

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

高層管理人員 SENIOR MANAGEMENT



- 1 陳帆太平紳士
Mr Chan Fan, Frank, JP
機電工程署署長
Director of Electrical and Mechanical Services
- 2 薛永恒太平紳士
Mr Sit Wing-hang, Alfred, JP
機電工程署副署長/規管服務
Deputy Director/Regulatory Services, EMSD
- 3 賴漢忠太平紳士
Mr Lai Hon-chung, Harry, JP
助理署長/電力及能源效益
Assistant Director/Electricity and Energy Efficiency
- 4 彭耀雄先生
Mr Pang Yiu-hung, Eric
助理署長/氣體及一般法例
Assistant Director/Gas and General Legislation

- 5 梁建民博士、太平紳士
Dr Leung Kin-man, JP
助理署長/鐵路
Assistant Director/Railways
- 6 何家儀女士
Ms HO Ka-yee, Camilla
部門會計師
Departmental Accountant
- 7 羅肇嫻女士
Ms Lo Siu-han, Cynthia
機電工程署主任秘書
Departmental Secretary, EMSD

嚴國豪先生出任機電工程署部門會計師至2015年12月13日
Mr Yim Kwok-ho was Departmental Accountant up to 13 December 2015

業務回顧 OPERATIONS REVIEW

規管服務於2015/16年度的多方面工作饒有成果，這實在有賴多年來同事的努力及業界和社會大眾的支持。

Years of hard work came to fruition in 2015/16 for the Regulatory Services in many areas, thanks to the efforts by our colleagues, as well as support from the trades and the community.



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

業務回顧 OPERATIONS REVIEW

多年努力 終見成果

以升降機安全為例，我們於2015年推出先導性的「優質升降機服務認可計劃」，以表揚升降機負責人在更新和維修升降機方面的出色表現，計劃共吸引逾1 200名升降機負責人參與。計劃的成功，除了是業界及同事多年努力的成果外，亦反映業界及大眾比以前更加了解和肯定升降機負責人的重要性。我們期望將來可進一步擴展該計劃。

經過同事過往的努力，2015年7月推出的「車輛維修工場自願註冊計劃」也漸見成果。在計劃推出首年以來，全港已有超過1 200間車輛維修工場自願註冊。我們期望透過車輛維修工場及技工自願註冊計劃，提升車輛維修服務水平和加強市民對車輛維修專業的認同，並為探討立法強制註冊安排作出準備。

能源效益事務處是年亦成果甚豐。《建築物能源效益條例》順利實施，其他節能計劃及公眾教育項目亦如期推展。我們於2015年推出的「全民節能」網站目前已有53個綠色及支持機構加入，這些機構以該網站作為向社區推廣其活動的中心平台，如此成績實在值得我們引以為榮。

安全至上 絕不妥協

儘管機電安全、氣體安全及鐵路安全方面的表現不斷進步，意外事故也日漸減少，然而規管服務依然面對不少挑戰。在本港機電安全持續改善的情況下，部分業界同人或會認為，我們堅持的安全標準及程序應可放寬，從而減少安全規定對他們的業務所構成時間及金錢上的影響，但為確保公眾安全，我們身為規管者，絕不能亦不會因商業或其他考慮因素而在安全事宜上妥協。公眾對我們的信任，乃建基於我們獨立的專業判斷，這點必須向所有持份者再三強調。

YEARS OF HARD WORK BEARS FRUIT

Take lift safety as an example, we launched the Quality Lift Service Recognition Scheme (QLSRS), a pilot scheme aimed at commending the outstanding performance of Responsible Persons (RPs) in lift modernisation and maintenance. The Scheme was launched in 2015 and attracted the participation of over 1 200 RPs. The success of the Scheme is not only the result of the hard work by the trades and our colleagues, it also indicates that the importance of RPs is being better understood and recognised by the trades and the public alike. We look forward to its further extension in the coming years.

Likewise, the Voluntary Registration Scheme for Vehicle Maintenance Workshops (VRSVMW) launched in July 2015 is beginning to see results after great efforts by our colleagues in the past years. More than 1 200 workshops in Hong Kong have voluntarily registered since the first year of the Scheme. Through the voluntary registration schemes for vehicle maintenance workshops and vehicle mechanics, we aim to raise the service standard of the vehicle maintenance and enhance public recognition of the trade professionalism, as well as to prepare for the exploration of the feasibility of making registration arrangement mandatory through legislation.

It has also been a fruitful year for our Energy Efficiency Office. The Buildings Energy Efficiency Ordinance was smoothly implemented, whereas other energy saving schemes and public education programmes were also rolled out as planned. Launched in 2015, the “Energy Saving for All” website has become a hub for so far 53 green and supporting organisations to promote their activities to the community, which is truly a result to be proud of.

SAFETY MUST NEVER BE COMPROMISED

Continuous progress has been made in electrical and mechanical (E&M) safety, gas safety and railway safety as well, with incident numbers generally on a declining trend. Nevertheless, there remain many challenges facing the Regulatory Services. While E&M safety in Hong Kong is in the course of steady improvement, some members of the trades may expect that there is room for relaxation in the safety standards and procedures that we insisted on, thereby minimising impact on their operations in terms of time and cost due to safety requirements. However, to protect public safety, we as a regulator must not and will not compromise safety for commercial or any other considerations. Our independent and professional judgment underpins the trust that the public places in us. This is a message that we must stress to all stakeholders.



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近年，我們拓展工作範圍，協助業界提高服務水平，因為服務水平上升有助提升安全表現。上述的「優質升降機服務認可計劃」及「車輛維修工場自願註冊計劃」便是其中兩個例子。我們相信更好的服務能讓公眾安心，享受優質生活，這與我們創造公眾價值的目標是一致的。

In recent years, we have expanded our scope of work to help the trades improve their service quality, as service quality often goes hand in hand with safety performance. Notable examples are the QLSRS and the VRSVMW mentioned above. We believe better services would bring the public peace of mind and quality of life, which is in line with our goal to create public value.

持續創新 推動節能

有賴能源效益事務處的努力，我們近年在能源效益及節能上的工作可謂進入收成期。隨着《能源效益(產品標籤)條例》、《建築物能源效益條例》及《區域供冷服務條例》相繼生效，規管框架已漸見成熟，而其他進行中的計劃及推廣活動亦取得不俗進展。

USING INNOVATION TO DRIVE ENERGY SAVING

Our work in energy efficiency and conservation has been enjoying a period of “harvest” in recent years, thanks to the efforts by the Energy Efficiency Office. With the Energy Efficiency (Labelling of Products) Ordinance, the Buildings Energy Efficiency Ordinance and the District Cooling Services Ordinance coming into force, a holistic regulatory framework is taking shape, while various other ongoing schemes and promotional initiatives have achieved promising progress.

啟德發展區的區域供冷系統順利運作，並連接更多租戶，包括工業貿易大樓及兩所小學。雖然部分水管仍在敷設中，但我們已開始累積營運區域供冷系統的經驗。這些經驗有助我們衡量擴展區域供冷技術至其他地區的可行性。

The District Cooling System (DCS) in Kai Tak Development is operating smoothly and more tenants in the area, including the Trade and Industry Tower and two primary schools, have been connected to the DCS. Although the laying works for some pipes are still underway, we have begun to accrue experience in operating the DCS, which will be useful for us to assess the feasibility of extending the DCS model to other districts.

業務回顧

OPERATIONS REVIEW

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不斷創新一向是推進我們能效工作的動力，我們也致力應用各種先進技術幫助市民節能，希望發揮先導作用。

Innovation has always been the driving force behind our energy efficiency work. We endeavour to be always one step ahead by applying advanced technology to help the community save more energy.

”

其實，不斷創新一向是推進我們能效工作的動力，我們也致力應用各種先進技術幫助市民節能，希望發揮先導作用。最佳例子是我們推動啟德發展區區域供冷系統的工作，無論在項目性質和規模方面，該系統都是香港首創的。至於其他工作範疇，如產品能源標籤和推動可再生能源等，我們都不斷參照世界各地的先進技術和最新標準，務求把最適合本地需要的引進香港。

我們很高興見到社會大眾日漸接受節能低碳的生活方式，並會調動資源去繼續推動節能工作，同時拓展更多新的節能領域。

未雨綢繆 迎接挑戰

我們近年研究將「預警指標」概念應用於規管工作上，希望透過預警指標預測並評定受規管行業的潛在風險，以助我們及早採取相應措施。在2016/17年度，我們將調整和整合各個預警指標。鑑於各行業的需求不同，發展各異，負責的部別將為其規管的行業訂立合適的預警指標。

我們的另一工作重點，是處理老化的機電設施。本港經濟在七八十年代起飛，不少機電設施於同期落成啟用，至今已使用三四十年之久，難免對安全構成潛在威脅。這正是我們提倡為舊樓更新升降機的一大原因。至於其他機電及氣體系統，亦同樣面對老化問題。為此，我們將推出更多措施，協助社會更換老化的設施。

Indeed, innovation has always been the driving force behind our energy efficiency work. We endeavour to be always one step ahead by applying advanced technology to help the community save more energy. The best example is our work in DCS which is the first of its kind and scale in Hong Kong. In other areas such as energy efficiency product labelling and the promotion of renewable energy, we constantly keep monitoring of advanced technologies and the latest standards around the world in order to introduce the most appropriate ones into Hong Kong.

We are delighted that the community is increasingly receptive to an energy saving, low carbon lifestyle, and shall continue to deploy resources to sustain the momentum of our work as well as explore more new frontiers in energy saving.

STAY PREPARED FOR CHALLENGES AHEAD

In recent years, we have explored the applicability of “precursors” in our regulatory works, with a view to anticipating and assessing potential risks in the regulated trades and thereby developing corresponding measures at an early stage. In 2016/17, we shall fine-tune and consolidate our various precursors. As each trade differs in needs and dynamics, the responsible division will develop precursors that suit its regulated trades.

The other priority is to deal with the aging E&M assets. Most E&M facilities in Hong Kong were built in the 70s and 80s when the city's economy took off. These E&M facilities are now in their thirties and forties, which inevitably pose potential safety hazards. This is a major reason why we are promoting the modernisation of aging lifts in old buildings. The same applies to other aging E&M and gas systems. More initiatives will therefore be carried out to facilitate the overhaul or replacement of these facilities.

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我們必須宏觀地了解業界動向，應對科技變遷，避免因循守舊、故步自封，方能發揮捍衛公眾安全的角色。

We must adopt a holistic perspective on the trade dynamics and adapt to the changing technologies. We must ensure that our role, as the gatekeeper of public safety, stays unhindered by statutory boundaries nor stereotyped mindsets.

”

每次發生機電事故，都提醒我們須時刻保持警覺，方能找出業界實際面對的安全問題，防止同類事故重演。意外事故亦讓我們可以深刻反思我們現時保障安全的方法。我們不能因為現時零事故或少意外便掉以輕心，以為安全規管系統一切正常。我們必須宏觀地了解業界動向，應對科技變遷，避免因循守舊、故步自封，方能發揮捍衛公眾安全的角色。

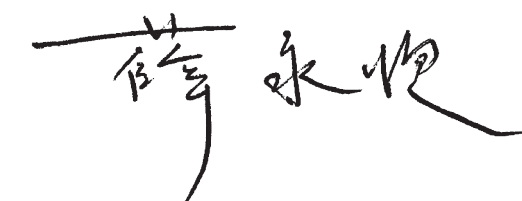
Each and every E&M incident is a reminder that we must stay alert at all times to be able to detect the real safety issues to which the trades are prone in order to prevent recurrence of similar tragedies. Accidents and incidents also make us take a deep, critical look at our current approach to ensuring safety. We should never take the currently zero or low incident numbers as an indication that everything about the safety regulatory system is working just fine. We must adopt a holistic perspective on the trade dynamics and adapt to the changing technologies. We must ensure that our role, as the gatekeeper of public safety, stays unhindered by statutory boundaries nor stereotyped mindsets.

感謝各界支持

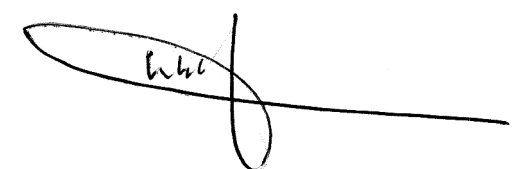
社會發展日新月異，協作和相互支持變得日益重要。因此，規管服務必須與時並進，保障業界及公眾安全，並讓能源使用更具效益，服務水平更見優良。2015/16年度的工作成果，全賴同事、各業界的工作小組及協會、學術界、專業機構、非政府機構、訓練學院及其他加入我們顧問及技術委員會的機構支持，我們謹致謝忱。我們亦要感謝相關決策局及部門的協作，以及海外機構無私地分享經驗。我們承諾來年將繼續致力做得更好。

GRATITUDE TO ALL WHO MADE IT POSSIBLE

In a society of rapid change, collaboration and mutual support grows increasingly important. The Regulatory Services must evolve with the times to protect the safety of the trades and the public, and to make energy use more efficient and service quality better. All this would not have been accomplished in 2015/16 without the support of our staff, the task forces and associations of the trades, academics, professional bodies, NGOs, training institutes and all organisations who served on our advisory and technical committees. Our gratitude goes to them all. We are also grateful to the relevant policy bureaux and departments for their collaboration and our overseas counterparts who generously shared their experience. We pledge to continue devoting ourselves to doing even better in the coming years.



薛永恒
機電工程署副署長/規管服務



Alfred W H Sit
Deputy Director/Regulatory Services, EMSD

里程碑 MILESTONES 2015

7月JULY

精明選擇車輛維修服務

推出車輛維修工場自願註冊計劃，提升業界服務水平及形象。截至2016年3月底，已吸引超過1 200間工場申請加入計劃。

WISE CHOICE OF VEHICLE MAINTENANCE SERVICE

Launched the Voluntary Registration Scheme for Vehicle Maintenance Workshops to enhance the service standard and image of the trade, attracting over 1 200 workshops to apply for registration as of end March 2016.



7月JULY

增強青年環保意識

慳電熄一熄青年獎及「新能源、新世代」太陽能車比賽開鑼，活動旨在增強青年對再生能源及能源效益的認識。「新能源、新世代」太陽能車比賽在2016年1月圓滿結束。

ENHANCEMENT OF YOUNG GENERATION'S GREEN AWARENESS

Launched the Youth Energy Saving Award and the New Energy New Generation Solar Car Competition to enrich young people's knowledge on renewable energy and energy efficiency. New Energy New Generation Solar Car Competition was later concluded in Jan 2016.



2015

10月OCTOBER

提高升降機服務水平

推出先導性的優質升降機服務認可計劃，共收到94份申請。由獨立顧問評核各升降機負責人在優化舊有升降機及管理升降機的表現。頒獎禮於2016年4月舉行。

UPLIFTING LIFT SERVICE QUALITY

Launched the pilot Quality Lift Service Recognition Scheme, attracting 94 applications from Responsible Persons of lifts whose performance in lift modernisation and management of lift service quality was assessed by independent consultants. The prizes were presented in April 2016.



11月NOVEMBER

邁向綠化之都

2015年11月25日，新能效評級標準全面實施，涵蓋強制性能源效益計劃下空調機、雪櫃及洗衣機三項產品。

TOWARDS A GREENER ENVIRONMENT

Full implementation of new energy efficiency grading standards took effect on 25 November 2015, covering room air-conditioners, refrigerating appliances and washing machines under the Mandatory Energy Efficiency Labelling Scheme.



里程碑 MILESTONES 2015

12月 DECEMBER

新《電力(線路)規例工作守則》提升安全水平

公布更新版的《電力(線路)規例工作守則》，以緊貼最新科技發展及安全規定。

NEW CODE OF PRACTICE FOR THE ELECTRICITY (WIRING) REGULATIONS BRINGS ENHANCED SAFETY

An updated edition of the Code of Practice for the Electricity (Wiring) Regulations was published to keep the trade abreast of the latest developments in technology and safety requirements.



