能源效益及相關事項通訊
A Newsletter on Energy Efficiency and Related Matters

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EnergyWits 智能

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本期內容 Contents

機電工程署 EMSD

強制性能源效益標籤計劃
Mandatory Energy Efficiency Labelling Scheme

為進一步方便市民挑選具能源效益的器具及提升市民對節約能源的意識，政府現正透過《能源效益（產品標籤）條例》推行強制性能源效益標籤計劃。三類訂明產品，空調機、冷凍器具和緊湊型熒光燈(即慳電膽) 已納入強制性能源效益標籤計劃首階段內。

《能源效益（產品標籤）條例》（第598章）已於2008年5月9日刊登憲報。 根據條例的規定，進口商或製造商供應的訂明產品必須屬已獲機電工程署按其名稱編配參考編號的表列型號，並附有符合規格的能源標籤。而訂明產品的進口商或製造商以外的人（例如零售商或批發商）供應的訂明產品必須屬已獲編配參考編號的表列型號，並附有能源標籤。能源標籤把能源效益分為五級。產品如獲第一級能源標籤，表示該產品能源效益最高，如獲得第五級能源標籤，則表示該產品的能源效益最低。

條例於憲報刊登後有18個月的寬限期，讓業界為遵從有關法例規定作好所需的準備。在寬限期內，沒有參考編號和能源標籤的訂明產品仍然獲准供應。進口商和本地製造商如欲繼續供應這些產品，必須為其產品型號申請編配參考編號，並製作能源標籤。寬限期將於2009年11月8日屆滿。

環境局及機電工程署於2008年5月3月舉辦了強制性能源效益標籤計劃啟動禮，向公眾宣傳有關計劃。環境局局長邱騰華在啟動禮致辭時表示很高興看見市民及業界對推動能源效益及強制性能源效益標籤計劃的努力及支持。啟動禮當日場面非常熱鬧，並得到業界的踴躍參與及支持。

機電工程署署長已核准及發出「產品能源標籤實務守則」，以便就條例所訂的規定提供實務指引及技術細則。機電工程署於2008年6月30日，7月10日及8月26日舉辦

To further facilitate the public in choosing energy efficient appliances and raise public awareness on energy saving, the Government has introduced a mandatory Energy Efficiency Labelling Scheme (EELS) through the Energy Efficiency (Labelling of Products) Ordinance. Three types of prescribed products covered in the first phase of the mandatory EELS are room air conditioners, refrigerating appliances and compact fluorescent lamps.

The Energy Efficiency (Labelling of Products) Ordinance, Cap. 598 was published in the Gazette on 9 May 2008. Under the Ordinance, a prescribed product being supplied by an importer or manufacturer shall be a listed model having a reference number assigned in his name by the Electrical & Mechanical Services Department and bear an energy label that complies with the specified requirement. A person who is not an importer or manufacturer of a prescribed product, for example a retailer or wholesaler, shall ensure that a prescribed product being supplied by him/her is a listed model with a reference number and bears an energy label. Energy label classifies the energy performance of a product into five grades. A product with Grade 1 energy label is among the most energy efficient in the market while a product of Grade 5 is least efficient.

There is an 18-month grace period after gazetting of the Ordinance for the trades to make the necessary preparations for complying with the statutory requirements. During the grace period, a prescribed product is still allowed to be supplied without reference number and energy label. Importers and local manufacturers shall apply for assignment of reference number and prepare the energy labels for their product models if they wish to continue to supply these products after the grace period. The grace period will end on 8 November 2009.

A launching ceremony, organized by the Environment Bureau and Electrical & Mechanical Services Department was held on 3 May 2008 to promote the scheme to the general public. Officiating at the launching ceremony, the Secretary for the Environment, Mr. Edward Yau, was pleased to see the efforts and support by the trade and members of the public in promoting energy efficiency and the mandatory EELS. The launching ceremony was well attended by the trade to show their support for the mandatory EELS.

The Director of Electrical & Mechanical Services has approved and issued a Code of Practice on Energy Labelling of Products to

了三場「強制性能源效益標籤計劃業界研討會」，吸引了多名來自業界人仕出席。研討會的主要目的是讓業界更了解強制性能源效益標籤計劃的要求。由於反應熱烈，機電工程署計劃於日後安排更多同類形研討會供業界參加。

強制性能源效益標籤計劃詳情可參閱機電工程署網頁:www.emsd.gov.hk

provide practical guidance and technical details in respect of the requirements under the Ordinance. With a view to helping the trade to better understand the requirements under mandatory EELS, EMSD held 3 trade seminars on 30 June, 10 July and 26 August 2008 which were well attended by the trade representatives. EMSD is planning to organize more seminars in the future to promote the scheme.

