

EnergyWits

智能

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能源效益事務處 進入第二個十年

Into the Second Decade of the Energy Efficiency Office



自 1994 年下旬成立以來，能源效益事務處已經歷了十載寒暑。為了紀念十周年，事務處出版了一本名為「節能十載」的小冊子。

小冊子扼要地介紹了能源效益事務處過去十年在能源效益及節約方面的工作成就。我們亦很榮幸得到公營私營機構的顯赫人士在小冊子中致賀辭。

能源效益事務處剛踏入第二個十年，我們喜見事務處在能源效益及可再生能源方面有一些新的發展，在本期通訊中會加以報導。

我們深信在能源效益事務處的第二個十年，事務處以至於機電工程署全體全人都會竭盡所能，為建設一個更節能及更環保的香港而努力！

歡迎各位讀者向能源效益事務處索取「節能十載」小冊子，又或者從機電工程署網站 (<http://www.emsd.gov.hk>) 下載電子版本。

Established in the second half of 1994, the Energy Efficiency Office (EEO) is now ten years old. To commemorate its tenth anniversary, EEO has published a booklet titled "A Decade of Energy Efficiency & Conservation".

In the booklet, the work and achievements of EEO in the past decade are briefly reviewed. We are also honoured to have congratulatory messages from many distinguished persons from both the public and the private sectors.

Having just walked past the starting post of the second decade of the Office, we are glad to see in EEO a number of exciting developments in energy efficiency and renewable energy. These new developments are briefly reported in this issue.

We believe that in this second decade of EEO, the Office and the Department will continue to devote our best to make Hong Kong a more energy-efficient and a greener city.

Please feel free to get a copy of the booklet from EEO, or download it from EMSD's website (<http://www.emsd.gov.hk>).



能源效益事務處同事手持「節能十載」小冊子合照
Colleagues of the Energy Efficiency Office holding copies of the booklet

透過比賽節省更多能源

Competing for Greater Energy Saving

引言

在 2003 年及 2004 年，機電工程署分別為政府部門及私營機構推出了兩個節能比賽。

比賽的目的是為了：

- 鼓勵政府內部以及私營機構節約能源；及
- 表揚能夠節省大量電力及在能源管理方面採用最佳節能方法的部門及機構。

Introduction

In 2003 and 2004, EMSD launched two energy saving competitions in succession – the first one for government departments, and second one for the private sector.

The objectives are:

- to encourage government departments and private sector organizations to practise energy conservation; and
- to recognize those who are able to demonstrate quantifiable energy savings and adopt best practices in energy management.

「香港能源效益及節能獎 (政府機構)」圓滿結束

關於這獎項

在環境運輸及工務局的全力支持下，機電工程署在 2003 年 8 月推出了「香港能源效益及節能獎 (政府機構)」比賽。

這次比賽共有 192 支隊伍參加，競逐 3 個類別的獎項 — 10 個部門競逐「星級節能獎」、9 個部門角逐「能源效益及節能最佳方法獎」及 173 個場地爭奪「場地節能獎」。

在 2003 年 10 月至 2004 年 9 月的比賽期間，各參賽隊伍均竭盡所能，減少用電量，從而達到與去年同期比較，電費上有實質的減省。



渠務署署長從曾蔭權先生手中接過能源效益及節能最佳方法金獎
Director of Drainage Services receiving the Energy Efficiency and Conservation Best Practice Gold Award from The Honourable Donald TSANG

Successful Conclusion of the Hong Kong Awards for Energy Efficiency and Conservation in Government

About the Awards

EMSD launched the "Hong Kong Awards for Energy Efficiency and Conservation in Government", in August 2003, with the support of the Environment, Transport and Works Bureau.

A total of 192 teams competed for three categories of awards - 10 departments competing for the Star Saver Awards, 9 departments for the Energy Efficiency and Conservation Best Practice Awards, and 173 venues for the Venue Saver Awards.

These teams worked hard to reduce their electricity consumption within the competition period of October 2003 to September 2004, in order to record dollar savings as compared to the preceding twelve months.