12月 DECEMBER

增加人手 迎接新鐵路挑戰

鐵路科增設11個職位，包括兩名總工程師，對現有鐵路線及新鐵路項目，加強鐵路安全監察及規管制度。

STRENGTHENED TEAM TO MEET NEW RAILWAY CHALLENGES

Created 11 new posts in the Railways Branch including two Chief Engineers to enhance safety oversight of existing railway lines and new railway projects, and strengthen overall railway regulatory regime.



12月 DECEMBER

建設低碳社區

2015年版《建築物能源效益守則》及《能源審核守則》刊憲頒布。兩份守則經多番諮詢業界和持份者而成，並將每三年檢討一次，反映最新技術及大眾需要。

BUILDING A LOW-CARBON COMMUNITY

The 2015 edition of the Building Energy Code and Energy Audit Code were gazetted and published after thorough consultations with the trade and stakeholders. Both Codes are reviewed and updated every three years to reflect the latest changes in technology and community needs.



3月 MARCH

新鐵路綫準備就緒

西港島綫西營盤站B3入口開幕，標誌西港島綫所有測試工作及安全檢查正式完成。與此同時，我們正密鑼緊鼓，檢查即將啟用的南港島綫(東段)及觀塘延綫，確保有關路線運作安全。

GETTING READY FOR THE NEW RAILWAY LINES

Entrance B3 of Sai Ying Pun Station of West Island Line was opened, thus completing all commissioning works and safety inspections for the line. Numerous safety inspections of railway systems are being conducted on the soon-to-be opened South Island Line (East) and Kwun Tong Line Extension to ensure their safe operation.



2016



瓶裝石油氣分銷商 安全表現評級計劃

LPG Cylinder Distributor
Safety Performance Recognition Scheme

1月 JANUARY

攜手確保氣體供應安全

推出瓶裝石油氣分銷商安全表現評級計劃，獲瓶裝石油氣註冊氣體供應公司轄下的184個分銷商全數參與。評級結果於2016年7月公布。

JOINT EFFORT TO ENSURE SAFE GAS SUPPLY

Launched the LPG Cylinder Distributor Safety Performance Recognition Scheme with all 184 distributors under the Registered Gas Supply Companies supplying LPG cylinders joining. The rating results were announced in July 2016.

重要數字 KEY FIGURES

電業工程人員

ELECTRICAL WORKERS

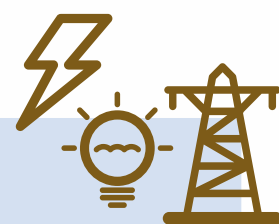


註冊電業工程人員
Registered Electrical Workers

76 000 名
Nos.

電力供應

ELECTRICITY SUPPLY



本地售電量
Local Electricity Sales

43 912 百萬度
GWh

升降機及自動梯

LIFTS AND ESCALATORS

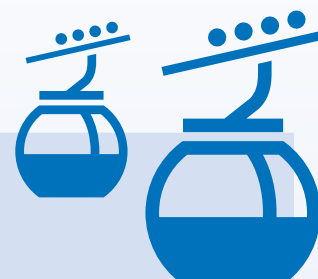


升降機
Lifts 63 561 部
Nos.

自動梯
Escalators 8 925 部
Nos.

纜車

ROPEWAYS



昂坪360架空纜車索纜長度
Rope Length of
Ngong Ping 360
5.8 公里
km

海洋公園登山纜車長度
Rope Length of
Ocean Park Cable Car
1.4 公里
km

鐵路

RAILWAY



鐵路路線總長度
Railway Total Route Length

221 公里
km

鐵路年度載客量
Railway Annual Patronage

1 884 百萬
Million

燃氣供應

GAS SUPPLY



氣體喉管網絡總長度
Total length of gas pipe network

3 583 公里
km

石油氣車輛

LPG VEHICLES



石油氣加氣站
LPG Filling Stations
67 個
Nos.

持牌石油氣車輛
Licensed LPG Vehicles
22 058 輛
Nos.

區域供冷

DISTRICT COOLING SYSTEM

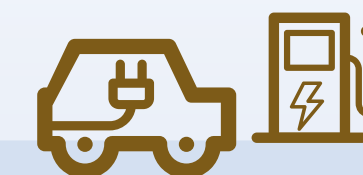


啟德區域供冷系統總供冷量
Total Cooling Capacity
of Kai Tak District Cooling System
284 兆瓦
MW_r

啟德區域供冷系統管道總長度
Total Pipe Length of Kai Tak
District Cooling System
40 公里
km

電動車

ELECTRICAL VEHICLES



電動車
Electric Vehicles

4 461 輛
Nos.

電動車充電站
Electric Vehicle Charging Points

1 611 個
Nos.

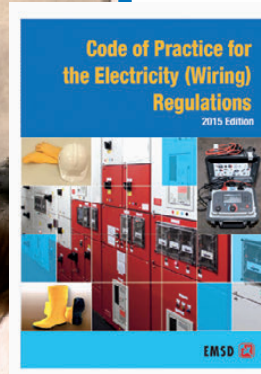
保障公眾安全 PROTECTING PUBLIC SAFETY

電力安全 ELECTRICAL SAFETY



我們舉辦安全講座及出版新《電力(線路)規例工作守則》，提高業界的安全意識。

We arranged safety talks and published the new Code of Practice for the Electricity (Wiring Regulations) to enhance the safety awareness of the trade.



電力安全

事故數字下降

在2015年，第三者損毀供電電纜事故宗數是自2001年全面實施相關規例以來的最低紀錄，由2014年的44宗減少至2015年的39宗；固定電力裝置事故宗數，亦由2014年的60宗減少至2015年的50宗；電氣產品事故則變化不大，2015年有56宗，2014年則有55宗。

事故數字下降對市民來說無疑是好消息，這意味着安全水平有所提高。事故數字下降，乃因承辦商的安全意識和工程人員的工程質素得以提升所致。我們會繼續主動採取積極措施，舉辦更多安全講座，視察工地，以及密切監察「目標」承辦商的安全表現，進一步提高業界的安全意識。

ELECTRICAL SAFETY

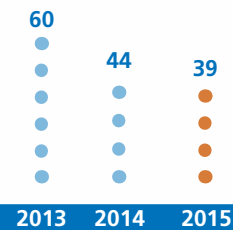
Fewer Incidents

The year 2015 saw a record low of third-party damage to electricity supply line incidents, from 44 in 2014 to 39 in 2015, since the relevant Regulation had come into full operation in 2001. Fixed electrical installation incidents also fell from 60 in 2014 to 50 in 2015, while electrical product incidents remained steady at 56 compared to 55 in 2014.

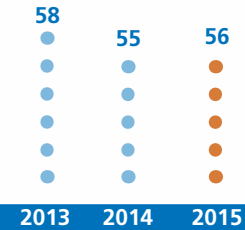
This is good news for the community as fewer incidents mean a higher level of safety for all. It had been made possible by raising contractors' safety awareness and the working parties' quality of work. We would continue to take proactive measures to further enhance the safety awareness of the trade by arranging additional safety talks and site inspections as well as closely monitoring the safety performance of "target" contractors.

電力事故數目 Electrical Incident Figures

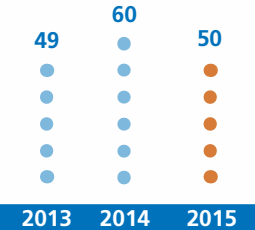
第三者損毀供電電纜事故
Third Party Damage to
Electricity Supply



電氣產品事故
Electrical Product Incidents



固定電力裝置事故
Fixed Electrical Installation
Incidents



出版新工作守則

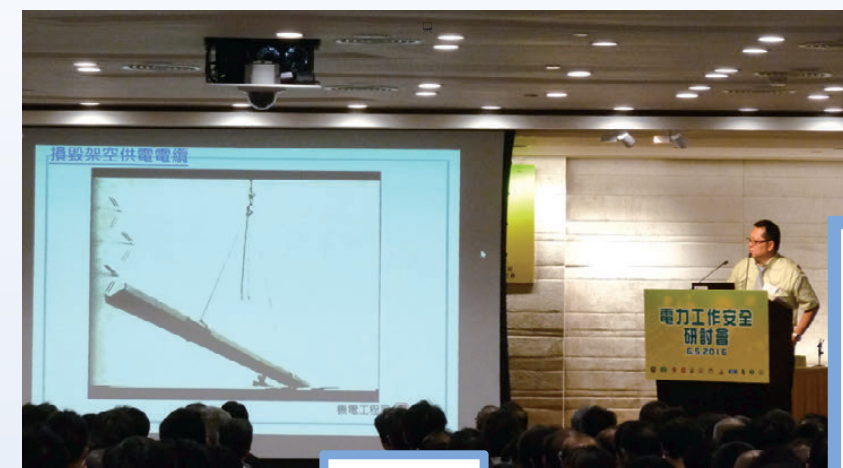
《電力(線路)規例工作守則》更新版於2015年12月出版，旨在配合最新的技術及安全要求，此乃年內的一項主要發展。新版本更新了2009年版的內容，反映工作小組經詳細討論後得出的成果，工作小組由來自電業界不同範疇的代表組成。新工作守則其中一個重大改進是納入在高壓裝置上進行工作的安全預防措施；另一重大改善，是要求使用備有上鎖功能的微型斷路器及模製外殼斷路器，這有助確保電力裝置鎖上，以免在施工時不慎被開啟。

2015年版的工作守則會於2017年12月全面實施，在兩年寬限期內，我們會積極向業界宣傳守則的內容。

New Code of Practice Published

A key development in the year was the publication of an updated edition of the Code of Practice (CoP) for the Electricity (Wiring) Regulations in December 2015, a major update on the 2009 edition, to keep abreast of the latest technology and safety requirements. This was the result of detailed deliberations by a working group comprising representatives from different sectors of the electrical industry. One of the significant enhancements of the new CoP is the incorporation of detailed safety precautions for work on high voltage installation. Another major enhancement is the requirement of using miniature circuit breakers and moulded case circuit breakers with lockable function to ensure that the devices can be locked off and will not be inadvertently turned on during electrical work.

The 2015 edition of the CoP will be fully implemented in December 2017 after a two-year grace period, during which we shall actively promote it to the trade.



與業界及其他政府部門舉辦電力工作安全研討會。

The Electrical Work Safety Seminar was held in collaboration with the industry stakeholders and other government departments.



保障公眾安全

PROTECTING PUBLIC SAFETY

電力安全 ELECTRICAL SAFETY

維繫業界與市民

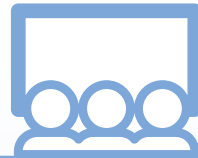
與電業界持份者保持聯繫，有助預防事故發生。2015/16年度，我們多次與電力公司高層進行會議，並舉辦超過300場實地視察暨安全講座。我們的安全意識計劃以註冊電業工程人員為重點目標，計劃內容包括舉辦2015傑出註冊電業工程人員選舉，比賽吸引了約80名參賽者。年內，我們亦推出了首個安全論壇，為合資格人士提供平台，提高業界相關安全意識及對規管要求的認知。他們的工作表現對預防第三者損毀供電電纜極為重要。

我們亦經各種宣傳和公眾教育渠道，包括大規模外展項目，直接聯繫市民。我們的專責外展工作大使走訪各學校、幼稚園及安老院舍，舉辦電力安全講座，年內接觸了35 000多名市民。

Engagement with Trade and Public

Engaging with stakeholders in the electrical business can help prevent incidents. In 2015/16, we held senior level meetings with the power companies and conducted over 300 joint site inspections cum safety talks. Registered Electrical Workers (REW) are a key target of our safety awareness programmes, such as the Outstanding Registered Electrical Worker Awards Scheme 2015 which attracted about 80 participants. We also launched during the year our first safety forum for Competent Persons as a platform to enhance their awareness of the relevant safety and regulatory requirements. Their work performance is vital to avoiding third-party damage to electricity supply lines.

We also directly engaged with the public via various publicity and public education channels, such as our extensive outreach programme. Our dedicated ambassadors visited schools, kindergartens and elderly homes to give lively electrical safety talks, reaching over 35 000 individuals in the year.



電力法例部的宣傳大使正教導幼稚園同學電力安全。
Ambassador from Electricity Legislation Division teaching electrical safety to kindergarten students.



舉辦傑出註冊電業工程人員選舉，表揚業界表現傑出者。
The Outstanding Registered Electrical Worker Awards Scheme was organised to commend trade members with remarkable performance.

鍥而不捨地調查意外事故

TO INVESTIGATE WITH PERSEVERANCE

屈兆鵬工程師
Pan Wut, Engineer



作為一個電力法例部的當值工程師，除了需要具備專業知識外，還需要具有鍥而不捨的精神，與團隊合作調查電力意外事故。電力法例部的工程師屈兆鵬先生，正正是其中一位當值工程師。屈先生於2016年2月的一個晚上，接到來電報稱有人在新界一個偏僻的地點觸電死亡，他隨即和其團隊趕赴現場調查意外事故。

屈先生和他的調查團隊從死者發生意外的地點開始調查，細心地檢查地點內的每一個電力裝置。由於事發的地點十分偏僻，設備簡陋且欠缺照明系統，大大增加了調查工作的難度。徹夜調查後，屈先生和他的調查團隊已於清晨檢查所有相關的電力裝置，可是仍未找出觸電的原因。他們並沒有氣餒，決定擴大調查範圍，包括發生意外地點以外的其他電力裝置，並且增派人手繼續調查。調查團隊馬不停蹄連續工作十八小時，直至當天的下午六時許，在事發地點附近的另一座建築物內發現事故原因。屈先生對這次意外事故的調查感到畢生難忘。

屈先生說：「事發現場往往一片混亂，單憑表面所見是很難下判斷的。我們必須心思慎密及觀察入微，更要抱着鍥而不捨的精神，才能找出箇中原因。」

As a duty engineer of the Electricity Legislation Division one must be equipped with not only professional knowledge but also perseverance to work with colleagues on the investigation of electrical incident. Mr Pan Wut of the Electricity Legislation Division serves as one of duty engineers. On a night in February 2016 he received a call about a fatal incident in a remote village house in the New Territories. Having heard that the victim was electrocuted, he immediately rushed to the spot with his investigation team.

Mr Wut and his team began their investigation at the site of the incident, digging into every corner to check each electrical installation. As it was far from the city, facilities nearby were primitive and lighting was inadequate. All these factors added to the difficulty of investigation so that the team was yet to discover the cause of the incident despite the completion of checking of all related electrical installations. Mr Wut and his team, however, did not give up. The extent of investigation was expanded to other electrical installations beyond the site and; manpower was added as well. Eventually by 6pm — after over 18 hours of work — the team found the cause in another building neighbouring the site. This investigation is surely an unforgettable memory to Mr Wut.

“Careful thought and condensed observation are the key, so is the perseverance that let you discover the underlying cause and make judgement amid the chaos,” he concluded.

保障公眾安全

PROTECTING PUBLIC SAFETY

電力安全 ELECTRICAL SAFETY

運用科技提升效益

為提升值班工程師處理事故時的工作效率，本署為他們提供最新的「值班裝備」平板電腦式電話。這個裝置結合所有通訊工具於一身，包括手提電話、電郵及相關應用程式，可加快訊息交流。我們現正將地理資訊系統納入電器產品商店的資料庫，以便更有效規劃巡查行程。

Using Technology for Better Efficiency

A new “duty kit” tablet-phone was made available to our duty engineers to help them work more efficiently during handling of incidents. This device integrates all communication tools including mobile phone, email and relevant apps on a single gadget to expedite information sharing. We are also working on integrating the GIS system with our database of electrical product shops to make inspection itinerary planning more effective.



使用最新的「值班裝備」以提升處理事故的工作效率。
Using new “duty kit” to enhance working efficiency in handling of incidents.



透過研討會向業界人士講解新版《電力（線路）規例工作守則》。
Explaining to members of the industry on the new Code of Practice for the Electricity (Wiring) Regulations through seminars.