Details of the mandatory EELS can be viewed at EMSD homepage : www.emsd.gov.hk

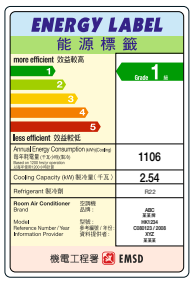
啟動禮主禮嘉賓合照
Officiating guests of the launching ceremony

啟動禮得到業界的鼎力支持
Launching ceremony received overwhelming support from the trade

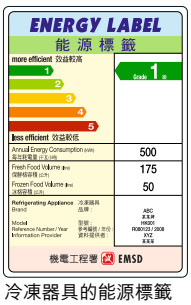
市民透過參與遊戲環節認識能源標籤
Audience learning about energy label through participating in the games session

環境局局長邱騰華先生及機電工程署署長何光偉先生主持啟動儀式
The launching ceremony was officiated by Mr. Edward YAU, Secretary for the Environment and Mr. K.W. HO, Director of Electrical & Mechanical Services

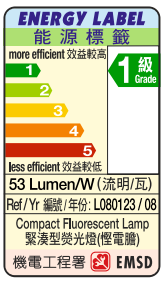
強制性能源效益標籤計劃海報
Mandatory EELS poster



空調機的能源標籤
Energy Label for Room Air Conditioners



冷凍器具的能源標籤
Energy Label for Refrigerating Appliances



緊湊型熒光燈（慳電膽）的能源標籤
Energy Label for Compact Fluorescent Lamps

「全港私家車至醒慳油駕駛比賽」

開展典禮 暨省油駕駛遊戲巡禮

Hong Kong Fuel Economy Run for Private Cars (HK ECO-DRIVERS)

Launching Ceremony cum Eco-Driving Games Fair

機電工程署於二〇〇八年九月三十日，假黃大仙龍翔中心舉行「全港私家車至醒慳油駕駛比賽」開展典禮暨省油駕駛遊戲巡禮，以提高私家車駕駛者節省燃油的意識。

環境局副局長潘潔博士在主持典禮時表示，要達到節約能源的目標，有賴公私營機構和市民的通力合作。

她說：「車輛減少耗用燃油，肯定能減低二氧化碳及溫室氣體的排放量。」

是次活動除了帶出節約能源對可持續發展的重要性外，亦鼓勵市民身體力行，在日常生活特別是駕駛方面實踐節約能源的原則。

當日的開展典禮亦設有問答遊戲、砌圖及塗顏色活動，和市民分享節省燃油的資訊。機電工程署亦於十月十三日及十五日在尖沙咀香港科學館舉辦了兩場簡報會，邀請專家與與會者分享慳油貼士。而慳油駕駛比賽將於十二月十四日(星期日)舉行，參賽車輛將會分為不同組別進行比賽，暫定組別計有汽油私家車組、家庭組、公開組及其他組別，參賽者須在安全駕駛的情況下完成指定路線，以耗油量最少者成為優勝者。詳細資料及報名表格可從http://www.eeawards.emsd.gov.hk下載。比賽截止報名日期為二〇〇八年十一月八日。

根據機電工程署本月公布的「香港能源最終用途數據2008」，運輸類別的能源消耗量佔香港最終用途能源消耗量的３５％，僅次於商業類別的３８％。

The launching ceremony for HK ECO-DRIVERS cum Eco-Driving Games Fair was held on 30 September 2008 at the Lung Cheung Mall in Wong Tai Sin to raise motorists' awareness of energy and fuel conservation. The Run is organized by the Electrical and Mechanical Services Department.

Officiating at the launching ceremony, the Under Secretary for the Environment, Dr Poon Kit, said energy conservation required joint efforts by the Government, the private sector and the general public.

"Reducing fuel consumption of vehicles can certainly contribute to reduction in the emission of carbon dioxide and greenhouse gases," she said.

Highlighting the importance of energy conservation to sustainable development, the event also called on the public to observe this principle in daily life, in particular through driving.

Besides the ceremony, there were quizzes, puzzles and colour painting providing information on fuel saving. EMSD also arranged two briefing sessions at Hong Kong Science Museum, Tsim Sha Tsui, on 13 & 15 October, during which experts were invited to share fuel saving tips with the audience. The highlight of the campaign - the Fuel Economy Run - will be held on 14 December 2008 (Sunday). All participating vehicles would be classified into different categories including Private Petrol Vehicles, Family Category, Open Category and Others. Details and application form can be downloaded from website http://www.eeawards.emsd.gov.hk. The winners will be those drivers whose vehicles consume the least fuel to complete the designated route, under safe driving condition. Deadline for enrolment is 8 November 2008.