優勝者

經過一年的激烈競爭，評審團選出優勝者。評審團成員包括：

- 潘樂陶先生（能源諮詢委員會主席），擔任評審團主席
- 陳佐堅先生（香港設施管理學會會長）
- 張琮瑤女士（行政署長）
- 張麗萍女士（長春社總監）
- 姚思教授（能源效益及節約小組委員會主席）
- 關育材先生（香港工程師學會會長）
- 本署署長黎仕海先生。

無論是優勝者與否，大多數參賽者均能在節約能源方面取得好成績。與去年比較，個別場地的用電量更減少超過 10%。

頒獎典禮於 2004 年 12 月 13 日舉行，我們很榮幸邀請到曾蔭權先生擔任主禮嘉賓。

曾蔭權在恭賀勝出的局署創下佳績之餘，也在演辭中呼籲各部門的同事繼續努力，為公眾樹立良好榜樣。

The Winners

After a year of intense competition, the winners were selected by a judging panel comprising of:

- Mr Otto POON (Chairman of the Energy Advisory Committee), as chairman of the panel
- Mr Kenneth CHAN (President of the Hong Kong Institute of Facility Management)
- Ms K Y CHANG (Director of Administration)
- Ms Lister CHEUNG (Chief Executive of the Conservancy Association)
- Prof Peter HILLS (Chairman of the Energy Efficiency and Conservation Sub-committee)
- Mr James KWAN (President of Hong Kong Institution of Engineers)
- Mr Roger LAI, our Director.

The winners and non-winners alike demonstrated very good results in energy efficiency and conservation, with individual venues achieving a reduction in electricity consumption of greater than 10% when compared to the previous year.

The prize presentation ceremony was held on 13 December 2004. We had the pleasure of inviting The Honourable Donald TSANG to be the officiating guest.

While congratulating the winning bureaux and departments on their achievements, The Honourable Donald TSANG in his speech appealed to colleagues in all departments to continue their efforts, and to set a good example to the public.

各獎項的奪魁者 Champions in Different Award Categories

獎座之一
One of the prizes
for the Awards

| 獎項 Awards | 優勝者 Winners |
|---|--|
| 能源效益及節能最佳方法金獎 Energy Efficiency and Conservation Best Practice Gold Award | 渠務署 Drainage Services Department |
| 星級節能金獎（大用電量） Star Saver Gold Award (Large Consumption) | 消防處 Fire Services Department |
| 星級節能獎（小用電量） Star Saver Award (Small Consumption) | 土木工程拓展署 Civil Engineering and Development Department |
| 辦公大樓節能金獎 Office Building Saver Gold Award | 公務員事務局位於皇后大道中 9 號的辦事處 Offices of Civil Service Bureau in 9 Queen's Road Central |
| 非辦公大樓節能金獎 Non-Office Building Saver Gold Award | 消防處梅窩消防局 Mui Wo Fire Station of Fire Services Department |

為私人機構而設的 「香港能源效益獎」

關於這獎項

為政府部門而設的節能比賽已圓滿結束。該比賽的成功促使我們設計一個特別為私營機構而設的「香港能源效益獎」節能比賽，並於2004年10月推出該比賽。

比賽為兩類機構而設：(i) 商業及住宅樓宇的物業管理公司及(ii) 非官立學校，並且得到中華電力有限公司及香港電燈有限公司的支持。

比賽開展典禮於2004年10月16日在數碼港舉行。

- 主禮嘉賓乃環境運輸及工務局局長廖秀冬博士。
- 特別嘉賓有潘樂陶先生（能源諮詢委員會主席）、曹榮森先生（香港電燈有限公司執行董事）及阮蘇少湄女士（中華電力有限公司常務董事）。

私營機構的反應

私營機構對這項比賽反應熱烈，實在令人鼓舞。在報名截止之日，已有300多所樓宇和學校參加了比賽。這項比賽由2004年12月開始，為期一年。

為參賽機構提供支援

我們在2005年2月24日舉辦了一個經驗交流工作坊，我們並會安排同事探訪參賽學校，提供節能貼士及指引。

我們的同事亦會應要求探訪個別物業管理公司，與他們分享節能經驗。

Launched for the Private Sector: Hong Kong Energy Efficiency Awards

About the Awards

The "Hong Kong Energy Efficiency Awards" for the private sector was launched in October 2004, following on the success of the government energy saving competition.