來年新措施

踏進2016/17年度，我們將會舉辦更多活動，向業界推廣《電力（線路）規例工作守則》新版本，並會集中資源，巡查需特別關注的處所，如舊工廠大廈內的迷你倉及定期測試證明書已過期的舊樓。我們亦會就與「完工證明書」相關的電力工程（即新完成或改裝電力工程）加強執法。

同時，我們會研究大型戶外招牌的安全事宜，及對市場上新電氣產品進行更多監察測試，以監控其安全水平。

Initiatives Next Year

In 2016/17, there will be more promotion activities carried out for the new CoP for the Electricity (Wiring) Regulations to the trade. We shall focus our resources on conducting inspections for premises with special concerns, such as mini-stores in old factory buildings as well as old buildings with overdue periodic test certificates. We shall also further step up our enforcement actions on those “WR1” related electrical works, i.e. newly completed or alteration electrical works.

At the same time, we would look into the electrical safety aspects of large outdoor sign boards, and conduct more surveillance tests on new electrical products in the market to monitor their safety.



測試市場上的電氣產品，以監控其安全水平。
Conducting surveillance tests on electrical products in the market to monitor their safety.

? 冷知識 Did You Know?

香港首間發電廠於1890至1922年間在灣仔星街運作。
Hong Kong's first power station operated from 1890 to 1922 at Star Street, Wan Chai.

保障公眾安全 PROTECTING PUBLIC SAFETY

氣體安全 GAS SAFETY



機電工程署員工正稽察對家居氣體裝置的定期安全檢查工作。
EMSD staff auditing the regular safety inspection of household gas installation.

氣體安全

第三者損毀事故創新低

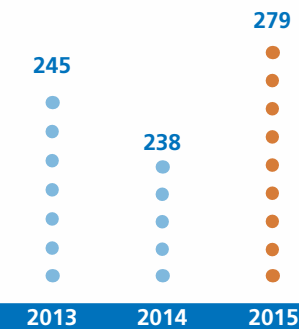
在2015年，由於承辦商的安全意識有所提高，令第三者損毀地下煤氣喉管事故宗數創近年新低，只有12宗。不過，氣體事故總數則由2014年的238宗增至2015年的279宗，相信是因為我們積極向氣體用戶及物業管理公司宣傳氣體安全知識，令他們對疑似氣體洩漏事件警覺性提高。我們仍會繼續致力推行教育和宣傳工作，務求提升大眾的氣體安全意識。

GAS SAFETY

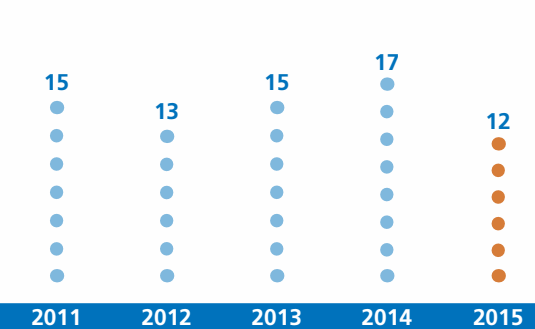
Record Low Third-Party Damage Incidents

In 2015 the number of third-party damage to underground town gas pipes hit a new low of 12 in recent years, thanks to contractors' heightened safety awareness. However, the total number of gas incidents increased from 238 in 2014 to 279 in 2015. The rise is believed to be ascribable to our proactive efforts in promoting gas safety to gas users/property management agents which in turn heightened their alertness to suspected gas leaks. We would sustain our educational and promotional impetus to strive for higher public awareness of gas safety.

氣體事故總數
Total Gas Incidents



第三者損毀地下氣體喉管事件
Third Party Damage to Underground Gas Pipe Incidents



致力監察註冊氣體承辦商的表現，提升公眾的對氣體安全的關注。
Striving to monitor Registered Gas Contractors' performance and promote gas safety to the public.

推廣定期安全檢查及地下煤氣網絡安全

為促進煤氣安全，我們已於2015/16年度推行數項新措施。每18個月進行一次住宅單位定期安全檢查非常重要，這有助定期檢測氣體用具的運作情況，以及盡早發現用戶喉及供氣分喉鏽蝕。不過，未能進入單位仍是一個難題，為此我們與房屋署及香港中華煤氣有限公司(煤氣公司)合作，於三個公共屋邨推出試行計劃，向多次拒絕定期安全檢查服務的住戶宣傳定期安全檢查的重要性。試行計劃相當成功，於計劃結束時，該些公共屋邨的目標住戶定期安全檢查服務的完成率已由48%提升至78%，並會分階段將此推廣計劃擴展至其他公共屋邨。

為加深市民對地下煤氣網絡安全的了解，我們與煤氣公司的代表合作，於2015年12月舉辦了一場新聞簡報會，向20多間傳媒機構分享確保地下煤氣網絡安全的規管策略及相關技術，同時示範使用多種測漏裝置。是次活動引起傳媒的廣泛興趣及報導。

Promoting Regular Safety Inspection and Underground Town Gas Network Safety

Several new initiatives were launched in 2015/16 to enhance town gas safety. Regular Safety Inspection (RSI) in a residential flat once every 18 months is important for regular monitoring of the operating conditions of gas appliances and early detection of installation pipe and riser corrosion, but unsuccessful access to flats remained an issue. In this regard, we had worked with the Housing Department and Towngas on a pilot scheme in three public housing estates for promotion of RSI to those households repeatedly rejecting RSI services. Upon the completion of the pilot, the RSI access rate of the target households in these estates raised from 48% to about 78%, and we have been extending the joint RSI promotion to other public housing estates by phases.

To help the public know more about underground town gas network safety, we organised in December 2015 a media briefing devoted to this topic. Together with Towngas representatives, we shared with over 20 media organisations our regulatory strategies and relevant technologies to ensure underground town gas network safety, with demonstration of leakage detection devices. The event generated wide media interests and coverage.

保障公眾安全

PROTECTING PUBLIC SAFETY

氣體安全 GAS SAFETY

向傳媒講解 煤氣管網安全 BRIEFING THE PRESS ON TOWN GAS NETWORK SAFETY

吳玉華工程師
Alice Ng, Engineer



2015年12月14日，氣體標準事務處舉辦了一場傳媒簡介會，向傳媒介紹我們提升煤氣管網安全的規管工作。簡介會由該事務處的工程師吳玉華帶領她的小組統籌。她指出，舉辦簡介會最困難的地方，在於如何準確及淺白地解釋相關技術事宜。

多番籌備後，簡介會於觀塘樂華南邨的空地正式開始。簡介會上，氣體標準事務處的人員首先介紹該事務處近期規管方面的工作成果，並示範各種檢測氣體洩漏的方法，如步行式洩漏測量、車載式洩漏測量、激光甲烷探測器，以及「飛行管道檢查器」。「飛行管道檢查器」是一部遙控模型飛機，能檢測位於斜坡、橋樑或其他難以到達位置的地點的煤氣喉管。簡介會有逾20位報業、電視台及電台的傳媒朋友出席，他們對「飛行管道檢查器」和該事務處為預防第三者損毀事故而最新制訂的「預警指標」特別感興趣。

簡介會獲廣泛報道，有助公眾更了解我們規管煤氣管網安全的工作。吳女士亦很榮幸參與籌備簡介會，讓她與傳媒合作，是她事業上一個寶貴的經驗。

The Gas Standards Office (GasSO) held a media briefing on 14 December 2015 to brief the media about our regulatory work to enhance town gas network safety. Alice Ng, engineer in GasSO, led a team to plan the event. "The challenge was how to explain technical matters in laymen terms that are accurate and easy to understand," she said.

After much preparation, the team held an outdoor press briefing at Lok Wah (South) Estate in Kwun Tong on GasSO's latest regulatory efforts, followed by demonstrations on the use of various inspection technologies including walking leakage survey, vehicle leakage survey, as well as laser methane gun to detect gas leakage, and a "flight pipeline inspector" which was a drone to detect leakage on gas pipes on slopes, bridges or locations that are difficult to access. The 20-plus media organisations from newspapers, TV and radio programmes attending the event were particularly interested in the drone and the "precursor" which was newly developed by GasSO to prevent third-party damage incidents.

The briefing generated wide and much positive coverage which helped the public understand more about our safety regulatory work on town gas network. Ms Ng also appreciated the opportunity to lead the event which gave her precious experience in working with the media.



瓶裝石油氣分銷商安全表現評級計劃

為進一步提升瓶裝石油氣業界的安全表現，機電工程署與註冊氣體供應商於2016年初攜手合作，推出「瓶裝石油氣分銷商安全表現評級計劃」，參與計劃者包括五間供應瓶裝石油氣的註冊氣體供應公司旗下所有184個分銷商。在是項計劃下，註冊氣體供應商委託獨立稽核公司，就分銷商運送氣瓶安排、氣體用具安全檢查、客戶單據資料紀錄、員工培訓紀錄和氣體安全作業紀錄的表現評級。

參與的分銷商中，33間獲評為最高的金級、22間銀級、129間銅級，分銷商名單及其安全表現評級刊登於機電工程署網頁。分銷商會於店內展示計劃標誌及評級證書，以茲識別。另外，市民亦已從電視及電台知悉有關計劃。



推出「瓶裝石油氣分銷商安全表現評級計劃」，進一步提升瓶裝石油氣業界的安全水平。
LPG Cylinder Distributor Safety Performance Recognition Scheme was launched to further enhance the safety performance of the LPG trade.

LPG Cylinder Distributor Safety Performance Recognition Scheme

To further enhance the safety performance of the liquefied petroleum gas (LPG) cylinder trade, EMSD and the Registered Gas Supply Companies (RGSCs) jointly launched the LPG Cylinder Distributor Safety Performance Recognition Scheme in early 2016. All the 184 distributors under the five RGSCs supplying cylindered LPG joined the Scheme. Under the Scheme, independent auditing companies commissioned by the RGSCs gave ratings to the distributors based on their performance in LPG cylinder delivery arrangement, safety inspection of gas appliances, customer data records, employee training records and gas safety operation record.

Among the participating distributors, 33 attained gold rating, the highest level of safety performance, while 22 and 129 received silver and bronze ratings respectively. The list of distributors and their safety performance ratings was available on the EMSD website. Distributors will display the Scheme logo and the rating certificate at their shops for easy identification. Also, the public was informed about the Scheme through TV and radio.

? 冷知識 Did You Know?

全港尚有4支煤氣燈，位於中環都爹利街，「晚六朝六」亮燈，為香港法定古蹟。
The only four existing Gas Lamps in Hong Kong are situated at Duddell Street, Central and are lighted up from 6p.m. to 6a.m. They are declared monuments in the city.

保障公眾安全

PROTECTING PUBLIC SAFETY

氣體安全 GAS SAFETY

到訪車輛維修工場
REACHING OUT
TO VEHICLE
MAINTENANCE
WORKSHOPS羅振雄工程師
Ronald Law, Engineer孫美寶統籌員
Mabel Sun, Coordinator

車輛維修註冊組的羅振雄工程師，可能是到訪最多車輛維修工場的一位同事。羅先生部分的工作，是推廣車輛維修工場自願註冊計劃。他與到訪大使團隊的統籌員孫美寶女士，足跡幾乎遍及全港2 700間車輛維修工場。

車輛維修工場自願註冊計劃於2015年7月推出，旨在提升車輛維修行業的服務水平及形象。到訪車輛維修工場，是向工場東主及營運者介紹計劃，爭取他們的支持。自2015年11月開始，羅先生和孫女士大部分時間會到訪工場，每周工作六天和平日亦常超時工作。幸而，不少經到訪的車輛維修工場對計劃反應熱烈。

羅先生和孫女士到訪工場時，察覺到一些值得注意的事項。孫女士說：「其實大多數工場都是小本經營，資源有限。然而，只要我們向他們清楚解釋計劃的內容，並協助他們填寫表格，提交申請，他們亦多樂意參加計劃。」羅先生亦充滿信心地指出：「我們將繼續到訪車輛維修工場，目標在2016年，推動全港達到七成的工場加入計劃。」

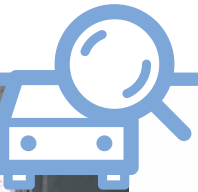
Probably no one has visited more vehicle maintenance workshops (VMWs) than Ronald Law, an engineer of the Vehicle Maintenance Registration Unit, as one of his duties is to promote the Voluntary Registration Scheme for Vehicle Maintenance Workshops (VRSVMW). Working with Mabel Sun, the team coordinator of ambassadors, they have visited almost all of the 2 700 workshops in Hong Kong.

The VRSVMW was launched in July 2015 to enhance the service standards and image of the vehicle maintenance trade. The visits aimed to explain the objective of VRSVMW to the workshop owners/operators so as to convince them to support it. Ronald and Mabel spent most of their time since November 2015 for visiting workshops six days a week and work late during weekdays. Response from the visited workshops was enthusiastic.

Ronald and Mabel learned a few important things from their visits. "Most workshops are small businesses with limited resources, so they are more likely to join if we reach out to them to explain the scheme and help them with the paperwork for application," Mabel said. "The outreach visits are ongoing, with the goal to facilitate 70% of all workshops in Hong Kong to join in 2016," Ronald confidently emphasized.



覆檢石油氣燃料缸，確保安全。
Revalidating LPG fuel tanks to ensure safety.



保障石油氣車輛安全

去年，石油氣車輛安全方面大有進展。車用石油氣定期品質檢定測試運作暢順。根據《氣體安全（氣體供應）規例》規定，石油氣燃料缸必須每五年最少檢測一次。2015/16年度是燃料缸的覆檢高峰期，我們與石油氣燃料缸工場及分銷商通力合作，確保市場為石油氣的士及小巴供應足夠經覆檢的燃料缸。覆檢工作進行順利，沒有影響全港22 000輛石油氣車輛的運作。

2015年4月，黃大仙一間車輛維修工場發生事故，導致三死九傷。除了調查事故外，我們採取多項緩解措施，防止類似事故再次發生，包括持續加強巡查車輛維修工場。我們亦加緊監控市面的石油氣燃料泵，防止非法更換石油氣燃料泵。

此外，為方便車主、司機、車隊管理代理及市民識別提供石油氣系統維修工程的車輛維修工場，我們開始向所有共1 100名合資格的維修石油氣車輛燃料系統第六類勝任人士派發證明卡及證書，供他們在維修工場內展示。我們亦向能夠檢修石油氣車輛燃料系統的車輛維修工場派發識別標誌，但相關工場必須設有符合我們要求的安全設備及通風系統，以及聘用「第六類勝任人士」進行有關檢修服務。

Keeping LPG Vehicles Safe

Turning to safety in LPG vehicles, much progress was made last year. The regular monitoring of auto-LPG quality continued in a smooth manner. The cyclical peak of fuel tank revalidation of LPG vehicles, required once every five years under the Gas Safety (Gas Supply) Regulations, proceeded smoothly in 2015/16 without disruption to the operation of the city's 22 000 LPG vehicles. This was a result of our coordination with the LPG fuel tank workshops and distributors to ensure sufficient supply of revalidated fuel tanks in the market for LPG taxis and light buses.

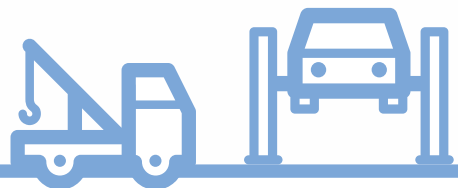
An incident happened in April 2015 at a vehicle repair workshop in Wong Tai Sin, killing three and injuring nine. Apart from investigating into the incident, we took various mitigation measures to prevent such tragedies from recurring, such as stepping up workshop inspections on an ongoing basis. We also tightened up the monitoring and control of LPG fuel pumps in the market to prevent unlawful fuel pump replacement.

Furthermore, to enable vehicle owners, drivers, fleet management agents and the public to easily identify vehicle maintenance workshops (VMWs) that are competent to carry out LPG fuel system servicing works, we started issuing identification cards and certificates to all 1 100 Competent Persons (Class 6) qualified to service LPG vehicle fuel systems for display in their workshop. We also issued identification signage to those VMWs capable of providing services to LPG vehicle fuel system, but only if we were satisfied that they were equipped with the necessary gas safety equipment and ventilation system and had employed Competent Person (Class 6) for carrying out such service.

