control design in operation.



我們的操作及維修團隊經驗豐富，為新落成的北大嶼山醫院提供一站式專業服務。

Our experienced operation and maintenance team provides professional one-stop services for the newly built North Lantau Hospital.



北大嶼山醫院的日間手術中心計劃於2014/15年度第四季投入服務。我們確保中心設備運作正常。

The day procedure centre of the North Lantau Hospital is planned for service commencement in the fourth quarter of 2014/15. We ensure proper operation of equipment inside the centre.

HEALTH AND PUBLIC HYGIENE

The year 2013/14 saw a steady rise in our services for the Hospital Authority (HA) and Department of Health (DH), underscoring the support role we play in public health.

In addition to taking up the O&M services for the North Lantau Hospital, which began offering patient services in phases from September 2013, we have also been preparing to expand our services for other public hospitals by engaging in pilot O&M contracts for Alice Ho Miu Ling Nethersole Hospital, Haven of Hope Hospital, United Christian Hospital and Yan Chai Hospital.

Demand for hospital engineering services is set to increase as the Government has significantly increased its recurrent subvention to HA in recent years, while also separately funding major capital works programmes for HA. Projects in the pipeline include the

development of new major hospitals, plus expansion and re-development of United Christian Hospital, Kwong Wah Hospital, Queen Mary Hospital and Kwai Chung Hospital.

Other new hospitals include the Hong Kong Children's Hospital, which is being developed as the first specialist paediatric public hospital in Hong Kong, and a new hospital for the Kai Tak development area, which will serve the expanding Kowloon East population as urban development continues in the area. We have been providing professional support for the advance planning of these new projects while also preparing ourselves for their future O&M work.

We play an active role in assisting HA and DH in renewing and remodelling existing equipment and venues. Examples include the provision of a pharmacy aseptic dispensing unit

for the Princess Margaret Hospital, technical support for the setting up of the new Renal Centre at the Pamela Youde Nethersole Eastern Hospital, and technical assistance for the acquisition of digital dental X-ray imaging systems at various public dental clinics.

Targeting to deliver even higher quality engineering services to HA's engineering assets to keep them at the best operating status, we identified renal equipment as an asset category for pilot implementation of ISO 55001 asset management standard. Other assets, such as lifts and escalators, will follow suit. Our efforts aim to systematically optimise the management of assets in respect of risk assessment and mitigation, contingency planning and maintenance scheduling, and ultimately to enhance the safety and effectiveness of high quality healthcare services delivered to the members of the public.



從2013年8月開始，我們一直為環境保護署的「改裝垃圾車資助計劃」提供技術方案，以減少垃圾車運載廢物時對環境造成的滋擾。

Since August 2013, we have been providing technical solution for the implementation of the Retrofitting Subsidy Scheme for Refuse Collection Vehicle of Environmental Protection Department in order to minimise the environmental nuisance in the transportation of waste.

環保節能方面，除了協助醫管局轄下醫院設置高能效的製冷機組外，我們也為醫院進行碳排放及能源審核，以尋找改善能源效益的空間。

公共衛生方面，我們也為政府的「改裝垃圾車資助計劃」盡一分力，協助環境保護署舉辦工作坊、審核由私營垃圾車營運商提交的資助申請書，並檢查已改裝的垃圾車，確保符合規格。

該計劃旨在協助私營垃圾車營運商把車斗完全密封及安裝污水收集缸，以防止出現臭味滋擾、滲濾液溢出或廢物四濺等公共衛生問題，並為符合即將生效、規定所有垃圾車車斗必須密封的法例要求作好準備。營運基金為這計劃提供的支援，可為市民改善環境及路邊衛生情況。

火化爐也是我們的公共衛生服務之一。年內，和合石及柴灣哥連臣角火葬場的新火化爐都已投入服務。新爐都符合最新排放標準。我們為火葬場的機電裝置提供專業操作及維修保養，目標是為公眾提供有效率、有尊嚴的火葬服務。

年內我們的工作贏得不少客戶的讚賞及認同。醫管局港島西醫院聯網總經理（行政事務）葉佩華女士，對我們為隔

離病房通風系統提供的緊急維修服務有以下評語：「……機電工程營運基金員工跟醫護人員及我們的團隊充分合作，解決種種問題以完成維修工作，並維持病房的暢順服務分毫不受影響。」

廣華醫院病理部高級醫務化驗師梁雅珊女士也指出，我們團隊的「技術支援為醫院化驗所提供了優質的服務，也是化驗所多年來能暢順運作的主要原因之一。」

食物環境衛生署時任新界區高級衛生督察（墳場及火葬場）吳國倫先生就我們於和合石火葬場提供的操作及維修保養服務，特別是農曆新年前火葬服務需求最高峰時的工作表現，有以下評價：「假如沒有機電工程營運基金人員的努力和支援，重建後的和合石火葬場要面對首個農曆年的服務需求高峰，肯定不會這樣順利。」

一如以往，我們期望通過加強對醫管局及其他公共醫護客戶的支援工作，讓客戶部門能為病人及家屬提供更好的服務。

On the environmental front, we assist HA hospitals in introducing chillers with higher energy efficiency. In addition, we also conduct carbon and energy audits for HA to identify opportunities of energy saving.

With regard to public hygiene, in order to facilitate the implementation of the Government's Refuse Collection Vehicle (RCV) Retrofitting Scheme, we have been assisting the Environmental Protection Department in organising workshops, vetting financial subsidy applications from private RCV operators, and conducting checks of retrofitted vehicles.

The Scheme aims to help private operators fully enclose their RCVs and install leachate collection tanks to eliminate public hygiene problems, such as odour nuisance, dripping of leachate and spattering of waste, in preparation for the forthcoming statutory requirement for all RCVs to be fully enclosed. EMSTF's support role in the Scheme will help improve the environment and roadside hygiene for all.

Cremators are another aspect of public hygiene services. Meeting the latest

emission requirements, new cremators at the Wo Hop Shek Crematorium and the Cape Collinson Crematorium in Chai Wan were commissioned during the year, with us providing professional operation and maintenance services for the electrical and mechanical installations. Our aim is to facilitate the provision of efficient and dignified cremation services to the community.

Our work during the year has earned recognition from clients. Ms Winnie Yip, Cluster General Manager (Administrative Services), Hong Kong West Cluster Hospitals, Hospital Authority, commented in regard to urgent repair of an isolation ward ventilation system, "...the EMSTF team was able to collaborate with ward users and our team to overcome various challenges and complete the repair process...without disruption of service to the ward."

Ms Phyllis Leung, Senior Medical Technologist of the Department of Pathology at Kwong Wah Hospital also noted that our team's "technical support is one of the essential factors in providing good quality services in smooth running (of the lab) over the years."

Mr Ng Kwok-lun, the then Senior Health Inspector (Cemeteries & Crematoria) New Territories of the Food and Environmental Hygiene Department, commented on our O&M services at the Wo Hop Shek Crematorium, notably during the period prior to Chinese New Year when cremation demand peaked. "Without their contribution and support, the first Lunar New Year peak for the reprovisioned Wo Hop Shek Crematorium could not be passed without event," he said.

As always, EMSTF looks forward to improving its support for HA and other public healthcare and hygiene clients, so that they may better serve patients and their families.



我們一直為鑽石山火葬場（左）及哥連臣角火葬場（右）的機電裝置，提供專業操作和維修服務。我們時刻緊記，「以專業尊重態度處理火化程序，令死者安息，使家屬盡快取回骨灰」。
We have been providing professional operation and maintenance services for the electrical and mechanical installations at Diamond Hill Crematorium (left) and Cape Collinson Crematorium (right). It is always in our mind – "With the hope that the deceased rests in peace, we treat every cremation procedure professionally with respect, and ensure his/her family members receive bones as soon as possible".

機電工程營運基金所支援的公共設施中，康文及運動設施與廣大市民的關係應最為密切，因絕大部分市民都會使用泳池、運動場、公園、公共圖書館、表演及文化場地。我們也有多個團隊專責為政府辦公大樓提供機電服務，確保大樓運作暢順，以最佳狀態服務市民。

Our interface with the general public is perhaps the most frequent in recreation and sports, as there can be almost no one in Hong Kong who does not make use of swimming pools, sports ground, parks, public libraries, or performance and cultural venues. A number of our teams are also dedicated to meeting the E&M needs of government offices buildings to ensure they operate smoothly and are in prime condition to serve the public.

康文設施與政府大樓

位於將軍澳的香港單車館已於2013年12月啟用，這是本港首個室內單車賽道場館。場內設有一條符合國際標準、長250米的木質單車賽道，並可容納3 000名觀眾，讓香港有能力舉辦爭先賽及凱林賽等國際單車賽事。我們協助康樂及文化事務署為單車館設計及安裝了一套精確度達千分之一秒，完全符合國際單車聯盟標準的專業計時系統。我們也為單車館的機電裝置提供操作及維修保養服務。我們會不遺餘力，確保各項裝置穩妥可靠，用家稱心滿意。

年內，高山劇場新翼也順利落成。新翼採用密封式設計，可容納596名觀眾。我們為新翼大樓提供屋宇裝備顧問服務，並負責機電及屋宇裝備工程的設計。

2013/14年度有數幢政府大樓落成啟用，例如位於九龍城的新九龍城政府合署，這是一幢多用途政府大樓，其機電及屋宇裝備系統均由我們提供操作和維修保養服務。另一個在年內啟用的新場地，是香港郵政設於九龍灣的中央郵件中心。我們協助香港郵政將紅磡國際郵件中心的郵政服務，在該中心於2014

年3月初關閉後，順利遷移至九龍灣新址。在策劃及具體落實遷移工作方面，我們都助客戶一臂之力；而中央郵件中心內各項新升格的郵政設備，連同機電、空調、電子及屋宇裝備設施等，都由我們負責操作及維修保養。

我們的新措施之一，是協助各政府大樓取得「綠建環評」認證，這是一套由香港綠色建築議會制訂的全面環境評估系統。我們已為機電工程署總部大樓展開評估工作，預計評估結果可於2014年第四季得出。我們希望透過總部大樓的「綠建環評」認證，為改造現有建築成為能符合最新標準的綠色建築，打造成功先例。

在所有評估工作完成後，機電工程署總部大樓勢將成為首批獲得「綠建環評」之「既有建築」認證的政府大樓之一。屆時我們的總部大樓會更環保，讓使用我們服務的人士及市民大眾，得到更綠色的體驗。這次經驗，可應用於協助其他政府大樓取得有關評級，尤其是現有建築，它們比新建築更難達到「綠建環評」的環保表現要求。



我們為高山劇場新翼的舞台和劇場設備提供專業的機電服務，以確保市民獲得最佳娛樂享受！

We provide professional E&M services for the stage and theatre equipment in Ko Shan Theatre New Wing to ensure it is enjoyable for citizens.



RECREATIONAL FACILITIES AND GOVERNMENT BUILDINGS

我們確保香港郵政「中央郵件中心」內新升級的郵政設施——「綜合揀信機」能無間斷地暢順運作，更準確、更快速地分揀郵件。

We ensure non-interrupted smooth operation of newly upgraded postal equipment — the Optical Video-coding Integrated System, for more accurate and rapid mail sorting in Hongkong Post's Central Mail Centre.

The completion of the Hong Kong Velodrome (HKV) in Tseung Kwan O opened in December 2013 marks the city's first indoor track cycling venue. The venue boasts a 250-metre wooden cycling track, built to international standards, and seats 3 000 spectators, enabling Hong Kong to host international cycling competitions such as sprint and keirin events.

We helped the Leisure and Cultural Services Department (LCSD) design and install a professional timing system for the Velodrome. The timing system fully complies with the International Cycling Union's standards, with accuracy up to 1/1000th of a second. We also provide O&M services for various installations at the new facility, making extra efforts to ensure it is reliable and enjoyable for users.

The Ko Shan Theatre also saw the completion of a new wing, a fully enclosed structure that can house 596 audiences, for which we acted

as building services consultant and provided E&M as well as building services engineering design.

During 2013/14, several government venues came into operation. An example is the new Kowloon City Government Offices, a mixed-use government building in Kowloon City for which we provide O&M services for its E&M and building services systems. Among the new venues opening during the year was Hongkong Post's Central Mail Centre (CMC) in Kowloon Bay. We helped the client plan and implement the smooth migration of postal services to CMC from its International Mail Centre in Hung Hom, which closed in early March 2014. We also provide O&M services for all the newly upgraded postal equipment at CMC, as well as its E&M, air-conditioning, electronic and building services facilities.

One of our new initiatives is to help government buildings obtain certification to Building Environment Assessment Method (BEAM) Plus,

a comprehensive environmental assessment scheme recognised by the Hong Kong Green Building Council. We have already begun the assessment process for our own EMSD headquarters building and assessment results will be available in the fourth quarter of 2014. Through the BEAM Plus certification, we tried to set a successful case of converting an existing building to a green building meeting the latest standards.

Upon completion of all assessments, our headquarters will likely be among the first in Government to obtain BEAM Plus for Existing Building, making the building a greener facility for our service users and the public to enjoy. The experience gained can be applied to help other government buildings achieve the rating, in particular existing buildings, which face more challenges than new buildings in meeting the BEAM Plus building performance criteria.



我們率先為政府物業的升降機進行優化工程，期望帶動私人物業加入優化行列，提升現有升降機運作的安全水平，使運作更為有效、可靠和舒適，讓公眾受惠。

We take the lead to modernise existing lifts in government premises, being trade model for the private premises to follow suit, making the existing lifts more safe, effective, reliable and comfortable for the benefit of the public.

為提升升降機的安全水平，使運作更為有效、可靠和舒適，我們由2013/14年度開始，為數千部現有的政府升降機進行優化工程，預計在四至五年內完成。

年內，我們繼續為司法機構改善法庭科技設備，例如更新高等法院「科技法庭」的視聽系統，以供進行需使用視像會議及其他視聽系統的聆訊。此外，由於終審法院即將遷往前立法會大樓，我們也會為大樓內的視聽系統提供設計和項目管理服務。

我們的服務還涵蓋數據中心，現時我們為九龍灣及小蠔灣數據中心提供操作、維修保養及伺服器代管服務。

我們於2013/14年度，成功續簽為添馬政府總部大樓及立法會綜合大樓各個機電及屋宇裝備提供操作及維修保養的服務水平協議，讓我們得以透過為旗艦政府大樓提供操作及維修保養，繼續服務市民。此外，我們今年也與康樂及文化事務署成功續簽服務水平協議，延續良好伙伴關係，一起服務市民。

機電工程營運基金員工的努力，贏得客戶認同。康樂及文化事務署經理（香港單車館及將軍澳運動場）戴婉君女士在評論營運基金就單車館計時系統所提供

的服務時說：「感謝（營運基金團隊）耐心聆聽客戶的要求，你們在籌備標書規格過程中提供了寶貴的技術意見，又不斷監察工程進度，使單車館能成功舉行一連串的出色賽事。」

我們經常要為政府大樓進行緊急搶修，以確保市民大眾從周一至周五都能無間斷獲得所需服務。一個獲客戶嘉獎的例子，就是我們在東區法院發生水浸事故後，迅速修復該處的供電系統。為此，東區裁判法院書記長郭煥樺女士讚揚我們的團隊：「在周末花大量時間進行緊急維修工作，務求恢復電力供應」，讓法院大樓所有法庭和辦公室都能恢復正常運作。

愛秩序灣官立小學是另一相同例子，我們的團隊為該校進行緊急搶修後，校長張俊珊女士向我們的同事致謝，稱讚他們「修理舞台燈光系統的服務又快又有水準，使學校的畢業典禮辦得更成功。」

作為全港康文設施和政府大樓的機電工程服務供應者，我們十分重視使用者是否舒適方便，同時率先推行各項措施，積極主動為政府大樓進行環保評估及能源管理認證等工作。

Aiming to make lifts more safe, effective, reliable and comfortable for users and the public, we have embarked on a lift modernisation programme for thousands of existing government lifts since 2013/14. Completion is scheduled within four to five years.

During the year, we have continued to help the Judiciary deploy better technologies in courts. For example, we renovated the audio-visual system of the Technology Court in the High Court Building for hearing cases requiring video conferencing and other audio-visual systems. As the Court of Final Appeal will relocate to the former Legislative Council building, we shall also be assisting in providing design and project management services for its audio-visual system.

Our work also covers data centres, for which we are providing O&M and server hosting services at the Kowloon Bay and Siu Ho Wan Data Centres.

Our Service Level Agreement (SLA) for O&M of various E&M and building services systems at the Central Government Offices and Legislative Council Complex at Tamar was successfully renewed in 2013/14, so that we may continue to serve the public via servicing these flagship government buildings. Besides, the SLA with LCSD was also renewed this year, extending our partnership to serve the public.

Our work has been rewarded with client recognition. Commenting on EMSTF's service with regard to the timing system at the HKV, Ms Tina Tai Yuen-kwan, Manager (Hong Kong Velodrome & Tseung Kwan O Sports Ground) of the Leisure and Cultural

Services Department said, "Thanks to (our team's) patience in listening to client requirements, offer of valuable technical advice in preparing tender specifications and constant monitoring of progress of work, a series of spectacular events were staged at the HKV with brilliant success."