According to the "Hong Kong Energy End-use Data 2008" published by the EMSD, the transport sector accounts for 35% of end-use energy consumption in Hong Kong, second only to the 38% for the commercial sector.

是次活動由香港汽車會、香港汽車工業學會、香港汽車修理同業商會和香港專業教育學院（李惠利分校）協辦，並得到中華電力有限公司、香港中華煤氣有限公司、香港電燈有限公司、中石化（香港）油站有限公司、易高環保投資有限公司、香港蜆殼有限公司、埃克森美孚香港有限公司及雪佛龍香港有限公司的鼎力支持，充分顯示不同機構在節約能源方面的緊密合作。

機電工程署署長何光偉感謝有關機構積極支持活動。他說：「透過向公眾展示公私營機構的伙伴關係，我們希望凝聚更多力量，把節約能源和燃油的工作做得更好。」

The run was co-organised by the Hong Kong Automobile Association, the Institute of the Motor Industry Hong Kong, the Hong Kong Vehicle Repair Merchants Association Ltd and the Hong Kong Institute of Vocational Education (Lee Wai Lee). The supporting organisations included CLP Power Hong Kong Limited, The Hong Kong and China Gas Company Limited, The Hong Kong Electric Co. Ltd., SINOPEC (Hong Kong) Petrol Filling Station Co. Ltd., ECO Environmental Investments Ltd., Shell Hong Kong Limited, ExxonMobil Hong Kong Limited and Chevron Hong Kong Limited. This represented a strong collaborative effort among different organisations in promoting energy conservation.

The Director of Electrical and Mechanical Services, Mr Ho Kwong-wai, expressed his thanks to the organisations supporting the event.

Through strong public and private collaboration on energy and fuel savings, we hope to appeal to the public to maintain the momentum," Mr Ho said.

開展典禮嘉賓、與會代表和現場觀眾市民共同支持慳油開展活動
VIP guests, representatives from different organizations and the public showed strong support to the fuel saving event

遊戲巡禮部份得獎小朋友
Winners for the game fair having a group photo

主禮及出席嘉賓大合照，向公眾展示公私營機構的伙伴關係，凝聚更多力量
Officiating and VIP guests show how the public and private collaboration maintain momentum on energy and fuel savings

各嘉賓在潘潔副局長和何署長的帶領下，主持開展儀式
Dr Poon Kit, USEN and Mr Ho, DEMS officiated at the ceremony with other VIP guests

傳媒報導活動之餘，不忘向協辦機構代表查詢慳油良方
The media tried to get some fuel saving tips from our co-organisers, providing a better coverage of the campaign

為慳油活動加上色彩，為環境盡個人力量
Fuel saving event was added with different color with individual effort

追蹤太陽的太陽能光伏系統

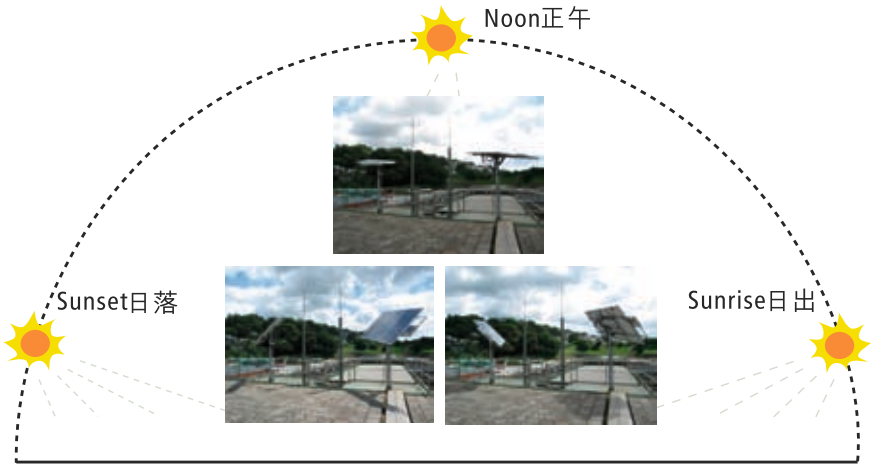
Sun Tracking Photovoltaic System

由於市民對溫室效應的意識日漸提高，香港的可再生能源裝置近年持續增多，當中包括了太陽能光伏系統。

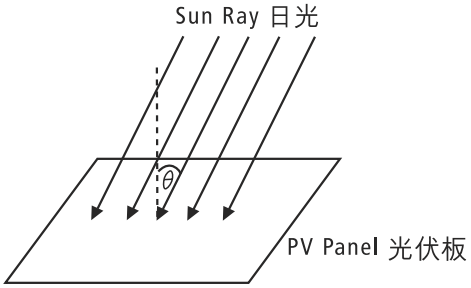
環顧世界，光伏板的市場雖然蓬勃，但價格下調的幅度，仍不足為光伏系統帶來具吸引力的回本期。要縮短回本期，我們得透過改善太陽能電池的轉換效率，或增加光伏板的曝光機會，以增加其發電量。前者因涉及昂貴的先進技術，現時仍未普及；而簡單的太陽追蹤器則可使後者得到實現。

