

EnergyWits 智能

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BEEO 建築物能源效益條例 New Technical Guidelines 新版技術指引 TG-BEC 2015

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2016年6月30日發出
技術指引 (TG-BEC 2015)
Buildings Energy Efficiency Ordinance -
Issuance of Technical Guidelines
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強制性能源效益標籤計劃 - 精明選擇冷氣機

Mandatory Energy Efficiency Labelling Scheme - Smart Choice for Room Air Conditioners

冷氣機的種類及其能源效益的比較

Classification of Room Air Conditioners and Comparison of Energy Efficiency

冷氣機的種類一般可分為獨立式（即窗口式）和分體式，由於該兩類冷氣機在設計及安裝上有所不同，以至其能源效益表現也有差別。一般來說，分體式冷氣機的能源效益比窗口式冷氣機高。另外，變頻式冷氣機比非變頻式冷氣機更能省電。

Room air conditioners can be generally classified into two categories, namely, package type (or window type) and split type. As the two types are different from each other in terms of design and installation, their energy efficiency performance varies. In general, split type room air conditioners are more energy efficient than window type room air conditioners. In addition, inverter type room air conditioners are more energy saving than non-inverter type room air conditioners.

根據消費者委員會於2016年5月的產品測試報告，比較了10款變頻分體式冷氣機及4款定頻分體式冷氣機的能源效益，變頻式樣本較非變頻式（即定頻式）樣本全年省電約40%。

According to the product test report by Consumer Council in May 2016 in which the energy efficiency of 10 models of inverter split type and 4 models of non-inverter split type room air conditioners were compared, samples of inverter type room air conditioners would use approximately 40% less energy than those of non-inverter type annually.

不同種類冷氣機的能源效益比較

Comparison of Energy Efficiency of Different Types of Room Air Conditioners



變頻分體式冷氣機
Inverter Split Type Room Air Conditioners



非變頻分體式冷氣機
Non-Inverter Split Type Room Air Conditioners



窗口式冷氣機
Window Type Room Air Conditioners

能源效益較高
More Energy Efficient



能源效益較低
Less Energy Efficient

註：現時已有變頻窗口式冷氣機在市場上供應，其能源效益可能高於部份非變頻分體式冷氣機。

Note: Some inverter window type room air conditioners are now on the market.

Their energy efficiency may be higher than that for non-inverter split type room air conditioners.

相同種類冷氣機的能源效益比較

Comparison of Energy Efficiency between Room Air Conditioners of the Same Type

在本港供應的訂明產品(包括冷氣機)須貼上能源標籤，讓消費者知悉有關產品的能源效益表現。要比較相同種類冷氣機的能源效益，可參考能源標籤上的資訊，選擇具能源效益的型號。

Energy labels are required to be shown on prescribed products (including room air conditioners) for supply in Hong Kong to inform consumers of their energy efficiency performance. To compare the energy efficiency between room air conditioners of the same type, you may make reference to the energy labels and choose the energy efficient products.

| ENERGY LABEL | |
|---|--|
| 能源標籤 | |
| more efficient 效益較高 | |
| 1 | Grade 1 級 |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| less efficient 效益較低 | |
| Annual Energy Consumption (kWh)(Cooling) 每年耗電量(千瓦小時)(製冷) <small>Based on 1200 hours operation 以每年使用1200小時計算</small> | 1106 |
| Cooling Capacity (kW) 製冷量(千瓦) | 2.54 |
| Refrigerant 製冷劑 | R410A |
| Room Air Conditioner Brand 空調機品牌: | ABC 某某牌 |
| Model Reference Number / Year Information Provider 型號: 參考編號 / 年份: 資料提供者: | HK1234 U1-C080123 / 2014 XYZ 某某基 |
| 機電工程署 EMSD | |

能源效益級別：

1級能源效益最高(綠色)，5級則最低(紅色)

Energy efficiency grade:

Grade 1 products are most efficient (green) and

Grade 5 products are least efficient (red)

每年耗電量：

你可利用這數字比較不同型號可節省多少電費

Annual electricity consumption:

Use this number to estimate how much money

you could save by choosing different models

最大製冷量(千瓦)

Cooling capacity at full load (kW)

選擇具能源效益冷氣機的步驟

Steps for Choosing an Energy Efficient Room Air Conditioner

步驟
STEP

1

確定冷氣機的製冷量

Determine the cooling capacity of the room air conditioner

步驟
STEP

2

視乎安裝的環境，應優先選擇變頻分體式，其次為非變頻分體式及最後為窗口式冷氣機。

Depending on the installation environment, the selection priority of room air conditioner should be firstly the inverter split type, then the non-inverter split type and lastly the window type.