Urgent repairs in government buildings are often called for to ensure uninterrupted service provision for the public during weekdays. A case in point that won client appreciation was the swift repair of the power supply system in the Eastern Law Courts following a water flooding incident. Ms Pauline Kwok, First Clerk of the Eastern Magistrates' Courts, complimented our team for carrying out "urgent works over the weekend for extensive hours in order to restore timely power supply", so that all

courts and chambers could resume smooth operation.

A similar case was our prompt repair work for the Aldrich Bay Government Primary School, with Headmistress Ms Cheung Tsun-shan thanking our colleagues for "the prompt action and quality service in repairing the stage lighting system which greatly enhanced the graduation ceremony".

As the E&M engineering service provider for recreational facilities and government buildings, we attach great importance to taking care of the comfort and convenience of the users, as well as taking the lead in initiatives such as environmental assessments and energy management certifications for buildings.



香港首個室內場地單車計時系統由機電工程營運基金負責設計和安裝，精確度可達千分之一秒，完全符合國際單車聯盟的標準。

The Hong Kong's first indoor track cycling timing system was designed and installed by EMSTF, providing timing accuracy up to 1/1000th of a second. This timing system complies fully with the International Cycling Union's standards.

治安對香港的繁榮安定十分重要。我們協助管理全港紀律部隊的機電系統，為香港繼續保持全球最安全的地區之一出一分力。

Law and order is essential to Hong Kong's economy and stability. We assist the disciplined forces in taking care of their E&M systems so as to contribute to maintaining Hong Kong as one of the safest regions in the world.

保安

年內我們為紀律部隊客戶進行了幾個重要工程項目，較突出的項目是為香港海關於國泰航空貨運站安裝的航空集裝箱檢查系統，及為懲教署於羅湖懲教所安裝的無匙「電鎖保安系統」。

香港是國際貿易樞紐，空運貨量極大。航空集裝箱檢查系統，就是應香港海關的要求，提升貨物檢測效率。系統能處理大型板貨及航空集裝箱貨物，大大縮短了查找違禁品和異常狀況的時間。

至於「電鎖保安系統」，則由懲教署和機電工程營運基金共同設計，是全港首個用於懲教機構的同類系統。「電鎖

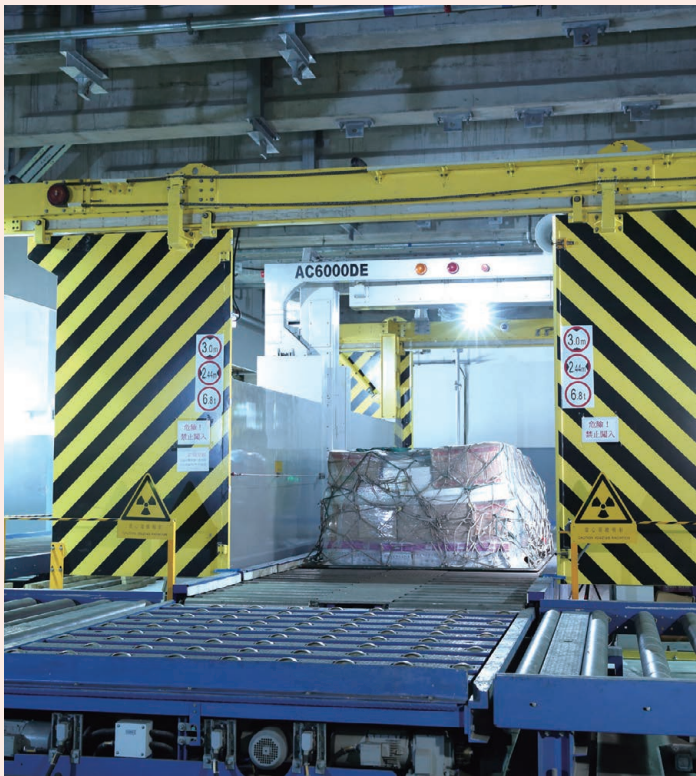
保安系統」主要結合了閉路電視、對講機、召喚按鈕及電腦化電鎖等子系統而建成，用以核實職員身份及控制出入，使院所內日常囚室開門的開關不再需要鎖匙。懲教所職員現可直接於控制室開關囚室開門，大大縮短了反應時間，而萬一發生危急情況，這點更非常重要。職員現也無需再往返囚室及匙房提取所需鎖匙，可能省下長達數百米的路程，大幅度提高了工作效率。

「電鎖保安系統」不但贏得客戶讚賞，更榮獲「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。系統未來亦會應用於其他懲教所，全面提升本港懲教機構的保安水平。



我們與懲教署共同設計設於羅湖懲教所的無匙「電鎖保安系統」，集監控、記錄和身份認證等多項功能於一身，大幅度提升了羅湖懲教所的運作效率。

We jointly designed the keyless Electric Locks Security System in Lo Wu Correctional Institution (LWCI) with Correctional Services Department. Various functions like monitoring, recording and identity verification were included in this new system, which greatly improved the operation efficiency at LWCI.



我們為香港海關設計、安裝及保養全新的航空集裝箱檢查系統，有助提升貨物查驗效率。
We designed, installed and maintain the new Palletised Cargo Inspection System for the Customs and Excise Department to improve the cargo inspection efficiency.

SECURITY

Several significant engineering projects for our disciplinary clients were carried out in 2013/14, most notably the Palletised Cargo Inspection System at the Cathay Pacific Cargo Terminal for the Customs and Excise Department (C&ED) and the keyless Electric Locks Security System (ELSS) at the Lo Wu Correctional Institution for the Correctional Services Department (CSD).

The Palletised Cargo Inspection System was designed to address C&ED's need to efficiently inspect a huge volume of air cargo as Hong Kong is an international trading hub. The system expedites the inspection

process by scanning cargoes in form of pallet and unit load device, which considerably reducing the time and efforts taken to detect contraband and other abnormalities.

The ELSS, jointly designed by EMSTF and CSD, is the first system of its kind in Hong Kong's correctional institutions. It integrates CCTV, intercom, call button and computerised e-lock subsystems to verify the identity of the requesting staff for access control, making physical keys no longer required in daily locking or unlocking of cell gate doors at the institution. CSD officers may now operate cell gate doors directly from the control room,

greatly reducing response time, which can be critical in case of emergency. The new system also eliminates the need for officers to collect the keys from the key room, a distance saving can be up to several hundred metres, greatly boosting efficiency.

The ELSS has won client recognition and also received the "Best Innovation (Entrepreneurial Innovation) Special Mention" award at the Hong Kong ICT Awards 2014. It may be extended to other institutions in due course, taking security in Hong Kong's correctional institutions to a new level.



因應實施邊境禁區範圍縮減，我們協助香港警務處在落馬洲路段安裝一套新的邊界圍網保安系統，加強邊境保安。
We assisted Hong Kong Police Force reinforce border security by building a new border fence protection system at Lok Ma Chau section for the implementation of reduction of Frontier Closed Area.

另一方面，營運基金已開始為消防處將軍澳消防訓練學校籌建實火模擬事故訓練設施，並已展開招標工作。為了讓訓練更迫真，這套訓練設施會提供各種事故的現場原大模擬實景，包括高樓大廈、船、飛機、車輛、火車站、加油站、油缸及石油氣缸。

新設施將提高消防模擬訓練的質素，加強學員的救火能力，提升社會消防安全。我們十分重視市民的生命財產安全，能為我們的消防員提供高效和可靠的訓練設施而出一分力，我們感到驕傲。

此外，我們因應邊境禁區範圍縮減的實施，為警務處於落馬洲及打鼓嶺段設計及建造一個現代化圍網保安系統的工程，年內也有良好進展。我們與警務處也順利續簽了一份六年的服務水平協議，讓我們繼續為警務處提供操作及維修保養服務。

我們持續為多個紀律部隊提供機電、電子和屋宇裝備系統的維修保養服

務，例如海關設於落馬洲及深港西部通道邊境檢查站的兩個固定X光車輛掃描系統。我們無間斷的機電支援，幫助客戶部門提高工作效率，使市民安居樂業。

對機電工程營運基金的服務，很多客戶部門都表示欣賞。懲教署高級監督（工程及策劃）鍾子綸女士說：「機電工程署的全面工程支援，讓我們能保持正常運作，完全不受干擾。」香港警察學院槍械訓練科警司陳永亮先生則讚揚我們為該校安裝一個新模擬動作系統的專業表現：「貴署員工專心致志，勤奮且具備豐富專業知識，很快已解決了項目的所有困難，順利高效完成工程。」

社會安定是我們共同的願望。我們協助紀律部隊管理工程系統，提供合適保養，確保設施高效運作，讓客戶部門更全心為香港繼續保持安穩太平。

In another development, EMSTF started to provide professional E&M support for the construction of specialised live fire simulators at the new Tseung Kwan O Fire Services Training School for the Fire Services Department, with tender exercise commenced during the year. The facility will provide full-size mock-ups of high-rise apartments, ships, aircrafts, vehicles, railway stations, refilling stations, oil and LPG tanks to make the fire fighting and rescue drills more realistic.

The new facility will enhance the quality of simulation training and build up the fire fighting capability of the trainees, improving the community's fire safety in due course. We care about the lives and properties of the public, and we are proud of our contribution to the provision of effective and reliable training for our fire fighters.

The project to design and build a modern fence protection system for the Hong Kong Police Force (HKPF) at the Lok Ma Chau and Ta Kwu Ling sections progressed well during the year to support the implementation of reduction of Frontier Closed Area. In addition, the renewal of a six-year Service Level Agreement with HKPF will enable us to contribute further through O&M services for the Police.

We also continued to provide maintenance services to various E&M, electronic and building services systems for disciplined forces, such as the two C&ED Fixed X-ray Vehicle Inspection Systems at the Lok Ma Chau and Hong Kong-Shenzhen Western Corridor border control points. It is on-going E&M support services like these that

have helped our client departments improve their efficiencies, so that our community can continue to thrive in a safe and stable social environment.

Many client departments have expressed appreciation of our services. Ms Chung Chi-lan, Senior Superintendent (Works and Planning) of CSD noted, "The full backup from EMSD has helped us in maintaining our normal day-to-day operations without any disruption". Mr Ricky Chan Wing-leung, Superintendent of Police, Weapons Training Division of the Hong Kong Police College, also acknowledged EMSTF's professionalism in installing a new motion simulation system. "With full devotion, diligence and professional knowledge of your staff, these challenges were overcome and the project was completed smoothly and efficiently", he wrote.

Maintenance of law and order is essential to our community. We play a key support role in ensuring that the disciplined forces are equipped with effective, appropriate and well maintained engineering systems, making Hong Kong a safer place to live.



我們持續為多個紀律部隊提供機電、電子和屋宇裝備系統的維修保養服務。我們無間斷的機電支援，幫助客戶部門提高工作效率，使市民安居樂業。

We continued to provide maintenance services to various E&M, electronic and building services systems for disciplined forces. It is on-going E&M support services that have helped our client departments improve their efficiencies, so that our community can continue to thrive in a safe and stable social environment.

我們支援全港交通運輸工程系統的服務，深入城市的每一個層面，與市民息息相關。我們的宗旨，是提供優質可靠的運輸工程支援服務，讓公眾體驗安全、方便又順暢的交通。

Our engineering services that support traffic systems are woven into the fabric of the city's daily life, touching everyone in Hong Kong. We are committed to providing quality and reliable engineering support to facilitate a safe, convenient and smooth transportation experience for the public.

運輸

我們的服務範圍涵蓋海陸空交通基建。機場管理局（機管局）是其中一個主要客戶，我們為機管局提供多個重要工程系統的維修保養服務，包括跑道燈、行李處理、污水處理和空調系統等。我們也為駐赤鱗角的政府部門，以服務水平協議的方式提供服務，如最近與民航處續簽的五年服務水平協議，讓我們為民航處設於機場內外的所有設施，包括其新總部大樓，提供操作及維修保養服務。我們所有服務的目的都是讓市民能舒適愉快地享用機場設施。

在航空服務方面，由於航班日益增加兼且惡劣天氣，員工在維修保養戶外工程系統時，例如跑道燈的工作，面對不少挑戰。年內，我們與機管局共同開發了一套跑道燈「固定電流調節器測試平台」，以創意去解決問題。這測試平台的優點，是讓維修人員能隨時在室內環境進行跑道燈亮度穩定測試及就基本故障進行檢查，不受天氣影響。這方案大大提高了我們維修保養跑道燈的效率，讓我們在任何天氣下都可繼續維修保養工作，並減少對跑道運作的干擾。這測試平台既新穎、有創意又實用，更於2013年底取得設計專利。

2013/14年度完成的重大工程項目中，以我們協助旅遊事務署完成的啟德郵輪

碼頭項目就最為突出。郵輪碼頭已於2013年6月正式開幕，首個泊位也同時投入服務，加強了香港作為國際郵輪中心的地位。機電工程營運基金在郵輪碼頭各類包括全球最大型活動乘客登船橋在內的機電系統的設計和安裝，都扮演着重要的角色。

與此同時，我們為海事處更新優化船隻航行監察服務系統，工作進展良好。這是個橫跨幾年的項目，採用先進科技，更有效監察及管理本港水域的船隻交通情況。

至於陸路運輸，我們的服務也十分多元化。除了為約5 800部政府車輛提供維修保養服務、及滿足與各個客戶部門協議的服務承諾外，我們的車輛服務團隊更為各政府部門提供一般及特別用途車輛的採購服務。

車輛維修保養方面，我們已主動為政府車隊開展資產管理系統PAS 55/ISO 55001認證的準備工作，務求優化車隊的資產壽命及質素。我們由消防處的救護車開始，在消防處的全力配合及支持下，現時所有救護車都已成功得到PAS 55的認證，是次認證工作進一步加強我們與客戶之間的緊密伙伴關係。可靠的救護車車隊，對市民可說生死攸關。認證工作反映我們對這方面的高度重視。



我們為超過10 000盞機場跑道燈提供專業的維修服務，確保飛機於跑道及滑行道可安全升降和行駛。
We provide professional maintenance services to over 10 000 airfield ground lightings, ensuring runways and taxiways are safe for taking-off, landing and manoeuvring of planes.



我們的維修團隊與香港機場管理局，共同設計一套固定電流調節器測試平台，並取得專利。測試平台可在室內快捷地測試機場跑道燈，減少對跑道運作的影響。
Our maintenance team jointly designed and patented the Constant Current Regulator Testing Platform with the Airport Authority Hong Kong, allowing us to test the airfield ground lighting indoor and work faster, minimising disruption to runway operations.



我們協助客戶部門採購特別用途車輛。我們亦為部分車輛提供維修保養服務，如圖中所見於機場消防局的快速截擊車，便是一例。
We assist client departments in procuring special purpose vehicles. We also provide maintenance services for some of these vehicles, such as Rapid Intervention Vehicle in Main Airport Fire Station as shown.



我們如期在啟德郵輪碼頭完成首個泊位各項工程。「海洋水手號」順利於2013年6月12日停泊郵輪碼頭。
Upon the timely completion of our work on the first berth, Mariner of the Seas successfully docked at the Kai Tak Cruise Terminal on 12 June 2013.

TRANSPORT

Our work in the transport sector spans Hong Kong's air, sea and land transport infrastructure. The Airport Authority Hong Kong (AA) is a key client for which we maintain several crucial systems at the Hong Kong International Airport, including its airfield ground lighting, baggage handling, wastewater treatment and air-conditioning systems. We also provide O&M services to government departments stationed at Chek Lap Kok via Service Level Agreements (SLAs), such as the recently renewed five-year SLA with the Civil Aviation Department for providing O&M services to all its airport facilities including its new headquarters. All these services are provided with the ultimate goal of giving the public a comfortable and pleasant airport experience.

Increasing air traffic and adverse weather conditions combine to pose challenges to the maintenance of outdoor airport systems, such as airfield ground lighting. During the

year, EMSTF and AA jointly developed an innovative solution to this problem with the creation of our Constant Current Regulator Testing Platform. This enables brightness stability tests and basic lamp failure detection checks to be conducted indoors at any time. This has greatly enhanced our airfield ground lighting maintenance efficiency, allowing us to work in any weather and also reducing disruption to runway operations. The design was successfully patented at the end of 2013 in recognition of its novelty, creativity and practicality.

Among the milestone projects completed in 2013/14, Kai Tak Cruise Terminal stands out. It officially opened in June 2013 when the first berth commenced operations, boosting Hong Kong's position as an international cruise hub. EMSD played a key role in the design and installation of various E&M systems, including the world's largest movable Seaport Passenger

Boarding Bridges, at the Cruise Terminal for the Tourism Commission.

Meanwhile, good progress was made in our work on the Replacement and Upgrading of Vessel Traffic Services System for Marine Department, a multi-year project that involves the deployment of state-of-the-art technologies to provide more efficient and effective vessel traffic surveillance and management capabilities in the Hong Kong waters.