As people are getting more and more aware of climate change, the number of renewable energy installations in Hong Kong has been increasing in recent years. Among them are the photovoltaic systems.

Although the worldwide market is blooming, PV cost is still not low enough to attain an attractive payback period. For shortening the payback period, we have to increase its yield either through enhancing the conversion efficiency of PV cells or allowing it more chance to be exposed to solar irradiation. The former is currently not economical as it involves the use of sophisticated but costly technology. However, the later approach can be realized through simple sun trackers.



光伏板的輸出功率取決於直接落在光伏板板面的幅照度。傳統的光伏系統以固定角度安裝，每天只在中午時分才正面面對著太陽，其餘時間的幅照量都打了折扣，折扣率為入射角「θ」的餘弦，當中以日出及日落時分的幅照量最少。



The output power of a PV panel depends on the strength of the solar irradiation falling directly onto its surface. For conventional fixed installation, PV panel normally faces the Sun directly only for a short period at noon each day. In the other time periods, the panel receives lesser solar radiation at a factor equal to the cosine of the sun ray incident angle (as shown in the figure) and is lowest at sunrise and sunset.

Sun tracker is a technology for turning the orientation of PV panel such that it can always face the sun at a very small incident angle. Theoretically, the technology can greatly enhance the yield.

EMSD recently installed 2 sun trackers at a government venue. Each tracker holds 3 mono-crystalline PV panels with a total rating of

太陽追蹤器的作用是將光伏板的座向調節，使它與陽光組成的入射角長期保持細小。理論上，這是可大大提高其發電量。

機電工程署近日在一政府場所，安裝了兩套帶追蹤器的光伏系統。每套有三片單晶硅光伏板共450瓦，並已接駁電網。在測試過程中，我們會將其中一組的追蹤器，像傳統的光伏系統般，固定在傾斜並向南位置，另一組則按其功能每天追蹤太陽位置，以作比較。下圖是兩套系統在一晴天中所收集到的幅照量，讀者不難察覺到，追蹤器能使光伏系統在每天的早上和午後收集到更多的幅照量。

