

# EnergyWits 智能

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# 亞太經合組織能源工作組第55次會議

## 55<sup>th</sup> APEC Energy Working Group and Associated Meetings



## Asia-Pacific Economic Cooperation

能源工作組是亞太經濟合作組織(亞太經合組織)轄下的區域論壇,成員包括亞太經合組織全部21個經濟體。能源工作組自1990年成立以來,每年舉行兩次會議,由全部21個成員經濟體輪流舉辦,以討論能源政策事宜的發展及進度。

2018年5月14至18日,環境局及機電工程署(機電署)代表中國香港主辦亞太經合組織能源工作組第55次會議,為香港自1991年加入亞太經合組織以來,第三度舉辦該活動,上一次已是2007年的能源工作組第34次會議。對於能在11年後再度主辦有關會議,機電署深感榮幸。

The Energy Working Group (EWG) is a regionally-based forum operating under the Asia-Pacific Economic Cooperation (APEC) umbrella with participation by all 21 APEC economies. Since its launch in 1990, the EWG meets twice a year with all 21 member economies taking turns to host the meetings to discuss the development and progress of energy policy issues.

From 14 to 18 May 2018, the Environment Bureau and the Electrical and Mechanical Services Department (EMSD) hosted the 55th APEC EWG and Associated Meetings (EWG55) on behalf of Hong Kong, China. It was the third time that Hong Kong hosted the event since joining APEC in 1991. The last EWG meetings hosted by Hong Kong dated back to EWG34 in 2007. It is indeed a great honour for the EMSD to host the meetings again after 11 years.



### APEC Energy Working Group and Associated Meetings

Hong Kong, China • 14 - 18 May 2018



Asia-Pacific Economic Cooperation



環境局  
Environment Bureau



機電工程署  
EMSD





# 年輕人與亞太經合組織專家交流會

## Youth Dialogue with APEC Experts

這次活動的亮點之一，是2018年5月15日舉行的「年輕人與亞太經合組織專家交流會」，目的是培育年輕人，使他們具備能源效益及節能的知識，並提升他們對有關範疇的認識。此互動交流環節由機電署副署長／規管服務賴漢忠先生與亞太經合組織能源工作組代表共同主持，有超過50名青年積極參與。他們與能源工作組專家分享觀點，一同探討能源效益及節能的未來發展。



One of the highlights of the event was the “Youth Dialogue with APEC Experts” held on 15 May 2018 with the objective of nurturing youths as well as equipping them with knowledge about and raising their awareness of energy efficiency and conservation. This interactive Dialogue was co-chaired by Mr Harry LAI, Deputy Director / Regulatory Services of EMSD, and APEC EWG representatives with active participation from over 50 youths, who shared their views and explored the future development of energy efficiency and conservation with EWG experts.

### 六位年輕人參與交流會的分享

#### Sharing from Six Youths Who Participated in the Youth Dialogue



機電工程署 張佩怡 (左四)

氣候變化已成為國際社會的一大挑戰，我們應加快尋找創新能源管理及節能科技，以應對有關問題。各國專家分享的獨特見解及科技知識，實在令我大開眼界。

**Karen CHEUNG Pui Yi, Electrical and Mechanical Services Department (4<sup>th</sup> left)**

Climate change has become a challenge to international communities. We ought to accelerate our search for innovative energy management and energy saving technologies in order to combat it. The unique perspectives raised and technological knowledge offered by the experts have widened my horizon.





#### 香港大學 郭宇好 (右五)

我十分榮幸能以學生的身分參與交流會，並得此寶貴機會向能源專家提問。欣悉節能目標是能夠實現的，期盼我們能使用更多可再生能源，減少使用化石燃料。

#### 香港城市大學 羅芷筠 (右二)

交流會不僅讓我有機會熟悉能源效益方面的最新科技發展。從探討能源資源以至數據分析，以及能源管理的需求/供應，還使我加深了解把科學與工程融入現代決策和透過教育提高公眾對可持續發展的認識的重要性。

#### 中華電力有限公司 唐尉庭 (左二)

我很榮幸能參與是次活動，就可再生能源、大數據分析及能源強度請教專家。最啟發我的部分，是其中一位專家提到，我們不一定需要最嶄新或最先進的科技，最重要的是如何能利用現有科技來減低能源強度。