Our support services for land transport are many and varied. Apart from looking after the maintenance of about 5 800 government vehicles and meeting the performance pledge agreed with our client departments, our vehicle engineering team also provides procurement services for all general and special purpose vehicles for various government departments.



ISO 55001認證有助優化交通燈的功能，提升設備的可用性和減少訊號故障對市民構成的影響。
ISO 55001 certification helps optimise traffic lights in order to enhance equipment availability and minimise disruption to the public due to fault signal.

採購車輛方面，我們不單協助客戶設計和採購車輛，更確保購買回來的車輛能真正滿足客戶的運作需要，並符合本地及國際在安全及環保方面的法規與標準，讓政府車隊為社會樹立良好榜樣。

年內，我們也繼續為本港多條行車隧道，提供各種系統的設計和安裝工程服務，並為主要交通基建項目，例如為中環灣仔繞道和東區走廊連接路、港珠澳大橋、蓮塘/香園圍口岸幹線及將軍澳—藍田隧道等，提供有關機電、屋宇裝備、電子、交通控制及監察系統的專業意見和技術支援服務。

運輸署也委託我們就海底隧道及城門隧道的隧道通風系統及交通控制監察系統的更新工程，提供項目管理服務。此外，我們也負責在各個交通要道，以LED屏幕顯示實時交通資訊，方便駕車人士即時得悉主要幹線的路面交通情況。

行人交通也是我們運輸工程服務的一環。更新中環至半山自動扶梯系統的撥款已經批出，我們的目標是盡快確定工程的技術規格和招標細節安排，讓工程盡快展開。另一方面，根據政府的「人人暢道通行」計劃，未來幾年會為全港的行人通道（即行人天橋、高架行人路及隧道）加裝300多部升降機，為市民包括輪椅使用者締造無障礙通行的便利環境。我們除了會為相關部門的設計和建造工程提供意見和技術服務外，也會負責日後的維修保養服務，確保所有行人通道的升降機和自動梯順暢運作，使市民感到便捷。

年內，我們提升了交通燈維修保養服務水平，着手ISO 55001認證工作，希望就交通燈的安裝、維修保養及減少故障時間等工作，能更有系統地處理。我們也計劃將交通燈維修保養系統與地理信息系統結合，屆時有關交通燈故障的檢測及修理效率會大大提高，對公眾的干擾也會減到最少。

年內我們收到不少客戶的嘉許，當中包括我們為天文台提供的服務。香港天文台高級科學主任（氣象預測系統）陳栢緯先生，對營運基金員工為天文台氣象浮標上的風速計支柱改善安全設計，表示感謝。「貴署員工專心致志，使氣象浮標維持高水平的使用率，讓故障時間減至最少，對確保航空安全非常重要。」

安全可靠的本地及國際交通運輸，是香港經濟及繁榮的支柱。因此，我們會盡力提供合適的工程方案以應付香港的運輸需求，讓所有道路使用者和行人，包括傷障人士，都能安全暢順抵達目的地。

On the maintenance side, we have taken the initiative to optimise asset life and quality for the government fleet via certification to Asset Management System PAS 55/ISO 55001 standards. The initiative began with ambulances under the Fire Services Department (FSD), all of which have now been certified with PAS 55 standards. The certification has obtained cooperation and support from FSD, demonstrating our close partnership with the client. The community counts on a reliable ambulance fleet in life-critical situations, and the certification effort demonstrates the extra care we take in this regard.

As to vehicle procurement, we not only assist user departments in designing and acquiring vehicles but also ensure that the models acquired best fit their operational needs. We make sure that the acquired vehicles meet various local and international safety as well as environmental regulations and standards, which in turn makes the government fleet become a model for the rest of the community.

During the year, we continued to provide project design and implementation services for various systems used within Hong Kong's road tunnels. We also continued to provide professional advisory and technical services with regard to E&M, building services, electronics and traffic control and surveillance systems for major transport infrastructure projects, including those for the Central-Wan Chai Bypass and Island Eastern Corridor Link, Hong Kong-Zhuhai-Macao Bridge, Trunk Road for Liantang/Heung Yuen Wai Boundary Control Point and Tseung Kwan O – Lam Tin Tunnel.

The Transport Department (TD) has also entrusted projects to us for the management of the replacement of road tunnel ventilation and traffic control and surveillance systems for the Cross Harbour Tunnel and Shing Mun Tunnel respectively. Furthermore, we are also responsible for the provisioning of electronic variable-



我們提供技術支援予路政署及土木工程拓展署，在行人通道加裝升降機，為市民提供暢通無阻的通道。
We provided technical support to Highways Department and Civil Engineering and Development Department to install lifts at walkways, providing convenient barrier-free access to the public.

message systems with LED display technology at strategic locations, to disseminate real-time information on traffic conditions for the convenience of drivers on key roads and highways.

Pedestrian traffic is another component of our transport service. The funding for the refurbishment of the Central-Mid-Levels Escalator and Walkway System has been approved, and we aim to finalise the technical specifications and tendering arrangement for implementation as soon as possible. In a separate development, under the Government's "Universal Accessibility" programme, more than 300 new lifts will be installed at walkways (i.e. footbridges, elevated walkways and subways) throughout the territory in the next few years, providing convenient barrier-free access to the public, including wheelchair users. Besides providing technical support and advisory services to the relevant departments for the design and construction works, our subsequent maintenance services will also see to it that all walkways lifts and escalators operate smoothly, to ensure that walkways stay user-friendly.

Our traffic signal maintenance services were taken to a new level in the year, when we introduced an ISO 55001 certification programme that will bring about a more systematic approach

to the installation, maintenance and improvement of traffic lights availability. We also plan to integrate our traffic light maintenance system with the Geographic Information System, which will greatly enhance efficiencies in fault detection and rectification so as to minimise disruption of service to the public.

Compliments from clients during the year covered our service to the Hong Kong Observatory (HKO). Mr Chan Pak-wai, Senior Scientific Officer (Meteorological Forecast System) of HKO thanked our staff for making safety improvements to the weather buoy anemometer mast design. "The dedicated effort of your team has enabled the weather buoys to maintain a high level of service availability with minimum equipment down time, which is very important in the assurance of aviation safety," he said.

Reliable local and international transport is the backbone of Hong Kong's economy and continuing prosperity. As such, we have spared no effort to provide appropriate engineering solution for the community's transport needs. We strive to achieve that all road users and pedestrians, including the physically challenged, are able to reach their destinations safely and smoothly.

企業管理
Corporate
Stewardship



機電工程營運基金的企業目標是「透過與客戶的伙伴關係，創造公眾價值利惠市民」，並透過實施五大策略以達到目標。我們欣然報告，經過第一年的實踐，五大策略的推展工作已取得相當進展。

One year into the implementation of the five strategies to achieve EMSTF's corporate goal of "creating public value for community betterment through partnership with our clients", we are glad to report good progress.



我們非常重視員工與管理層的溝通，於總部大樓大堂設立「員工天地」，作為雙方對話的平台。員工及管理層可於展板上張貼建議、問題、評論及回應。We value staff and management communication. A Staff Corner is set up as a new platform for dialogue in the headquarters lobby for staff and management to post suggestions, questions, comments and responses.

企業管理 Corporate Stewardship



我們的策略業務單位及支援單位攜手合作，就落實每個策略推出多項重要營運措施。五大策略分別是：提供優質服務、成為業界典範、建立員工才能與關懷文化、優化知識管理及持續綠色作業。

Our strategic business units and support units have worked together to roll out key operational initiatives under each of the five strategies: deliver excellent service, become a trade model, build capacity and caring culture, enhance knowledge management and sustain green operation.

機電工程營運基金不單致力怎樣去做得更好，也清楚了解為何要做得更好，就是要為每個香港市民提升生活質素。歸根究底，我們相信，只有具備矢志服務市民的決心和熱情，營運基金才能貫徹目標，創造「公眾價值」。

EMSTF is focused not only on how to do its work better, but also has a clear sense of why it should do so, namely, to improve the quality of life for everyone in Hong Kong. After all, we believe it is by having the mind-set and the passion to serve the community that we will create the “public value” we aim to deliver.

五大策略

提供優質服務

2014年的客戶滿意度指數創歷年新高，我們在8分滿分中，取得總評分6.22分，證明我們持續改善服務的表現得到客戶認同。營運基金更於2013/14年內收到接近200封嘉許信，來自客戶部門不同階層的人員，這也是客戶滿意度的表現，對此我們深感欣悅。

優質服務是多面的，我們特別着重幾個策略性層面，例如充分運用「建築信息模擬」技術以有效推行資產管理工作，為客戶提供可靠高效的維修保養服務。本港建築物和工程資產日漸老化，資產管理可確保市民享用的公共服務不受干擾，這點十分重要。

就此，我們積極主動地協助客戶就關鍵系統（例如救護車隊和交通燈系統），進行資產壽命周期規劃及風險為本的資產管理工作。我們已為客戶的多個工程系統取得PAS 55資產認證，並會陸續為客戶的其他關鍵系統落實資產管理制度。

優質服務與新科技的應用息息相關。我們現正在17個試點推行綜合樓宇管理系統，並試用各種流動通訊技術，包括智能手機應用程式，以方便客戶報告故障，也可讓我們及時向客戶匯報工作進展。

各策略業務單位不斷增加對一般維修保養工作的外判力度，並同時緊密監察外判商的服務質素。這項措施對我們十分重要，基於人力資源方面的限制，外判可讓我們在不影響服務質素的情況下騰出人手，為客戶進行其他更為重要的工作。我們亦正檢視如何強化對外判合約的質素管理。

同時，我們已委託顧問公司探討採用「新工程合約」的可行性，有關研究進展良好。我們也於2014年1月推出網上「維修外判合約表現監察」先導系統，以加強管理承辦商的表現。

THE FIVE STRATEGIES

Deliver Excellent Service

The Customer Satisfaction Index 2014 hit a record high score of 6.22 out of 8, an indication that continuous service improvements were recognised by client departments. We are also delighted to have received almost 200 appreciation letters from staff of different levels in client departments in 2013/14, another measure of client satisfaction.

Excellent service has many facets. We are focused on a few strategic areas, such as leveraging the potentials of Building Information Modelling to facilitate effective asset management for providing reliable, efficient and cost-effective maintenance services to clients. Asset management is particularly important to ensuring uninterrupted service to the public, especially given the city's increasingly aging assets.

In this regard, we have proactively helped clients conduct asset life-cycle planning and risk-based asset management of critical systems such as ambulance fleets and traffic lights. We have also achieved PAS 55 certification for various asset systems of our clients and shall continue to implement for them asset management systems for other critical assets.

Excellent service also hinges upon deployment of new technology. Pilot implementation of Integrated Building Management System on 17 sites is in progress. Various mobile technologies, including smart phones apps, are in trial use to facilitate fault reporting and keeping customer informed of work progress.

All strategic business units have been increasing their use of outsourcing for routine maintenance and operation work, while keeping a close eye on quality supervision. This is a vital step to release our limited manpower to take on other critical work for clients without sacrificing the quality of our service. In this regard, we are reviewing our outsourcing contracts for better service quality control.

Concurrently, a consultant has been engaged to explore the suitability of adopting New Engineering Contract and the study is in good progress. Meanwhile, a pilot web-based Performance Monitoring System for Maintenance Contracts was launched in January 2014 to enhance of contractor performance management.

Become a Trade Model

Our priority is to take the lead in building a communication platform for E&M practitioners to share and implement best practices in operation and maintenance, maintain high standards of work safety, and promote E&M trade.

We drafted the proforma specification for Electrical Installations Term Maintenance Contract and are formulating the best practices for operation and maintenance of E&M assets.



我們造訪中華電力，就資產管理工作進行交流，務求為客戶提供更可靠高效、更具成本效益的維修保養服務。

We visited CLP Power to exchange views on asset management in order to provide more reliable, efficient and cost-effective maintenance services for clients.

成為業界典範

我們的首要工作，是為機電業界牽頭建立一個溝通交流的平台，好讓業界從業員分享和實踐在營運操作和維修保養方面的最佳做法，維持高水平的職業安全標準，以及推廣機電行業。

我們為電力裝置保養合約草擬了標準規格，並正就機電設備的操作和維修保養制訂最佳作業模式。

我們年內為員工和承辦商舉行各種職業健康及安全講座、活動和比賽。我們將與業界協作，檢視相關作業方法、指引和合約條文以提升安全表現，同時修訂我們的安全政策和安全手冊。

我們與業界攜手推廣機電行業，在2013年3月舉辦「香港機電業（技術人員）——就業及發展」活動，吸引超過2 700人入場參觀。

我們與香港電台聯合製作共分九集的電視連續劇《機電夢飛翔》，已於2014年1月首播。在節目播出期間同時舉辦一連串宣傳活動，讓市民從嶄新的角度了解機電行業，認識行業內容、吸引之處和各種挑戰，及如何造福市民等。

建立員工才能與關懷文化

員工是我們工作成效之所繫，只有建立員工才能，我們最終才可貫徹企業目標。建立員工才能，是指投放更多資源於技術及軟技巧培訓以提高工作成效，同時在工作中為同事提供支援和鼓勵，讓同事與管理層進行積極有效的溝通。我們亦盡力以身作則，提供安全健康的工作環境，以吸引新人加入機電行業。

為招攬新人加入，我們優化了部門的見習技術員訓練計劃，增加每年的招聘人數、提升見習技術員工資。

我們也協辦及參與了香港機電業推廣工作小組於2014年2月舉行的「機電業博覽——人才大招募」博覽會，推廣工作小組是由17個機電行業機構和公用事業公司代表組成。上述兩項措施，目標都是提高公眾對機電工程業的興趣，吸引年青新血入行。

為加強員工的相互溝通和關懷文化，部門更推出多項新猷，例如2013年推出一項嶄新的「假如我是署長」比賽，鼓勵員工突破框框，提出創新的意念，同時藉此了解員工的期望。部門也於總部大樓大堂設立「員工天地」，只要符合一些簡單規則，員工便可將對部門的建議、問題和意見張貼在展板上，事前無須審查；而部門管理層也會在展板上貼出回應。

我們參加了為期兩天的「機電業博覽——人才大招募」博覽會，是次活動由香港機電業推廣工作小組於2013/14年度舉行，目的是吸引年青新血入行。

We participated in the two-day E&M Trades Expo – Manpower Recruitment, organised by the Hong Kong E&M Trade Promotion Working Group in 2013/14 to attract new blood to join the industry.





我們於2014年年初推出一連串推廣機電行業的宣傳活動，頭炮是推出與香港電台聯合製作的《機電夢飛翔》電視連續劇。其中一集於機場拍攝，展示機電人員如何支援機場的暢順運作。

We kicked off a series of promotional activities for the E&M industry in early 2014 with the TV drama series "Engineering, Life and Dreams", jointly produced by RTHK and EMSD. One of the episodes was shot in the airport to illustrate how E&M workers contribute to the smooth operation of airport facilities.

We held various occupational health and safety seminars, programmes and contests for staff and contractors during the year. We will collaborate with the trade to review relevant practices, guidelines and contract provisions to enhance safety performance, and revamp our safety policy and safety handbook.

We promoted the E&M industry by joining hands with the trade. We organised the "Hong Kong E&M Trade (Technical Personnel) – Career and Development" in March 2013, attracting 2 700 visitors.

We launched a TV series entitled "Engineering, Life and Dreams" with RTHK, broadcast in January 2014. The nine-episode drama series, supported by parallel promotional activities, gave the public a fresh perspective on an engineering career – what it means, its thrills and challenges, and how it benefits the community.

Build Capacity and Caring Culture

Human resources are the key success factor in everything we do, hence it is only by building staff capacity that we can eventually achieve our corporate goal. Capacity building means investing more resources in technical training and soft skills development for better results, and also creating a supportive work environment where communication between staff and management is dynamic and effective.

We also endeavour to lead by example in attracting new blood to the E&M industry by providing career opportunities in a safe and healthy environment.

To attract new talent to the E&M industry, we upgraded our technician training scheme, expanded the annual intake and raised trainee salaries. We also helped steer and took part in E&M

Trades Expo – Manpower Recruitment in February 2014, organised by the Hong Kong E&M Trade Promotion Working Group with representatives of 17 E&M organisations and utilities. Both initiatives raised public interest in E&M engineering and helped attract young talent to the trade.

To foster staff communication and a caring culture, many new tools were rolled out. A new "If I Were DEMS" Competition was held in 2013 to tap staff's expectations and encourage out-of-the-box ideas. A Staff Corner was set up in the headquarters lobby, featuring panels on which colleagues may post suggestions, questions and views, without prior screening but subject to a few ground rules, to which management will post responses as appropriate.

你的聲音·我在聆聽 Your voice, We listen

熱線電話
81020097
所有個人資料及談話內容絕對保密

服務對象
機電署所有員工

服務形式

- 電話輔導熱線
- 面談輔導
- 語音服務
- 轉介服務
- 培訓課程及工作坊

服務範圍

- 人際相處及溝通技巧
- 工作壓力
- 婚姻關係及子女管教
- 情緒管理
- 哀傷輔導及生活轉變
- 財務管理

香港家庭福利會
Hong Kong Family Welfare Society

機電工程署
EMSD

我們關懷員工，細心聆聽及支援員工的需要。我們委託了香港家庭福利會為有需要的員工提供專業輔導服務，協助他們處理壓力及相關問題。
We care about our staff, listen to and support their needs. We commission the Hong Kong Family Welfare Society to provide professional counselling service for staff members who need it so as to enable them to cope with stress and manage other related issues.