步驟
STEP

3

選擇標有1級能源標籤的型號

Choose the model with Grade 1 energy label

步驟
STEP

4

選擇每年耗電量較低的型號

Choose the model with lower annual electricity consumption

低易燃製冷劑的家用空調機

Domestic Room Air Conditioners Using Mildly Flammable Refrigerants

為應對氣候變化，世界各國都致力減少溫室氣體排放及逐步淘汰高全球變暖潛能值（GWP）的氣體。

In response to climate change, the world is committed to reducing greenhouse gas emissions and phasing out the use of high Global Warming Potential (GWP) gases.

現時空調機常用的製冷劑（俗稱「雪種」）有較高的GWP，當泄漏到大氣層時會加劇全球暖化。個別家用空調機製造商已開始採用較低GWP的雪種，但有些雪種或有輕度易燃性。

At present, refrigerants that are widely adopted in domestic air conditioners usually have high GWP. Leakage of these refrigerants to the atmosphere will accelerate global warming. So individual manufacturers have opted for lower GWP refrigerants, but some of which may have mild flammability.

使用較低GWP但輕度易燃雪種的家用空調機應貼有「易燃」標誌，以資識別。市民如選用該類產品，可與供應商或具有處理相關雪種經驗的技術人員聯絡，安排進行安裝、檢查或維修。

Domestic air conditioners using lower GWP but mildly flammable refrigerants should be labelled with a "Flammable" symbol for identification. Consumers are advised to contact suppliers or technicians who have experience in relevant refrigerants for installation, inspection and maintenance of such products.



「易燃」標誌
"Flammable" Symbol

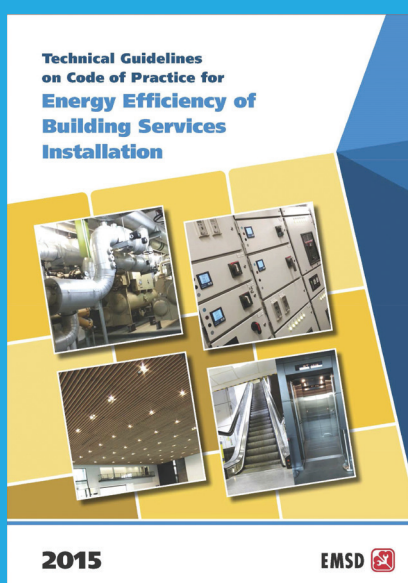
《建築物能源效益條例》 - 2016年6月30日發出技術指引 (TG-BEC 2015) Buildings Energy Efficiency Ordinance - Issuance of Technical Guidelines (TG-BEC 2015) on 30 June 2016

機電工程署於2015年12月11日刊憲頒布《建築物能源效益守則》2015年版。為協助各界了解《建築物能源效益守則》中在各項工程上有關能源效益的要求，機電工程署與各專業團體、業界團體、學者及政府部門合作，於2016年6月30日發出《建築物能源效益守則2015年版技術指引》。

The Electrical and Mechanical Services Department (EMSD) gazetted the 2015 edition of the Code of Practice for Energy Efficiency of Building Services Installation (Building Energy Code, BEC) on 11 December 2015. To assist in the understanding of the energy efficiency engineering requirements in BEC, EMSD, in collaboration with various professional institutions, trade associations, academia and government departments, issued a set of technical guidelines, namely, Technical Guidelines on Code of Practice for Energy Efficiency of Building Services Installation, 2015 Edition (TG-BEC 2015) on 30 June 2016.

這份指引概括說明及解釋《建築物能源效益守則》2015年版法例及工程上的要求，並輔以表格、圖例及例子，以及特別註明經收緊及新增的能源效益要求。而符合《條例》要求而設的聲明及發出的相關表格亦會在此詳細說明。

This set of Technical Guidelines provides an overview and certain explanations of the legislative requirements and the engineering requirements of BEC 2015 Edition, with illustrative tables, diagrams and examples, and in particular including the updates and highlights to address the tightened and new addition of energy efficiency requirements as well as providing detail descriptions on the declarations made and forms issued for demonstration of compliance.