#### 香港電燈有限公司 陳懿德 (右三)

很榮幸能與亞太經合組織的專家討論能源效益、節能及可持續發展等議題。我深信年輕人的一貫熱誠和決心，必定能為香港締造美好的將來。

#### 香港中華煤氣有限公司 黃錦權 (左一)

這個互動交流會提供平台，讓我們向亞太經合組織的不同專家學習，以及就能源效益和可再生能源等議題交換意見，我很高興能夠參與其中。交流會使我更了解亞太經合組織經濟體的策略方向和合作模式，推動我更積極參與能源業的工作，為「綠色」未來作出貢獻。

#### Holly KWOK, The University of Hong Kong (5<sup>th</sup> right)

I am very honoured to participate in the Dialogue as a student and have the precious chance to consult the energy experts. I am glad to know that the energy reduction target is achievable and hope that we can use more renewable energy and less fossil fuels.

#### Violet LAW Tsz Kwan, City University of Hong Kong (2<sup>nd</sup> right)

The Youth Dialogue has not only provided me with the opportunity to familiarise myself with recent technological advancements in energy efficiency - from exploration of energy resources to data analysis; as well as demand for / supply of energy management, but has also enhanced my understanding of the importance of incorporating science and engineering into contemporary policy-making and raising public awareness of sustainability through education.

#### Viki TONG Wai Ting, CLP Power Hong Kong Limited (2<sup>nd</sup> left)

I am honoured to be involved in this event which has allowed me to consult experts for their views on renewable energy, big data analytics and energy intensity. The most inspiring part was that one of the experts mentioned we do not necessarily need the latest or the most advanced technology, what matters most is how existing technologies could be utilised to achieve lower energy intensity.

#### Jacqueline CHAN Yee Tak, The Hongkong Electric Company, Limited (3<sup>rd</sup> right)

It is my honour to discuss with APEC experts issues of energy efficiency and conservation as well as sustainable development. I am convinced that the consistent enthusiasm and determination of youngsters will create a bright future for Hong Kong.

#### Theo WONG Kam Kuen, The Hong Kong and China Gas Company Limited (1<sup>st</sup> left)

I am delighted to participate in this interactive Dialogue, which has provided a platform for us to learn from different APEC experts and exchange views on such topics as energy efficiency and renewable energy. I have learnt more about the strategic direction and collaborative practices of APEC economies, and am motivated to get more involved in the energy industry and contribute to a "green" future.



是次活動包括為期四天的會議及一天的慈山寺和T-PARK [源 區]技術考察,大會非常榮幸邀得環境局局長黃錦星先生及機電署署長薛永恒先生出席。超過180位來自亞太經合組織經濟體的代表及能源專家聚首一堂,討論相關地區面對的能源機遇與挑戰。

This event included four-day meetings and one-day technical visits to the Tsz Shan Monastery and T-PARK. We are honoured to have invited the attendance of Mr WONG Kam Sing, Secretary for the Environment, and Mr Alfred SIT, Director of Electrical and Mechanical Services, at the event. Over 180 delegates from APEC economies and energy experts gathered together to discuss energy opportunities and challenges faced by the region.



▲ 技術考察活動  
Technical visits



▲ 環境局局長黃錦星先生於歡迎晚宴上向亞太經合組織能源工作組第55次會議的所有代表致辭

Mr WONG Kam Sing, Secretary for the Environment, delivers a speech to all APEC EWG55 delegates at the Welcome Dinner



▲ 機電署署長薛永恒先生歡迎所有出席能源工作組第55次會議的亞太經合組織經濟體代表

Mr Alfred SIT, Director of Electrical and Mechanical Services, welcomes all EWG55 delegates from APEC economies

亞太經合組織能源工作組第55次會議已圓滿結束。我們希望藉是次活動,鼓勵年輕人進一步認識與節能減排有關的議題。未來,香港特區政府會更積極參與亞太經合組織能源工作組的活動,以應對氣候變化。

APEC EWG55 was successfully concluded. We hope that young people will be encouraged to further their understanding of issues related to energy saving and emission reduction through this event. The Hong Kong SAR Government will participate more actively in APEC EWG activities in the future to combat climate change.