其他新猷包括為即將退休的員工舉行榮休聯歡會，答謝他們多年來的寶貴貢獻。另外，我們也委託香港家庭福利會為有需要的員工提供輔導服務。這些雖只是小小心意，但我們相信對受方人員卻有重大意義。此外，我們也開始以短期合約方式，聘用在特定範圍具備豐富經驗的退休員工，以減輕同事的工作負擔。

優化知識管理

我們繼續拓展「知識群體」，以加強部門的學習和交流文化，並持續發展和改善部門的網上知識管理平台，讓員工有一個共通平台交流和搜尋機電知識。該平台最近更透過政府內聯網開放給借調到其他部門工作的同事，讓他們也可分享最新的機電專門知識，與時並進。

至目前為止，部門同事已紛紛自發成立了16個「機電知識區」。每個知識區由一位總工程師領導，探討同事感興趣的機電工程知識，以及與品質管理、合約、職安健和電腦服務相關的課題。除了「機電知識區」外，同事也就他們感興趣的事務，自組「睿智小組」交流和分享工作知識與經驗。

同時，我們贊助了30多個由員工自發組成的工程或技術睿智小組，進行本地或海外知識分享活動。已有約420位同事透過有關活動拓闊知識視野、增加面對面分享資訊和識見的機會，以及建立部門以外的人際網絡。

為方便員工於「知識管理平台」發掘新資訊，我們每兩星期發布《知識群體摘要》電子通訊，以及推出各種網上知識管理工具如「匯智分享」和「睿智關注」等。此外，還有其他工具，包括一個「電子自學中心」，以方便員工隨時隨地學習新知識。

我們於2013年6月完成編製《機電工程營運基金政策手冊》，並已於部門內聯網上發布，手冊旨在闡釋部門各種政策背後的理念，方便中層管理人員隨時查閱。與此同時，每年的「機電工程署品質及安全日」亦已成為亮點活動，讓所有策略業務單位通過匯報和互動交流，分享彼此經驗和成功個案。最近的品質及安全日已於2013年11月舉行，我們邀得兩位客席嘉賓在活動當日就「安全、品質與客戶滿意度」專題，與員工分享心得。



2013年推出的「假如我是署長」比賽，同事提出各種創新意念，讓管理層進一步了解員工的期望。
The "If I Were DEMS" Competition was launched in 2013, whereby colleagues presented various and innovative ideas to enable management to understand staff expectations.



新活動之一，是為即將退休的員工舉行榮休聯歡會，答謝他們多年來盡心工作。高層管理人員、退休員工和家屬齊齊分享這難忘一刻。
One of our new initiatives is to organise farewell tea parties for retiring officers to thank them for their dedicated efforts. Senior management, the retiring officers and their family members share memorable moments.

Other new initiatives included holding farewell tea parties for retiring officers to thank them for their valuable contribution, and commissioning the Hong Kong Family Welfare Society to provide counselling service to any EMSD staff member who needs it. These may seem like small gestures, but we believe they have great value for recipients. We have also started recruiting retired staff with solid experience in specific areas for short-term contracts to reduce our colleagues' workload.

Enhance Knowledge Management

We continued to develop the Knowledge Communities to foster a more effective learning and sharing culture. We continued to develop and improve our online Knowledge Management (KM) Platform, which serves as a single access point for colleagues to share and search E&M knowledge. Recently, the Platform has

been made available to the seconded staff via the Government Intranet so that our colleagues working in other departments can also share and keep abreast of the latest expert knowledge.

To date, 16 E&M Knowledge Areas have mushroomed throughout EMSD on a voluntary basis. Each is led by a Chief Engineer and explores a specific field of E&M engineering knowledge of interest to staff members. These Engineering Areas also include topics such as management of quality, contracts, occupational health and safety, as well as computer services. Besides E&M Knowledge Areas, staff also voluntarily set up Interest Groups to discuss and share working knowledge and experiences in their areas of interest.

Concurrently, we sponsored more than 30 staff-initiated engineering or technology interest groups on local or overseas knowledge sharing activities

that allowed some 420 staff members to expand their knowledge horizons, promote face-to-face sharing of information and insight, and build networks beyond our organisation.

To enable staff to discover new knowledge on the KM Platform, we published a bi-weekly e-newsletter "Knowledge Communities Digest" and developed online knowledge tools like "Share", "Follow". Other initiatives to facilitate staff learning anytime and anywhere included an E-learning Centre.

We completed an EMSTF Policy Manual in June 2013, and launched it on our Intranet to provide a handy reference for our middle management on the rationale behind the department's various policies. Meanwhile, our annual EMSD Quality and Safety Day continues to be a focal event for all strategic business units to share their experiences and success stories via presentations and interactive exchanges. The latest Quality and Safety Day, held in November 2013, featured two guest speakers who shared their perspectives on the "Safety, Quality and Customer Satisfaction" theme.

Knowledge management is key to building staff capacity and ensuring a strong foundation for service excellence. It is also vital to keeping EMSTF current and relevant in order to address the ever-changing needs of the community. Still in its early stages, our knowledge management work will continue to require further effort in the years to come.



見習工程師訓練計劃學員自發組成的睿智小組，參觀香港理工大學的電動車實驗室，以加深對電動車的認識。
Interest groups initiated by our Engineering Graduate trainees visited the Electric Vehicle Laboratory of the Hong Kong Polytechnic University to learn more about electric vehicles.

知識管理是建立員工才能的關鍵，能為優質服務奠定堅實的基礎。營運基金要能與時並進，提供適切服務以滿足不斷轉變的社會需要，知識管理更是必不可少的要素。我們在知識管理方面的工作，仍處於初步階段，在未來數年仍需再接再厲，繼續努力。

持續綠色作業

作為本港提倡能源效益與節能的先驅，我們一直致力在日常運作中節省天然資源和保護環境。我們採納並推廣綠色採購政策，推動營運基金擴大採用環保規格，以及在各策略業務單位公布採用綠色採購單。此外，我們亦通過優化主要場館的能效，促進能源節約。

去年另一重要行動，是為總部大樓落實「綠建環評」之「既有建築」的鉑金級認證評估工作。評估過程要求大樓以最新的綠色建築科技，進行若干更新及優化工程。有關工程現正順利進行。

總結：創造公眾價值利惠市民

上述根據五大策略進行的工作，是我們透過與客戶的伙伴關係，創造公眾價值利惠市民所着力推展的主幹活動。在宏觀層面，我們也不斷檢視營運基金的運作模式、管理架構和企業管治，尋找改善空間。

舉個例子，我們最近全面檢視了營運基金的企業管治及管理體系。現時的系統始於2003年，採納了「全面優質管理」的理念架構，並於2006年贏得香港管理專業協會優質管理獎金獎。為精益求精，我們最近開始將營運基金的整體運作，與最新的「全面優質管理」理念架構作出比較及修正，找出我們應維持的優勢，須予密切留意以作改善的地方，同時查找紕漏以盡快採取行動作出矯正。

我們期望上述檢視工作，能讓我們為營運基金的管理架構重新聚焦，創造更大公眾價值利惠市民。

Sustain Green Operation

As an early pioneer of energy efficiency and conservation in Hong Kong, we have always endeavoured to save natural resources and protect the environment through our operations. We aim to adopt and promote green practices in procurement by enhancing the use on the list of green specification in EMSTF and promulgating the adoption of green procurement list in our strategic business units. Also, we promote energy savings through optimisation of energy performance of major venues.

A key initiative last year was implementation work for the certification of our headquarters building to the Building Environment Assessment Method (BEAM) Plus Platinum Rating for Existing Buildings, which calls for

revamping and upgrading works using the latest green building technologies. The relevant works are in good progress.

Summing Up: Create Public Value for Community Betterment

Our work under the five strategies forms the pillars supporting our focused effort to create public value for community betterment delivered via long-term service partnerships with our clients. On a more macro level, we are also constantly reviewing our mode of operation, management framework and governance, and seeking opportunities for improvement.

An example is a review of our current governance and management system, for which we have adopted the Total Quality Management (TQM)

framework since 2003 and won the Gold Award of the Hong Kong Management Association Quality Award in 2006. Recently, we have begun benchmarking our operations against the latest TQM criteria for performance excellence. Through this exercise, we shall identify the strengths that we should maintain, the areas for improvement that we should pay close attention to, and the gaps that we would need to fill.

With this, we expect to be able to review and refocus our management framework so as to create greater public value for community betterment.

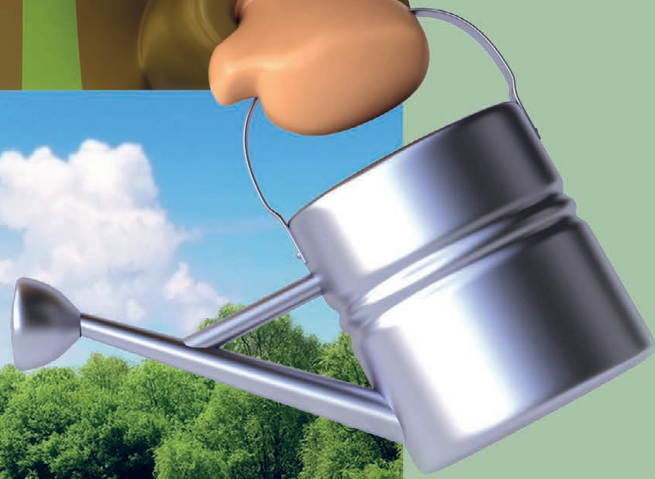


香港飛機工程有限公司的客席講者，在2013品質及安全日與我們分享品質管理和工作間安全的經驗。
Guest speakers from Hong Kong Aircraft Engineering Company Limited graced the Quality and Safety Day 2013 to share quality management and workplace safety experiences.

社會及環保報告

Social and Environmental Report





關於本報告

About this Report

這份機電工程署的環保報告，闡述我們年內在環保和社會方面的表現。本報告也為機電工程署提供一個與持份者溝通的平台，讓他們了解機電工程署在本港可持續發展及逐步邁向低碳生活之旅所擔當的角色。

範圍

本報告涵蓋機電工程署由2013年4月1日至2014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》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。

This is the annual publication of the Electrical and Mechanical Services Department (EMSD) reporting on its annual performance in social and environmental aspects. This report also serves as a communication platform for EMSD and its stakeholders, addressing its role in the sustainable growth of Hong Kong and the journey towards low carbon living.

SCOPE

This report covers the operations of EMSD from 1 April 2013 to 31 March 2014. All data are presented as absolute figures and cover the geographic locations in which EMSD operates. 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. 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.



機遇和挑戰

Opportunities and Challenges

可持續發展對機構的影響

這章闡釋可持續發展及我們機構的動態關係，及彼此如何互相影響。

作為負責任的政府部門，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，及化解要走上可持續發展之路而面臨的挑戰。

對規管服務的影響

作為安全和能源效益的規管機構，規管服務直接受到全球日趨重視的可持續發展風氣影響。國際機構及本港的政策制訂者都要求優先處理可持續發展事項，例如管制排放物和減低能源強度。作為亞太經濟合作組織（亞太經合組織）的成員，香港全力支持2011年的《亞太經濟合作會議檀香山宣言》，致力在2035年前將能源強度降低45%。

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。

由於政府陸續制訂和實施更多能源效益法例，我們的執法工作也會相應增加。與此同時，由於業界及市民大眾需要更多有關能源效益、節約能源和可再生能源的資訊，以及深化對這些範疇的認識，我們會加強公眾教育工作。我們也會提升員工的能力以讓他們更有效地執行職務，並為香港引入適用的先進節能技術。

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 responsible 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 mitigate and manage the challenges it poses in every aspect of our operations.

Impact on Regulatory Services

As a regulator in safety and energy efficiency matters, our Regulatory Services is directly impacted by the increasing worldwide emphasis on sustainable development. Both international bodies and local policy makers call for priority attention to sustainability issues such as emissions control and energy intensity reduction. As a member of the Asia-Pacific Economic Cooperation (APEC), Hong Kong fully supports the 2011 APEC's Honolulu Declaration, and will strive to reduce 45% of energy intensity by 2035.

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 more energy efficiency legislations are enacted and implemented, our enforcement work will also grow. At the same time, our trades and citizens will need more information on energy efficiency and conservation as well as renewable energy, further boosting our public education work. We shall also step up our internal capabilities to perform these duties more effectively and, at the same time, introduce more state-of-the-art energy efficiency technologies and innovative concepts into Hong Kong.

對營運服務的影響

客戶部門期望我們維修保養的工程資產，能有最佳的壽命周期，和可持續的效益表現，這都是合理的要求。但是客戶的工程資產日漸老化，為服務的穩定性帶來威脅。因此，提高對資產管理的重視和推廣良好的管理方法，實已刻不容緩。這方面對我們來說，是個良好的機遇，我們可以提供更多的服務，協助客戶為重要的工程資產進行ISO 55001認證。

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與日俱增。我們也一直積極主動，在可行情況下盡量採用更綠化、更具能源效益和環保的作業方法。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。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，善用各種節能措施，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平，令作為我們客戶時刻都處於本港綠色營運先鋒之列。

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。

Impact on Trading Services

Clients have a reasonable expectation that the engineering assets we help them maintain will enjoy an optimal life cycle and are sustainable in their performance. However, the aging issues of clients' engineering assets have become a potential threat to service reliability. It is therefore an urgent need to raise awareness of the importance of asset management and promote good practices. This is good opportunities for us to provide more services in helping clients to obtain ISO 55001 certification for critical engineering assets.

Clients have been increasing demand for our energy management, energy saving and renewable energy project services. 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. In the long run, the challenge will be one of helping our clients to make good use of the best practices through behavior changes and other means, in order to take the government's energy saving achievements 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.

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.

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，協助他們直接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。

Key examples include the Buildings Energy Efficiency Ordinance, Energy Efficiency Registration Scheme for Buildings, 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 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 provides 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 directly 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. From time to time, we also give technical support to the Environment Bureau on other environment or energy related schemes and initiatives.

環保成效

Environmental Performance

環保責任

我們相信，在創造公眾價值的同時，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，以免後代沒機會使用這些資源。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」，而規管服務也要求所有活動都以保護環境方式進行。

因此，我們的首要任務是避免污染環境，而在無法完全避免的情況下，則盡量減輕有關的影響。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。我們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，我們把品質、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實施該管理系統。

至2009/10年度，機電工程營運基金之下的所有OHSAS 18001認證均已成功提升至2007年版，而於2010/11年度，所有部別亦已將其ISO 9001系統提升至2008年版。部門的一貫做法，是定期檢討及更新我們的環境管理系統，確保符合最新的ISO 14001及有關標準。

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", while RS also requires all its activities to be conducted in an environmental manner.

Our first priority is, therefore, to avoid creating environmental pollution, or reduce the impact if pollution is inevitable. 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 which has evolved over the years. Our 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, we streamlined and combined our various management systems in quality, environment and occupational health and safety into an Integrated Management System (IMS), which was upgraded to ISO 14001:2004 in 2006. In 2008, the entire RS adopted IMS.

By 2009/10, all OHSAS 18001 certificates under EMSTF were successfully updated to the 2007 version, while all divisions have also been upgrading their ISO 9001 system to the 2008 version since 2010/11. It is our departmental practice to regularly review and upkeep the IMS to ensure that it conforms to the latest ISO 14001 and related standards.

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，香港已採納宣言，並會致力達標。

以下是我們在2013/14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2014年3月底，計劃已有約6 100個表列產品型號。

強制性能源效益標籤計劃，完全改變了市民挑選家居電器的方法。
The Mandatory Energy Efficiency Labelling Scheme has fundamentally changed the way our community selects domestic appliances.

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.

Highlighted below are key developments in 2013/14 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 2014, around 6 100 product models have been listed under the Scheme.

強制性能源效益標籤計劃
認住能源標籤 慳電又慳錢

Mandatory Energy Efficiency Labelling Scheme
Look for the Energy Label
Save Electricity, Save Money

ENERGY LABEL
能源標籤

1 級能源 效益最高 (綠色)
Grade 1 products are most efficient (Green)

你可利用「每年耗電量」比較不同型號可節省多少電費
Use "Annual Electricity Consumption" to estimate the money you could save by choosing different models

最佳效能 空調機
Best efficient 空調機
Annual Energy Consumption (kWh/year)
1106
Power Input (W)
254

Room Air Conditioner
Model Number / Year
JBC
R22
10000
10000/2008
R22
R22

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環保成效 Environmental Performance

《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。

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的4.5億元撥款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。計劃雖已於2012年4月7日結束，但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。

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2013/14年度完成，並開始提供服務。一般而言，區域供冷系統較傳統氣冷式空調系統的耗電量，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耗電量達8 500萬千瓦小時，即每年減少排放59 500公噸二氧化碳。

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。

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.