The competition is targeted at two sectors: (i) property management units of commercial and residential buildings and (ii) non-government schools.

This competition is supported by CLP Power Hong Kong Limited and the Hongkong Electric Company Limited.

The launching ceremony was held at the Cyberport on 16 October 2004.

- Dr Sarah LIAO, Secretary for the Environment, Transport & Works, officiated the ceremony.
- Mr Otton POON (Chairman of the Energy Advisory Committee), Mr K S TSO (Managing Director of Hongkong Electric Company Limited) and Mrs Betty YUEN (Managing Director of CLP Power Hong Kong Limited) were the distinguished guests.

Response of the Private Sector

The response of the private sector to the Awards is indeed encouraging. By the application deadline, we saw over 300 buildings and schools already participating in the competition. The competition period will last for one whole year, starting from December 2004.

Providing Support to Participants of the Competition

We organized an experience-sharing workshop on 24 February 2005. A school visit programme is being arranged, under which our colleagues will visit the participating schools to offer tips and guidelines on energy saving.

Upon request, our colleagues will also visit individual property management units to share with them our experiences in energy saving.



「香港能源效益獎」節能比賽開展典禮
Launching ceremony of the Hong Kong Energy Efficiency Awards

在 2004 年裏「節能空調系統的蒸發式冷卻塔廣泛使用淡水先行性計劃」的進展情況

Progress of the Pilot Scheme for Wider Use of Fresh Water in Evaporative Cooling Towers for Energy-Efficient Air-Conditioning Systems in 2004

在 2004 年裏，這項先行性計劃進展良好，年內有更多的樓宇參與這計劃，並有多座申請了使用淡水的冷卻塔於年底前落成啟用。

指定地區

自 2004 年年底，在先行性計劃下的指定地區已增至 57 個。2004 年裏新增的三個指定地區分別位於銅鑼灣、牛池灣及落馬洲。

申請數目

參與先行性計劃的申請數目大幅上升，截至 2004 年年底為止，申請總數已達 130 宗，與 2003 年年底的 65 宗比較，增幅達 100%。

預計當有關的水冷式空調系統全部落成後，每年可節省 5200 萬度電，涉及的非住宅樓面面積約為 430 萬平方米。

已落成的裝置

去年內共有 15 個冷卻塔裝置落成。在 2003 年年底落成的裝置則有 7 個，因此截至 2004 年年底，已落成的裝置共 22 個。

更多資料

先行性計劃提供良機讓樓宇業主把氣冷式空調系統改為水冷式空調系統，從而節省電費支出。

有關先行性計劃的小冊子及指定地區的位置圖，可從本署網址下載：
<http://www.emsd.gov.hk/emsd/chi/pee/wacs.shtml>。

The year 2004 was a fruitful one for the Pilot Scheme. A lot more buildings joined the Scheme, and quite a number of applicants had their cooling towers completed in the year.

Designated Areas

By the end of the year, the number of Designated Areas under the Pilot Scheme reached a total of 57. The three new Designated Areas added in 2004 are situated within Causeway Bay, Ngau Chi Wan, and Lok Ma Chau respectively.

Number of Applications

The number of applications saw a large increase. By end-2004, the total number of applications reached 130, representing a 100% growth from the 2003 year-end total of 65.

An annual electricity saving of 52 million kWh is expected upon completion of all of the water-cooled air-conditioning systems under these applications, which together will be serving some 4.3 million square metres of non-domestic floor space.

Completed Installations

15 cooling tower installations were completed in the year 2004. Together with the aggregate total of 7 at end-2003, the total number of completed installations at end-2004 reached 22.