# 出席海外論壇推廣區域供冷系統 提升香港的國際地位

## Promoting District Cooling System at Overseas Symposium to Enhance Hong Kong's International Status

為推廣可持續發展，機電署署長薛永恒先生和高級工程師盧潔瑩女士在2018年4月12及13日遠赴英國倫敦，出席由英國特許屋宇設備工程師學會主辦的「2018技術研討會」。為期兩天的技術研討會吸引全球眾多業界人士參加。

薛先生和盧女士以「香港區域供冷系統」為演講主題，向海外的學者和業界從業員介紹機電署為配合行政長官的施政新理念，在發展項目上擔當的「促成者」、「推廣者」和「規管者」角色。此外，他們也闡述香港為響應《巴黎協定》而利用創新科技促進項目的可持續發展，應對氣候變化，善用能源和強化城市基礎設施。啟德區域供冷系統不但可節省能源，亦可提高啟德區的整體綠化覆蓋率。機電署一直採取具體行動，以「創新」、「互動」及「協作」為原則，提升香港在機電安全及善用能源方面的國際地位。

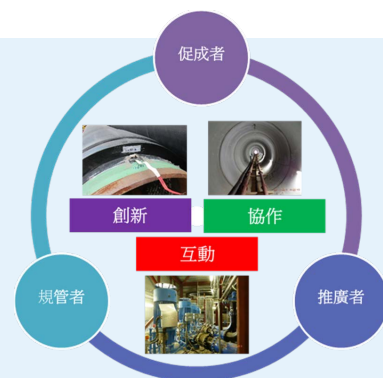
To promote sustainable development, Mr Alfred SIT, Director of Electrical and Mechanical Services, and Ms Denise LO, Senior Engineer, attended the CIBSE Technical Symposium 2018 organised by the Chartered Institution of Building Engineers (CIBSE) in London, United Kingdom, on 12 and 13 April 2018. The two-day Technical Symposium attracted participation from many industry practitioners from around the globe.

With "Hong Kong District Cooling System (DCS)" as the presentation topic, Mr SIT and Ms LO introduced to overseas academics and industry practitioners the roles of a "facilitator", "promoter" and "regulator" played by the EMSD in the project, which tie in with the Chief Executive's new concept of governance. In addition, they also highlighted Hong Kong's efforts in responding to the Paris Agreement by using innovative technologies to promote sustainable development of the project, coping with climate change, making good use of energy and strengthening urban infrastructure. The Kai Tak DCS not only saves energy but also increases the overall greening ratio of the Kai Tak District. The EMSD has been taking concrete actions to enhance Hong Kong's international status in terms of electrical and mechanical safety and effective use of energy, following the principles of being "innovative", "interactive" and "collaborative".



機電署署長薛永恒先生在研討會上指出，區域供冷系統是香港的節能基礎設施之一

Mr Alfred SIT, Director of Electrical and Mechanical Services, points out at the Symposium that the DCS is one of the energy saving infrastructures in Hong Kong



作為「規管者」、「促成者」及「推廣者」，政府以「創新」、「互動」及「協作」為原則，加強香港的機電設備

As a "regulator", "facilitator" and "promoter", the Government adopts the principles of being "innovative", "interactive" and "collaborative" in enhancing Hong Kong's electrical and mechanical installations

此外，機電署轄下的啟德區域供冷系統的營辦商香港區域供冷聯營有限公司，獲得由國際物業設施管理協會(香港分會)舉辦的亞太區設施管理大獎2018的亞太區最佳職業健康及安全獎優異證書，以表揚其在上述項目的職業健康及安全管理方面的出色表現。

Besides, Hong Kong District Cooling DHY Joint Venture, the operator of the Kai Tak DCS under the EMSD, has won the Certificate of Excellence of the Asia Pacific Best Occupational Health and Safety Award at the Asia-Pacific Facility Management Awards 2018 hosted by the Hong Kong Chapter of International Facility Management Association in recognition of its outstanding performance in the occupational health and safety programme implemented in respect of the above project.