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, and also assisting it in vetting funding applications. 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. Though the Schemes were closed on 7 April 2012, the EMSTF continued to assist in monitoring progress of approved projects until their completion.

District Cooling System

Phases I and II of the District Cooling System (DCS) at the Kai Tak Development began supplying chilled water in 2013/14 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.

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".

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2013/14年度，在機電工程署4.27億元直接採購的貨品中，有1 172萬元的貨品是綠色採購單上的貨品。

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。2013/14年度，有564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。

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覓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，我們已於2010年7月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，供員工參考。

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。我們於本年度為政府各政策局及部門完成了23個節能項目，例如燈光系統、太陽能街燈、高能效太陽能熱水系統、為學校和政府大樓安裝節省用水器材、以水冷式空調系統取代風冷式空調系統和安裝高效能無油離心式製冷機組等。預計這些新設備可每年減省耗電量達490萬千瓦小時。

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 2013/14, from the total amount of \$427 million for direct purchase of goods in EMSD, \$11.72 million was spent on purchases for the products on the green procurement list.

We keep track of the offers from suppliers for the green contents of their products. We shall change the green requirements to "mandatory" 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 2013/14, the updated EMSD Suppliers Lists contained 564 suppliers who were able to provide environment-friendly products for procurement.

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.

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 completed 23 energy efficiency projects for government bureaux and departments, such as installations of lighting systems, stand-alone solar street lights, high energy efficiency solar hot water systems, water-saving devices for schools and government buildings, replacement of air-cooled chillers with water-cooled chillers, and high efficiency oil-free centrifugal chillers. It is expected that these new installations will generate an annual energy savings of around 4.9 million kWh.



我們在2013年為民航處進行了一項試點項目，以節能的90瓦特發光二極管燈取替一盞常規的600瓦特氖光航空障礙燈，十分成功。民航處委託我們於2014年將改善工程擴展到其他航空障礙燈基站。

Subsequent to our successful trial replacement of a conventional 600W-neon obstacle light with a 90W-LED at one of CAD's obstacle light stations in 2013, CAD has entrusted EMSD to replace all neon obstacle lights at the remaining obstacle light stations with LED light in 2014.

為民航處推行環保項目

機電工程署為所有航空障礙燈進行定期檢查和緊急維修，確保運作正常，這是民航處委託我們的工作之一。航空障礙燈提醒機師要小心飛越機場附近的山嶺，確保來往機場航班的安全。2013年12月我們進行了一項試點項目，為一盞航空障礙燈安裝了GSM制式的自動撥號器，並以節能的發光二極管燈取代現有的航空障礙燈。這項試點項目每年節省了2 000多千瓦小時耗電量。因此，我們會於2014年內將這項改善工程擴展到其他航空障礙燈基站。

民航處也委託我們為民航處總部大樓，安裝四套中快型電動車充電設備，推廣使用電動車。

年內另一環保項目，是為民航處航空交通管制大樓、備用航空交通管制大樓及總部大樓內的電梯、洗手間、門柄等作二氧化鈦塗層處理。這種光催化劑塗層，能氧化及化解有機物質，減少空氣中的污染物並殺菌，幫助淨化空氣，改善上述範圍的空氣質素。

Green Project for Civil Aviation Department

EMSD conducts regular inspection and emergency repairs for all hilltop obstacle lights to ensure their proper functioning, which is part of the work entrusted by the Civil Aviation Department (CAD). The lights alert pilots to take extra care in navigating the nearby mountains, ensuring safety of flights to and from the Airport. In December 2013, we installed a trial GSM auto dialer and replaced the obstacle light on one of the obstacle light stations with a more energy efficient Light Emitting Diode (LED) light. The trial project saves over 2 000kWh power consumption per year. Similar modification is being extended to other obstacle light stations in 2014.

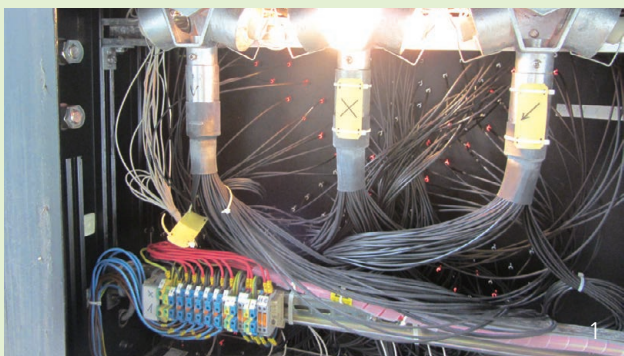
CAD also entrusted us to install four semi-fast electric vehicle charging facility at CAD Headquarters in 2013/14 to promote the use of electric vehicles.

Another environmental initiative in 2013/14 was the application of TiO_2 coating to certain areas such as lifts, toilets and door handles at the Air Traffic Control Complex/Back-up Air Traffic Control Complex/CAD Headquarters to improve air quality in those areas. The coating oxidises and decomposes organic matters and volatile organic compound, and kills bacteria.



我們為民航處升降機提供二氧化鈦塗層的處理，改善升降機空氣質素。

We applied TiO_2 coating to CAD lifts to improve air quality.



我們替運輸署更換行車線管制燈號和可變車速限制標誌，從而提供更好的訊號顯示，以確保青馬管制區的行車安全。以上1-4照片分別為舊式鎢鹵燈；新式發光二極管燈；新式發光二極管燈內部及青馬管制區的行車線管制燈號。
 We assisted Transport Department in replacing the LCS and VLSL to provide a better display of signals in order to ensure road safety in TMCA. Photos 1-4 above show the old Halogen lamp type; the new LED type equipment; the internal of new LED type equipment; and LCS equipment at TMCA, respectively.

更美麗方案：發光二極管行車標誌

安裝於青馬管制區的行車線管制燈號和可變車速限制標誌，自1997年管制區啓用以來，已使用逾17年。現有的光纖式行車線管制燈號和可變車速限制標誌，採用鎢鹵燈泡光源作照明，但由於鎢鹵燈泡的照明效能較低及壽命較短，隨著設備日漸老化，行車線管制燈號和可變車速限制標誌的顯示已逐漸變得暗淡。此外，光纖式行車線管制燈號和可變車速限制標誌正逐步被市場淘汰，部分備用零件短缺，要維持良好操作狀態愈趨困難。

機電工程署獲運輸署委託，更換現有的行車線管制燈號和可變車速限制標誌，以確保青馬管制區的安全運作，從而便利將來的維修保養。我們計劃採用發光二極管式的行車線管制燈號及可變車速限制標誌，更換工程項目已於2014年6月展開。由於發光二極管的可視角度遠較現有的裝置為廣，而且更光亮，可為駕駛人士提供更清晰的交通燈號和訊息。此外，發光二極管式顯示標誌的耗電量較低，使用年限較長，因而較現有燈號及標誌更環保可靠。

LED Traffic Signs Bring Brighter Solution

The Lane Control Signal (LCS) and Variable Speed Limit Sign (VLSL) installed at Tsing Ma Control Area (TMCA) have been in service for more than 17 years since TMCA opened in 1997 and are showing aging problems. The existing LCS and VLSL are fibre optic type illuminating signs using halogen lamps as the light source. Halogen lamp has relative low luminous efficiency and short life cycle. As they age, the displays of these LCS and VLSL have become dimmer. The existing fibre optic type LCS and VLSL are also being phased out of the market, and it has become increasingly difficult to maintain them in good working condition due to lack of certain spare parts in the market.

EMSD was entrusted by Transport Department to replace the LCS and VLSL to ensure the safe operation of TMCA and to facilitate future maintenance of the equipment. We plan to select LED type of LCS and VLSL for this replacement work and the project was commenced in June 2014. As LED has a significantly wider viewing angle than the existing ones and is much brighter, the new signs will provide a clearer display of traffic signals/information to motorists. In addition, LED also consume much less electricity, have a longer serviceable life and are more reliable, hence the new signs are more environment-friendly than existing ones.



我們於伺服器上加建熱氣流通道，將冷和熱的空氣分隔在不同的通道中，以求達至最佳散熱效能。
Staff building a hot aisle containment separating hot and cold aisles in the server room to achieve the best cooling efficiency.



我們全力支持小蠔灣數據中心的電子病歷檔案及其他客戶資料的儲存工作。
Our team is dedicated to supporting the Siu Ho Wan Data Centre for the secure storage of the electronic health record and other client data.

數據中心空調系統綠色創新

我們的小蠔灣數據中心主要負責為政府部門提供數據儲存服務，其中包括食物及衛生局的電子病歷檔案儲存。我們率先為小蠔灣數據中心的空調系統採用了創新的環保高效節能設計，估計可以提高整體散熱效能達20%至30%，此舉是支援其他政府部門的環保措施。

這套獨特的空調系統是位於伺服器機房內，採用一個屏蔽式熱氣流通道設計。該設計是由一個鋁質框架，利用聚碳酸酯隔板置於伺服器機架頂部及每行機架兩旁所組成。屏蔽式熱氣流通道設計是一個高成本效益的解決方案，能把冷和熱的空氣分隔在不同的通道中。

伺服器機房中冷氣流通道的空氣溫度及相對濕度會由相關空調機組加以控制和監測，令它們處於可接受範圍內用作冷卻數據設備。為避免製造額外冷氣，這物理屏障擔當了一個重要角色，以分隔冷熱氣流通道，防止由熱氣流通道到冷氣流通道的再循環氣流，及由冷氣流通道到熱氣流通道的旁通氣流。這屏蔽式熱氣流通道設計能有效地收集由數據設備所產生的熱量，並帶回到空調機組，使該系統能24小時更節能地運作。

該節能空調系統乃數據中心第二期擴建工程的一部分，項目於2013年2月開始，並於2013年12月完成。

Data Centre Has Innovative, Green Air-Conditioning System

The Siu Ho Wan Data Centre stores vital data for various government departments, such as electronic health records of the Food and Health Bureau. Our initiative to redesign its air-conditioning system with innovative, energy efficient measures aims to improve the overall cooling efficiency by 20% to 30% as a green measure to support client departments.

This unique air-conditioning system comprises a hot aisle containment design in the server room. Formed by an aluminium framework with polycarbonate inserts on top of the server racks and at the two ends of the row, the hot aisle containment is a cost effective solution to separate the air between cold and hot aisles.

The air temperature and relative humidity in the cold aisle of server room are maintained in an acceptable range by the air-conditioning system for cooling the server equipment. In order to minimise the unnecessary supply of conditioned air, the physical barrier plays an important role to divide the cold and hot aisles which prevents both re-circulation air flow from hot aisle back to the cold aisle and bypass air flow directly from cold aisle to hot aisle respectively. This hot aisle containment design results in efficient collection of the dissipated heat from the server equipment back to the air-conditioning units, so as to operate the data centre in a more energy efficient manner round the clock.

The energy saving air-conditioning system is part of the Phase II expansion of the data centre, construction of which started in February 2013 and was completed in December 2013.

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。2013/14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：

- 2013年4月在中國北京舉行的「亞太經合組織能源效益及節能專家小組第41次會議」。
- 2013年4月在越南河內舉行的「亞太經合組織新能源及可再生能源技術專家小組第40次會議」。
- 2013年10月在中國北京舉行的「亞太經合組織新能源及可再生能源技術專家小組第41次會議」。
- 2013年11月在越南峴港舉行的「亞太經合組織能源工作小組第46次會議」。
- 2013年11月在泰國曼谷舉行的「亞太經合組織能源效益及節能專家小組第42次會議」。
- 2014年3月在日本東京由亞太經合組織和東南亞國家聯盟聯合舉辦的「能源統計工作坊」。

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 2013/14, EMSD representatives attended a variety of regional and international conferences and meetings, with key ones as follow:

- The 41st Meeting of APEC Expert Group on Energy Efficiency and Conservation, April 2013, Beijing, China.
- The 40th Meeting of APEC Expert Group on New and Renewable Energy Technologies, April 2013, Hanoi, Vietnam.
- The 41st Meeting of APEC Expert Group on New and Renewable Energy Technologies, October 2013, Beijing, China.
- The 46th Meeting of APEC Energy Working Group, November 2013, Da Nang, Vietnam.
- The 42nd Meeting of APEC Expert Group on Energy Efficiency and Conservation, November 2013, Bangkok, Thailand.
- APEC/ASEAN (Association of Southeast Asian Nations) Joint Workshop on Energy Statistics, March 2014, Tokyo, Japan.

節約營運資源

電力

我們主要的用電地點包括九龍灣總部大樓（連同企業數據中心）、加路連山工場、芬園車輛維修站、小蠔灣車輛維修站，以及香港國際機場空郵中心的機電工程署工場。年內用電量增加5.8%，如排除因為企業數據中心服務需求增加之因素，2013/14年度的用電量則比2012/13年度減少4.6%。

水

主要用於空調、園藝灌溉、飲用和清潔等。年內用水量較2012/13年度增加8.1%，原因是機電工程署總部大樓進行的活動增加，導致用水量上升。

煤氣

加路連山工場是使用煤氣供應熱水的主要場地。2013/14年度的煤氣用量較2012/13年用量增加。

CONSERVATION OF OPERATIONAL RESOURCES

Electricity

Major venues of electricity consumption include our Kowloon Bay Headquarters (including Corporate Data Centre), Caroline Hill workshop, Fan Garden Vehicle Depot, Siu Ho Wan Vehicle Depot, and the EMSD workshop in the Air Mail Centre at the Hong Kong International Airport. Electricity consumption increased by 5.8% compared to last year. If the effect of activity changes due to increased service demand for the Corporate Data Centre is excluded, there would be a net reduction of 4.6% in electricity consumption.

Water

Water is mainly consumed for air-conditioning, gardening, drinking and cleaning. Water consumption increased by 8.1% compared to 2012/13, which was due to increased activities in EMSD Headquarters in the year.

Towngas

The Caroline Hill workshop is the major venue using towngas for water heating. Towngas consumption in 2013/14 was increased.

機電工程署的電力、水及煤氣用量 ELECTRICITY, WATER AND TOWNGAS CONSUMPTION AT EMSD

	11/12	12/13	13/14
電力 Electricity ('000kWh)	12 872	12 960	13 714
水 Water (m ³)	53 897	46 168	49 912
煤氣 Towngas (MJ)	137 808	131 760	223 728

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。2013/14年度的用紙量較原定上限少2.6%。由2001年起，我們已廣泛採用由循環再造纖維製成的環保紙。2013/14年度，環保紙佔部門總用紙量97.6%。原木紙只用於對外文件，而且盡量少用。我們在2013/14年度採購了2 984個碳粉盒，而由2005/06年度開始，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、舊充電電池、金屬廢料、舊車胎及光管為主。

MATERIALS

Materials Used in Offices

Paper and toner cartridges are the main materials used in offices. We make every effort to reduce our paper consumption. In 2013/14, paper consumption was 2.6% below the set quota. Since 2001, we have adopted the extensive use of environment-friendly recycled paper made from recycled fibre. In 2013/14, 97.6% 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 2 984 toner cartridges in 2013/14 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 re-condition and re-use 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。2013/14年度，我們的運輸工具直接產生的二氧化碳約為1 660公噸，而使用電力間接排放的二氧化碳則約為9 512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2014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5 859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%。我們還有三部電動車。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」。

EMISSIONS

Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions are widely acknowledged as a cause of global warming and climate change, and 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 2013/14, direct emissions from our transport activities amounted to about 1 660 tonnes of CO₂ and our electricity consumption gave rise to about 9 512 tonnes of CO₂.

Transport

The use of transportation vehicles in EMSD operations consumes non-renewable fossil fuels and generates GHG emissions. As of 31 March 2014, we have a fleet of 220 vehicles including lorries, vans, saloon cars and motorcycles to deliver our services, and at the same time maintain 5 859 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, reduced use of transportation 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 three 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".

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，可生產高達350千瓦電量的天然能源。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2014年3月底，該系統已累積生產193萬千瓦小時的能源。

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 2014 was 1.93 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」及「『不要鎢絲燈泡』節能約章」，鼓勵社會減少空調用電量，以及停止使用能源效益低的鎢絲燈泡。
- 於2013/14年度推出第二及第三期《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2013年11月14日推出為氣體煮食爐而設的自願性能源效益標籤計劃。
- 《建築物能源效益守則》2012年版的照明功率標準已經提升，並於2014年2月刊憲。
- 於2013年3月及9月分別推出《能源審核守則2012年版技術指引》及《建築物能源效益守則2012年版技術指引》。
- 根據從多個淡水冷卻塔抽取的891個水樣本的測試結果，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，以減低冷卻塔可能傳播退伍軍人病症的公眾衛生風險。

前瞻

- 就自願性能源效益標籤計劃擴展至涵蓋微波爐，進行籌備工作。
- 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2014/15年度繼續抽驗約800個淡水冷卻塔的水樣本，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 and the Energy Saving Charter on No Incandescent Light Bulbs, aiming to reduce electricity consumption for air-conditioning and phase out the use of energy-inefficient incandescent light bulbs.
- Published the second and the third issues of the Energy Label Newsletter in 2013/14 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 Gas Cookers on 14 November 2013.
- Upgraded the lighting power density standards in the Building Energy Code 2012 Edition and gazetted in February 2014.
- Published the Technical Guidelines on Energy Audit Code 2012 Edition and the Technical Guidelines on Building Energy Code 2012 Edition in March and September 2013 respectively.
- Took 891 water samples from fresh water cooling towers (FWCTs), and requested their owners to carry out abatement action to reduce the potential public health risk of spread of Legionnaires' disease. EMSD began implementing measures since 2011/12 to regulate contaminated FWCTs, with delegated powers under the Public Health and Municipal Services Ordinance (PHMSO).