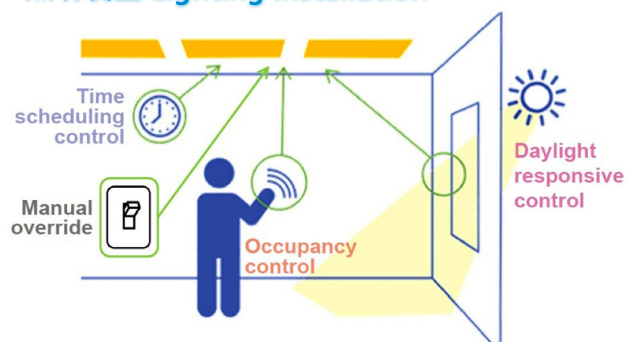


《建築物能源效益守則》2015年版技術指引
Technical Guidelines on BEC, 2015 Edition (TG-BEC 2015)

《建築物能源效益守則2015年版技術指引》是《建築物能源效益守則》2015年版的指引文件及非立法文件，讓各界了解《建築物能源效益守則》2015年版的訂明的要求；同時，亦為提升能源效益及改善能源審核的程序，提供良好的工程作業指引。以下為一些重點：

Serving as guidelines document to BEC 2015 Edition and being not a legislative document, TG-BEC 2015 also provides, in parallel to the basic understanding of the requirements of BEC 2015, the good engineering practices for enhanced energy efficiency and energy audit. Some major highlights are as below:

照明裝置 Lighting Installation



- (a) 自動照明裝置的種類
Type of Automatic lighting control
- (b) 日光感應控制的細則
Detail Daylight responsive control

電力裝置 Electrical Installation

- (c) 為各中央屋宇裝備裝置提供獨立的計量設備
Provision of separate metering devices for each of the Central Building Services Installations

空調裝置 Air-conditioning Installation



Fan Speed
↓ 50%



Fan Power
≤ 30%

(d) 低速運行的固定風量配風系統及可變風量配風系統
CAV and VAV with low speed mode



Fan Speed
↓ 66%



Fan Power
≤ 40%

(e) 需求控制通風
Demand control ventilation

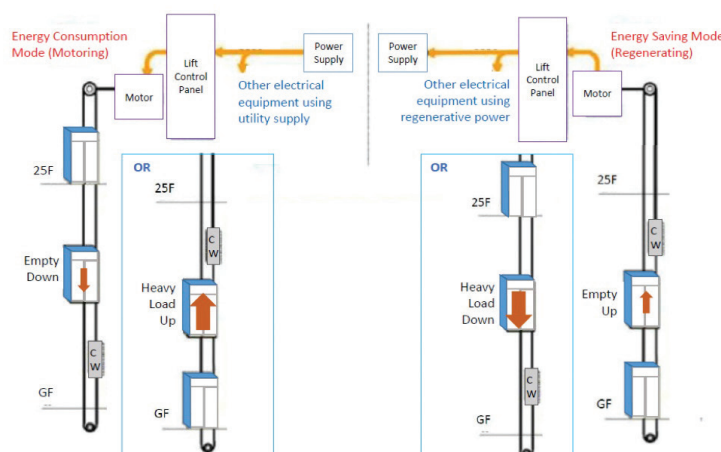
(f) 為空調機組提供直接數位控制
Direct digital control for AC plant

升降機及自動梯裝置

Lift and Escalator Installation

(g) 為升降機提供反饋制動系統

Provision of Regenerative braking system for lift

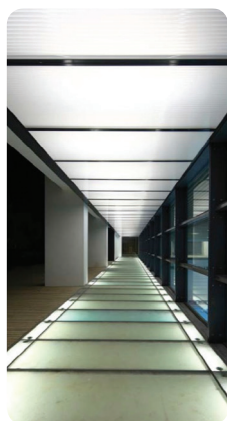


《建築物能源效益守則2015年版技術指引》除了解釋《建築物能源效益守則》的新規定外，更闡述及澄清業界關注的各項議題及執行方面的細節。例如，在計算一個空間的照明功率密度時，應包括以下照明裝置：