保障公眾安全

PROTECTING PUBLIC SAFETY

氣體安全 GAS SAFETY



到訪車輛維修工場，向東主解釋「車輛維修工場自願註冊計劃」事宜。
Our team visited vehicle maintenance workshops to explain the Voluntary Registration Scheme for Vehicle Maintenance Workshops to workshop owners.

推出車輛維修工場自願註冊計劃

2015年7月，我們推出了「車輛維修工場自願註冊計劃」。這個計劃有助提升香港車輛維修工場的形象和服務水平，是2013年推出《車輛維修工場約章計劃》後的一個新里程。註冊車輛維修工場須承諾營運質素不低於《車輛維修工場實務指引》在技術、環保、安全、員工培訓、服務和文件紀錄等方面的要求。成功註冊的工場可展示計劃頒發的標誌，方便車主和司機作出識別服務可靠的工場。

截至2016年3月，全港2 700間車輛維修工場當中，已有超過1 200多間工場申請註冊。我們廣泛宣傳，幾乎走訪香港每一間車輛維修工場，鼓勵和協助工場負責人註冊，令註冊工場數目持續上升。

易燃雪種

現時廣泛使用於空調行業的非易燃氫氟烴雪種會導致全球暖化，並可能會根據全球協議的時限內被淘汰。部分現有氫氟烴雪種的替代品本質上是可燃燒的，有導致火警及爆炸的風險。

在2015年，我們與相關部門採取聯合行動，糾正於改裝冷氣系統時涉及使用易燃雪種或石油氣的個案。我們亦與空調及製冷業、物業管理業及機電承辦商的主要持份者會面，提高他們對使用易燃雪種相關法例要求及潛在風險的認知。

Voluntary Registration Scheme for Vehicle Maintenance Workshops Launched

A related development that would help VMWs in Hong Kong boost their image and service standards was the launch of the Voluntary Registration Scheme for Vehicle Maintenance Workshops (VRSVMW) in July 2015. The VRSVMW is a step forward following the introduction of the Vehicle Maintenance Workshops Charter in 2013. To register under the scheme, VMWs should pledge to operate at a quality level not lower than that specified in the Practice Guidelines for Vehicle Maintenance Workshops in terms of technical, environmental, safety, staff training, service and documentation requirements, etc. The Registered VMWs can display the scheme's logo for easy identification of workshop that provide reliable services to car drivers and owners.

As of March 2016, over 1 200 out of Hong Kong's 2 700 workshops were registered under VRSVMW. The number is still growing as a result of our extensive outreach programme, in which we visited almost every workshop in Hong Kong with a view to encouraging and facilitating the workshop owners to register under the scheme.

Flammable Refrigerants

The current non-flammable hydrofluorocarbon (HFC) refrigerants widely used in the air-conditioning industry are of global warming potential, and will likely be phased out according to a time table to be established under a worldwide agreement. Some alternatives to existing HFC refrigerants are flammable in nature, and might pose fire or explosion risks.

We carried out joint operations with relevant government department in 2015 to rectify cases involving the use of flammable refrigerants or LPG in retrofitted air-conditioning systems. We also met the key stakeholders in the air-conditioning and refrigeration industries, property management sectors as well as E&M contractors to heighten their awareness of relevant statutory requirements and the potential risks of using flammable refrigerants.



業界人士及公眾出席「車輛維修工場自願註冊計劃」推廣日。
Vehicle maintenance trade members and the public attended the Promotion Day of Voluntary Registration Scheme of Vehicle Maintenance Workshops.

來年展望

2016/17年度將會推行數項與氣體相關的環保計劃，例如煤氣公司會把將軍澳新界東南堆填區經處理的沼氣注入至煤氣網絡作燃氣使用，充分利用原本會被浪費的沼氣，並達至減少碳排放的效果。在氣體安全方面，機電工程署負責審批堆填區沼氣處理設施的建設及現有煤氣裝置的相關改動。

同時，北大嶼山小蠔灣有機資源回收中心將於2017年正式啟用，中心內有機廢物生物分解時產生的沼氣將會用於製熱和發電。中心設有應具報氣體裝置，我們會審批其建造過程，以確保氣體安全。

來年會進一步加強規管石油氣車輛燃料缸，包括鼓勵業界開設新石油氣燃料缸工場，採用石油氣液體交換系統，以排走燃料缸內的石油氣，以及將所有石油氣燃料缸工場登記為註冊氣體供應公司，以更有效地管理工場運作。

在宏觀的層面及業界的支持，我們正準備於2016/17年度推出一個全面系統，以更有效地監控整個覆檢石油氣燃料缸和更換燃料泵的過程，包括引入設計使用期較長的新型石油氣燃料泵；於燃料泵的當眼處標示識別號碼，以便出售和更換燃料泵時作紀錄；以及引入保安標籤系統，確保維修石油氣燃料缸合乎法例要求。

同時，為協助車輛維修業提升服務水平，我們會繼續推廣「車輛維修工場自願註冊計劃」。我們的目標是在2016年，達到全港七成的工場加入計劃。

Developments Next Year

2016/17 will see a few gas-related green developments. An example is the new project where Towngas will utilise the treated landfill gas from the South East New Territories Landfill in Tseung Kwan O for injection into the town gas network as fuel gas. This will make good use of the landfill gas that would otherwise go to waste, and also generate carbon emission reduction benefits. In the gas safety aspect, EMSD is responsible for approving the construction of the landfill gas treatment facilities and associated modifications on existing town gas installations.

Meanwhile, the Organic Waste Treatment Facilities at Siu Ho Wan in North Lantau will commence operation in 2017. The biogas generated from the biological breakdown of the organic waste from the plant will be used for heating and power generation. As the facility comprises notifiable gas installations, we shall be vetting its construction to ensure gas safety.

The coming year will see further efforts to enhance regulatory control of LPG vehicle fuel tanks, including encouraging the trade to set up new LPG fuel tank workshops using LPG liquid transfer system to purge LPG fuel tanks, and registering all LPG fuel tank workshops as Registered Gas Supply Companies for better control of their operations.

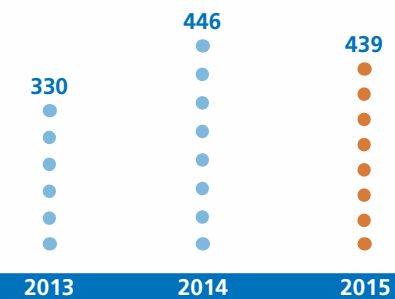
On a macro level and with the trade's support, we are working on a comprehensive system to be launched in 2016/17 to better control the entire process of LPG fuel tank revalidation and pump replacement. This includes: introducing a new generation of LPG fuel pumps to the market with longer design life; marking identification number on a pump at a conspicuous spot that can be easily recorded during pump sale and replacement; and introducing a security label system to ensure lawful repair of the fuel tank.

At the same time, we shall continue to promote VRSVMW to help the vehicle maintenance trade raise its service standards. We target to have 70% of workshops in Hong Kong joining VRSVMW in 2016.

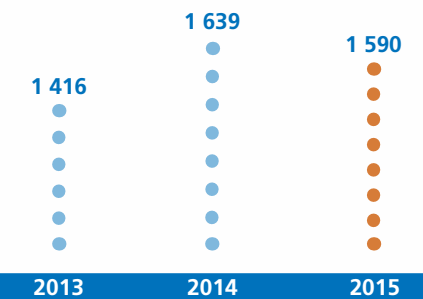
保障公眾安全 PROTECTING PUBLIC SAFETY

機械安全 MECHANICAL SAFETY

已報告的升降事故
Reported Lift Incidents



已報告的自動梯事故
Reported Escalator Incidents



機電工程署員工正檢查海洋公園的登山纜車。
EMSD staff checking the Ocean Park cable cars.

機械安全

減少意外，提升安全意識

2015/16年度的重點繼續是預防事故發生和提升市民的安全意識，主要針對以下三方面：架空纜車、機動遊戲機、升降機及自動梯。以升降機及自動梯為例，有賴業界及市民的努力，升降機意外宗數由2014年的446宗減至2015年的439宗，自動梯意外宗數則由2014年的1 639宗減至2015年的1 590宗。值得注意的是，2015年因乘客行為導致的升降機及自動梯意外宗數均見下降，表示市民更注重安全。

MECHANICAL SAFETY

Fewer Incidents, Higher Safety Awareness

The focus in 2015/16 continued to be on incident prevention and raising public safety awareness in three key areas: aerial ropeway, amusement rides, lifts and escalators. Take lifts and escalators as an example. Thanks to the efforts by the trade and the public, the total number of lift incidents declined from 446 in 2014 to 439 in 2015, and the total number of escalator incidents fell from 1 639 in 2014 to 1 590 in 2015. It is noteworthy that both lift and escalator incidents caused by passenger behaviour have declined in 2015, a sign that the public have become more safety conscious.



監督昂坪360纜車的導軌纜修正工程，大幅提升纜車的可靠度。
Reliability of Ngong Ping 360 saw a significant increase due to monitoring of the track rope "shifting" works.

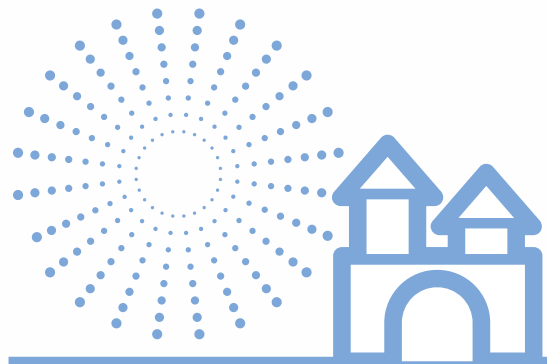
架空纜車改善工程

我們在架空纜車方面的發展重點，包括監督海洋公園登山纜車B線的系統升級工程，以及監察昂坪360纜車的導軌纜修正工程。在2015年，昂坪360纜車的可靠度進一步提升至99.89%，即是纜車平均運作每八小時，才只有不足半分鐘的停頓。

Ropeways Improvement Work

Some key developments in our work on aerial ropeway included overseeing the system upgrade of the Cable Car "B" line in Ocean Park, and monitoring the Ngong Ping 360 (NP360) track rope "shifting" works. Reliability of NP360 has further improved to 99.89% in 2015, meaning there was less than 0.5-minute stoppage for every eight hours of cable car operation.

保障公眾安全

PROTECTING PUBLIC SAFETY
機械安全 MECHANICAL SAFETY

透過嚴格的審批、完善的發牌機制及持續的監察，確保機動遊戲機能安全操作。
Serious assessment, a well-established licensing mechanism and continuous monitoring are key to amusement rides safety.



及時和嚴格審批臨時機動遊戲機

在2015年，我們亦忙於審批臨時機動遊戲機，以確保荔園Super Summer、歐陸嘉年華及東華慈善嘉年華這三個大型嘉年華會的機動遊戲機安全，於假日期間為本港市民及遊客帶來歡樂與刺激。雖然審批時間非常緊迫，我們仍然將保障市民安全放在第一位，在審批機動遊戲機時堅守極高的安全標準。

Timely and Stringent Vetting of Mobile Rides

We were also busy vetting mobile amusement rides in 2015 to ensure the safety of rides in three major carnivals. These included the Lai Yuen Super Summer, the Great European Carnival and the Tung Wah Charity Carnival, bringing fun and excitement to local citizens and tourists in the holiday seasons. Despite the tight timeframes for the events, we put safeguarding the public as the first priority and maintained very high safety standards in vetting and approving the rides.

冷知識 Did You Know?

全港最快及運行距離最長的雙層升降機位於環球貿易廣場，每秒可上升9米，總運行距離為425米。
The fastest double-deck elevator with the longest travelling distance in Hong Kong is in International Commerce Centre with a rated speed of 9m/s and a 425m travelling distance.

嘉年華機動遊戲機的審批
VETTING
CARNIVAL RIDES

溫家豪工程師
Jonathan Wan, Engineer



戶外嘉年華的機動遊戲機深受大眾歡迎。然而，對機動遊戲機的各方面進行審批，確保其安全運作，需要花費大量心力和時間。一般法例部的溫家豪工程師指出，2015年冬季首次同時有兩個大型嘉年華會在港舉行，嘉年華會的主辦商，往往希望在取得租用地後，在最短時間內開幕。雖然時間緊逼，審批工作亦必須確保無論在規管程序和安全標準上，都必須符合規定才可批核。

Outdoor carnival rides are major attractions to the public but it takes a great deal of work behind-the-scenes to vet and ensure their safety. "Winter 2015 was the first time to have two large-scale carnivals at the same period in Hong Kong. The challenge is always the tight time frame as operators are naturally keen to start the rides as soon as possible within a short period after occupancy of the site," Jonathan Wan, engineer in the General Legislation Division (GLD) said. "But we need to safeguard the safety and insist on full compliance with regulatory procedures and safety standards before granting approval", he supplemented.

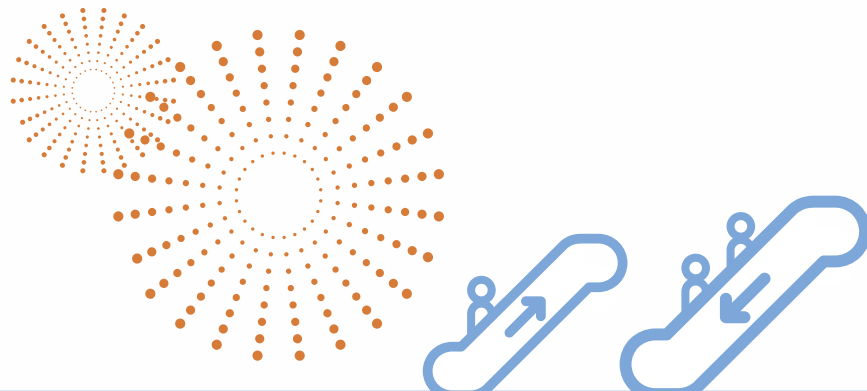
審批過程分為兩部分。首先是機動遊戲機的設計審批。當設計獲批准後，機動遊戲機便會開始安裝，安裝完成後由獨立檢測員檢測，並由一般法例部的負責人員在場監督整個過程。每台機動遊戲機均有一名已獲一般法例部考核及批准的主管人員來監督它的運作和保養工作。只有當符合所有法例要求之後，一般法例部會為機動遊戲機發出一張「使用及操作許可證」。當以為萬事俱備的時候，2015年12月突如其來的連日下雨，卻導致安裝延期。審批團隊唯有日以繼夜地加緊工作，以趕回進度。

The vetting has two stages. First is ride design vetting. With design approved, the rides are then installed and checked by an independent surveyor in the presence of a GLD officer. The operation and maintenance work of each amusement ride is supervised by a Competent Person assessed and approved by GLD. Only when all these requirements are complied with will GLD issue a "permit to use and operate" for the ride. Even with everything well planned, the unexpected rain in December 2015 delayed the installation work, and the team had to work day and night afterwards to make up for the time lost.

溫先生視安全為第一，並非常高興他們的工作不但能讓公眾安全乘坐機動遊戲機，更為他們帶來歡樂，共度佳節。

"Safety is always our priority," he said. "We are happy about our work as safe rides bring happiness to the public in the joyful seasons."

保障公眾安全

PROTECTING PUBLIC SAFETY
機械安全 MECHANICAL SAFETY

我們執行《升降機及自動梯條例》(第618章)，規管本港升降機及自動梯的使用及保養。

We regulate the use and maintenance of lifts and escalators in Hong Kong through the implementation of the Lifts and Escalators Ordinance (Chapter 618).