Way Forward

- Prepare for the extension of the Voluntary Energy Efficiency Labelling Scheme to cover microwave ovens.
- Review the Building Energy Code and Energy Audit Code.
- Continue to conduct annual water sampling of about 800 FWCTs in 2014/15 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。作為良好的企業，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，並鼓勵大家多參與專業工程學會的活動，為提升本地工程專業的水平及發展作出貢獻。

員工之僱用和發展

僱用

截至2013/14年底，我們共有5 168名僱員。我們承諾維護平等就業政策，目前有212名員工為輕度殘疾人士，佔員工總人數約4.1%。

年內，我們參與《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。

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 working for us, 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.

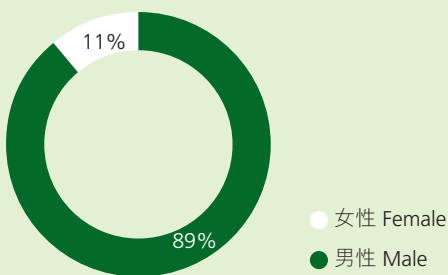
STAFF EMPLOYMENT AND DEVELOPMENT

Employment

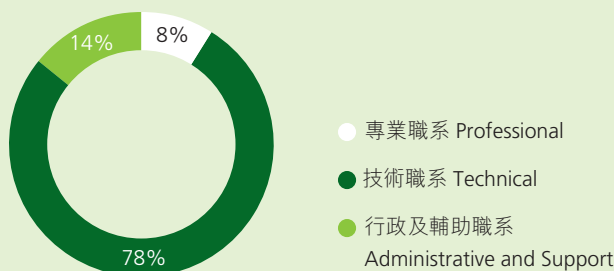
At the end of 2013/14, we have 5 168 employees. As a commitment to upholding the equal opportunity employment policy, we currently have 212 employees with minor disabilities, representing about 4.1% of our total workforce.

During the year, EMSD joined the Talent-Wise Employment Charter and Inclusive Organisations Recognition Scheme as an Employer Organisation to promote the employment of persons with disabilities.

按性別劃分
BREAKDOWN BY GENDER



按職級劃分
BREAKDOWN BY GRADE



僱用人員 Strength : 5 168名
* 截至2014年3月31日 As at 31 March 2014

員工病假

在2013/14年度，部門因員工放取病假而失去的工作天共20 098.5天，即相等於每名員工約3.89天。

Sick Leave

In 2013/14, a total of 20 098.5 working days were lost due to sick leave. This is equivalent to around 3.89 days per employee.

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。我們推廣持續進修的文化，並通過人力資源方面的有效管理和不斷改進，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。

在未來兩年，我們會透過發展部門「知識群體」以加強知識管理。

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。這計劃一向公認是香港工程界的最佳在職培訓計劃之一，目的是確保香港能有足夠的受訓工程師，滿足業界的需要。在2013/14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19位見習工程師。

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. We are committed to promoting a continuous learning environment to develop 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.

We will enhance knowledge management by developing departmental "Knowledge Communities" in the next two years.

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 2013/14, we recruited 19 engineering graduates specialising in electrical, mechanical, electronics, building services, information technology and biomedical engineering.



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。
We fully support our employees in pursuing learning and development opportunities that will eventually enhance their contribution to the organisation.

見習技術員訓練計劃

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平的訓練，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50多年來，為業界培訓了超過5 000名學徒。在2013/14年度，我們招募了59名見習二級技術員（三年訓練制）和32名見習一級技術員，同時新增設見習二級技術員（四年訓練制）的職位，並招募了93人。除提供在職訓練外，我們亦資助學徒修讀香港專業教育學院的工藝證書課程和高級文憑課程。

我們在2012/13年將學徒職位名稱更改為見習二級技術員（前稱技工學徒）及見習一級技術員（前稱技術員學徒），並加強宣傳工作，例如：到學校舉辦講座、製作小冊子及與業界合辦職業展覽等。目的為吸引更多的年輕人透過加入機電工程署而晉身機電業界。

培訓目標

在2013/14年度，每名員工的每年平均受訓日數為4.74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。

Technician Training Scheme

Another key training programme is our Technician Training Scheme which aims to provide systematic and good standard training to satisfy the present and future needs of EMSD as well as the community. The long-standing scheme has been running for over 50 years, successfully trained more than 5 000 apprentices for the profession. In 2013/14, we recruited 59 technician trainee II (three-year training) and 32 technician trainee I. A new post namely technician trainee II (four-year training) was created and we recruited 93 persons. Besides on-the-job training, we sponsored the apprentices to attend craft certificate courses and higher diploma courses in the Institute of Vocational Education.

To attract more young people to embrace the E&M trade through joining EMSD as apprentice, we renamed the post title of the apprentice to technician trainee II (formerly known as craft apprentice) and technician trainee I (formerly known as technician apprentice) in 2012/13, and enhanced the promotion works such as conducted briefing sessions at schools, published leaflets and coordinated with trades to organise job expo.

Training Targets

In 2013/14, we achieved 4.74 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.



每名員工每年平均受訓日數 TRAINING DAYS PER STAFF PER YEAR ON AVERAGE

2013/14 年受訓日數
2013/14 Training Days

4.74

受訓目標日數
Training Target Days

4.5

健康安全的工作環境

職業健康及安全

機電工程署對職業健康及安全十分重視。我們的職安健政策及架構，確保部門各部分的職安健都達至並維持在高水平。

我們的「職業安全及健康策導委員會」，由高層管理人員組成，負責制訂部門的職安健政策、檢討部門內部及承辦商的意外事故，並監察部門在執行職安健措施方面的情況，以令安全表現得以持續改善。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，定期進行會議，落實部門的職安健宣傳活動和措施。

機電工程署設有安全管理制度及程序，以實踐我們為員工提供一個安全工作環境的承諾。透過定期舉辦各種職安健比賽和宣傳活動，包括首長級人員參觀工地及由部門安全專業人員實地視察和作員工簡報會，以及所有前線監工必須接受強制性安全訓練等，努力提高工作場所的安全。以下是我們於2013/14年度進行的部分工作。

年內新猷

2013/14年內，我們為三類工種引進了施工前安全檢查表格，即高空工作、路面工作、和涉及部門同事使用化學品的工作。我們更提倡一套「健體十式」，供同事在每天早操時多一個選擇，並安排了這套健身操的培訓班，也於部門的內聯網提供示範圖片和短片。

此外，部門也計劃將現有的「綠咭」重溫課程由半天增至一天，以加強員工的安全知識。至於合約安全方面，我們也就升降機與自動梯及機電工程合約工作，舉辦了兩場研討會，目的是為業界人士提供平台，探討除了滿足合約要求外，如何進一步加強各種安全措施。我們會繼續與業界合作，舉辦安全研討會和其他活動，推動工作安全。

A HEALTHY AND SAFE WORKING ENVIRONMENT

Occupational Health and Safety

At EMSD, we accord great importance to Occupational Safety and Health (OSH). Our Safety and Health Policy and infrastructure help ensure that a high standard of OSH in the workplace is achieved and maintained throughout the department.

The Steering Committee on Occupational Safety and Health, which comprises members of senior management staff, has been set up in EMSD to formulate departmental OSH policies, review in-house and contractor safety performance and oversee the implementation of OSH initiatives with a view to enabling continuous improvement in safety performance. Our Departmental Occupational Safety and Health Committee, which comprises management and staff representatives from branches/divisions as well as departmental consultative committees, meets on a regular basis to implement the departmental OSH promotional activities and initiatives.

EMSD have safety management systems and procedures in place to achieve our commitment of maintaining a safe work place for our employees. We strive to enhance workplace safety by regularly organising various occupational safety and health competitions and promotional activities, site visits by directorate officers, site inspections and staff briefings by our in-house safety professionals, and mandatory safety training for all frontline supervisors. The following are some examples in 2013/14.

New Initiatives

During 2013/14, we introduced pre-work safety check forms for three types of work, namely work at height, work on roads and use of chemicals by in-house staff. Furthermore, we recommended "Ten Strengthening Movements" as an additional option for staff morning exercise. Training sessions on the exercises were organised, supplemented by pictorial and video "demos" on the departmental Intranet.

Plans were also underway to extend our existing "green card" revalidation course from half-day to full-day in order to enhance staff knowledge of work safety. As far as contract safety is concerned, we have organised two contract work safety seminars on lift and escalator work as well as E&M work. The seminars aimed to establish a platform for industry practitioners to explore effective safety measures over and above contract requirements. We shall continue to collaborate with the trade to organise safety seminars and events to promote safety.

我們在浮標風速計支柱上安裝齒輪箱，使維修員工和航班更安全。
Installing a gear box onto the anemometer mast of the water buoy has enhanced safety for maintenance staff and air traffic.



(安裝前) 為風速計支柱安裝齒輪箱前，高空作業對維修員工有潛在危險。
(Before installation) Maintenance work before installing the gear box on the anemometer mast posed potential hazards of working at height.



(安裝後) 改善風速計支柱設計後，維修工作更安全。
(After installation) Maintenance work after fixing the anemometer mast in the cage is much safer.

新設計提升員工與航班安全

我們為香港天文台氣象浮標上的儀器主動提出改善設計方案，不單解決了維修人員的安全問題，更促進航班安全。

香港國際機場對開水域現共設有五個氣象浮標，每個均有儀器自動收集和測量風力、氣壓、溫度和濕度等資訊，通過無線電波，每十秒將即時資訊傳送到機場航空交通管制塔內的天文台機場氣象所。這些天氣資訊對預測機場周邊地區的風切變十分重要，有助飛機師緊隨預定的飛行路徑，確保航班安全。

然而，維修人員由於要攀爬維修籠至浮標頂部進行工作，會有潛在危險。我們在徵得天文台和海事處的准許後，主動重新設計風速計支柱，安裝一組密封式金屬齒輪箱，使浮標頂部的風向及風速監察裝置可輕易降下，工作人員再無需攀爬維修籠，已可進行維修。新設計既提升了工作安全，又不影響浮標的堅固性和穩定性，裝置的可用時間也見增加，有助提高航班安全。

New Design Enhances Staff and Air Traffic Safety

Our initiative to re-design the anemometer masts for the Hong Kong Observatory (HKO) weather buoys has solved safety issues for maintenance staff and contributed to better aviation safety.

Five weather buoys are currently deployed in waters off the Hong Kong International Airport, each with an automatic weather station mounted on a three-metre diameter buoy, measuring weather information such as wind, air pressure, temperature and humidity. Each station transmits the information by radio to the HKO Airport Meteorological Office in the Airport Traffic Control Tower every ten seconds. The information is vital for estimating wind shear over the areas around the airport, which helps pilots stay in their intended flight paths and ensures aviation safety.

However, climbing over the maintenance cage of the weather buoy and up to the anemometer mast to carry out maintenance work poses potential hazards for staff. With consent from HKO and the Marine Department, we took the initiative to re-design the anemometer mast by installing a gear box onto it so that the mast can be lowered down for maintenance work, eliminating the need to climb up the cage. The new design has enhanced maintenance work safety without compromising the robustness and stability of the buoys. System availability has also been raised, thus enhancing aviation safety.



得獎同事出席頒獎禮。
Our award-winning colleagues at the prize presentation ceremony.



機電工程署及機管局代表與各參與機構代表，一起舉行切燒豬儀式。
EMSD staff and representatives from AA and other organisations sharing an auspicious "roast-pig carving" moment.

機場團隊獲機場安全運動比賽獎

機場工程分部同事於機場管理局每年一度的「飛行區及行李處理大堂安全運動」中，奪得多個獎項。安全運動的目的，是鼓勵及推廣安全文化，並提高行李處理大堂工作人員的安全意識，從而達至零意外。頒獎禮已於2014年1月9日舉行，行李處理組同事張樹興先生和李志堅先生，均獲頒「模範安全員工」獎，其出色表現備受表揚。

香港國際機場過去一年的客運量高達5 990萬人次，在機場維持高度安全的工作文化至為重要。我們一直都積極參與機場管理局的各種安全運動和措施，未來也會繼續支持。

Airport Team Wins Airport Safety Campaign Award

Our Airport Engineering Services Sub-division has won various awards at the annual Airfield and Baggage Hall Safety Campaign organised by the Airport Authority (AA). The campaign aims to achieve zero accident through encouraging and promoting a safety culture by raising the safety awareness of the baggage handling staff. Our colleagues Mr Cheung Shu-hing and Mr Lee Chi-kin, both of the Baggage Handling System team, were awarded the Safety Role Model Award. Their outstanding performance was recognised at a prize presentation ceremony held on 9 January 2014.

With passenger traffic of over 59.9 million passengers last year, the Hong Kong International Airport demands a strong safety culture at the workplace. We have always been supportive of the AA's safety campaigns and initiatives and shall continue to do so in future.



機電工程署講者向承辦商強調，部門的最終目標是所有工地都做到零意外。
EMSD speakers reminded contractors that our ultimate goal was zero accident at all work sites.

研討會提倡合約工作安全

我們於2013年11及12月，假機電工程署總部大樓舉行了兩場合約工作安全研討會，探討升降機與自動梯和機電工程的合約工作安全問題，共吸引了來自83個承辦商的320位人士參加。研討會的目的，是與業界人士分享和提倡有關工作安全的最佳做法，以及各種公德措施。與會講者一致強調，落實各種最佳做法、並在過程中注入創意，是加強工作安全和提高設施可用性的關鍵。

Seminars Promote Contract Work Safety

We held two contract work safety seminars on lift and escalator as well as E&M work at the EMSD Headquarters in November and December 2013, which attracted 320 participants from 83 contractors. Organised for industry practitioners, the seminars shared and promoted best practices in work safety and considerate practices. Speakers unanimously emphasised that adopting industry best practices and innovation the key to work safety and service reliability.

員工關係

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2011/12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為6.5分（10分為滿分），與上次於2009年進行的調查相比，輕微上升0.2分。過去幾年的員工整體滿意度均見穩定。下一次調查將於2014/15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審核，跟進工程的進度，並盡量避免工程對附近地方造成不便或滋擾。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。

為了加強員工對承辦商及供應商管理的技巧和誠信，部門於2011年7月推出了《機電工程項目管理手冊》，並定期更新內容，最新版的《機電工程項目管理手冊》第四版已經於2013年3月推出。此外，還有為負責合約管理的員工定期安排有關合約管理、承辦商管理、合約安全及誠信管理的簡介會。

STAFF RELATIONS

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 2011/12 survey, every employee at senior engineer rank or below was offered an opportunity to express his/her views through a survey questionnaire. The overall staff satisfaction rating from the survey was 6.5 (on a scale of 10), which was a slight improvement of 0.2 as compared to the previous survey in 2009. Overall satisfaction levels in the past years have shown a steady trend. The next survey will be conducted in 2014/15.

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 neighbourhoods where the works take place. Regular reviews on contractors' performance are carried out to assess contractor performance throughout the project.

To enhance our staff skill and integrity in managing the work of contractors and suppliers, the Project Administration Handbook (PAH) for E&M Engineering Works was first issued in July 2011. Regular reviews were conducted to include the latest guidelines and updated administrative measures deployed by the department. The Fourth Revision of the PAH(E&M) was issued in March 2013. 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，同時致力調低利潤，讓客戶保留更多資源優化社會服務。

為持續改進服務，我們於2014年年初委託了獨立顧問公司進行新一輪的客戶意見調查，以量度80個客戶部門對機電工程營運基金服務的滿意度。是次客戶意見調查成功發出1 895份問卷，收回的已完成問卷有993份。整體回應率為52.4%。待顧問公司提交調查報告後，我們會研究調查結果，並着手改進，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水電及氣體供應。

政府部門及營運基金客戶的研討會及論壇

年內，我們繼續向其他政府部門和營運基金客戶，推廣能源效益與節能的好處和最新發展。有關課題包括一般的最佳做法及個別範疇的有效節能措施。

政府能源消耗匯報及監察

在2013年6月至7月，我們舉辦了三場「政府能源消耗匯報及監察」簡介會，除了匯報每年的能源消耗情況外，亦向各同事介紹有關節約能源的最新措施，以深化政府的節能文化。

CLIENTS

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

In order to provide quality and ever improving services for our clients, we commission an independent research consultant in early 2014 to conduct a new round of Customer Opinion Survey to gather feedback from 80 of our client departments on our Trading Services. At the end of the survey, 993 out of the 1 895 questionnaires successfully dispatched were returned. The overall response rate is 52.4%. We will act upon receiving the survey report from the consultant, 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 utilities supply to citizens affected by major incidents.