從2008年9月1至17日期間的數據顯示，有追蹤器的光伏系統所收集到的幅照量平均增加了約18%，在烈日中更可增至26%，而在陰天裏則沒有明顯的增加。

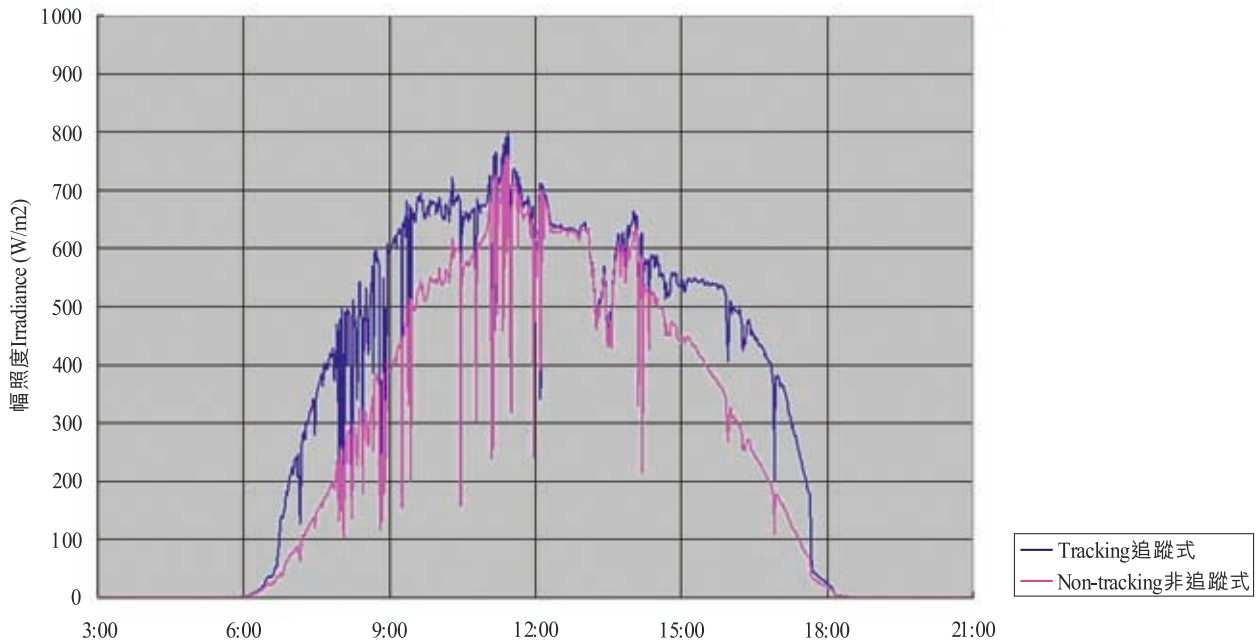
我們現正繼續收集數據，為追蹤太陽的光伏系統作全年性的評估。

450W per tracker and both trackers are grid-connected. For evaluation purpose, one tracker is fixed in its position like conventional PV installation (i.e. tilted and facing South) and the other tracks the sun position daily and adjusts the orientation of the PV panels accordingly. The figure below shows the collected solar irradiation on each tracker in a sunny day. It is obvious that the sun-tracking panels received more solar irradiation in the morning and afternoon.

For the period from 1 to 17 September 2008, preliminary analysis showed that around 18% more solar energy was collected during the period through the adoption of sun tracker. In sunny days, the figure could shoot up to 26% whilst the gain in collected solar energy was minute in cloudy days.

More data are being collected to evaluate the year-round performance of the sun tracker.

兩套系統在一晴天中所收集到的幅照量
Collected Solar Irradiation on a Typical Sunny Day



強制實施**建築物能源效益守則**的進展
Development on the Mandatory Implementation of the **Building Energy Codes**

香港特別行政區政府環境局聯同機電工程署於2007年12月28日就強制實施「建築物能源效益守則」的建議所展開為期三個月的公眾諮詢，已於2008年3月31日完結。環境局和機電工程署隨即整合各方意見，並已於2008年5月26日呈交立法會環境事務委員會討論。綜合各方意見，絕大多數都支持強制實施守則的建議，以及把現有樓宇納入建議的強制計劃。大多數意見都認同政府的建議方向正確，以提升樓宇的能源效益和節省能源。環境局和機電工程署現正參考收集到的意見，擬備有關強制實施守則的立法建議，並計劃在2009年提交上立法會。

BEC for voluntary HKEERSB

The Public Consultation on the Mandatory Implementation of Building Energy Codes launched by the Environment Bureau in conjunction with the Electrical and Mechanical Services Department (EMSD) on 28 December 2007 ended on 31 March 2008. The Environment Bureau and EMSD then consolidated the views and comments from various sectors and submitted to the Legislative Council Panel on Environmental Affairs on 26 May 2008 for discussion. The vast majority of the views received supported the implementation of the proposed mandatory implementation of the BEC and the inclusion of existing buildings in the proposed mandatory scheme. The majority of the views received agreed that the Government's proposal is in the right direction for promoting energy efficiency and conservation in buildings. The Environment Bureau and EMSD are now preparing the legislative proposal for a mandatory implementation of the BEC, taking into account the comments received. It is planned to introduce the legislative proposal to the Legislative Council within 2009.

根據收集到的大多數意見，我們建議
Based on the majority of views received, we propose that

- 應強制實施守則， 以提升樓宇的能源效益及節約能源。
  The mandatory implementation of the BEC should be pursued with a view to improving energy efficiency and conservation in buildings.

- 把新建商業樓宇及住宅和工業樓宇的公用地方納入建議的強制計劃。發展商須向機電工程署署長(署長)提交自我聲明。署長在接獲所需資料和文件後，會發出「遵行規定證明書」。而樓宇業主須就「遵行規定證明書」每十年申請續領一次。
  New commercial buildings and communal areas of residential and industrial buildings should be included in the proposed mandatory scheme. Developers should be required to submit self-declarations to the Director of Electrical and Mechanical Services Department (DEMS). DEMS would issue Certificates of Compliance upon receipt of the required information and document. Building owners are required to apply for renewal of the Certificates once every 10 years.

- 把政府樓宇和公營機構樓宇納入建議的強制計劃，並考慮把其他建築物，例如大型的教學用途樓宇納入計劃。
  Government buildings and buildings in the public sector should also be included in the proposed mandatory scheme. Also, consideration should be given to the inclusion of other buildings such as major educational buildings.