朗豪酒店的蒸發式冷卻塔
Evaporative cooling towers at
Langham Hotel



香港理工大學包玉剛圖書館安裝了蒸發式冷卻塔
Hong Kong Polytechnic University Pao Yue
Kong Library Building is now equipped with
evaporative cooling towers

For More Information

The Pilot Scheme offers an excellent opportunity for building owners to make the switch from air-cooled air-conditioning systems to water-cooled ones, to save on their electricity bills.

The brochure of the Pilot Scheme and the location plans for the Designated Areas can be found in our website at:
<http://www.emsd.gov.hk/emsd/eng/pee/wacs.shtml>

小型燃料電池發電機

A Small Fuel-cell Generator



燃料電池發電機及氫氣供應設備
Fuel-cell generator and hydrogen gas supply equipment

In November 2004, EEO tested the operation of a 1kW fuel-cell generator using local-made hydrogen gas supply equipment, to generate electricity using hydrogen gas as fuel.

The fuel-cell generator is a Canadian equipment, which can serve both as an electric generator and an uninterruptible power supply unit.

Even though the equipment is relatively small in scale, the operational test did provide valuable hands-on experience for EEO in hydrogen and fuel cell technology.

2004年11月，能源效益事務處為一台1,000瓦的燃料電池發電機進行運作測試，把發電機接駁至本港製造的氫氣供應設備，以氫氣作燃料，產生電力。

該發電機由加拿大生產，可用作發電機及不間斷電源供應設備。

雖然這只是一台小型發電機，但這項運作測試為能源效益事務處在應用氫氣及燃料電池技術方面提供了寶貴的經驗。

機電工程署第三個測風站 EMSD's Third Wind Monitoring Station

機電工程署現正進行一項風力測量計劃。2005年1月底，該計劃之下的第三個風力監測站，於位處偏遠的伙頭墳洲（即晨曦島）建成。

首兩個風力監測站已於2004年投入運作，分別位於政府物料營運中心天台及砵甸乍山。

伙頭墳洲的風力監測站設有一個50米高的管狀塔，由數條纜索固定位置，塔身不同高度均設有風速計和風向計。這個風力監測站會蒐集一年多的風力資料，以供評估該區的風力發電潛力。

未來數月，本署亦將會在香港東邊建立多兩個風力監測站。

EMSD is implementing a wind measurement programme. In late January 2005, the third wind monitoring station under the programme was erected on Town Island, a remote island.

The first two wind monitoring stations were put into operation in 2004, respectively on the roof of the Government Logistics Centre and at Pottinger Peak.

The station at Town Island consists of a 50-metre tubular tower, stabilized by guy wires. Anemometers and wind vanes, installed at different levels of the tower, will gather wind data over the next year, to assess the wind energy potential in the region.

Two more stations on the eastern side of Hong Kong will be erected in the coming months.



伙頭墳洲風力監測站塔桿
Tower pole of Town Island
Wind Monitoring Station

「能源效益標籤計劃」新增三種產品

Energy Efficiency Labelling Scheme Covers Three More Product Types



個人電腦現在被納入能源效益標籤計劃
Personal computers are now covered by the EELS

在 2004 年 12 月，本署把自願參與的「能源效益標籤計劃」擴展至電子鎮流器、個人電腦及家用即熱式氣體熱水爐。

產品必須符合有關產品的「計劃文件」所訂的能源表現規定，才可貼上能源標籤。

消費者可憑着零售店舖內產品上的能源標籤，得悉個別產品的能源效益表現。

在加入上述三種產品後，「能源效益標籤計劃」現已涵蓋 16 種電器及氣體用具，此外亦包括汽油載客車輛。

今年裏，機電工程署亦會協助環境運輸工務局諮詢公眾和業界有關施行強制性能源效益標籤計劃，以便消費者選擇具能源效益的設備。

In December 2004, we extended the voluntary Energy Efficiency Labelling Scheme (EELS) to cover also electronic ballasts, personal computers and domestic gas instantaneous water heaters.

To qualify for an energy label, the product should meet the energy performance requirements laid down in the respective "scheme document".

Energy labels affixed onto products on display in retail outlets serve to inform consumers the energy performance of individual products.

With the inclusion of these three new types of products, the EELS now covers a total of 16 types of products, and besides also cover petrol passenger cars.