提升升降機及自動梯行業

為提升升降機服務質素，我們於2015年10月推出「優質升降機服務認可計劃」。這項試行計劃收到94份來自升降機負責人的申請，評分準則乃根據在優化升降機、管理承辦商，以及服務停頓紀錄的表現，由獨立顧問實地核查評分。頒獎典禮於2016年4月舉行，共有45位得獎者獲得嘉許。

香港現有超過60 000部升降機，約半數已使用超過20年。這項計劃有助鼓勵升降機優化工程及提高負責人管理升降機的能力。我們會檢討計劃，決定未來路向。

另一項提高升降機及自動梯承辦商安全表現的措施，是修訂「註冊承辦商表現評級」制度下，為註冊升降機/自動梯承辦商及工程師而設的「表現評估計劃」。已修訂的計劃涵蓋更多違規事項，更能反映承辦商的表現，並進一步協助升降機/自動梯擁有人選擇高質素的維修保養服務承辦商。修訂的計劃已由2016年2月1日起生效。

為提高業界的專業水平，除了舉辦各種技術研討會，向負責人介紹升降機及自動梯的新技術外，我們於2015/16年度向註冊升降機/自動梯承辦商、工程師及工程人員發出三份誠信指引。

審計署署長第66號報告書於2016年4月發表，內容包括對我們監察升降機及自動梯安全運作的意見和建議。有見及此，我們會實施各項必要措施，協助業界提升整體達標率。

Enhancements of the Lift and Escalator Trade

A new initiative to boost quality in lift service was the Quality Lift Service Recognition Scheme launched in October 2015. The pilot scheme attracted 94 applications from Responsible Persons of lifts, and assessment was based on their performance in lift modernisation, management of lift contractors and lift service stoppage records, with on-site verification by an independent consultant. 45 award winners received their prizes in a ceremony in April 2016.

As about 50% of the existing 60 000-plus lifts in Hong Kong are over 20 years' old, such a scheme could be very useful to boost lift modernisation and Responsible Persons' management quality of lift service. We shall review the scheme to decide on the way forward.

Another initiative to step up the safety performance of lift and escalator contractors was revising the Performance Assessment Scheme (PAS) for Registered Lift/Escalator Contractors and Engineers, under the Contractors' Performance Rating System. The revised PAS includes more non-compliance items so as to better reflect the performance of contractors and further assist lift/escalator owners in choosing quality contractors for maintenance and repair services. The revised PAS took effect on 1 February 2016.

To help raise professionalism of the trade, three probity guidelines for registered lift/escalator contractors, engineers and workers were issued in 2015/16, in addition to our holding of various technical seminars to introduce new technologies in lift and escalators to the Responsible Persons.

In response to the Director of Audit's Report No. 66 published in April 2016, which contained comments and suggestions about our work in monitoring the safe operation of lifts and escalators, we shall implement all necessary measures to help the trade raise its overall level of compliance.



修正移交核對表

與此同時，我們收集到業界及市民的意見後，稍為修正了「升降機或自動梯保養工作移交事宜核對表」，例如加入移交前必須由交出和接管保養的承辦商一起實地監察的新規定。我們會繼續私人住宅及商業樓宇升降機的保養價格調查，結果每半年公布一次，令價格更透明。

未來工作

踏入2016/17年度，我們會繼續密切監察海洋公園登山纜車A線的優化工程及昂坪360纜車的導軌纜更換工程，亦會更新現行的機動遊戲機指引，尤其針對受歡迎的臨時機動遊戲機。

升降機及自動梯方面，我們會展開新一輪的業界調查，了解業內人士的工作狀況及面對的挑戰，並與2014年的結果作比較，以協助業界尋找吸引和挽留高質素工人的方案。我們會繼續與職業訓練局(職訓局)合作，職訓局會於2016/17年度推出新的兼讀證書課程，讓經驗豐富的升降機/自動梯工人獲得註冊所需的學歷。

繼2015年12月出版《電梯快訊》創刊號後，我們會繼續出版這刊物，作為定期與負責人及業界分享安全資訊的另一渠道。

Handover Checklists Finetuned

Meanwhile, we have fine-tuned the "Checklist for Handover and Takeover of Lift/Escalator Maintenance" after gathering feedback from the trade and the public. An example is the new requirement for a joint site inspection by the outgoing and incoming contractors before handover. The survey of maintenance price in private residential and commercial buildings is ongoing, with results announced every six months to make the trade more transparent to the public.

Work Ahead

Going into 2016/17, we shall closely monitor the modernisation work of Ocean Park's Cable Car "A" and the track rope replacement work in NP360. The current amusement rides guidelines will be updated, especially for mobile rides which are gaining popularity.

For lifts and escalators, we shall conduct a new round of trade survey to canvass the working conditions of the workforce and the challenges, for comparison with the 2014 survey, so as to help the trade come up with solutions to attract and retain quality workers. We have also been working with the Vocational Training Council which is launching a new part-time certificate course in 2016/17 to help experienced lift/escalator workers gain the necessary academic qualifications for registration.

Subsequent to the inaugural issue of our new "Lift and Escalator Newsletter" in December 2015, we shall continue to publish this publication as another channel to regularly share safety information with the Responsible Persons and the trade.



出版《電梯快訊》，加強機電工程署與業界、負責人和市民的溝通及信息的交流。
We publish the Lift & Escalator Newsletter to enhance communication and information exchanges between EMSD and the trade, Responsible Persons, as well as the public.

保障公眾安全 PROTECTING PUBLIC SAFETY

鐵路安全 RAILWAY SAFETY



機電工程署員工與工程人員一同檢查機場管理局新購入於香港國際機場營運的無人駕駛列車。
EMSD staff worked with engineering staff to inspect the newly purchased automated people mover by Airport Authority Hong Kong operating in the Hong Kong International Airport.

鐵路安全

事故減少令人鼓舞

去年，鐵路事故的宗數錄得有記錄以來的新低，現有及新鐵路安全規管方面的工作亦穩步發展。

由設備故障及員工行為引起的鐵路事故宗數，由2014年的90宗減少至2015年的新低84宗。過去一年，我們不僅深入調查事故，並且建議香港鐵路有限公司(港鐵)採取更多積極事故預防的措施。鐵路乘客數量上升，事故宗數反而下降，確實令人鼓舞。

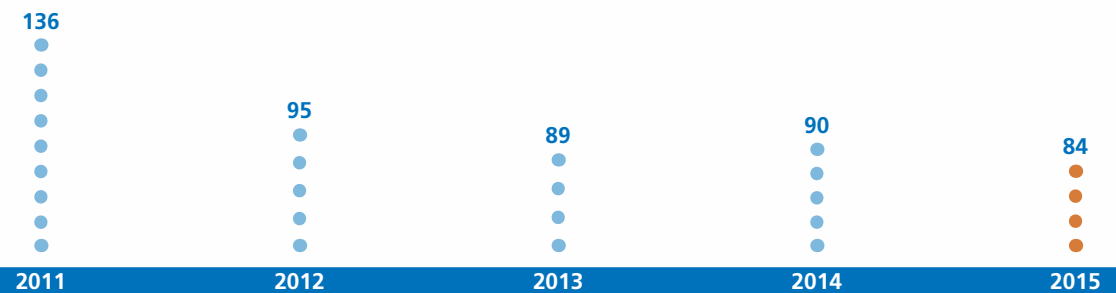
RAILWAY SAFETY

Fewer Incidents Show Encouraging Trend

The past year saw a new low in railway incidents record as well as steady progress in our safety regulatory work for both new and existing lines.

Railway incidents caused by equipment failure and staff behaviour decreased from 90 in 2014 to a new low of 84 in 2015. In the past year, we not only conducted in-depth investigation into incidents, but also suggested the MTR Corporation Limited (MTRCL) to take more pro-active incident prevention measures. The downward incident trend is particularly encouraging in view of the increase in rail passengers.

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



新鐵路線最新發展

繼西港島綫於2014年12月啟用和西營盤站於2015年3月投入服務後，唯一未開放的西營盤站B3出口亦於2016年3月落成，西港島綫所有驗收工作正式完結。另外，於2015年啟用的機場中場客運廊，透過配有新信號系統的無人駕駛列車延綫，連接至一號客運大樓。該無人駕駛列車的伸延於2016年1月獲批准於同年2月啟用，現已全面投入服務。

由於觀塘綫延綫及南港島綫(東段)預期於2016年度後期投入服務，我們忙於在緊逼的時限內檢查鐵路系統和設施。我們的目標是確認兩綫「安全正常」，符合嚴格的安全標準，可於預定日期啟用。

New Railway Lines Update

Further to the opening of the West Island Line in December 2014 and its Sai Ying Pun Station in March 2015, the only outstanding Exit B3 of that station was also opened in March 2016, thus completing all commissioning work for the line. In a different development, the Airport Midfield Concourse opened in 2015 is connected to Terminal 1 via an extension of the Automated People Mover (APM) system with a new signalling system. The APM extension was approved in January 2016 for opening in February in the same year and is in full operation.

As the Kwun Tong Line Extension and South Island Line (East) approach their respective target opening dates later in 2016, we have been busy with numerous inspections of their railway systems and facilities against very tight deadlines. Our target is to confirm both lines as "safe and sound" for operation to begin by the target opening dates, meeting a set of stringent safety standards.



港鐵西營盤站B3出口正式啟用，南港島綫及觀塘延綫亦即將投入服務。
Exit B3 of Sai Ying Pun MTR Station was formally opened; the South Island Line (East) and Kwun Tong Line Extension will soon commence services.

保障公眾安全

PROTECTING PUBLIC SAFETY

鐵路安全 RAILWAY SAFETY



檢查港鐵維修工場的機件，確保機件符合安全要求。
Checking the equipment at the maintenance workshop of MTRCL to ensure the equipment has met the safety requirements.

積極調查事故

2015年11月，荃灣綫荔景及葵芳站之間的鐵路發生路軌裂縫事故，突顯了我們處理事故的積極態度。雖然此乃個別事件，亦不影響鐵路安全，我們仍認真對待，聘請物料專家獨立檢測路軌裂縫，並審視港鐵提交的調查結果。我們亦與港鐵商討，敦促他們採取改善措施，包括加強路軌關鍵位置的人手測試檢查以及調整焊接位的位置，進一步減低同類事故再次出現的機會。

增添人手提升鐵路安全

2015/16年度，鐵路科增添了11個新職位，包括兩個總工程師職位。新添的人手有助我們加強對現有鐵路綫和新鐵路項目的安全監察工作，也加強整體鐵路規管制度。團隊如今更有能力於「點、線、面」三個層次進行日常規管工作，能更全面徹底地審批港鐵的安全系統及表現。「點」的層次是指署方會加強安全巡查的次數和深入程度；「線」的層次是指主動檢視港鐵的維修保養工作流程；「面」的層次則是指會從宏觀的策略角度，去檢討及調校目前用於港鐵的安全規管機制。新增人手亦令我們可調配更多資源與港鐵聯手合作，向市民宣傳安全知識。

Proactive Incident Investigation Approach

A rail crack incident in November 2015 that happened on a section of the rail between Lai King and Kwai Fong stations on the Tsuen Wan Line highlighted our proactive approach to incidents. Though the incident was an isolated case without impact on railway safety, we took it seriously and engaged a material expert to independently examine the rail crack and review the investigation results submitted by MTRCL. We also conferred with and urged MTRCL to take improvement measures including enhancement of manual test at critical locations and adjustment of the weld location to further reduce the possibility of recurrence of similar incidents.

New Capacity Boosts Railway Safety

A total of 11 new posts were created in the Railways Branch in 2015/16, including two Chief Engineers. The new capacity has already helped us enhance safety oversight of existing railway lines and new railway projects, and strengthen the overall railway regulatory regime. The team is also now better equipped to carry out its daily regulatory work at the “point”, “line” and “plane” levels for more comprehensive and thorough vetting of MTRCL’s safety systems and performance. At the “point” level, EMSD will increase the frequency and depth of safety inspections. At the “line” level, it will proactively look into the maintenance workflow of MTRCL. At the “plane” level, it will review and adjust the current safety regulatory regime applied to MTRCL from a macro and strategic perspective. Added capacity also means we can deploy more resources to promote safety to the public, via joint campaigns with MTRCL.

冷知識 Did You Know?

港鐵香港大學站深入地底約70米，是距離地面最深的車站。
HKU is the deepest MTR station with a depth of 70m from ground level.

沙中綫「東西走廊」 迎接八卡車廂列車 EIGHT-CAR TRAINS FOR SHATIN TO CENTRAL LINK-EAST WEST CORRIDOR

朱錦漢工程師
Cavell Chu, Engineer



現時在馬鐵及西鐵綫行駛的列車，將逐漸劃一改為八卡車廂，以應付預計日增的載客量，並確保列車能在沙中綫「東西走廊」的操作系統下運作。朱錦漢先生是鐵路科的工程師，負責監察西鐵綫列車由七卡車廂改為八卡車廂的安全事宜，貢獻良多。

朱先生指：「改裝工程完成後，西鐵綫整體載客能力可提升約百分之十四。」。現時，西鐵綫有28輛七卡列車，自2016年1月起於西鐵車廠逐漸改裝為八卡列車。改裝工程將於2019年完成，以配合沙中綫「東西走廊」的預計通車日期。改裝工序甚多，主要包括在七卡列車中添加一節新車廂，修改車載信號系統以對應八卡列車行駛，以及在車廂內增設動態路線圖及通道端螢幕。

當改裝完成後，港鐵及鐵路科會嚴格地對整列列車進行各種測試。朱先生強調：「改裝後的八卡列車須符合所有安全要求及通過相關測試，以確保列車能安全地接載乘客。」

All existing trains on West Rail Line and Ma On Shan Line have been converting to 8-cars progressively for increasing the overall passenger capacity and also ensuring the compatibility with the operation of the future SCL-EWC. Cavell Chu, engineer of the Railways Branch, made substantial contribution in overseeing the safety aspects of the train conversion of existing 7-car trains of West Rail Line to 8-car trains.

“Upon completion of the train conversion, overall carrying capacity on the West Rail Line will be enhanced by about 14%”, he said. West Rail Line has a total of 28 numbers of 7-car trains which have been progressively converting to 8-car trains by 2019 when SCL-EWC is scheduled to open. Conversion work of the West Rail Line 7-car trains began in January 2016 and is conducted in the West Rail depot. The major conversion work included the insertion of a new trailer car to form 8-car train configuration, modification of trainborne signaling system to cater for 8-car train operation, plus the provision of new features inside the trains such as dynamic route maps and gangway end displays.

Rigorous testing and commissioning of the entire train is conducted by MTRCL and the Railways Branch after the completion of conversion work. “All safety requirements must be satisfied and verified in order to ensure the converted 8-car train is safe for passenger service,” he emphasised.

保障公眾安全

PROTECTING PUBLIC SAFETY

鐵路安全 RAILWAY SAFETY

科技帶來進步

我們支持港鐵應用新科技，例如在即將啟用的南港島綫(東段)安裝超級電容器，用以提升能源效益。西鐵列車亦已安裝動態路線圖，以電腦屏幕顯示更新的資訊，令乘客更感方便。

Improvements via Technology

We are supportive of MTRCL's initiatives to apply new technologies. For example, super capacitors were installed on the to-be-opened South Island Line (East) to boost energy efficiency. Dynamic route maps, which are computer screens that can easily update display information, are being installed in West Rail trains for passengers' greater convenience.



觀塘延綫的何文田站已於2016年10月23日正式啟用。
Ho Man Tin Station of Kwun Tong Line Extension was officially opened on 23 October 2016.



西鐵列車亦已安裝動態路線圖，以電腦屏幕顯示更新的資訊，令乘客更感方便。
Dynamic route maps, which are computer screens that can easily update display information, are being installed in West Rail trains for passengers' greater convenience.



吸收海外經驗

從海外鐵路監管當局經驗中學習，對改善我們的工作非常重要。我們的團隊定期參與國際會議及交流活動，如2015年在南非舉行的國際鐵路安全議會。

為了學習調查事故的技巧，我們一名工程師遠赴英國克蘭菲爾德大學修讀精修課程，亦有其他同事前往新加坡，與當地的車輛管理處交流經驗。

Learning from Overseas Experience

Learning from overseas railway regulators is important to improving our work. Our team regularly participates in international conferences and exchange events, such as the International Railway Safety Council 2015 in South Africa.