In addition to the illustration of BEC new requirements, TG-BEC 2015 also provides elaborations and clarifications on various issues to the trades' concern and on enforcement related matters. For example, the following lighting installation shall be included in the calculation of Lighting Power Density of a space:

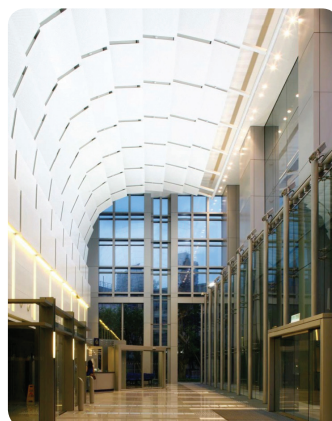
(a) 當頂置天窗式照明系統為某一空間提供大致均勻的照明水平時，它並不會被視作只有裝飾用途；

Panel type ceiling lighting is not regarded as solely used for decoration when it provides a substantially uniform level of illumination throughout such space;



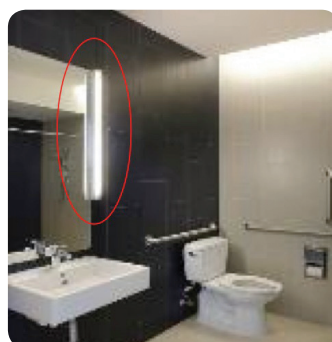
(b) 當非直接用作照明用途的燈光能為某一空間提供大致均勻的照明水平時，它可能不會被視作只有裝飾用途；

Indirect light might not be regarded as solely used for decoration when it provides a substantially uniform level of illumination throughout such space;



(c) 垂直擺放或裝嵌在鏡子旁邊的照明，能讓站在鏡子前的人清楚看到自己。這種照明將界定為有功能用途。

Vertical or wall-mounted lighting besides the mirror allows an individual standing in front of the mirror become desirably visible. The lighting is therefore regarded as serving a functional purpose.



啟德發展區區域供冷系統的創新意念

Innovation behind District Cooling System in Kai Tak Development

啟德發展區規劃有大約170萬平方米的公共和私人非住宅空調樓面面積，製冷量需求約284兆瓦，為香港提供了一個難得的機會推展區域供冷系統。

With a planned total of about 1.7 million square metres in public and private non-domestic air-conditioned floor areas requiring about 284 megawatt (MW) cooling capacity, the Kai Tak development (KTD) presents a unique opportunity for implementation of a District Cooling System (DCS) in Hong Kong.

整個區域供冷系統是分階段建設。第一，二期工程已經完成，整個項目將會在2022年完成。現時區域供冷系統的服務客戶包括啟德郵輪碼頭，晴朗商場，工業貿易大樓以及兩所學校。

The project is implemented in phases. The Phases I & II have been completed and the entire project will be completed in 2022. District cooling services have been provided to Kai Tak Cruise Terminal, Ching Long Shopping Centre, Trade and Industry Tower and two schools.

創新意念和優點

Innovation and Advantages

與傳統空調系統相比，啟德發展區的區域供冷系統具有以下優點：

As compared with traditional air-conditioning systems, DCS at KTD possesses the following advantages:

- (a) 耗電量較傳統氣冷式空調系統和獨立使用冷卻塔的水冷式空調系統分別少35%和20%。在整個項目完成後，每年可節省高達8,500萬度電；

Consumes 35% and 20% less electricity than traditional air-cooled air-conditioning systems and individual water-cooled air-conditioning systems using cooling towers respectively. Upon completion of the whole project, the annual saving in electricity consumption is estimated to be 85 million kilowatt-hour;

- (b) 減少在建築物裝設製冷機組的前期建築費；

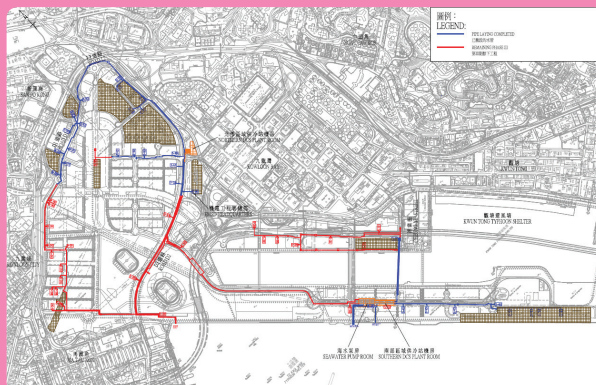
Reduction of upfront capital costs for installing chiller plants in user buildings;

- (c) 建築物無需安裝獨立的製冷機組和相關機電設備，因此令建築物設計更具彈性；

User buildings do not need to install their own chillers and associated electrical equipment, thus allowing more flexible building designs;

- (d) 比獨立的空調系統更能配合不同的冷凍需求。

More adaptable than individual air-conditioning systems to the varying demand for air-conditioning.