- 現有樓宇如進行大型翻新工程，便須提升能源效益。業主須安排為屋宇裝備裝置進行核證。此外，應考慮制訂合適的過渡安排，讓現有樓宇符合規定。
  Existing buildings should be required to improve energy efficiency whenever there are major retrofitting works. Building owners should be required to arrange certification of the building services installations. Consideration should be given to allow suitable transitional arrangements for existing buildings to comply.

- 強制所有商業樓宇每十年進行能源審核一次，並展示審核結果。此外，應考慮適當地分階段要求現有樓宇進行首次能源審核，讓計劃得以順利實施。
  The carrying out of energy audits once every 10 years for commercial buildings and the display of the audit results should be made mandatory. Proper phasing should be considered for the carrying out of first energy audits for existing buildings to smooth out the implementation.

- 由認可專業人士核證聲明和能源審核。署長會在建議的法例中制訂認可專業人士名冊。
  The self-declarations and energy audits should be certified by recognized professionals. DEMS will set up a register of recognized professionals under the proposed legislation.

- 署長會發出有關能源效益標準和規定以及能源審核的實務守則。
  DEMS will issue codes of practices on the energy efficiency standards and requirements and on energy audits.

- 採用《香港建築物能源效益註冊計劃》最新的守則作為現行能源效益標準和規定，並定期更新。
  The recently updated BEC for Hong Kong Energy Efficiency Registration Scheme for Buildings should be adopted as the current energy efficiency standards and requirements. There should be a regular update of the energy efficiency standards and requirements.

- 應設立具足夠阻嚇作用的懲罰制度，並訂明各方在樓宇不同發展階段所肩負的責任。
  There should be a penalty system with clear responsibility at different stages of the building development, and with sufficient deterrent effect.

- 應採用分級制度，以署長發出的守則作為適用於建議法例涵蓋的所有樓宇的基本標準，同時制訂另一套自願遵守的較高標準，藉此認證取得較佳能源效益的樓宇，以鼓勵追求卓越的環保表現。
  A tiered arrangement should be adopted whereby the BECs issued by DEMS should be the minimum standards applicable to all buildings covered by the proposed legislation, and a higher set of standards should be introduced to give recognition, on a voluntary basis, to buildings that can achieve better energy efficiency so as to encourage superior environmental performance.

- 加強公眾教育，並推廣樓宇節能的伙伴計劃。
  Public education and partnership on energy saving in buildings should be strengthened.

為**啟德**發展區設立一個區域供冷系統
Provision of a District Cooling System at the **Kai Tak** Development

啟德發展區的公共及非公共的非住宅發展工程計劃將產生龐大的新增空調需求並由此而生的電力消耗增長。為啟德發展區設立一個區域供冷系統能減少電力消耗增長和碳排放增長。一個區域供冷系統比傳統的風冷式空調系統節省百分之三十五電力。在全面發展期，啟德發展區的非住宅在使用空調方面基於風冷式空調系統裝置的估計按年電力消耗可達二億四千三百萬

The public and non-public non-domestic development projects at the Kai Tak Development (KTD) will generate substantial new demand for air-conditioning and associated electricity consumption growth. Provision of a District Cooling System (DCS) for non-domestic developments at Kai Tak Development is able to reduce the growth of electricity consumption and carbon emission. A District Cooling System (DCS) consumes 35% less electricity as compared with traditional air-cooled air-conditioning systems (AACS). Upon full development, the annual non-domestic electricity consumption

度電。據此推算，採用建議區域供冷系統可節省達最多按年八千五百萬度電或等於按年減排五萬九千五百公噸二氧化碳。

建議區域供冷系統工程計劃是為啟德發展區作設計/建造/營運一個區域供冷系統。工程計劃的建議範圍包括一個北面冷水機房、一個南面地底冷水機房和地底海水泵房、海水管道工程、冷水管道工程與啟德發展區內使用樓宇所須接駁設施。此區域供冷系統的估計供冷量基於總計劃的非住宅空調樓面面積為約一百七十三萬平方米是二百八十四兆瓦。該工程計劃將會配合實際發展時間表實施。