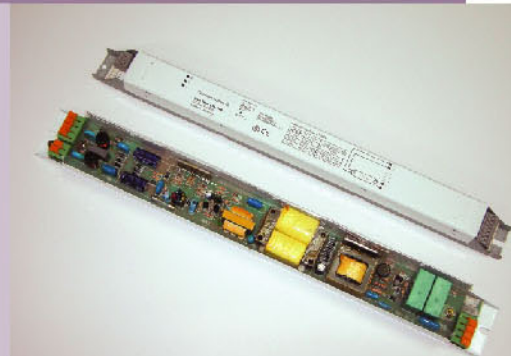
In this year, EMSD will also assist the Environment, Transport and Works Bureau to consult the public and the trades on a mandatory energy efficiency labelling scheme to facilitate consumers to choose energy-efficient equipment.



家用即熱式氣體熱水爐
Domestic gas instantaneous water heater



個人電腦
Personal computers



電子鎮流器
Electronic ballast

漫畫設計比賽及網站

Comic Strips Design Competition and Website

黎署長與得獎者合照
Our Director with the winners



去年，機電工程署推出名為「能源漫畫創作」的網上漫畫設計比賽，參加者可在有關網站以網上提供的工具創作以節約能源為主題的漫畫，然後透過網站提交參賽作品。

比賽由機電工程署、中華電力有限公司、香港電車有限公司及港九電器商聯會合辦，小海白創作室協辦。



Competition and Website

Last year, EMSD launched an on-line comic strips design competition "My Comic Energy". Users could visit the website and use an on-line design tool to design comic strips with themes related to energy conservation, and then submit the creations for competition via the website.

The competition was jointly organized by EMSD, CLP Power, Hongkong Tramway and Hong Kong & Kowloon Electrical Appliances Merchants Association, with the support of Hyper Workshop.



- (上) 中學組冠軍作品，由聖公會基孝中學的葉嘉偉同學創作
(above) Champion piece of Secondary School Group, created by IP Ka-wai of the S.K.H. Kei Hau Secondary School
- (左) 小學組冠軍作品，由大埔舊墟公立學校（寶湖道）的蘇璋浚同學創作
(left) Champion piece of Primary School Group, created by SO Wai-tsun of the Tai Po Old Market Public School (Plover Cover)

參賽作品共 1,480 件，分別來自 200 多間中、小學的學生及市民。頒獎典禮已於 2004 年 10 月 14 日的「機電安全香港通」中舉行。我們並把其中的 45 幅優秀作品收錄在一本漫畫冊中。

雖然比賽已經結束，有關網站 (<http://www.mycomicenergy.hk>) 仍繼續向公眾開放，讓有興趣的人士可以嘗試在網上設計漫畫。

There were totally 1,480 entries from students of over 200 primary and secondary schools as well as other members of the public. Prize presentation was held at the E&M Safety Campaign on 14 October 2004. We also produced a comic book with 45 of the best entries.

Even though the competition has ended, the website (<http://www.mycomicenergy.hk>) remains in service. Anyone interested can visit the site and design a comic strip on-line.

第五屆太陽能車比賽

5th Solar Cart Race



太陽能車比賽嘉賓合照
Guests of the Solar Cart Race

由香港地球之友主辦、機電工程署協辦的第五屆太陽能車比賽已於 2005 年 1 月 16 日在維多利亞公園舉行。當日天朗氣清，氣氛熱烈。除了機電工程署外，亦有其他機構為這項活動提供支援。

環境運輸及工務局常任秘書長（環境）郭家強先生獲邀擔任主禮嘉賓，本署署長黎仕海先生亦為其中一位特別嘉賓。

比賽期間，本署亦聯同香港地球之友設立一個展覽及遊戲攤位，推廣能源效益及可再生能源。該攤位大受市民歡迎，結果贏得「我最喜愛的綠色攤位」獎項。

Under a fine weather on 16 January 2005, the 5th Solar Cart Race organized by the Friends of the Earth Hong Kong (FoE(HK)) and co-organized by EMSD took place with much fun and joy at the Victoria Park. Other than EMSD, a number of other organizations also supported the event.