區域供冷系統地下冷卻水管道的佈局規劃

Layout Plan of DCS underground chilled water pipework

作為全香港其中最節能、可靠的空調系統之一，在設計考慮中，如何選擇製冷機組起著非常重要的作用。以區域供冷系統北廠為例，在系統完成後，將會有14台由400冷噸至5,000冷噸的製冷機組。在這樣的製冷機組合下，即使任何一台製冷機組發生故障，也不會對區域供冷系統的運作產生不良影響，因而令這系統比傳統的空調系統更可靠。此外，不同製冷量的製冷機組能夠滿足不同的冷凍需求，從而使區域供冷系統比傳統空調系統更具能源效益。

Being one of the most energy efficient and reliable air-conditioning systems in Hong Kong, selection of chillers plays an important role in design consideration. Taking DCS North Plant as an example, upon completion of the whole system, there will be 14 nos of chillers in total, ranging from 400RT to 5000RT. With such combination of chillers, breakdown of any one chiller will not cause adverse effect to the operation of DCS, hence making it a more reliable system than traditional air-conditioning system. In addition, chillers with different cooling capacities could meet the varying cooling demand, thus making DCS more energy efficient than traditional air-conditioning system.



不同製冷量的製冷機組令區域供冷系統更可靠及更具能源效益

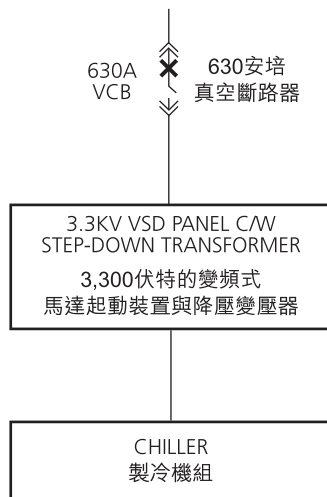
Chillers with different cooling capacities increases the energy efficiency and reliability of DCS

變頻式的馬達起動裝置

Variable Speed Drive (VSD) Moto Starter

在眾多製冷機組當中，2,500冷噸的製冷機組配備了變頻式的馬達起動裝置。使用此裝置的優點包括：
Amongst the chillers, the 2,500RT chillers are equipped with Variable Speed Drive (VSD) motor starter.
The advantages of using VSD motor starter include the followings:

- (a) 透過調節壓縮機的轉速降低能耗；
Reduce energy consumption by adjusting the speed of compressor;
- (b) 負載電流永遠不會超過100%，為設備提供更好的保護從而延長其壽命；
Better protection to equipment thus allowing longer equipment life as it never draws more than 100% of its full load current;
- (c) 壓縮機以較低的轉速運行，從而降低運行其間的噪音水平。
Lower operating noise level as the compressor operates at lower speed.



變頻式馬達起動裝置示意圖
Schematic of VSD motor starter



2,500冷噸製冷機組
2,500RT Chillers



630安培真空斷路器
630A Vacuum Circuit Breaker



3,300伏特的變頻式馬達起動裝置與降壓變壓器
3.3kV VSD Panel with Step-down Transformer

我們的綠色鄰居 - 啟德發展計劃的工業貿易大樓

Our Green Neighbour - Trade and Industry Tower in Kai Tak Development

綠色建築備受重視
Green Buildings are Drawing Attention

為配合未來的發展方向，政府正在以九龍東作為試點，研究發展智慧城市的可行性。九龍東將會成為一個可持續發展的核心商業區，在轉型過程中，建立低碳綠色社區是其中一項重要原則，細則包括推展環保連接系統及基礎設施，以及推廣綠色建築和綠化。

To meet our vision of developing a smart city, the government is carrying out a pilot study in Kowloon East to examine the feasibility. The area will be developed into a sustainable central business district. Creating a low carbon green community is a key principle of this transformation; its details would include implementing the Environmentally Friendly Linkage System and infrastructure, and promoting green building and greening.