# 2018 亞太城市建設與管理實務論壇

## Asia-Pacific Forum on Urban Construction and Management 2018

機電署高級工程師盧錦祥先生於2018年5月18至20日在中國北京舉行的2018亞太城市建設與管理實務論壇上，發表題為《香港啟德發展區區域供冷系統—設計及工程管理》的技術論文。

該論壇以「一帶一路」為背景，主題是城市發展的建設管理與實踐，而機電署有關實施區域供冷系統的低碳及節能空調基建設施的論文，正好切合論壇的主題。論壇由北京建築大學主辦，區域協辦單位包括來自內地、台灣、澳門及香港等地的工程機構。香港科技大學土木及環境工程系校友會和香港工程師學會(土木分部)為其中兩個協辦單位。

盧先生在演講中與來自兩岸四地的與會者(包括學者、專業人士和業內人士)分享機電署在啟德發展區成功實施首個區域供冷系統的經驗，涵蓋項目所遇到的挑戰和用以解決有關問題的方案。重點包括與其他項目單位協作，以協調區域供冷系統管道的布線和鋪設；採用「設計、建造及營運」合約模式，就區域供冷系統工程進行採購；安裝洩漏檢測系統，以監察地下區域供冷系統管道的狀況；以及透過立法，授權政府向區域供冷用戶徵費，以收回區域供冷系統的資本投資和營運成本。

Mr LO Kam Cheung, Senior Engineer of EMSD, presented a technical paper on "District Cooling System at Kai Tak Development in Hong Kong - Design & Engineering Management" at the Asia-Pacific Forum on Urban Construction and Management 2018 held from 18 to 20 May 2018 in Beijing, China.

As the Forum featured the theme of construction and management practices and issues on urban development against the background of "One Belt, One Road", the EMSD's paper on the implementation of district cooling system (DCS), which is a low carbon and energy efficient infrastructure for air-conditioning systems, fits well with such theme. The Forum was organised by the Beijing University of Civil Engineering and Architecture, with engineering organisations from the mainland of China, Taiwan, Macau and Hong Kong as regional co-organisers. The Civil and Environmental Engineering Alumni Association of the Hong Kong University of Science and Technology and the Hong Kong Institution of Engineers (Civil Division) were two of them.

In the presentation, Mr LO shared with participants, including academics, professionals and industry practitioners from the four regions, the experience of the EMSD in the successful implementation of the first-of-its-kind DCS at Kai Tak Development, covering the challenges encountered and the solutions adopted to tackle them. Highlights included collaboration with other project parties for co-ordination of DCS pipework routing and pipe laying, works procurement with the Design-Build-Operate contract strategy for the DCS plant, installation of the leakage detection system to monitor the condition of underground DCS pipes, and legislation to empower the Government to charge fees from district cooling users for recovering the capital investment and operation costs of the DCS.



### ▲ 在論壇發表有關啟德發展區區域供冷系統的論文

Presentation of the paper on DCS at Kai Tak Development at the Forum

### ▼ 論壇的嘉賓及講者在會場合照

Group photo of guests and speakers at the Forum





# 啟德區域供冷開放日

## Kai Tak District Cooling Open Day

為慶祝部門成立70周年，同時推廣區域供冷系統的能源效益及連繫社區，機電署聯同啟德區域供冷系統營辦商香港區域供冷聯營有限公司，於2018年5月19日在啟德區域供冷系統北廠舉辦首個開放日。開放日由環境局局長黃錦星先生、機電署署長薛永恒先生及營辦商代表莊偉泉先生主持開幕儀式。其後，局長還與區內的聖公會聖十架小學和保良局何壽南小學及即將遷往啟德的文理書院(九龍)的「區域供冷大使」對話，聆聽他們分享使用區域供冷系統的好處。

開放日當天設有以機電署規管服務及能源效益為主題的攤位遊戲，還設有導賞團，讓市民大眾參觀廠房內的供冷設備。

To celebrate the 70th anniversary of the EMSD, promote the energy efficiency of district cooling system (DCS) and connect with the community, the Department, in collaboration with Hong Kong District Cooling DHY Joint Venture, the operator of the Kai Tak DCS, organised the first Open Day at the North Plant of the Kai Tak DCS on 19 May 2018. The opening ceremony of the Open Day was officiated by Mr WONG Kam Sing, Secretary for the Environment, Mr Alfred SIT, Director of Electrical and Mechanical Services, and Mr Chris CHONG, representative from the operator. The Secretary then conversed with the District Cooling Ambassadors from SKH Holy Cross Primary School and PLK Stanley Ho Sau Nan Primary School in the district as well as Cognitio College (Kowloon), which will move to Kai Tak soon, and listened to their sharing of the benefits of using the DCS.