To refresh our incident investigation skills, one of our engineers attended an intensive course at Cranfield University in the UK while other colleagues exchanged experience with the Land Transport Agency in Singapore.

來年重任

2016/17年度亦將會是忙碌的一年，除觀塘綫延綫和南港島綫(東段)計劃於本年度啟用外，主要的更新工程，如更換新信號系統，將會全面展開。我們還會準備為預期2018年開始付運的93輛新列車進行安全檢查。

Coming Highlights

2016/17 will be another busy year, as the Kwun Tong Line Extension and South Island Line (East) are scheduled to open this year, while major asset replacement works such as those on the new signaling system will be in full swing. Preparation work on the safety inspections of 93 new rolling stocks, scheduled to commence their delivery in 2018, will also gather speed.



南港島綫(東段)海洋公園站已進入籌備營運階段及展開鐵路系統測試。
Ocean Park Station of South Island Line (East) entered pre-operational phase and testing and preparatory work is underway.



推廣能源效益及節能

PROMOTING ENERGY EFFICIENCY AND CONSERVATION



舉辦「新能源、新世代」太陽能車比賽，提升年青人對可再生能源及能源效益的認識。
The New Energy New Generation Solar Car Competition was organised to enhance young people's knowledge in renewable energy and energy efficiency.

全面實施新能源效益標準

全面實施空調機、雪櫃及洗衣機的新能源效益評級是2015年強制性能源效益標籤計劃的重大成就。新評級標準已於11月25日正式實施，產品須提升其能源效益表現，以獲得一級能源效益標準。我們預計新評級標準將可每年節省約三億度電及減少約21萬噸二氧化碳的排放。為確保新評級標準順利推行，我們在全面實施初期三周內巡查了超過1 200間店舖，而巡查中我們並沒有發現任何不符合條例要求的個案。

FULL IMPLEMENTATION OF NEW ENERGY EFFICIENCY STANDARDS

A major achievement in 2015 was the full implementation of new energy efficiency grading standards for room air-conditioners, refrigerating appliances and washing machines under the Mandatory Energy Efficiency Labelling Scheme (MEELS). Coming into effect on 25 November, products are required to be more energy efficient in order to obtain Grade 1 energy label, and it is expected to save about 300 million kWh of electricity every year with an annual reduction of about 210 000 tonnes of carbon dioxide emission. To ensure a smooth transition to the new standards, over 1 200 shops were inspected without any non-compliance in three weeks' time upon the implementation.

「全民節能」活動

“ENERGY SAVING FOR ALL” CAMPAIGN EVENTS

「慳電熄一熄青年獎」
The Youth Energy Saving Award

2 000 名參賽者
Participants

第四屆「室內溫度節能約章」
The fourth Energy Saving Charter on Indoor Temperature

3 300 機構參加
Participating Organisations



擴大強制性能源效益標籤計劃涵蓋範圍

為協助市民選擇更具能源效益的電器，我們將擴大強制性能源效益標籤計劃的涵蓋範圍，並於本年諮詢及獲得立法會環境事務委員會、業界及其他持份者的支持。屆時，更多類別的電器將會納入計劃中，包括電視機、儲水式電熱水器和電磁爐，而現時空調機及洗衣機在計劃內的涵蓋範圍亦將會擴展。在計劃內現有及將納入的產品，合共佔家用每年耗電量約七成。條例的修訂正在準備中，並預計於2017年提交立法會進行審議。



機電工程署同事定期巡查電器舖，檢查供應商有否為電器妥善地貼上「U1能源標籤」。
EMSD staff performs regular inspection at electronic appliance shops to check if “U1 energy labels” are affixed on prescribed electrical products.

EXTENSION OF PRODUCT COVERAGE UNDER MEELS

Going forward, to help buyer make more energy efficient choices, preparation work to extend product coverage under MEELS has made remarkable progress this year through obtaining views and support from Legislative Council Panel on Environmental Affairs, trades and other stakeholders. More products will be covered, such as televisions, storage type electric water heaters and induction cookers. The existing coverage of room air-conditioners and washing machines will also be extended. Coupled with existing products under MEELS, they account for about 70% of total annual electricity consumption in the residential sector. The relevant draft legislative amendments for the Legislative Council are being prepared with a view to be submitted in 2017.

? 冷知識 Did You Know?

目前香港最大的太陽能光伏系統位於南丫島發電站，這個系統於2010年7月開始運作。
Currently the largest solar PV system in Hong Kong is at the Lamma Power Station which commenced operation in July 2010.

推廣能源效益及節能 PROMOTING ENERGY EFFICIENCY AND CONSERVATION



環境局與機電署推行「全民節能」運動，鼓勵青年人節約能源。左圖為「慳電熄一熄青年獎」頒獎典禮。
The Environment Bureau and EMSD jointly launched the “Energy Saving for All Campaign” to encourage energy-saving among teenagers. Left picture shows the Youth Energy Saving Award prize presentation ceremony.

「全民節能」活動

2015/16年度我們舉辦了多場節能活動，是繁忙而精彩的一年。在2015年5月開鑼的「全民節能2015」活動下，「慳電熄一熄青年獎」吸引了超過2 000名參賽者，以創意推動節能。勝出的隊伍於2016年6月的頒獎典禮中獲贈現金獎，他們將現金獎捐贈給心儀的非政府機構。優勝者更於2016年8月在署長帶領下前往丹麥及瑞典，參觀該國的低碳城市。他們將於2016年11月與公眾分享是次旅程的所見所聞。

與此同時，「新能源、新世代」太陽能車比賽成功吸引12隊大、中學隊伍參與。他們親自設計、製作及駕駛太陽能車，並於2016年1月在香港科學園的決賽日中，角逐多個獎項。

2015年夏季，我們舉辦了第四屆「室內溫度節約章」。除發展商、物業管理公司、商舖、辦公室、住宅及屋苑外，我們邀請非政府機構參與。是年度的約章吸引了上述界別逾3 000個機構參加，他們承諾於六月至九月將室內平均溫度控制於攝氏24至26度之間。

這些社區活動特別以年輕人及學生為對象，藉以希望他們影響其親友，並將節約能源的信息一傳十、十傳百。



“ENERGY SAVING FOR ALL” CAMPAIGN EVENTS

Many energy saving events made 2015/16 busy and vibrant. Under the “Energy Saving for All 2015” Campaign that began in May 2015, the Youth Energy Saving Award attracted over 2 000 participants to implement creative energy saving measures. The winning teams received cash prizes which were in turn donated to NGOs of their choice at a prize presentation ceremony in June 2016. The winners went on a study trip to Denmark and Sweden scheduled for August 2016, led by the Director of Electrical and Mechanical Services, to learn about low-carbon green cities. The trip will be followed by a sharing session with the public in November 2016.

Meanwhile, the New Energy New Generation Solar Car Competition attracted 12 teams from universities and secondary schools to take part in the solar car design, construction and race event. The finale took place in January 2016 when the teams’ solar cars competed at Hong Kong Science Park for several awards.

The summer of 2015 also saw the fourth Energy Saving Charter on Indoor Temperature, this time adding NGOs as a new category in addition to developers, property management companies, shops, offices, residential buildings and housing estates. The 2015 Charter attracted more than 3 000 participating organisations from all these sectors, pledging to maintain an average indoor temperature between 24 and 26 degree Celsius from June to September.

These community events aimed to engage youth and students in particular, so that they would influence their friends and families to create a multiplier effect in spreading the energy saving message.

學習能源效益 不分老幼 TEACHING CHILDREN ENERGY EFFICIENCY

鍾劍泉工程師
K. C. Chung, Engineer



艱深的算術、複雜的圖則，對我們的工程師也許是輕而易舉的事。不過，要讓小朋友明白何謂「能源效益」，可能會難倒不少工程師了。能源效益事務處的鍾劍泉工程師，2015年7月起接受了這項「艱鉅」的工作，務求用生動淺白的語言，教導小朋友節能，並鼓勵他們參加本署和環境局合辦的「慳電熄一熄青年獎」。

2015年7月10日，一群社區中心的小朋友，前往本署總部大樓參觀。鍾先生看着小朋友魚貫進入會議室，待他們坐好後，便播放簡報，開始介紹。首先映入小朋友眼簾的是一隻「慳神」，小朋友都認得這隻棕色的生物是「大嘍鬼」，但鍾先生卻說，「大嘍鬼」已學懂節能，進化成「慳神」。接着，鍾先生逐步向小朋友解釋節能的重要，並分享如何簡單地在家中節省能源，如關掉不須使用的電器，小朋友都聽得津津有味。

除了向本署參觀的訪客介紹「慳電熄一熄青年獎」外，鍾先生還在2015年9月新學年開始後，到訪多間學校，在禮堂裡向全校同學介紹此比賽。鍾先生的努力，吸引了逾2 000名大、中、小學生及公眾人士參與。比賽於2016年上旬結束，共30名學生分別獲得其所屬的組別的「白金級」，獲邀參加本地及海外學習團，鍾先生亦隨團出席。

Even difficult calculation and complicated graphs are rather easy to our engineers but how about teaching children what “energy efficiency” is? In July 2015, K. C. Chung, engineer of Energy Efficiency Office, accepted this challenge, trying to explain the concept of “energy efficiency” through vivid and simple words and to promote the Youth Energy Saving Award co-organised with Environment Bureau.

On 10 July 2015, a group of children visited EMSD Headquarters Building. Mr Chung looked at the children rushing into the Conference Room, waited for them to be seated, and started his powerpoint presentation. The children were happy to be greeted by “Hanson” but they all recognised it as Big Waster. Mr Chung told the children that Big Waster had evolved into Hanson and he is now a master in energy-saving. He continued to share with the children the importance of energy saving and some simple methods to save energy at home, like turning off unused electrical appliances. The children all listened to his sharing with great interest.

Mr Chung’s promotion of the Youth Energy Saving Award was not limited to visitors to EMSD. Once the school year had begun in September 2015, Mr Chung visited many schools, introducing this Award in large school halls to all their students. His endeavor bore fruits. Over 2 000 students from universities, secondary and primary schools, as well as the public joined the Award. The activity ended in early 2016, with 30 students gaining the “Platinum” award and were invited to attend local and overseas study missions, with Mr Chung also attending.

修訂技術指引

《可再生能源發電系統與電網接駁技術指引(2016年版)》現已推出，供使用太陽能光伏板發電的用戶參考。新版本的《指引》是2007年《指引》的修訂版本，反映了自2007年起的科技轉變。新《指引》闡釋了再生能源發電系統的各方面事項，如安全考慮、設備保護、可靠性、測試與試運等，並介紹如何向電力公司申請將再生能源發電系統接駁至電網。

TECHNICAL GUIDELINES UPDATE

To cater for the needs of those generating electricity with renewable energy power systems, we have published the latest Technical Guidelines on Grid Connection of Renewable Energy Power Systems (2016 Edition) to reflect technological changes since the 2007 edition. The Technical Guidelines address various aspects of renewable energy power generation systems such as safety, equipment protection, reliability, testing and commissioning etc, and outlines how to submit applications to the power company concerned for connecting the renewable energy power generation systems to its grid.

推廣能源效益及節能 PROMOTING ENERGY EFFICIENCY AND CONSERVATION



《建築物能源效益守則》2015年版及《能源審核守則》2015年版更緊貼科技發展。
The 2015 editions of Building Energy Code and Energy Audit Code were revised according to the latest technological development.

符合《建築物能源效益條例》要求表現良好

《建築物能源效益條例》於2012年推出後，大部分個案都符合《條例》要求，表現良好。2015/16年度，檢控數字為零，亦只有79宗不符《條例》要求的個案獲發敦促改善通知書。主要不符《條例》要求的個案，多見於舊樓宇或業權分散的大廈，它們往往無法如期於完成能源審核。幸好，大部分不符《條例》要求的個案，在我們發出敦促改善通知書後，已着手改善。我們將加強這方面的公眾教育，提醒業主及其代表者違反《條例》的後果。

《建築物能源效益守則》2015年版刊憲頒布

在推廣建築物能源效益方面，2015/16年度的一個里程碑是於2015年12月，據《條例》第40節，刊憲頒布《建築物能源效益守則》2015年版。《守則》針對新建建築物及現有建築物的部分分別於2016年6月及9月生效。

新版本的《守則》，經深入諮詢業界及其他持份者而成，全面地檢討及修訂2012版本《守則》的內容。據新版本的《守則》，建築物須設有日光感應控制、自動梯自動減速系統及升降機再生制動系統等能有效省電的設備，以進一步提升建築物能源效益及減少碳排放。

《能源審核守則》2015年版亦於2015年12月刊憲頒布，並於2016年6月生效。《能源審核守則》2015年版將採用與《建築物能源效益守則》一致的詞彙，以釐清《條例》對能源審核的要求。

由於兩份《守則》須每三年檢討一次，我們現已開始《守則》2018年版的諮詢工作。兩份《守則》亦是本署2015年12月周年傳媒聚會的焦點，而《守則》則於傳媒聚會後數天刊憲頒布。傳媒對《守則》深感興趣，並作廣泛報道。



GOOD COMPLIANCE WITH BEEO

Overall compliance with the Buildings Energy Efficiency Ordinance (BEEO) since the commencement of its implementation in 2012 has been good, with zero prosecution in 2015/16. A total of 79 improvement notices were issued in 2015/16 for non-compliance cases. The key non-compliances were failure to complete energy audits before the prescribed date, especially in old buildings with dispersed property ownership. Most of the non-compliances have been rectified upon the owners' receipt of our issued improvement notices. We shall step up public education work in this area and alert the property owners and their representatives to the consequences of non-compliance.

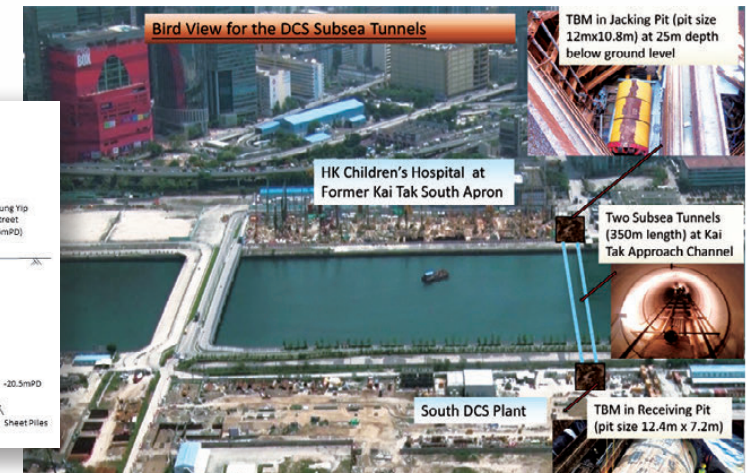
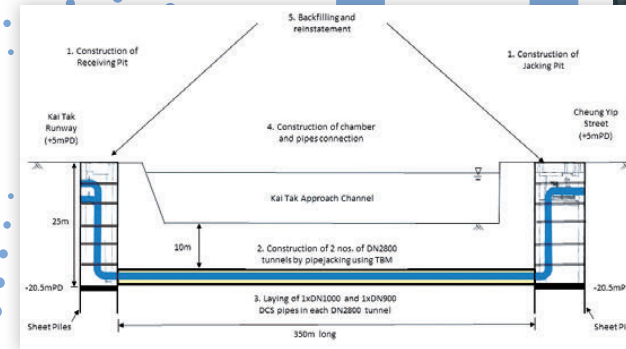
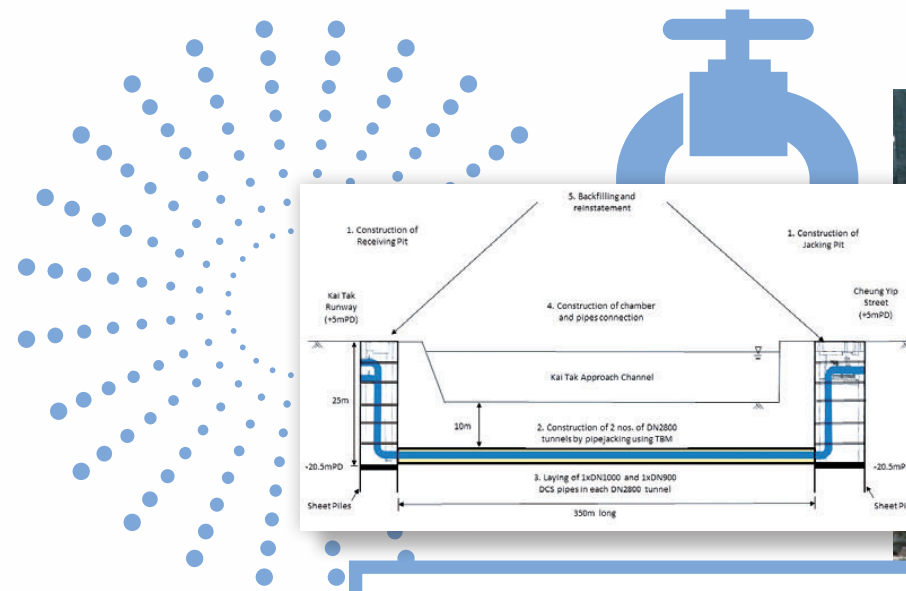
BUILDING ENERGY CODES 2015 EDITION GAZETTED

As to building energy efficiency, the milestone in 2015/16 was gazetting of the upgraded Code of Practice for Energy Efficiency of Building Services Installation in December 2015, pursuant to section 40 of BEEO. The Code will take effect in June 2016 for newly constructed buildings and September 2016 for existing buildings.