機電工程署負責制訂、推廣及實施能源效益及節約能源計劃，並就使用新能源及可再生能源向政府提供專業支援。我們經常走訪私人或政府建築物作實地考察，了解綠色建築最近的發展情況。今期通訊，我們將為大家介紹與我們總部一同位於啟德的綠色鄰居工業貿易大樓（下稱：工貿大樓）。

EMSD is responsible for the development, promotion and implementation of energy efficiency and conservation; and providing professional support to the Government on the use of new and renewable energy. We often visit private or government buildings to understand at the site latest development of green buildings. In this Newsletter, we will be presenting a green neighbour of our headquarters, geographically also in Kai Tak, the Trade and Industry Tower (TI Tower).

工貿大樓和綠色社區
TI Tower and Green Community

工貿大樓樓高22層，並有1層地庫，是政府部門聯用辦公大樓。市民可於大樓內使用多種前線服務，包括社區會堂、教師註冊、郵政服務、就業和勞資關係服務、鐵路計劃的土地行政服務、福利轉介服務、學生資助及中小型企業支援和諮詢服務。整個工貿大樓項目不論在地

面、垂直及屋頂均進行了廣泛綠化，其比率分別為21%、8%和30%，為所有使用者提供一個舒適寫意的環境。依附在大樓外牆的垂直綠化由低層伸延至天台，連成一條創新悅目的「綠色綵帶」。

TI Tower is a joint-user government office building with 22 storeys above ground and a single-storey basement. The public are able to access to a wide range of frontline services, including community hall, teacher registration, postal services, employment and labour relation services, land administration services for railway projects, referrals for welfare services, student finance, as well as support and advisory services for small and medium-sized enterprises. The whole TI Tower project features extensive at-grade, vertical and roof greening of 21%, 8% and 30% respectively so as to create a pleasant and relaxing environment for all users. A pleasant and innovative vertical green belt on the building facades forms a "green ribbon" of terraces climbing up to the roof.

工貿大樓憑著多項卓越的環保建築特色，2014年榮獲香港綠色建築議會環保建築大獎的「新建建築類別－興建中建築」大獎，並取得「綠建環評」的暫定鉑金級認證。

With all the above remarkable green building features, the building was awarded Grand Award for Buildings Under Construction in New Buildings Category in 2014 Green Building Award arranged by HKGBC. Also, the building has achieved Platinum rating in the Provisional Assessment Stage of the Building Environmental Assessment Method (BEAM Plus).

如欲了解更多關於綠色建築和可持續發展的資訊，請瀏覽以下網頁：

More information on green buildings and sustainable development are available on the following website:

https://www.archsd.gov.hk/archsd/html/report2015/en/index_home.html



工貿大樓協調道一側外貌，展示其「綠色綵帶」。啟德社區會堂在左下角

Overall view of TI Tower from Concorde Road, featuring the "green ribbon". The Kai Tak community hall is at the bottom left corner



縱向遮檔太陽裝置(左)
近距特寫及外牆不同位置安裝遮檔太陽裝置(右)
減少熱增量及眩光

Close up of the vertical sunshades (left) and application of sunshades in different areas of the façade (right) to reduce heat gain and glare



工貿大樓外牆的垂直綠化
Vertical greening on building façade of TI Tower



工貿大樓天台花園一角
View of roof garden of TI Tower



社區會堂天台綠化
Greening on the roof of the community hall



工貿大樓上層天台的太陽能光伏板
View of photovoltaic panel on upper roof of TI Tower



工貿大樓地庫停車場的太陽能煙囪系統 - 利用太陽能將通風井頂部的空氣加熱，促進井下空間的天然通風

Solar chimney in the basement carpark of TI Tower - It utilises solar heat to warm up the air at the top of an open shaft, thereby producing natural ventilation of occupied space under the shaft



社區會堂天台的太陽能煙囪系統排出口
Outlet of the solar chimney in the community hall roof



社區會堂走廊的太陽能煙囪系統
Solar chimney in the community hall foyer



工貿大樓管理辦事處外牆的集光導光管
Photo showing the anidolic light pipes in the façade for Building Management Office of TI Tower