Mr Keith KWOK, Permanent Secretary (Environment), was invited as the officiating guest-of-honour and Mr Roger LAI, our Director, was also one of the distinguished guests.

During the event, EMSD also set up an exhibition and game booth in conjunction with FoE(HK) to promote energy efficiency and renewable energy. The booth received many supporting votes from the public and won the "My Favorite Green Booth" award.



機電工程署的攤位贏得「我最喜愛的綠色攤位」獎項
EMSD's booth won the "Favorite Green Booth" award

能源效益講座 Energy Efficiency Talks

過去幾個月，我們為多家機構舉辦了能源管理講座。

在 2004 年 9 月 21 日，我們為新鴻基集團 120 多名職員舉辦有關能源審核及能源管理的講座。

香港女工商及專業人員聯會於 2004 年 12 月 11 日舉辦「怎樣令業務更環保及更具競爭力」論壇，本署獲邀成為該論壇的協辦機構之一。

立法會主席范徐麗泰女士為論壇的特別嘉賓。當日，我們一位同事發表演說，向 150 多名年輕女高級行政人員及專業人士講解能源管理。

In the past months, we delivered a number of energy management talks to various organizations.

Three talks on energy auditing and energy management were delivered to over 120 staff of the Sun Hung Kai Group on 21 September 2004.

EMSD was also invited by the Hong Kong Women Professionals and Entrepreneurs Association to be one of the supporting organizations for their Forum on How to Make a Business Greener and More Competitive held on 11 December 2004.

The Honourable Mrs Rita FAN, President of the Legislative Council, was the distinguished guest of the Forum. During the event, our colleague also delivered a talk on energy management to over 150 young women senior executives and professionals.

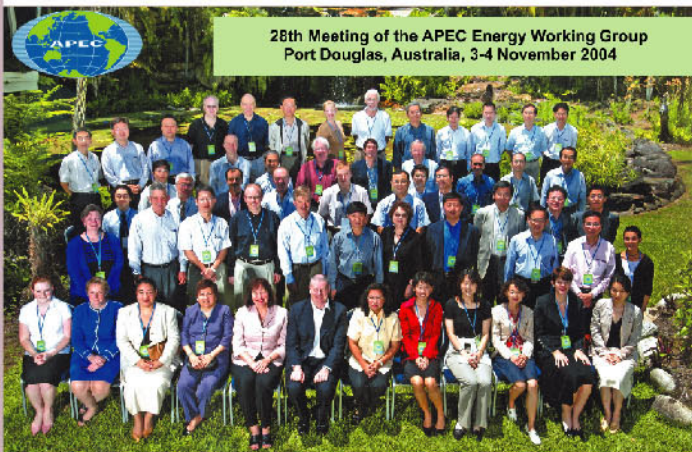


能源效益事務處同事與「怎樣令業務更環保及更具競爭力」論壇嘉賓合照

EEO colleagues with other guests of the Forum on How to Make a Business Greener and More Competitive

INTERNATIONAL EXCHANGE 國際交流

亞太經合組織能源工作組 第 28 次會議 28th APEC Energy Working Group Meeting



亞太經合組織能源工作小組第 28 次會議已於 2004 年 10 月在澳洲道格拉斯港舉行，本署的助理署長／能源效益及一名能源效益事務處同事參加了該次會議。

會議的其中一個議題是如何實行亞太經合組織能源保安措施。欲知詳情，請瀏覽能源工作組的網頁 (<http://www.apecenergy.org.au>)。

The 28th Meeting of the APEC Energy Working Group was held in October 2004 in Port Douglas, Australia. Our Assistant Director / Energy Efficiency and another officer of EEO participated in the meeting.

Implementation of the APEC Energy Security Initiative was one of the matters discussed during the meeting. Interested parties can visit the website of the APEC Energy Working Group (<http://www.apecenergy.org.au>) for more information.

聯絡資料 Contact

任何人士如欲就本通訊提出意見或詢問，請與我們聯絡，資料如下：

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