Game booths with the theme of EMSD regulatory services and energy efficiency were featured on the Open Day. Guided tours to the DCS plant were also arranged for members of the public to visit the cooling facilities at the plant.



環境局局長黃錦星先生、機電署署長薛永恒先生與一眾嘉賓及參加者合照

Group photos of Mr WONG Kam Sing, Secretary for the Environment, Mr Alfred SIT, Director of Electrical and Mechanical Services, and other guests and participants





# 在政府建築物推行重新校驗先導計劃

## Retro-commissioning Pilot Projects in Government Buildings

機電署作為節約能源的合作者及促進者，正積極推行重新校驗的節能方案，以進一步提升現有建築物的能源效益。重新校驗是一個既具成本效益又有系統的檢測過程，定期檢查現有建築物的能效表現，透過運用數據趨勢分析、專業分析及診斷方法，協助我們制定以科學為本的優化方案，以及持續改善屋宇裝備裝置的能效表現。

機電署於2016年就重新校驗展開先導研究。六座規模、用途、樓齡及能源年耗量各異的現有政府建築物被選定參與重新校驗先導計劃。這些政府建築物包括政府辦公室、教育服務中心及市政大廈，樓齡介乎10至30年。

As a collaborator and facilitator in energy saving and conservation, the EMSD is actively pursuing retro-commissioning (RCx), an energy saving method to further enhance the energy efficiency of existing buildings. RCx is a cost-effective and systematic process to periodically check the energy performance of existing buildings. With the use of data trending, professional analysis and diagnosis, RCx helps to develop a scientific-based optimisation scheme and continuously improve the energy performance of building services installations.

The EMSD commenced a pilot study on RCx in 2016. Six existing government buildings of varying sizes, usages, ages and annual energy consumption were selected to join the RCx pilot projects. These government buildings include government offices, an education services centre and municipal services buildings ranging from 10 to 30 years old.

### 參與重新校驗先導計劃的六座政府建築物

### Six government buildings joining the RCx pilot projects



九龍塘教育服務中心  
Kowloon Tong  
Education Services  
Centre



新界南總區警察總部  
New Territories  
South Regional Police  
Headquarters



北角政府合署  
North Point  
Government Offices



金鐘道政府合署  
Queensway  
Government Offices



士美非路市政大  
Smithfield Municipal  
Services Building



紅磡市政大  
Hung Hom Municipal  
Services Building

我們在重新校驗先導計劃中發現多個節能機會，由系調校(例如調整時間掣設定、優化系統控制次序、充分利用能源管理系統、重新校準關鍵感應器/致動器、減低鮮風、檢視設定點(溫度及靜壓)、微調氣體和空氣供應比例以提高鍋爐燃燒效率、進一步調整照明水平等)，以至涉及改善資本設備的建議，例如安裝有需求控制功能的感應器及致動器、加裝變速驅動器、修改及提升現行的大廈管理系統，以及更換設備等。

這些節能機會每年可節省約230萬度電，相等於有關建築物每年總能源消耗量的約5%。這些節能機會的回本期由數月至數年不等，平均約為三年。先導計劃除了展示重新校驗的效益外，亦為《重新校驗技術指引》提供真實例子，以供計劃推行重新校驗的持份者作參考之用。未來，我們會選定更多政府建築物以推行重新校驗，務求進一步提升建築物的能源效益。

Many energy saving opportunities (ESOs) have been identified in the RCx pilot projects, ranging from system tunings (such as adjusting timer setting, optimising system control sequencing, fully utilising energy management systems, recalibrating critical sensors/actuators, trimming down fresh air, reviewing set point (temperature and static pressure), fine-tuning the ratio of gas and air supply to improve boiler combustion efficiency, further adjustment of lighting level, etc.) to recommendations involving capital improvements, such as installing sensors and actuators with demand control function, adding variable speed drives, modifying and upgrading existing building management systems, and replacement of equipment, etc.