Seminars and Forums for Government Departments and EMSTF Clients

During the year, EMSD continued to promote the benefits and latest practices in energy efficiency and conservation to other government departments, public organisations and EMSTF clients. The topics covered general best practices as well as energy saving tips for specific areas.

Government Energy Consumption Reporting and Monitoring

Three briefings on "Government Energy Consumption Reporting and Monitoring" were held in June and July 2013, where we reported on the latest status of government energy consumption to colleagues from various bureaux and departments. We also updated participants on the latest energy saving measures in order to foster government's energy saving and conservation culture.

我們還邀請了政府產業署的外判物業管理公司分享「政府辦公大樓的良好內務措施」，中華電力有限公司則介紹「電能回購」，而我們的工程師亦主講了「能源消耗分析與報告」、「機電工程署總部大樓之良好內務措施」和「如何透過能源審核找出能源管理機會」。講者與參加者都有良好互動，積極分享經驗。

應用「常態化比較電力消耗」工作坊

2014年1月，我們為香港警務處舉辦了「常態化工作坊」，讓參加者重溫如何在相約的操作環境條件下，比較不同年度的電力消耗。

社區

我們的員工一向積極服務社會。他們除執行職務，向市民傳達機電安全和能源效益的信息外，還在工餘時參與義工服務，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平。

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、話劇表演、遊戲、問答比賽、講座及研討會，以滿足不同社會群組的需要。

We also invited a property management contractor for the Government Property Agency to share “Good Housekeeping Practices in Government Office Buildings”. A CLP Power representative briefed participants on the company's pilot rebate programme and our engineers spoke on the “Review and Report of Energy Consumption”, “Good Housekeeping Practices in EMSD Headquarters” and “Energy Audit – Identifying Energy Management Opportunities”. The presentations were followed by lively discussion and sharing between speakers and the audience.

“Normalisation Workshop” on How to Compare Electricity Consumption

In January 2014, we held a “Normalisation Workshop” for the Hong Kong Police Force, to refresh participants on how to compare annual electricity consumption in a similar operating environment.

COMMUNITY

Our staff have long been active in serving the community, both in their work duties to reach out to the public to disseminate E&M safety and energy efficiency messages, and as 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 ten years. 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, drama performances, game contests, quizzes, talks and seminars tailored to meet the needs of specific segments of the public.



機電工程署代表與講者合照。
Speakers and EMSD representatives at the forum.



研討會反應熱烈，吸引了約700名人士參加。
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

我們於2013年11月，舉辦了兩場「淡水冷卻塔和建築物能源效益的規管及實務」周年技術研討會，吸引了約700名人士參加。研討會目的是向業界及持份者，包括大廈業主、物業管理公司、顧問公司和承辦商，宣傳淡水冷卻塔的規管及實務事宜，並推廣建築物能源效益。

研討會分享了規管淡水冷卻塔的最新發展，並就淡水冷卻塔設計安裝、運作維修、水處理以及其他替代水源方面進行技術交流和分享經驗，並向業界簡介已於2012年全面實施的《建築物能源效益條例》及有關近況。

Technical Forum on Fresh Water Cooling Towers and Buildings Energy Efficiency

Two sessions of our annual "Control and Practice of Fresh Water Cooling Towers and Buildings Energy Efficiency" were held in November 2013 and attracted about 700 participants. The forum provided a platform to promote the control and practice of fresh water cooling towers, and briefed the trades and stakeholders on buildings energy efficiency. They included building owners, property management companies, consultants and contractors.

Topics covered included latest developments in the enhanced regulatory control of fresh water cooling towers, design and installation, as well as experience sharing on good operation and maintenance practices of cooling towers, water treatment management and technologies of alternative water sources. The forum also briefed the trades on the new Buildings Energy Efficiency Ordinance and the latest developments since its implementation in 2012.

《升降機及自動梯條例》簡報會

我們在2013/14年度於全港各區舉行了48場《升降機及自動梯條例》(條例)簡報會，向市民、業主立案法團及物業管理機構宣傳該條例。簡報會介紹條例規定升降機及自動梯負責人的責任，並講解如何管理升降機及自動梯的工作，同時鼓勵與會者為舊式升降機進行優化工程。我們也為香港物業管理公司協會會員，舉行了兩次簡報會，闡釋如何選擇及管理註冊升降機與自動梯承辦商。



公眾人士參與簡報會，了解新條例內容。
Members of the public attended a briefing on the new Ordinance.

Briefings on the New Lifts and Escalators Ordinance

Forty-eight briefing sessions were held in 2013/14 throughout Hong Kong to promote the new Lifts and Escalators Ordinance (LEO) to the general public, owners' corporations, and property management agencies. Speakers explained the duties of "Responsible Persons" for lifts and escalators under the LEO, briefed participants on how to manage the maintenance works of lifts and escalators, and also promoted the modernisation of aging lifts. We also held two briefing sessions for members of the Hong Kong Association of Property Management Companies on how to select and manage registered lift and escalator contractors.



我們的示範員正解釋系統技術。
Our demonstrator explained a technical point.



攤位遊戲吸引了不少兒童參與。
Children taking part in our interactive games.

「創新科技嘉年華2013」展示智能交通系統

由創新科技署舉辦的「創新科技嘉年華2013」，於2013年11月2至10日假香港科學園舉行。機電工程署今屆主題是智能交通系統，攤位展示了我們設計及策劃的兩項工程：數碼聲音轉播系統及紅燈執法照相機。

是次嘉年華的總入場人次創出23萬新高，證明公眾對創新及科技的興趣日增。我們攤位的有趣互動遊戲及示範，更吸引了大批市民參與；市民並通過攤位活動，親身體驗我們可靠高效的機電工程服務。



市民對智能交通系統感興趣。
Members of the public were interested in the Intelligent Transport Systems demonstrations.

InnoCarnival 2013 Showcases Intelligent Transport System

The InnoCarnival 2013, organised by the Innovation and Technology Commission, was held from 2-10 November 2013 in the Hong Kong Science Park. The theme of the EMSD pavilion was "Intelligent Transport System", which showcased two applications – the Rebroadcasting systems for Digital Audio Broadcasting and Red Light Camera, both designed and implemented by EMSD.

The InnoCarnival 2013 attracted a record number of over 230 000 visitors, indicating growing public interest in innovation and technology. Through interactive games and demonstrations, the EMSD pavilion attracted many visitors to take part in our booth activities and experienced first-hand our reliable and efficient E&M services.

部門義工辦長者講座 Our Volunteers Organise Talk for the Elderly



我們的見習工程師和見習技術員，為基督教家庭服務中心的長者，於2013年8月8日舉辦了一個家居機電安全和能源效益講座。這類義工活動是機電工程署回饋社會的活動之一。
Our engineer and technician trainees organised a briefing for the elderly at the Christian Family Service Centre on domestic E&M safety and energy efficiency on 8 August 2013. Such volunteer activities are part of EMSD's efforts to give back to the community.

單車隊愛心義騎 Cycling Team Rides for Charity



社區活動
COMMUNITY
ACTIVITIES

機電工程署義工於2013年10月12日，參加了全港首個夜間慈善單車活動－為香港防癌會籌款的「綠線義行」。活動全程26公里，於沙田舉行。當晚機電工程署署長陳帆先生更親自領隊，而高層管理人員則捐款贊助車隊。
Our volunteers took part in Hong Kong's first evening charitable cycling event on 12 October 2013. The "New Town Rider – Night Ride" was a 26-kilometre cycling event which took place in Sha Tin, and raised funds for the Hong Kong Anti-Cancer Society. Mr Frank Chan, Director of Electrical and Mechanical Services, led our cyclists team while senior management sponsored the team.



機電安全健步行 E&M Safety Walk



部門60多名員工及家屬和高層管理人員，齊於12月8日參加了由香港機電業工會聯合會和香港機電工程師商聯會，於沙頭角農莊合辦的「機電安全健步嘉年華2013」，進行籌款及提倡地盤零意外。More than 60 EMSD staff members, their families and friends as well as our senior management participated in the "E&M Safety Walk and Carnival Fair 2013" on 8 December at the Sha Tau Kok Farm. The fund-raising event was jointly organised by the Federation of Hong Kong E&M Industries Trade Unions and the Hong Kong Federation of E&M Contractors Limited, which also promoted the goal of zero accident at work sites.

支持傷健共融日 Supporting Rehab Power Day



我們參加了香港復康力量於10月26至27日假維多利亞公園舉行的「復康力量傷健共融日2013」，部門攤位更特別設計了遊戲，鼓勵市民以更具能源效益的燈具取代鎢絲燈泡，並展示了機電工程署的其他能源效益計劃。We supported the "Rehab Power Day 2013", held on 26-27 October in Victoria Park by Hong Kong Rehabilitation Power. The EMSD booth used specially designed fun games to promote the replacement of incandescent light bulbs by more energy efficient lighting fixtures, and showcased other EMSD energy efficiency schemes.



參與無國界義工日 Taking Part in Volunteers' Day



部門的見習工程師於8月18日，參加了由「無國界義工」舉辦的「2013無國界義工日」大型周年活動。當天我們的義工隊探訪了兩家安老院舍，並以有趣的話劇和遊戲，提醒長者注意機電安全和節約能源。Our engineer trainees participated in the "Volunteers' Day 2013", a large-scale annual event organised by Volunteer Space on 18 August. On the day, the EMSD team visited two homes for the elderly, and used fun drama and games to raise their awareness of E&M safety and energy efficiency.

參與環保嘉年華 宣揚節能訊息 Promoting Energy Efficiency at Green Carnival 2014



我們參加了環保促進會於2014年1月12日假九龍公園舉行的「環保嘉年華」，也是這周年活動的支持機構之一。部門的攤位遊戲，圍繞如何建設低碳城市及選用高能效燈泡，吸引了不少市民參與。
EMSD participated in the Green Council's annual "Green Carnival" held on 12 January 2014 at Kowloon Park, as one of the supporting organisations. Our booth featured games about building a low-carbon city and using highly energy efficient light bulbs, attracting numerous visitors.



齊為公益百萬行 Colleagues Walk for Millions



2014年1月5日，部門130多名同事與親友參加了香港公益金舉辦的「港島、九龍區百萬行」，在部門高層率領下，順利完成了由黃泥涌峽道至香港仔郊野公園的行程。
More than 130 colleagues, their families and friends took part in the "Hong Kong and Kowloon Walk for Millions" on 5 January 2014, organised by the Community Chest. Led by our senior management, EMSD participants completed the walk from Wong Nai Chung Gap Road to the Aberdeen Country Park.

樂施毅行者2013
Oxfam Trailwalker 2013



機電工程署同事組成多個團隊，參加「樂施毅行者2013」，為樂施會各項扶貧救災工作籌募經費。跑過終點的是「巨大動力隊」。
Our staff members formed several teams to participate in the Oxfam Trailwalker 2013 to raise funds for Oxfam's various poverty alleviation and emergency relief projects. Passing the finishing line was the Immense Power Team.

保良局慈善步行
Po Leung Kuk Charity Walk



機電工程署30多位同事於2014年3月2日連同親友，齊參加「保良局慈善步行」籌款，為該局轄下260個服務單位籌募拓展經費。
More than 30 EMSD colleagues and their families and friends joined the Po Leung Kuk Charity Walk on 2 March 2014 to raise funds for its 260 service units to expand their services.



東區醫院籌款晚宴
Eastern Hospital Charity Dinner



2013年11月，我們參與了東區尤德夫人那打素醫院慈善信託基金的籌款晚宴，支持其推動醫療和醫學培訓的工作，並促進該院在其社區的健康服務。
In November 2013, EMSD participated in a charity dinner of the Pamela Youde Nethersole Eastern Hospital Charitable Trust, to support its cause to promote medicine and medical education as well as the health and welfare of the community which the hospital serves.

昂步棧道2014
Ngong Ping Charity Walk 2014



2014年1月12日，機電工程署四位同事參加了是次沿風景秀麗的「昂坪360救援徑」而行的慈善籌款步行，為香港青年旅舍協會籌募經費，支持探索大自然、推廣旅舍文化和環境保育的活動。
A team of four EMSD colleagues took part in the walk along the scenic Ngong Ping Trail on 12 January 2014, to raise funds for the Hong Kong Youth Hostels Association to explore nature, promote hostel culture and conservation.

與持份者溝通

作為政府機構，我們的持份者包括客戶、決策局、僱員、受規管業界、工商業組織、供應商和承辦商、專業和行業團體及社會大眾。

考慮到持份者的不同類別，我們提供了多種溝通渠道，以配合持份者不同的需要。當中包括年報、網站、通訊刊物如《機電與我》、《電力快訊》、《氣體快訊》、《智能》、《能源標籤快訊》、《機電傳聲》和《群聲》、客戶聯絡小組、員工協商委員會、與商會和專業團體的定期諮詢，以及有關機電安全及能源效益的宣傳及推廣與社區外展活動等。

此外，我們的高層管理人員更以身作則，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平。

我們於2013/14年度為下列主要持份者舉行了多項活動：

STAKEHOLDER ENGAGEMENT

As a government agency, our stakeholder groups include clients, policy bureaux, staff, regulated trades, industry and business organisations, suppliers and contractors, professional and trade associations and the general public.

Given the varied nature of our stakeholders, we have developed different communication programmes to cater to their different needs. Our communication channels include annual report, websites, publications such as the E&M Safety Newsletter, Electricity News, Gas Safety Bulletin, Energy Wits, Energy Label Newsletter, VoiceLink and Group Voice, customer liaison groups, staff consultative committees, regular consultations with trade associations and professional institutions, and ongoing electrical and mechanical safety and energy efficiency publicity, promotion and community outreach programmes.

Furthermore, our senior managers are also personally involved in supporting and encouraging 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 2013/14:

公眾人士 Public at Large

- 有32家發展商及管理公司承諾在2013年6月至9月期間，在他們旗下超過120多家商場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550間商舖、170座辦公室大樓和440家機構的辦公室簽署「室內溫度節能約章」。
- 為各類機構/學校舉行130場講座或探訪，宣傳能源效益及節能。
- 為多個機構舉行26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。
- 於2013年7月及12月分別走訪首批及次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規定。
- 32 developers and property management companies pledged to maintain an average indoor temperature at 120 shopping malls of between 24 and 26 degrees Celsius from June to September 2013, and more than 550 retail shops, 170 office buildings and 440 organisations signed up to the Energy Saving Charter on Indoor Temperature.
- Delivered/Organised 130 talks and visits to organisations/schools to promote energy efficiency and conservation.
- Delivered 26 presentations to various organisations for promotion of the Buildings Energy Efficiency Ordinance on mandatory implementation of building energy code and energy audit.
- Conducted a publicity visit to the first and second batches of commercial buildings, which are required to carry out the first energy audits, in July and December 2013 respectively to promote the Buildings Energy Efficiency Ordinance and to remind building owners of the relevant energy audit requirements.

公眾人士 Public at Large

- 舉行52次外展講座，而機電工程署教育徑也接待了276個參觀團，共約10 300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287次外展講座，向約41 000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380次外展講座，向28 000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51次學校展覽，宣傳強制性能源效益標籤計劃。
- 於2014年2月全面走訪全港有關的零售商，宣傳第一及第二階段的強制性能源效益標籤計劃。
- 於2013年7月，就強制性與自願性能源效益標籤計劃舉行聯合簡介會。
- 於2013年6月10日就能源效益、節能與節能駕駛，舉行一場公開研討會。
- 為業界人士就《供電電纜（保護）規例》的要求，舉行34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48場簡介會、技術及安全講座與研討會。
- 探訪超過2 000間車輪維修工場，推廣車輛維修工場約章計劃。
- Organised 52 outreach talks and 276 visits to the Education Path of EMSD Headquarters for about 10 300 visitors from different organisations and schools to promote energy efficiency and conservation.
- Visited 287 kindergartens, primary schools and elderly centres with about 41 000 participants to promote electrical safety.
- Visited 380 kindergartens, youth centres and elderly centres with over 28 000 participants to promote the safe use of amusement rides, lifts and escalators.
- Conducted 51 school exhibitions on the Mandatory Energy Efficiency Labelling Scheme (MEELS).
- Conducted a full-scale publicity visit to relevant retailers in February 2014 to promote the first and second phases of MEELS.
- Conducted briefing sessions on Energy Efficiency Labelling Scheme (both mandatory and voluntary) in July 2013.
- Held a public seminar on energy efficiency and conservation as well as eco-driving on 10 June 2013.
- Delivered 34 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 48 briefing sessions, technical and safety talks and seminars for trade representatives, lift/escalator owners, members of the incorporated owners and building management staff.
- Visited over 2 000 vehicle workshops to promote the Vehicle Maintenance Workshops Charter Scheme.