This 2015 edition of the Code is the outcome of detailed consultation with the trade and other stakeholders to review and upgrade the 2012 edition in a comprehensive manner. The aim is to further enhance building energy efficiency and reduce carbon emissions by, for example, requiring buildings to use technologies like daylight responsive control, automatic speed reduction for escalators and regenerative braking system for lifts which can substantially reduce electricity consumption.

Also gazetted in December 2015 was the upgraded Code of Practice for Building Energy Audit, effective in June 2016, giving more clarity to the energy audit requirements of the BEEO by improving the consistency of the Code such as the adoption of consistent terminologies. As both Codes are reviewed every three years, we have already started consultation work on the 2018 editions.

The Codes were also the focus of EMSD's annual media gathering held in December 2015, just a few days before the gazette date, generating much interest and coverage.



啟德區域供冷系統的客戶包括啟德郵輪碼頭、晴朗商場、工業貿易大樓及兩所學校。
The DCS at KTD provides district cooling services to the Kai Tak Cruise Terminal, Ching Long Shopping Centre, the Trade and Industry Tower, and two schools.



機電工程署員工正檢查啟德區域供冷系統的喉管及裝置。
EMSD staff checking pipes and installations at the DCS at KTD.

區域供冷系統的進展

在能源效益基礎建設方面，啟德區域供冷系統於2015/16年度屢有突破。系統現向啟德郵輪碼頭、晴朗商場及工業貿易大樓提供冷凍水，而本年度啟晴邨旁的兩所學校亦加入供冷系統的網絡。

我們已完成鑽挖一條25米深、穿越啟德明渠的海底隧道。該海底隧道將接駁區域供冷系統南廠及日後的用戶，如香港兒童醫院，相關喉管工程亦正進行。此隧道將連接原位於啟德南停機坪的建築物至區域供冷系統，甚為重要。

DISTRICT COOLING SYSTEM PROGRESS

On the energy efficiency infrastructure front, the District Cooling System (DCS) at Kai Tak Development made progress as planned in 2015/16, with two schools next to Kai Ching Estate newly connected to the system in addition to the three existing consumers, i.e. Kai Tak Cruise Terminal, Ching Long Shopping Centre and the Trade and Industry Tower.

Boring works for a 25-metre deep sub-sea tunnel across the Kai Tak Approach Channel that will connect the future consumers, including the Hong Kong Children's Hospital to the DCS South Plant was also completed, with pipework construction in progress. This tunnel is critical as it will connect future consumers in the former Kai Tak south apron area to the DCS South Plant.

推廣能源效益及節能

PROMOTING ENERGY EFFICIENCY AND CONSERVATION

向海外規管機構學習

能源效益事務處經常借鑑美國、歐盟、澳洲及南韓等海外同類型機構，參考其能源表現標準及做法。我們的工程師郭穎妍女士榮獲能源工程師學會「2016年亞太區能源管理經理」，以表揚她於區域內推廣能源效益的貢獻。

LEARNING FROM OVERSEAS REGULATORS

The Energy Efficiency Office is constantly benchmarking with its overseas counterparts in US, EU, Australia and South Korea in energy performance standards and related practices. We are also delighted that our engineer Ms Wendy Kwok was named "Asia Pacific Rim Region Energy Manager of the Year for 2016" by the Association of Energy Engineers for her contributions in promoting energy efficiency in the region.



能源效益事務處經常借鑑美國、歐盟、澳洲及南韓等海外同類型機構，圖示2016年世界能源工程會議。

The Energy Efficiency Office is constantly benchmarking with its overseas counterparts in US, EU, Australia and South Korea in energy performance standards and related practices. Photo showing World Energy Engineering Congress 2016.

推廣節能有方 榮獲學會肯定 AEE AWARD RECOGNISES LEADERSHIP ROLE IN PROMOTING ENERGY EFFICIENCY

郭穎妍工程師
Wendy Kwok, Engineer



能源效益事務處的郭穎妍工程師榮獲美國能源工程師學會「2016年亞太區能源管理經理」。此項殊榮肯定了我們在區域內推廣能源效益的領導實力。

郭女士於2009年加入能源效益事務處。自此，她協助草擬《建築物能源效益條例》、批核註冊能源效益評核人的申請，以及向環保機構推廣建築物能源效益。她亦主導籌劃及推出連串公眾教育活動，包括本署總部大樓教育徑的公眾導覽，以及學校外展計劃。早於2012年，郭女士已獲香港工程師學會頒授「年青綠色領袖」，以嘉許她推動環保教育及能源節約不遺餘力。

郭女士很高興能有機會參與各種工作，令她獲益良多。她亦感謝同事的支持，並說：「我們的同事積極探索新方法，令工作能及早完成目標。社區人士主動參與節能，亦令我們的工作事半功倍。」郭女士將於2016年9月遠赴華盛頓領取獎項，並藉此機會與海外人士交流，參觀當地的綠色建築。

Wendy Kwok, engineer in our Energy Efficiency Office (EEO), was named Asia Pacific Rim Region Energy Manager of the Year for 2016 by the US-based Association of Energy Engineers. The prestigious award recognises our leadership role in promoting energy efficiency in the region.

Since joining EEO in 2009, Ms Kwok has contributed to the early drafting stages of the Buildings Energy Efficiency Ordinance, the vetting of Registered Energy Assessor applications as well as promoting building energy efficiency with green organisations. She also led the planning and implementation of various public education programmes including the EMSD Headquarters Education Path guided tours for the public as well as school outreach programme. She won the "Young Green Leader Award" by the Hong Kong Institution of Engineers in 2012 for her contributions to green education and energy conservation.

She is grateful for the opportunity to have participated in a variety of rewarding initiatives, and appreciates the team's support. "Everyone in the office is enthusiastic and eager to explore new and better ways to achieve our objectives. It also helps that the community is supportive of energy efficiency, making our work more effective," she said. She will receive the award in Washington D C in September 2016 when she will take the opportunity to network with overseas counterparts and visit green buildings.

推廣能源效益及節能

PROMOTING ENERGY EFFICIENCY AND CONSERVATION

2016/17年度重點

2016/17將會是忙碌的一年。社區層面上，「全民節能2016」運動下的「慳神大比拼」於2016年6月推出。此計劃旨在表揚一些採用能源效益科技、應用節能最佳操作模式，及向租戶和用戶推廣節能，而表現良好的機構。「慳神大比拼」的勝出者將協助我們，向其他指定界別的機構宣傳節約能源。

「節約章2016」在今年夏季新設「中小學和專上院校」組別。涵蓋範圍除原有維持室內溫度至適當水平外，將納入關掉不須使用的電器及採購具能源效益的電器。

HIGHLIGHTS IN 2016/17

2016/17 will be another busy year. At the community level, a new “Energy Saving Championship Scheme” will be launched in June 2016 as part of the “Energy Saving for All 2016” campaign. This new Scheme aims to commend organisations that have excellent energy saving performance in adopting energy efficient technologies and applying operational optimisation of energy consuming systems as well as promoting energy saving to their tenants and occupants. Winners of the Scheme will help promoting energy saving to other organisations in specific sectors.

The Energy Saving Charter 2016 this summer will include a new category of schools and post-secondary education institutions. The scope will also be extended to cover switching off electrical appliances when they are not in use and procuring energy efficient appliances, in addition to maintaining the appropriate indoor air temperature.



新建建築物須安裝自動梯自動減速系統。若自動梯閒置三分鐘，將停止運作，以節省能源。

Escalators in newly constructed buildings are required to install automatic speed reduction devices which stop the motion of escalators that have idled for three minutes to save energy.

冷知識 Did You Know?

啟德區域供冷系統總製冷量為284兆瓦，足以供應40座30層高商業大廈的冷量需求。
The cooling capacity of Kai Tak District Cooling System is 284 MWr, which is equivalent to cooling supply for 40 nos. of 30-storey high commercial buildings.

強性能源效益標籤計劃方面，如擴大涵蓋範圍的進展順利，我們希望條例的修訂草案可於2017年內提交立法會進行審議，以涵蓋更多產品，協助市民選擇更具能源效益的電器。

為達到2015年度行政長官《施政報告》當中「減少政府樓宇耗電量5%」的目標，我們將繼續監察最後一批政府建築物的能源審核進程，該批建築物被視為節約能源的重點。

《在村屋安裝的家庭式太陽能熱水系統指南》亦將於明年修訂。《水冷式空調系統實務守則》修訂版亦於下年出版，以符合最新國際標準。據最近調查顯示，儘管違規冷卻塔數目與2010年的調查結果相比下降約四成，但退伍軍人症數字卻於2015年錄得66宗的新高。因此，我們將持續監察冷卻塔，向建築物擁有人及業界宣傳正確安裝及維修冷卻塔。

On the extension under MEELS, if all goes well, we hope the legislative amendments for the Legislative Council would be submitted in 2017 to cover more types of products and help buyer make more energy efficient choices.

Meanwhile we shall continue to oversee the energy audits for the final batch of government buildings, which were identified as the key source of energy savings, to fulfil the target of 5% reduction in energy consumption within Government over five years in accordance with the Chief Executive's 2015 Policy Address.

It is also time for a new edition of our Guidance Notes for Household-scale Solar Water Heating Systems at Village House which will be reviewed next year. An updated Code of Practice for Fresh Water Cooling Towers will be published next year to better align with the latest international standards. Though a recent survey showed that the number of unauthorised cooling towers has dropped by some 40% since the previous survey in 2010, Legionnaires' disease cases hit a record high of 66 in 2015. We shall continue to inspect cooling towers and promote their proper installation and maintenance to building owners and the trade.



於「淡水冷卻塔和建築物能源效益的規管及實務」技術研討會介紹淡水冷卻塔計劃及《建築物能源效益條例》。

Our team introduced the Fresh Water Cooling Towers Scheme and the Building Energy Efficiency Ordinance at the Technical Forum on Control and Practice of Fresh Water Cooling Towers and Buildings Energy Efficiency.

提高公眾安全及節能意識 RAISING PUBLIC AWARENESS OF SAFETY AND ENERGY CONSERVATION



「優質升降機服務認可計劃」頒獎典禮，嘉許升降機負責人和註冊升降機承辦商的努力及傑出表現。

The award presentation ceremony of the Quality Lift Service Recognition Scheme which commended responsible persons and registered lift contractors for their endeavours and outstanding performance.

要令大眾安心，我們必要讓大眾遵從良好習慣，注意安全事項及能源效益。因此，規管服務一直着重推廣公眾教育。在2015/16年度，我們雙管齊下，緊密聯繫受規管的業界及大眾，活動重點如下。

聯繫業界

各部別已設有良好的溝通渠道，與受規管的業界保持聯繫，包括出版通訊、單張及小冊子、網上最新消息、定期會面、座談會及會議、持續進修發展計劃、獎勵計劃，以及特別為各工作小組和委員會而設的活動。我們亦積極地聯絡業界商會、工會、專業團隊及培訓機構，了解他們的看法，並就特別議題調解。

Public education is a priority at Regulatory Services, as only when most people in the community follow good practices in safety and energy efficiency can we enjoy peace of mind. In 2015/16 we have adhered to the two-pronged approach of communicating with the regulated trades and the general public. The following are the highlights.

ENGAGING WITH THE TRADES

Each of our Divisions has well established channels for ongoing communication with its regulated trades, ranging from newsletters, leaflets and brochures, online news updates, regular meetings, briefings/seminars and conferences, continuous professional development programmes, award schemes and special events to various working groups and committees. We also actively engage with trade associations, workers' unions, professional bodies and training institutes to solicit their views and resolve specific issues.

獎勵計劃

獎勵和比賽，不但能提高同業、公司及機構的認受及動力，並能鼓勵他們遵從相關規定，精益求精。舉例而言，我們每年度所推出的傑出註冊電業工程人員選舉，已成為電業界的一項盛事。

數項新獎勵計劃亦於2015/16年推出。優質升降機服務認可計劃於2015年10月推行，旨在鼓勵升降機負責人，加強更新升降機及管理升降機承辦商。此計劃得到各方熱烈響應，在94張申請名單中，有45位負責人獲獎。

瓶裝石油氣分銷商安全表現評級計劃亦於2016年初推出，共有184個本港五間註冊氣體供應公司轄下的分銷商加入。參加者將獲得計劃的標誌，以及列有金、銀或銅評級的證書一張，讓分銷商張貼在其店鋪內，以供公眾參閱。承蒙業界支持，此計劃進一步提升瓶裝石油氣業務的安全水平及透明度，惠及各界，至為重要。

註冊計劃

我們亦推出自願註冊計劃，讓業界提升其服務水準及專業形象。值得一提的是於2015年7月推出的車輛維修工場自願註冊計劃，成功註冊的工場可展示計劃頒發的證書和標誌，方便車主和司機識別。

Award Schemes

Awards and competitions provide recognition and incentives to trade practitioners, companies and organisations and are good tools to encourage compliance and best practices. An example is our Outstanding Registered Electrical Worker Awards Scheme 2015 which has become a signature event for the electrical trade.

Several new award schemes were introduced in 2015/16, such as the Quality Lift Service Recognition Scheme launched in October 2015 aiming to encourage Responsible Persons (RPs) of lifts to enhance their performance in lift modernisation and management of lift contractors. The scheme attracted an enthusiastic response of 94 applications and 45 RPs won the awards.

Another new scheme was the LPG Cylinder Distributor Safety Performance Recognition Scheme launched in early 2016. All 184 distributors under Hong Kong's five Registered Gas Supply Companies (RGSCs) joined the scheme and were awarded the scheme logo together with a certificate indicating the distributor's rating — gold, silver, or copper — for displaying at its shop for the public's reference. Thanks to support from the trade, the scheme is an important step to further raise the level of safety and transparency of the LPG cylinder business for everyone's benefit.

Registration Schemes

Voluntary registration schemes are another way to facilitate the trades to raise their service standards and boost their professional image. A case in point is a new scheme called Voluntary Registration Scheme for Vehicle Maintenance Workshops (VRSVMW) launched in July 2015. Registered workshops can display the certificate and logo awarded under the registration scheme for easy identification by car owners and drivers.



業界人士和公眾出席「車輛維修工場自願註冊計劃」推廣日。

Vehicle maintenance trade members and the public attended the Promotion Day of Voluntary Registration Scheme of Vehicle Maintenance Workshop.