The energy saved from these ESOs is around 2 300 000 kWh per year, which is equivalent to about 5% of the annual total energy consumption of the buildings concerned. The payback period of these ESOs ranges from several months to several years, or about three years on average. Apart from demonstrating the benefits of RCx, the pilot projects have also provided real examples for the Technical Guidelines on RCx, which serves as a reference model for stakeholders who plan to implement RCx. In future, we will select more government buildings to implement RCx with a view to further enhancing the energy efficiency of buildings.



## 環境局局長參觀已進行重新校驗的建築物

此外，為推廣及提倡重新校驗作為應對氣候變化的有效措施，環境局局長黃錦星先生於七月初參觀多座已進行重新校驗的政府建築物及商業樓宇，包括新界南總區警察總部、海港城商場及新鴻基中心，以了解重新校驗的成效。

這些建築物作為重新校驗的先驅，其經驗對業界及公眾具有良好的參考價值。其中，新界南總區警察總部屬機電署為政府建築物進行重新校驗的第一批試點，該建築物的使用者對於重新校驗的成果反應正面。我們預期，在不久的將來會有更多建築物參與重新校驗計劃，以實現「重新校驗，幫你慳電」的目標。



## The Secretary for the Environment visited RCx-implemented Buildings

To promote and advocate RCx as an effective measure in combating climate change, Mr Wong Kam Sing, Secretary for the Environment, visited RCx-implemented government and commercial buildings in early July to learn about the effectiveness of RCx. These buildings include the New Territories South Regional Police Headquarters (NTSRPH), Harbour City shopping mall and Sun Hung Kai Centre.

The experience of these pioneering buildings of RCx provides good reference for the trade and the public. Users of the NTSRPH, which is among the first batch of government buildings for which RCx is implemented by the EMSD, responded positively to the results of RCx. We expect that there will be more buildings joining the RCx projects in the near future to realise the goal of "Retro-commissioning - Saving Energy for All".

▶ 環境局局長黃錦星先生(左)及機電署署長薛永恒先生(右)參觀已進行重新校驗的建築物



Mr WONG Kam Sing (left), Secretary for the Environment, and Mr Alfred SiT (right), Director of Electrical and Mechanical Services, visit RCx-implemented buildings



▲ 建築物使用者對於重新校驗的成果反應正面，並支持推行該計劃

Users of the buildings respond positively to the results of RCx and support its implementation



## 香港建築物能源效益註冊計劃

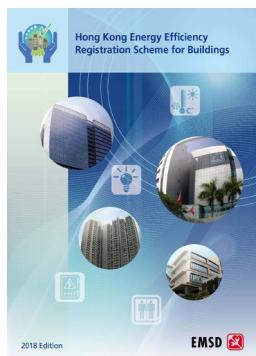
## Hong Kong Energy Efficiency Registration Scheme for Buildings

香港建築物能源效益註冊計劃近期已予檢討，節能表現比法定要求為佳的建築物／處所可獲此計劃認可及嘉許。經修訂的計劃由2018年1月1日起生效。



此計劃仍屬自願性質，接受所有公營和私營的新建及現有建築物申請。新的合規要求以本地及／或其他國際認可的建築物環境評估制度為基礎制定，以更廣泛地涵蓋環境／能源方面的表現。一如2018-19年度《財政預算案》載述，企業購置合資格的建築物能源效益和可再生能源裝置，其資本開支可獲更優惠的稅務安排，由目前分五年扣除改為全數在一年內扣除。

詳情請瀏覽機電署網頁  
[https://www.emsd.gov.hk/tc/energy\\_efficiency/energy\\_efficiency\\_registration\\_scheme\\_for\\_building/index.html](https://www.emsd.gov.hk/tc/energy_efficiency/energy_efficiency_registration_scheme_for_building/index.html)