日光導管在社區會堂天台採集陽光(左)，透過高反光度的內層(右)將光線傳到多用途練習場

Sun pipes transmit sunlight from the roof of the community hall (left) through high reflective internal surfaces to the multi-purpose hall (right)



光纖太陽能追蹤導光管利用自動太陽追蹤裝置盡量增加採光
Solar Tracking Optic Fibre Light Pipes maximise sunlight collection by use of automatic solar tracking devices



工貿大樓的廢紙處置系統可確保環境清潔衛生，既可節省人手和減少妨擾性工作，亦可促進廢紙回收及紓減電梯載運承重負荷

TI Tower's refuse disposal system for paper achieves clean and hygienic environment; saves manpower; reduces nuisance work; facilitates recycling of waste paper; and reduces lift traffic loads

全民慳神 全民節能 2016

Be Hanson Energy Saving for All 2016

環境局和機電工程署今年繼續推行「全民節能2016」運動，推動節約能源以應對氣候變化。

The Environment Bureau and the Electrical and Mechanical Services Department are jointly holding the "Energy Saving for All 2016" Campaign this year to promote energy saving for combating climate change.

環境局局長黃錦星在6月20日為「全民節能2016」主持啟動禮時指出，氣候變化是全球現正面對的重大挑戰。2015年12月，世界各國協議通過《巴黎協定》，目標是把全球平均氣溫升幅控制在工業化前水平以上低於攝氏2度之內，並努力將氣溫升幅限制在工業化前水平以上攝氏1.5度之內，為全球應對氣候變化踏出關鍵的一步。如同其他國家和城市，香港必須作好準備，齊心協力採取行動應對氣候變化的挑戰。

Officiating at the launching ceremony of the "Energy Saving for All 2016" Campaign on 20 June, the Secretary for the Environment, Mr Wong Kam-sing, said that climate change is now a great global challenge. Countries around the world adopted the Paris Agreement in December 2015 with an objective of holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature rise to 1.5°C above pre-industrial levels. The agreement is a crucial step in forging global efforts to combat climate change. As in other places, Hong Kong should get ready for taking collaborative actions to overcome the challenges of combating climate change.

政府正採取多方面措施減少溫室氣體排放，推動節約能源是應對氣候變化的工作重點之一，政府去年公布首份「香港都市節能藍圖2015~2025+」，為香港定下新目標，以期於2025年把能源強度減少40%。

The Government has implemented measures on various fronts to reduce greenhouse gas emissions, the promotion of energy saving is one of the key government initiatives to address climate change. The Government unveiled last year the first-ever "Energy Saving Plan for Hong Kong's Built Environment 2015~2025+" to set a new target for reducing Hong Kong's energy intensity by 40% by 2025.



「全民節能2016」啟動禮各出席嘉賓留影
Snapshot of all guests attended the "Energy Saving for All 2016" Campaign



環境局局長黃錦星與「慳神」於啟動禮上，呼籲大家合力應對氣候變化的挑戰

Secretary for the Environment, Mr Wong Kam-sing and "Hanson", urged the community to take collaborative actions to overcome the challenges of combating climate change, in the Launching Ceremony

「全民節能2016」運動涵蓋《節能約章2016》、「慳電熄一熄青年獎」頒獎典禮和「慳神大比拼」比賽。

The "Energy Saving for All 2016" Campaign comprises the Energy Saving Charter 2016, the prize presentation ceremony for the Youth Energy Saving Award (YESA) and the Energy Saving Championship Scheme (The Championship).

《節能約章2016》 Energy Saving Charter 2016



《節能約章2016》節能三招
The three tips of "Energy Saving Charter 2016"

香港建築物佔全港約九成耗電量，相當於超過六成的溫室氣體排放。政府自2012年起推行《室內溫度節能約章》計劃，邀請建築及物業管理界別簽署約章，承諾在盛夏（即6月至9月）期間把旗下物業的平均溫度維持在攝氏24至26度之間。今年推出的《節能約章2016》，擴大至學校及專上學校界別。簽署約章的團體，除承諾於盛夏維持適當室內溫度外，更進一步承諾在2016年6月至2017年5月期間，關掉不需要使用的電器，以及選購具能源效益的產品，包括獲一級能源標籤的電器產品。