公眾人士 Public at Large

- 於2013/14年度，從淡水冷卻塔共抽取了891個水樣本，根據測試結果及《公眾衛生及市政條例》的規定，我們要求淡水冷卻塔擁有人採取減除妨擾的工作。
- 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245場講座/研討會。
- 為了提升市民對氣體使用安全及良好方法的認識，我們於本年度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規定。我們亦探訪了20個寮屋和村屋區的居民，向他們講解家居氣體安全事宜。此外，我們亦向不同的工程承辦商舉辦了共28場的氣體安全講座以推廣氣體安全訊息。
- 於2013年9月9日與香港物業管理公司協會及職業訓練局，聯合舉辦有關升降機及自動梯安全與負責人責任的研討會，約有300位物業管理從業員參加。
- 於2013年11月18日與專業團體聯合舉辦有關機動遊戲機的技术研討會，討論監管制度及成為檢測員及合資格人員的要求。
- 於2014年3月6日舉辦研討會，與架空纜車從業員分享討論新技術資訊及安全意識。
- 於2014年3月18日舉辦有關建築工地升降機及塔式工作台的研討會，提升從業員對現行監管制度的認識。
- In 2013/14, 891 water samples were taken from fresh water cooling towers (FWCTs). We had requested the owners of the FWCTs to carry out abatement action under Public Health and Municipal Services Ordinance according to test results.
- Conducted 245 talks and seminars on the implementation of the Continuing Professional Development Scheme for Registered Electrical Workers.
- In order to enhance the community's awareness on safety and good practices in use of gas, we introduced applicants of food business licences to the requirements for liquefied petroleum gas (LPG) installations for catering purposes in restaurants and food preparation establishments through six seminars organised by the Food and Environmental Hygiene Department in this year. We also conducted visits to 20 squatter areas and villages to promote among the residents gas safety in households. Apart from this, we also organised 28 gas safety seminars to different contractors for the promotion of gas safety.
- Conducted a seminar on lift and escalator safety and Responsible Person's responsibilities on 9 September 2013, jointly with the Hong Kong Association of Property Management Companies and the Vocational Training Council, with the participation of about 300 property management members.
- Conducted a technical seminar with several professional institutions on 18 November 2013 on the regulatory regime of amusement ride safety and requirements of becoming a surveyor or qualified person in amusement rides.
- Conducted an experience sharing session on aerial ropeway technologies and safety awareness on 6 March 2014 for the operational personnel.
- Conducted an experience sharing session on the awareness of legal obligations on 18 March 2014 for the operational personnel of builders' lifts and tower working platforms.

我們的員工 Our Staff

- 規管服務於2013年12月10日及2014年2月18日舉行了管理工作坊。
- 機電工程營運基金於2013年9月4日及10月16日舉行了策略工作坊。
- 於2013年11月舉行三場署長簡報會。
- 首長級人員到訪了195個場地，進行員工親善探訪。
- 於2013年11月6日與部門11個工會舉行聯席會議。
- 於2014年3月舉行兩場部門專業人員周年論壇。
- 於2014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六次家訪、83次醫院探訪、56次工作間探訪、518次電話問候及27次吊唁探訪。
- Held the Regulatory Services' annual Management Workshops on 10 December 2013 and 18 February 2014.
- Held the EMSTF's annual Strategy Formulation Workshops on 4 September and 16 October 2013.
- Held three sessions of Director's Briefing in November 2013.
- Conducted 195 ambassador visits by directorate officers at various venues.
- Conducted a joint meeting with 11 staff unions of EMSD on 6 November 2013.
- Held two sessions of the Yearly Forum for professional staff in March 2014.
- Held four sessions of the Yearly Forums for seconded inspectorate, technical and junior staff from February to March 2014.
- Conducted six home visits, 83 hospital visits, 56 workplace visits, 518 goodwill phone calls and 27 condolence visits to sick or hospitalised staff, by the Staff Welfare Unit.

客戶 Our Clients

- 與香港警務處於2013年8月、11月及2014年1月及2月舉行高層會議，檢討我們的服務表現和尋找新的商機。
- 與渠務署於2013年3月、7月及10月舉行高層會議，檢討我們的工作表現。
- 分別與路政署、運輸署及消防處於2013年4月、及與入境事務處於2013年11月，舉行高層會議，檢討我們的服務表現。
- 與民航處於2013年6月、9月及2014年2月舉行工作層會議，檢討我們的服務表現。
- 與香港天文台於2013年5月、8月、11月及2014年2月舉行工作層會議，檢討我們的服務表現。
- 與香港機場管理局代表於2014年2月參觀澳門威尼斯人酒店的高壓製冷機組。
- 與食物環境衛生署於2014年1月舉行有關火葬場和骨灰龕的統籌會議。
- 安排與醫院管理局進行多次親善探訪、高層座談會及工作層座談會等。
- 於2014年2月及3月往路政署進行周年客戶拜訪，並檢討有關港珠澳大橋項目與中環灣仔繞道和東區走廊連接路項目的服務水平協議。
- 於2014年3月往土木工程拓展署進行周年客戶拜訪，並檢討有關蓮塘/香園圍口岸項目的服務水平協議。
- 與建築署於2014年1月進行服務水平協議檢討會議。
- 與警務處於2014年2月舉行高層會議，商討未來如何為客戶提供工程支援服務。
- 出席懲教署於2014年2月舉行的無線電系統移交儀式，並與客戶於活動後進行會議。
- 聯同懲教署呈交「電鎖保安系統」項目參與「2014香港資訊及通訊科技獎」，並獲得「最佳創新（企業創新）特別嘉許」獎。
- Held high level meetings with Hong Kong Police Force in August, November 2013 and January and February 2014 to review our service performance and explore new business opportunities.
- Held high level meetings with Drainage Services Department in March, July and October 2013 to review our service performance.
- Held high level meetings with Highways Department, Transport Department and Fire Services Department respectively in April 2013, and with Immigration Department in November 2013.
- Held working level meetings with Civil Aviation Department in June and September 2013 and February 2014 to review our service performance.
- Held working level meetings with Hong Kong Observatory in May, August and November 2013 and February 2014 to review our service performance.
- Paid joint site visit with the Airport Authority Hong Kong representatives to the high voltage air-conditioning chiller plant of the Venetian Macao Resort Hotel in February 2014.
- Held a coordination meeting with Food and Environmental Hygiene Department on crematoria and columbaria in January 2014.
- Conducted various courtesy visits, high level seminars and working level seminars for Hospital Authority.
- Paid annual customer visits to Highways Department in February and March 2014 to review the Service Level Agreements (SLAs) for the Hong Kong-Zhuhai-Macao Bridge project and the Central-Wan Chai Bypass and Island Eastern Corridor Link project.
- Paid annual customer visit to Civil Engineering and Development Department in March 2014 to review the SLA for Liantang/Heung Yuen Wai Boundary Control Point project.
- Attended a SLA review meeting with Architectural Services Department in January 2014.
- Held a high level meeting with Hong Kong Police Force in February 2014 to discuss future engineering support for client.
- Attended the Correctional Services Department (CSD) radio system handover event in February 2014 and met with CSD representatives afterwards.
- Submitted jointly with CSD the "Electric Locks Security System" project to the contest for the Best Innovation Award of the Hong Kong ICT Awards 2014 and received the "Best Innovation (Entrepreneurial Innovation) Special Mention" award.

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.

見習技術員連續五年獲職訓局獎項 Technician Trainees Win VTC Awards for Fifth Consecutive Year



機電工程署見習技術員繼2009、2010、2011及2012年連續四年奪得職業訓練局（職訓局）每年舉辦的「傑出學徒及見習員獎勵計劃」獎項後，2013年再奪此獎：見習二級技術員吳序強先生（圖1中間）榮獲「傑出學徒」獎項，見習一級技術員潘孝文先生（圖2中間）奪得「優異學徒」獎項，而見習二級技術員李日昇先生（圖3左面）在「最佳汽車學徒」比賽中，是六名優勝者之一。

EMSD technician trainees won the annual Outstanding Apprentice/Trainee Awards organised by the Vocational Training Council (VTC) again in 2013, after winning them for four consecutive years in 2009, 2010, 2011 and 2012. Mr Nick Ng Chui-keung, Technician Trainee II (middle in photo 1) won the Outstanding Apprentice award; Mr Poon Hau-man, Technician Trainee I (middle in photo 2) won the Apprentice of Excellent Performance award; and Technician Trainee II, Mr Lee Yat-sing (left in photo 3) was one of six winners in the "Best Apprentice Competition".

傑出青年工程師優異獎 Young Engineer Merit Award



我們的業務發展部工程師吳家煒先生，在2014年3月18日香港工程師學會舉辦的第39週年晚宴上獲頒本年度「傑出青年工程師優異獎」。該獎項表彰吳先生在工程專業領域的卓越表現，以及在推動工程專業和服務社會方面的傑出成就。

Mr Gordon Ng Kar-wai, Engineer in our Business Development Division, received the Certificate of Merit of the Young Engineer of the Year Award 2014 at the 39th Annual Dinner of The Hong Kong Institution of Engineers on 18 March 2014. The Award recognises Mr Ng's consistent excellence in professional work and his remarkable achievements in developing the engineering profession and serving the community.

2013年公務員優質服務獎勵計劃：我們的優勝團隊 Civil Service Outstanding Service Award Scheme 2013: Our Winning Teams



電力法例部的「精益求精隊」於2013年公務員優質服務獎勵計劃中，在「監管/執行服務」組別中分別獲得銅獎及特別嘉許（誠信管理）獎兩個獎項。
The Continuing Improvement Team of the Electricity Legislation Division won the Bronze Prize and Special Citation (Integrity Management) of the Regulatory/Enforcement Service Award under the Civil Service Outstanding Service Award Scheme 2013.



一般法例部員工獲頒優異獎，表揚「註冊升降機及自動梯承辦商表現評級」制度對加強升降機和自動梯安全的貢獻。
Our General Legislation Division staff received the Meritorious Award in recognition of the contribution of our Registered Lifts and Escalators Contractors' Performance Rating System in enhancing lift and escalator safety.

我們為消防處設計的消防安全教育巴士廣受市民歡迎，消防處和機電工程署在2013年公務員優質服務獎勵計劃中贏得部門合作獎類別的優異獎。
The highly popular Fire Safety Education Bus, which we designed for Fire Services Department, has won both departments the Meritorious Award under the Partnership Award category of the Civil Service Outstanding Service Award Scheme 2013.

重點與前瞻 HIGHLIGHTS AND WAY FORWARD

重點

- 每名員工年內平均接受4.74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。

Highlights

- Achieved an average of 4.74 annual training days per staff member.
- Arranged safety supervisor training for all works supervisors to improve safety performance.

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。
- 於2014/15年度進行的下一次員工滿意度調查，爭取提高員工滿意度。

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 2014/15.

全球報告倡議組織指標索引

GRI Indicator Index

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 請參閱《機電工程營運基金二零一三至一四年報告》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 2013/14 which is available in EMSD website.

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	2011/12	2012/13	2013/14
電力 (千瓦小時) # Electricity (kWh)#	12 872 172	12 960 001	13 713 616
煤氣 (兆焦耳) Towngas (MJ)	137 808	131 760	223 728
水 (立方米) Water (m ³)	53 897	46 168	49 912
柴油 (升) Diesel (l)	102 482	106 298	285 444
汽油 (升) Gasoline (l)	472 855	437 780	370 354
紙張 – A3、A4 (令) Paper – A3, A4 (ream)	27 587	27 245	26 992
油漆及溶劑 (升) Paint & Solvent (l)	27 947	20 273	20 057
潤滑油 (升) Lubrication Oil (l)	85 046	81 384	100 169
油脂 (公斤) Grease (kg)	1 674	1 464	1 708
製冷劑 (公斤) (例如R22及R134a) Refrigerant (kg) (e.g. R22 & R134a)	20 024	14 993	13 302
工業用氣體 (立方米) (例如氧、氬及乙炔) Industrial Gas (m ³) (e.g. Oxygen, Argon & Acetylene)	921	844	751
蓄電池電解液 (升) Battery Electrolyte (l)	535	165	201
原子車胎 (條) Tubeless Tyre (no.)	9 668	10 361	10 656
外車胎 (條) Outer Cover Tyre (no.)	2 648	2 760	3 108
車胎內膽 (條) Inner Tube (no.)	1 549	1 663	1 975
廢氣、污水及廢物® EMISSIONS, EFFLUENTS AND WASTE®			
廢紙 (公斤) Waste Paper (kg)	18 476	24 475	18 365
碳粉盒 (個) Toner Cartridges (no.)	3 736	3 446	3 121
用罄電池 (公斤) Batteries (kg)	3 389	2 631	16 040
金屬廢料 (公斤) Metal Scraps (kg)	14 511	24 180	27 484
廢油 (升) Waste Oil (l)	101 675	94 576	93 216
舊車胎 (條) Used Vehicle Tyre (no.)	12 369	4 847	11 862
含水銀照明燈 (盞) Spent Mercury Lamp (no.)	145 073	119 359	126 146
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)	3.36	4.77	5.59
員工滿意度 (以10分為滿分) Staff Satisfaction (out of a score of 10)	6.5	不適用 Not Applicable	不適用 Not Applicable
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)	4.62	5.44	4.74

不包括員工食堂和租用辦公室的電力消耗

@ 有關的廢物由持牌承辦商收集，供物料循環再造或棄置

Electricity Consumption of canteen, rented offices not included

@ The concerned wastes are collected by the licensed contractor for material recycling or disposal.

核實聲明

Verification Statement



香港品質保證局

範圍及目的 Scope and Objective

香港品質保證局已對機電工程署(下稱機電署)社會及環保報告2013/14(以下簡稱「報告」)的全部內容進行獨立驗證。該報告陳述機電署在2013年4月1日至2014年3月31日於可持續發展方面的表現及成就。核實組成員沒有參與編制報告的數據和資料。

此核實聲明的目的是對外保證此報告所記載之內容為完整及準確。

Hong Kong Quality Assurance Agency (HKQAA) was commissioned by Electrical and Mechanical Services Department (hereinafter referred to as "EMSD") to undertake an independent verification of the Social and Environmental Report 2013/14 (hereinafter called "the Report"). The Report stated EMSD's sustainability performance and efforts made for the period from 1st April 2013 to 31st March 2014. The verification team did not partake in the compilation of the data and information of the Report.

The aim of this verification was to provide assurance on the completeness and accuracy of the information stated in the Report.

方法 Methodology

核實工作是依據目前的最佳核實方法執行，以下為評估此報告的準則：

- 遵守社會及道德問責學會(Institute of Social and Ethical AccountAbility)AA1000保證標準所定的完整性、準確性、中立性、可比性、及回應性的原則；及
- 全球報告倡議組織(GRI)的可持續發展報告指南3.1版本

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

The process used in this verification was based on current best practices. The Report was reviewed based on the following criteria:

- The principles of completeness, accuracy, neutrality, comparability and responsiveness, as set out in the Institute of Social and Ethical AccountAbility standard AA1000, and
- The Global Reporting Initiative (GRI) G3.1 Guidelines.

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

結論 Conclusion

基於是次的核實結果，香港品質保證局確定報告所載的資料，能對機電署在社會及環保方面的表現，作出相關及完整的披露；核實組確認報告是根據事實記錄而編寫，其陳述的資料準確無誤。此報告公平和如實地載述了機電署各項與社會及環保有關的措施、目標、進度及表現。

核實組已分別地向機電署就將來的可持續發展報告在結構及內容方面可改進的地方提出了建議，這些建議並沒有影響核實組對報告的意見。

Based on the outcome of the verification process, the verification team determined that the information presented in the Report provided a material and complete representation of the performance of EMSD in the context of sustainable development. The verification team confirmed that the Report was prepared based on factual statements and that the data contained within the Report are accurate. It is a fair and honest representation of initiatives, targets, progress and performance on EMSD's social and environmental achievements.

Opportunities for improvement on the reporting structure and contents are separately submitted to EMSD for their consideration on the compilation of future sustainable development reports. It does not affect our opinion on the Report.

香港品質保證局

Signed on behalf of Hong Kong Quality Assurance Agency

譚玉秀
策略業務助理總監
2014年10月

Jorine Tam
Assistant Director, Strategic Business
October 2014

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香港機場管理局	Airport Authority Hong Kong
建築署	Architectural Services Department
國泰航空有限公司	Cathay Pacific Airways Limited
土木工程拓展署	Civil Engineering and Development Department
懲教署	Correctional Services Department
香港海關	Customs and Excise Department
衛生署	Department of Health
環境保護署	Environmental Protection Department
食物環境衛生署	Food and Environmental Hygiene Department
政府產業署	Government Property Agency
路政署	Highways Department
民政事務總署	Home Affairs Department
香港消防處	Hong Kong Fire Services Department
香港警務處	Hong Kong Police Force
香港郵政	Hongkong Post
醫院管理局	Hospital Authority
康樂及文化事務署	Leisure and Cultural Services Department
北大嶼山醫院	North Lantau Hospital
東區尤德夫人那打素醫院	Pamela Youde Nethersole Eastern Hospital
香港電台	Radio Television Hong Kong
旅遊事務署	Tourism Commission
運輸署	Transport Department



採用無氯氣漂染紙漿製造的環保紙印刷
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