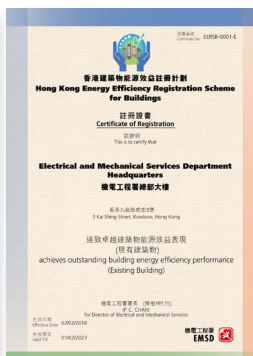


▶ 香港建築物能源效益註冊計劃(2018年版)

Hong Kong Energy Efficiency Registration Scheme for Buildings (2018 Edition)

The Hong Kong Energy Efficiency Registration Scheme for Buildings has been reviewed recently so that buildings/premises achieving better energy performance beyond the statutory requirements could be recognised and commended under the Scheme. The revised Scheme has been effective since 1 January 2018.

The Scheme remains voluntary and is open for application from all new and existing government and private buildings. The new compliance requirements are developed based on local and/or other internationally recognised building environmental assessment systems for broader coverage of environmental/energy aspects. As mentioned in the 2018-19 Budget, the Government will further enhance tax concessions for capital expenditure incurred by enterprises in procuring eligible energy efficient building installations and renewable energy devices by allowing tax deduction to be claimed in full in one year instead of the current period of five years.



Please visit our website for details: [https://www.emsd.gov.hk/en/energy\\_efficiency/energy\\_efficiency\\_registration\\_scheme\\_for\\_building/index.html](https://www.emsd.gov.hk/en/energy_efficiency/energy_efficiency_registration_scheme_for_building/index.html)

◀ 香港建築物能源效益註冊計劃(2018年版)的註冊證書範本

Sample of Certificate of Registration of the Hong Kong Energy Efficiency Registration Scheme for Buildings (2018 Edition)



# 強制性能源效益標籤計劃第三階段已正式生效

## Third Phase of Mandatory Energy Efficiency Labelling Scheme Has Come into Effect

使用更多具能源效益的產品可節省不少能源，有助減少發電過程中排放的溫室氣體及其他空氣污染物。為進一步提升市民對節約能源的意識，並鼓勵他們選擇具能源效益的產品，政府透過修訂《能源效益(產品標籤)條例》，推行強制性能源效益標籤計劃(強制性標籤計劃)第三階段。有關修訂已獲立法會通過，並於今年6月1日正式生效。為了讓業界作好所需準備，強制性標籤計劃第三階段設有18個月寬限期。

ENERGY LABEL 能源標籤		
more efficient 效益較高	Cooling 製冷	Heating 供暖
1 2 3 4 5	Grade 1 級	Grade 1 級
less efficient 效益較低	420	150
Annual Energy Consumption (kWh) 每年耗電量(千小時) Based on 1200 hours operation (Cooling) or 2400 hours operation (Heating) 以每年使用 1200 小時計算(製冷)或以每年使用 2400 小時計算(供暖)	2.54	2.48
Cooling and Heating Capacity (kW) 製冷及供暖量(千瓦)	R410A	
Refrigerant 製冷劑	ABC 某某牌	
Room Air Conditioner 品牌:	Model: HK1234	
Model 型號:	Reference Number / Year C180123 / 2018	
Reference Number / Year 參考編號 / 年份:	XYZ 某某某	
Information Provider 資料提供者:	機電工程署 EMSD	

Significant energy savings could be achieved by using more energy-efficient products, which helps reduce the emission of greenhouse gases and other air pollutants from power generation. To further promote public awareness of energy saving and the choice of energy-efficient products, the Government introduced the third phase of Mandatory Energy Efficiency Labelling Scheme (MEELS) through amendments to the Energy Efficiency (Labelling of Products) Ordinance. Such amendments had been approved by the Legislative Council and took effect on 1 June 2018. To enable the trade to make necessary preparation, there is a grace period of 18 months for the third phase of MEELS.