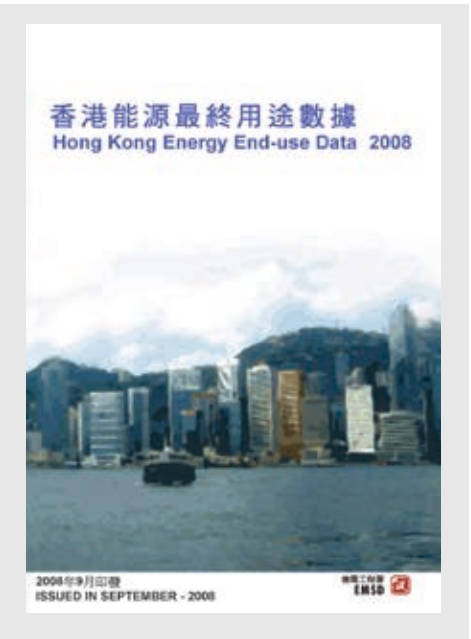
of KTD for air-conditioning purpose is estimated to be up to 243 million kWh based on AACS. Accordingly, the maximum annual saving in electricity consumption by adopting the proposed DCS is up to 85 million kWh, equivalent to a reduction of 59,500 tonnes of carbon dioxide emission per annum.

The proposed DCS project covers design, construct and operate a District Cooling System at the Kai Tak Development. The proposed scope of the project comprises a northern chiller plant, a southern underground chiller plant cum underground seawater pump house, seawater pipeworks, chilled water pipeworks and connection facilities at user buildings at KTD. The estimated cooling capacities of the DCS is 284 MW based on the total planned non-domestic air-conditioned floor area of about 1.73 million m^2. The project would be implemented to tally with the actual development schedule.

2008新版
香港能源最終用途數據已經發行!

NEW 2008
edition of the Hong Kong Energy End-use Data has been published!

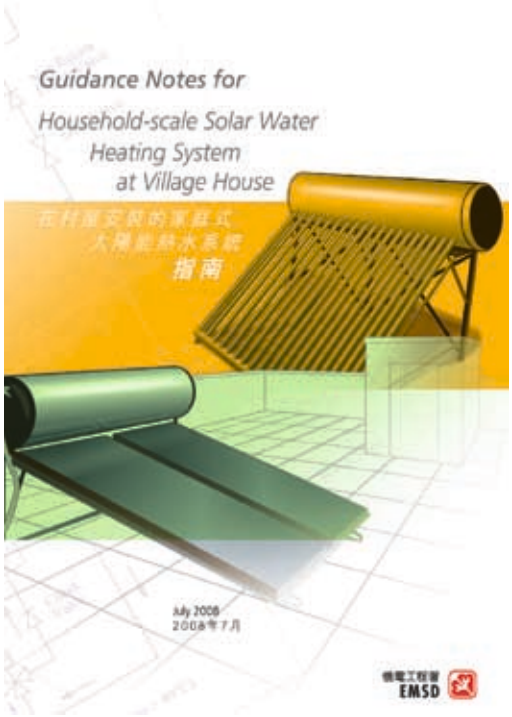
這數據庫記錄全港在2006年間一共使用了288,158太焦耳。當中四大類別-住宅、商業、工業及運輸業分別使用了18%，38%，9%和35%。和往年比較，按人口平均計算的能源最終用途量在2006年間錄得輕微的升幅，由2005年間的每人42.01千兆焦耳升至2006年間的42.02千兆焦耳。但從本地生產總值來看，每十億港元生產總值所需的能源使用量近年均持續下跌，由2005年的208太焦耳下跌至2006年的195太焦耳。有興趣的讀者可由下網址免費下載更加詳細的數據。



In 2006, 288,158 TJ were consumed by the end uses in Hong Kong. The consumption was split among the Residential, Commercial, Industrial and Transport Sectors in the proportion of 18%, 38%, 9% and 35%. Compared with the previous year, the consumption per capita recorded a slight increase. It increased from 42.01 TJ/capita in year 2005 to 42.02 TJ/capita in year 2006. However from the gross domestic product perspective, the consumption continued to decline in the recent years. It dropped from 208 TJ/ Billion HK dollar in year 2005 to 195 TJ/ Billion HK dollar in year 2006. Interested readers can seek further information from various tables, graphs and charts displayed in the following website:

http://www.emsd.gov.hk/emsd/e_download/pee/HKEEUD2008.pdf

在村屋安裝的
家庭式太陽能熱水系統指南
Guidance Notes for
Household-scale Solar Water Heating System
at Village House



氣候變化已是全球關注的事項。可再生能源技術的應用，除可減低能源消耗外，更能減少溫室氣體的排放，以緩和氣候變化對我們的影響。

在眾多可再生能源技術中，太陽能熱水應算是最普及的。通過太陽能的應用，既可節省能源開支，亦能減少化石燃料的使用，從而減少發電廠或燃氣生產廠所排放的二氧化碳。

在新界區有為數過萬座的村屋是非常適合太陽能熱水的應用。村屋一般只為二至三層高，天台大而平，適合安裝太陽能熱水器，加上附近的建築物和樹木一般都不太高，不會遮擋照落在村屋天台上的陽光。