提高公眾安全及節能意識

RAISING PUBLIC AWARENESS OF SAFETY AND ENERGY CONSERVATION

諮詢業界

我們重視諮詢業界，以確保受規管的業界的意見及關注事項獲得充分考慮。我們因應需要，透過與委員會及工作小組會面，並舉辦會議，加強討論，以諮詢業界。諮詢業界，不但讓我們聆聽到業界對我們規管工作寶貴的意見，更讓我們成功推出多項嶄新的活動及計劃。

以能源效益的工作為例，2015年12月，我們刊憲頒布《建築物能源效益守則》及《能源審核守則》2015年版。兩份守則經技術工作小組多番修改，錘鍊而成。技術工作小組由六個工作小組組成，成員來自政府部門（包括本署）、業界商會、專業團體、顧問或承建商組織，以及學界，能廣泛地涵蓋各界的知識及意見。

類似的成果也見於規管升降機及自動梯方面。升降機及自動梯安全諮詢委員會對我們加強規管升降機及自動梯，提供多番協助。2016年2月，我們修改為升降機/自動梯承辦商而設的表現評級計劃時，委員會便提出不少意見。委員會亦讓我們了解到業界運作的事宜，如定價、薪金及工作環境等，這些事項亦與我們的工作息息相關。而車輛維修技術諮詢委員會，亦鼎力支持我們的工作，使我們於2015年7月順利推出車輛維修工場自願註冊計劃。



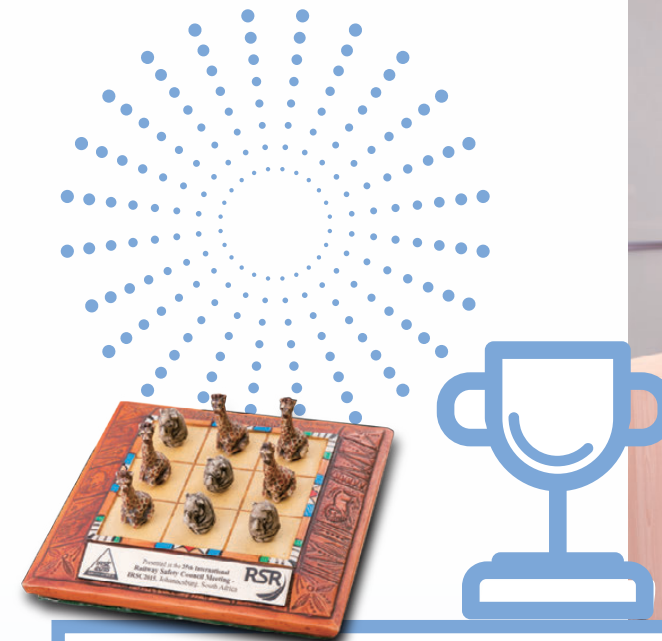
與升降機及自動梯安全諮詢委員會會面，聽取業界反映行業運作事宜。
Meeting with the Lift and Escalator Safety Advisory Committee has helped us understand practical trade issues.

Trade Consultation

Consultation with the trades is an important part of our work to make sure that the regulatees' views and concerns are taken into full account. Trade consultation is done via committees, working groups, meetings and discussions as necessary. These consultations have spearheaded the successful launch of many innovative trade events and schemes in addition to giving us precious feedback on our regulatory measures.

On the energy efficiency front for example, the upgraded 2015 editions of the Code of Practice for Energy Efficiency of Building Services Installation and the upgraded Code of Practice for Building Energy Audit, both gazetted in December 2015, were the results of numerous deliberations by a Technical Taskforce comprising six Working Groups. These consist of representatives from Government including EMSD, trade associations, professional institutes, consultant/contractor associations and the academia to reflect a wide spectrum of knowledge and views.

By the same token, the Lift and Escalator Safety Advisory Committee has helped us come up with enhancements to various regulatory tools, including the revised Performance Assessment Scheme for Registered Lift/Escalator Contractors that took effect in February 2016. This committee also provides channels for us to understand practical trade issues such as prices, wages and working conditions which are relevant to our work. In addition, the Vehicle Maintenance Technical Advisory Committee also gave us valuable support and input that led to the smooth launch of VRSVMW in July 2015.



2015年，鐵路科於南非舉行的議會榮獲「最佳論文獎」。
Railways Branch won a "Best Paper Award" at 2015 conference in South Africa.



持續專業發展

我們舉辦簡介會、講座及座談會，協助業界同人持續邁向專業。每年，本署均與港九電器工程電業器材職工會及香港電器工程商會舉辦年度技術座談會，深受電業界歡迎。

Continuous Professional Development

We are committed to facilitating the practitioners' continuous professional growth via briefings, seminars and symposiums. An example is the highly popular Annual Technical Seminar for the electrical trade, jointly organised by EMSD with the Hong Kong & Kowloon Electrical Engineering & Appliances Trade Workers Union and the Hong Kong Electrical Contractors' Association.

國際交流

互聯網讓市民實時了解世界各地的消息及資訊。而作為規管者，我們亦須時刻裝備自己，學習最新科技發展，緊貼社會熱潮，並向他國的規管機構借鏡。以能源效益事務為例，我們的同事定期出席亞太經合組織成員國舉辦的會議，積極結交參與者，了解更多最新發展。

International Exchange

As the Internet brings our citizens real-time news and information from all corners of the globe, we as regulators must constantly update ourselves on the latest technologies and social trends as well as learn from regulators in other countries. In energy efficiency matters for example, our colleagues regular attend various international APEC energy-related meetings and conferences to network and find out more about current developments.

鐵路科的同事每年都出席國際鐵路安全議會，更在2015年於南非舉行的議會中，憑〈使用自動月台閘門以減低安全風險〉榮獲「最佳論文獎」。我們多個部別，亦已成立學習團，學習外國同類機構的規管管理模式及日常運作。與內地交流方面，本署與國家質量監督檢驗檢疫總局的合作，已達十三年之久。雙方在資訊分享、培訓，以及就事件和不符標準的產品互相通報合作，成果豐碩。

Our Railways Branch attends the International Railway Safety Council (IRSC) every year, and won a "Best Paper Award" for our paper "Application of Automatic Platform Gates to Reduce Safety Risks" at IRSC 2015 in South Africa. Many of our Divisions have already set up study groups to learn about the regulatory regimes and practices of their overseas counterparts. As to the Mainland, EMSD's cooperation with the China General Administration of Quality Supervision, Inspection and Quarantine is now in its 13th year. The cooperation has yielded fruitful results in information sharing, training and mutual notification of incidents and non-compliant products.

提高公眾安全及節能意識 RAISING PUBLIC AWARENESS OF SAFETY AND ENERGY CONSERVATION

聯繫公眾

我們的規管工作，以讓公眾「安全安心」為本。多年來，我們了解到，要秉承此目標，我們必須時刻讓公眾了解本署的運作，亦須確保資訊能公開流通。當我們能向媒體提供充分的資訊，並以專業的態度，從速回應他們的查詢，公眾將能透過媒體報道，對我們的工作逐漸建立信任和信心，並感安心。

宣傳方面，我們採用各種線上及離線工具，並舉辦運動和活動，向男女老幼推廣機電安全及能源效益。本年，本署的網頁亦有所更新，操作簡易，更方便大眾瀏覽。

與傳媒合作

回應傳媒查詢，以及聯繫新聞從業員，是我們通訊工作中不可或缺的一環。我們非常重視與傳媒合作，時刻積極用心，開誠布公。最近一次的年度傳媒聚會，於2015年12月7日假本署總部大樓舉行，以數天後刊憲頒布的兩份建築物能源守則為主題，吸引了逾二十多位新聞從業員出席。會後，我們安排與會者參觀工業貿易大樓，介紹大樓內符合新守則的一些節能設備。

ENGAGING WITH THE PUBLIC

Over the years we have learnt that to enable the public to enjoy “safety and peace of mind” which is the ultimate goal of our regulatory work, we must be highly transparent in our operations and information dissemination. If we provide adequate information to the media and address their queries in a professional and timely manner, the public will gradually develop trust and confidence in our work via media reports, giving them peace of mind.

On the publicity side, numerous online and offline tools, campaigns and events were used during the year to promote E&M safety and energy efficiency to the general public of all ages. EMSD's website was also revamped during the year, with a more user-friendly design and is easier to navigate.

Working with the Media

Handling media enquiries and interacting with journalists is a key part of our daily communications work which we take very seriously, always striving to be pro-active and highly transparent. Our most recent annual media gathering was held at EMSD Headquarters on 7 December 2015, just a few days prior to the gazetting of the upgraded Building Energy Code, which made the new Code an apt theme for the event. Over 20 journalists attended the gathering, followed by a tour of the new Trade and Industry Tower nearby which showcased the latest energy saving features in its building services systems as required under the new Code.



於周年傳媒聚會介紹兩份建築物能源守則及政府大樓嶄新的節能裝置。
We acquainted journalists with the two Building Energy Codes and the new energy saving installations in government buildings at the annual media gathering.



邀請機電青少年大使乘坐香港摩天輪，並由工程師團隊介紹摩天輪的安全設計。
EMYA members were invited to ride on the Hong Kong Observation Wheel and were shown the safety design of the Ferris wheel.

機電青少年大使計劃及學校外展計劃

我們積極推廣多項青年運動，特別值得一提的是機電青少年大使計劃。此計劃旨在招納青年，成為機電大使，推廣機電安全、能源效益及機電業。去年，我們加強宣傳，會員人數大幅增加，至今已逾6 000人。我們更邀請會員出席各項教學活動，包括於2015年5月乘坐香港摩天輪，親身學習機電安全及節能事宜。

每月，大使都收到電子通訊，當中包括了不少安全小知識和節能小貼士。

公眾對我們學校外展計劃需求甚殷。於2015/16年度，各部別的全職校園大使走訪了338所機構，包括404所幼稚園、76所小學、22所中學、2所大專及訓練院校、3所特殊學校，以及112所老人及社區中心。我們共舉辦了42場展覽，並設有互動遊戲。據估計，年內132 336名人士，透過講座及展覽，學習到不少關於電器、升降機及自動梯、機動遊戲機安全的知識，以及節約能源的貼士。

與此同時，我們亦於總部大樓的教育徑舉辦導覽。2015/16年度，我們舉辦了458場導賞團，帶領來自學校、社區及青少年中心、本地專業組織及海外團體，於精心設計而舒適的環境下，並透過互動式展品，學習能源效益及機電安全。是年度，共17 286名人士參與。

E&M Young Ambassadors and School Outreach Programme

To step up our youth engagement programmes, in particular the E&M Young Ambassador (EMYA) Scheme which aims to empower young people to become ambassadors of E&M safety, energy efficiency and E&M engineering development, we held a recruitment drive last year which boosted EMYA membership to over 6 000. Members were invited to our various educational events, such as ride on the Hong Kong Observation Wheel in May 2015 where they learnt first-hand about mechanical safety and energy efficiency matters.

Every month EMYA members receive an e-newsletter, as well as useful tips on safety and energy efficiency from time to time.

Our school outreach programme saw great demand in 2015/16, with talks by our team of full-time school ambassadors from various Divisions at a total of 338 institutions, covering 404 kindergartens, 76 primary schools, 22 secondary schools, 2 tertiary or training institutes, 3 special schools and 122 elderly and community centres. A total of 42 exhibitions were also held at schools with interactive quiz games. It is estimated that 132 336 individuals received our messages through these talks and exhibitions during the year on the safe use of electrical and gas appliances, lifts and escalators and amusement rides as well as tips on saving energy.

Parallel with the school outreach programme are in-bound guided tours to the Education Path at our headquarters building. In 2015/16, we held a total of 458 guided tours for schools, community and youth centres, local professional bodies and overseas delegations. Visitors learnt about energy efficiency as well as E&M safety in a well designed, relaxing environment with interactive exhibits. A total of 17 286 individuals experienced the tour during the year.

提高公眾安全及節能意識 RAISING PUBLIC AWARENESS OF SAFETY AND ENERGY CONSERVATION

「新能源、新世代」太陽能車比賽

環境局及本署聯手推出「全民節能」運動下的「新能源、新世代」太陽能車比賽成功吸引12隊大、中學隊伍參與。他們親自設計、製作及駕駛太陽能車，並於2016年1月在香港科學園的決賽日中，角逐多個獎項。

New Energy New Generation Solar Car Contest

Under the “Energy Saving for All” Campaign jointly launched by the Environment Bureau and EMSD, the New Energy New Generation Solar Car Competition attracted 12 teams from universities and secondary schools to design, construct, and race their solar cars. The finale was held in January 2016 at the Hong Kong Science Park where the cars competed for several awards in the finale race.

慶祝學徒訓練計劃六十周年

本署於2015年9月慶祝學徒訓練計劃成立六十周年。多年來，計劃為本港各機構培訓了無數機電業人才。為隆重其事，我們舉辦了連串紀念活動，包括於本署總部大樓大堂舉辦回顧展，讓訪客及公眾一同參與。

Celebrating 60 Years of Apprentice Training

EMSD celebrated the 60th anniversary of its Apprentice Training Scheme in September 2015. The highly successful scheme nurtured thousands of outstanding E&M professionals and practitioners for many organisations in Hong Kong. A series of commemorative activities were held to mark the occasion, including a retrospective exhibition at our headquarters foyer for visitors and the public to enjoy.

學徒訓練計劃，現更名為技術員訓練計劃，每年繼續吸納及培育機電業後起之秀。

The Apprentice Training Scheme has been renamed Technician Training Scheme and continues to attract and nurture young E&M talent every year.



同事向參觀機電工程署總部大樓教育徑的同學介紹「慳電熄一熄青年獎」的比賽詳情。

Our staff explaining the details of the Youth Energy Saving Award to students visiting the Education Path of EMSD Headquarters.

教育徑訪客留心了解「慳電熄一熄青年獎」的遊戲規則。
Visitors of the Education Path listening to our engineer's presentation of the Youth Energy Saving Award.



慶祝學徒訓練計劃六十周年典禮於2015年9月舉行。
A ceremony was held in September 2015 to celebrate the 60th anniversary of the Apprentice Training Scheme.

機電工程署訓練組同事及見習員一連四日，於教育及職業博覽中推廣各訓練計劃。

Staff from the Training Unit and trainees of EMSD promoted the various training schemes in the four-day Education & Careers Expo.



參與教育及職業博覽2016，並於「機電工程日」邀請業界管理層及技術員分享入行挑戰。
EMSD joined the Education & Careers Expo 2016; managerial and technical staff of the E&M trade were invited to share with audiences potential challenges of joining the trade on the “Electrical and Mechanical Engineering Day”.

2016年教育及職業博覽的「機電大街」

由本署帶頭的香港機電業推廣工作小組，於2016年1月28至31日參與教育及職業博覽，為機電業招募人才。攤位以「機電大街」為主題，吸引了不少青年求職者。他們大多積極查詢本署的見習工程師計劃及技術員訓練計劃。

“E&M Street” in Education & Careers Expo 2016

The Hong Kong Electrical and Mechanical Trade Promotion Working Group, led by EMSD to attract new blood to E&M trades, took part in the Education & Careers Expo 2016 from 28 to 31 January. The booths used the “E&M Street” concept to attract young job seekers. Visitors' response to our Engineering Graduate Training Scheme and Technician Training Scheme was very enthusiastic.

更新中央投訴系統

本署於2015年11月更新了中央投訴系統。新系統有助我們更有效地處理及回應投訴。我們致力向公眾提供優質服務的同時，亦視投訴為學習及改善的機會。經更新的系統，設有提示負責人員的功能，並能管理資訊，以便記錄、分析及參閱投訴個案。

Central Complaints Registry Revamped

EMSD's Central Complaints Registry was revamped and launched in November 2015 with new capabilities to help us process and respond to complaints more effectively. Whilst we strive to provide excellent service to the public, we also regard complaints as opportunities to learn and improve. The upgraded Registry has reminder functions for subject officers, as well as information management functions to make documentation, analysis and reference of the complaint cases much easier.