強制性標籤計劃第三階段涵蓋五類電器，包括電視機、儲水式電熱水器、電磁爐、冷暖空調機(同時涵蓋供暖和製冷功能)及洗衣機(額定洗衣量超過7公斤但不超過10公斤)。冷暖空調機的製冷功能及額定洗衣量不超過7公斤的洗衣機，已分別涵蓋於第一及第二階段的強制性標籤計劃內。在18個月寬限期後(即2019年12月1日起)，製造商或進口商必須在產品貼上指定格式的能源標籤，才可在本港供應產品。本港所有供應商(包括批發商及零售商)不得供應沒有參考編號及能源標籤的訂明產品。

The third phase of MEELS covers five types of electrical appliances, namely televisions, storage type electric water heaters, induction cookers, room air conditioners for cooling and heating (covering both heating and cooling functions), and washing machines (with a rated washing capacity exceeding 7 kg but not exceeding 10 kg). The cooling function of room air conditioners for cooling and heating as well as washing machines with a rated washing capacity not exceeding 7 kg were covered in the first and second phases of MEELS respectively. After the 18-month grace period (i.e. from 1 December 2019 onwards), manufacturers or importers are required to attach energy labels in the specified format on the products before supplying them in Hong Kong. All local suppliers (including wholesalers and retailers) are not allowed to supply any prescribed product which has not been assigned a reference number and does not bear an energy label.

為向業界提供實務指引，機電署修訂了

《產品能源標籤實務守則》，加入有關新產品的技術細則。機電署估計，第三階段的強制性標籤計劃全面實施後，整個計劃每年合共可節省約6億度電，即每年減少排放約42萬公噸二氧化碳。



To provide practical guidance for the trade, the EMSD has revised the Code of Practice on Energy Labelling of Products to incorporate technical details of the new products. It is estimated that with full implementation of the third phase of MEELS, the potential annual electricity saving arising from the entire Scheme totals around 600 million kWh, which translates into an annual reduction of carbon dioxide emissions of about 420 000 tonnes.

有關強制性標籤計劃的詳情，請瀏覽「能源標籤網」，網址為 <https://www.emsd.gov.hk/energylabel>

For details of MEELS, please visit the website of "Energy Label Net" at <https://www.emsd.gov.hk/energylabel>



# 「機電·夢飛翔」展覽館開幕

## Grand Opening of EMSD Gallery

位於機電署總部大樓的「機電·夢飛翔」展覽館於2018年1月20日正式開幕。展覽館設有不同主題的展區，並利用一系列生動有趣的互動展品和遊戲，讓參觀人士遊歷機電旅程，從而認識機電署與城市發展的歷史和關係，以及機電署為市民、各政府部門及公營機構提供的服務，同時獲取機電安全、能源效益及機電行業的就業情況等資訊，廣收宣傳教育之效。

展覽館的設計概念源自一就讀香港理工大學環境及室內設計課程和香港知專設計學院展覽設計課程的學生。展覽館的嶄新設計除採納了年輕人的想法外，亦融入了流線、綠化、探索及感官記憶四大元素，貫徹機電署與時並進的信念。

市民可於「機電·夢飛翔」展覽館的開放時間（星期一至五上午9時30分至下午4時30分，公眾假期除外）作自助導賞。

The EMSD Gallery at the EMSD Headquarters was officially opened on 20 January 2018. The Gallery features a variety of themed exhibition areas, utilising interesting interactive exhibits and games to take visitors on an E&M journey, exploring the history of and relationship between the EMSD and urban development, as well as understanding the services provided by the EMSD for the public, various government departments and public organisations. The Gallery also provides information on E&M safety, energy efficiency and career information of the E&M trade for publicity and education purposes.

The design concept of the EMSD Gallery comes from a group of students from the Environment and Interior Design discipline of the Hong Kong Polytechnic University and those from the Exhibition Design discipline of the Hong Kong Design Institute. In addition to adopting youngsters' ideas, the novel design of the EMSD Gallery has also incorporated the concept of four elements, namely aerodynamics, greenery, exploration and sensory memory, embracing the EMSD's belief to move with the times.

Self-guided tours may be taken during the office hours of the EMSD Gallery (Mondays to Fridays from 9:30 a.m. to 4:30 p.m., except public holidays).



環境局局長黃錦星先生及機電署署長薛永恒先生與機電青少年大使一同探索「機電·夢飛翔」展覽館

Mr WONG Kam Sing, Secretary for the Environment, and Mr Alfred SIT, Director of Electrical and Mechanical Services, explore the EMSD Gallery with E&M Young Ambassadors



### 聯絡資料 Contact Information

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機電工程署  
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