為配合太陽能熱水系統在村屋的應用，機電工程署聯完成了一份《在村屋安裝的家庭式太陽能熱水系統指南》。 該指南的主要目的是為安裝在村屋的家庭式太陽能熱水系統的準買主、擁有人及安裝者提供指引，讓他們了解有關於安裝、操作和保養這類可再生能源設備的規定及申請程序。

該指引說明，太陽能熱水系統應安裝於村屋的天台範圍（簷篷頂部及樓梯頂篷蓋上的範圍除外），並須裝設在隨系統供應的支架上。另外，安裝熱水系統的位置應結構穩固及不被附近的建築物、大廈和樹木所遮擋。而太陽能集熱器應參照製造商的建議以適當的角度傾斜及面向以合適的方

Global warming has already been a worldwide issue. The use of renewable energy can reduce the use of fossil fuels as well as emission of greenhouse gases, resulting from burning of the fossil fuels.

The most commonly used renewable energy technology is solar water heating system. Through the application of solar energy, we can reduce the expenditure in energy bill, the use of fossil fuels and the greenhouse gas emissions at power plants and towngas production plants.

In New Territories, there are over ten thousands of village houses that are suitable for installation of solar water heating systems. These village houses generally are 2 to 3 storeys and have a large and flat roof-top which is suitable for installation of solar water heating system. Furthermore roof-top of these village houses is fully exposed to the sunlight since the adjacent structures and trees are generally not excessively tall.

To cope with the potential deployment of solar water heating system in village houses, EMSD has published a set of "Guidance Notes for Household-scale Solar Water Heating System at Village House". The Guidance Notes provide general guidelines for the intending purchasers, owners and installers of household-scale solar water heating system installed at village houses to understand the installation requirements and application procedures associated with the installation, operation and maintenance of such solar water heating system.

The Guidance Notes prescribe that the solar water heating system shall be installed on the roof-top area (except the area on the top of canopy and stairhood) of a village house and mounted on the supporting frame supplied with the system. It should be

向以取得全年計最佳效能。一般典型村屋的天台範圍能夠支承面積最大為2.5米長 × 3.5米闊而最重為700公斤的家庭式太陽能熱水系統。裝置擁有人須僱用註冊電業承辦商/ 註冊電業工程人員和持牌水喉匠進行安裝工作。如擬議裝置的太陽能熱水系統符合以上所訂明的要求，則有關裝置可予接受，而且無須提交申請。

若想下載該指引或了解更多其他有關太陽能熱水系統的資料，請瀏覽香港可再生能源網（網址：http://re.emsd.gov.hk/cindex.html）。

installed on a structurally sound area which should not be shaded by the adjacent structures, buildings and trees. The solar collector panel(s) should be tilted at an appropriate angle and properly oriented in accordance with the manufacturer's recommendations so as to maximise the year-round efficiency. In general, the roof-top area of a typical village house is able to support the solar water heating system up to a size of 2.5m (L) x 3.5m (W) and a weight of 700kg. The owner should employ appropriate Registered Electrical Contractor / Workers and licensed plumber to install the system. If the proposed installation of solar water heating system follows the above prescribed requirements, such installation can be acceptable and no application is required.

To download the Guidance Notes or for further information about the solar water heating system, please visit our HK RE Net (website http://re.emsd.gov.hk/eindex.html).

亞太經濟合作

組織能源效益專家小組會議

The 32nd Meeting of APEC Expert Group on Energy Efficiency & Conservation

機電工程署能益效能事務處於2008年7月30至31日在香港機電工程署總部大樓主辦了為期2天的第32次亞太經濟合作組織能源效益專家小組會議，並以中國香港代表參加是次會議。這次會議有來自8個亞太經濟地區的22位能源專家出席。議程主要討論各經濟合作組織能源效益項目及成果評估方法。機電工程署署長何光偉先生出席是次會議的歡迎場合，並發表講話，與各能源專家交換能源工作的意見。

On behalf of Hong Kong, China, the Energy Efficiency Office of the Electrical & Mechanical Services Department hosted the 32nd meeting of APEC Expert Group on Energy Efficiency & Conservation (EGEE&C) at the EMSD Headquarters on 30-31 July 2008. There were 22 energy experts from 8 APEC Member Economies participated in the event. The agenda mainly include the review of EE&C projects and reports on evaluation methodologies for EE&C policies and programmes. Mr. HO Kwong-wai, Director of EMSD hosted the official dinner, and exchanged views on energy initiatives with the delegates.

第32次亞太經濟合作組織能源效益專家小組會議

The 32nd Meeting of APEC Expert Group on EE&C