Buildings account for about 90% of total electricity consumption in Hong Kong and contribute more than 60% of greenhouse gas emissions. The Government launched the "Energy Saving Charter on Indoor Temperature" since 2012 to invite the building and property management sectors to sign up for the Charter and pledge to maintain the indoor temperature at their premises between 24 and 26°C during mid-summer (June to September). This year, invitation to the "Energy Saving Charter 2016" has been extended the categories to schools and tertiary education institutions. Apart from maintaining the appropriate indoor temperature, the signatories are also required to take a further step and pledge to switch off electrical appliances when they are not in use, and to procure energy efficient appliances, including electrical appliances with the Grade 1 Energy Label, during the period from June 2016 to May 2017.



參與機構簽署約章，一同為節能出力
Organization signed up the Charter to participate in collaborative efforts to promote energy saving

今年有超過3,200個團體簽署約章，包括約2,100家商場和商鋪、辦公大樓和辦公室；約800座屋苑和住宅大廈；約250個非牟利機構旗下物業，以及約80所新參與的學校和專上學院。

This year, over 3,200 participants have signed up for the Energy Saving Charter 2016, including around 2,100 shopping malls, shops, office premises and offices; about 800 housing estates and residential buildings; and approximately 250 properties of non-governmental organizations (NGO). In addition, about 80 schools and tertiary education institutions are new signatories to the charter.

詳情請瀏覽

<http://www.energysaving.gov.hk/esc2016/tc/home/index.html>

For details, please visit

<http://www.energysaving.gov.hk/esc2016/en/home/index.html>

「慳電熄一熄青年獎」頒獎典禮 Youth Energy Saving Award Prize Presentation Ceremony

在去年推出的「慳電熄一熄青年獎」鼓勵年輕人自發組織隊伍為其家居或所屬機構規劃和實施節約能源措施。在頒獎典禮上，各白金獎得主把獲得的獎金捐贈予他們提名的非牟利機構，用於提供青年服務。

Launched last year, YESA encourages young people to form teams to plan for and implement energy saving measures. At the prize presentation ceremony, the platinum winning teams gave out the cash rewards to their nominated non-governmental organizations for provision of youth services.

比賽分小學組、中學組和公開組。中學及公開組的勝出隊伍於8月參與海外「低碳城市」學習團，考察節能科技及措施，並分享學習成果。活動不但有助宣揚節能，也可推動關愛文化，兼具環保和社會意義。

The competition was divided into primary school, secondary school and open group categories. In August, winning teams from the secondary school and open group categories joined the Overseas "Low Carbon City" Study Mission to learn about energy saving technologies and measures, and shared what they have learnt. This event carried both environmental and social value, and helped promote energy saving as well as a harmonious and caring culture.

詳情請瀏覽

<https://yesa.emsd.gov.hk/tc/aboutus/index.html>

For details, please visit

<https://yesa.emsd.gov.hk/en/aboutus/index.html>



環境局局長黃錦星（第一行右六）及機電工程署署長陳帆（第一行右八）與各組白金獎獲獎隊伍、白金贊助商、評審委員及受惠非牟利機構合照

Secretary for the Environment, Mr Wong Kam-sing (first row, sixth right) and the Director of Electrical and Mechanical Services, Mr Frank Chan (first row, eighth right), pictured with all winning teams, Platinum Sponsors, Judging Panel and the nominated NGOs

「慳神大比拼」比賽 Energy Saving Championship Scheme

今年新推出的「慳神大比拼」比賽旨在挑選及表揚在採用節能科技、建立能源管理系統及向租戶和住戶推廣節約能源等多方面具有卓越節能表現的團體。參賽團體將涵蓋商場、辦公大樓、屋苑和住宅大廈，以及學校和專上學院等多個界別。獲獎團體將透過經驗交流會、講座及巡迴展覽，與相關業界分享實用的節能措施及節能科技，推動全民節能，並可能被提名代表香港出席國際會議及工作坊分享其經驗。

The Championship is newly launched this year to commend organizations that have excellent energy saving performance in adopting energy efficient technologies, apply operational optimization of energy consuming systems, and promote energy saving to their tenants and occupants. The participating organizations comprise shopping malls, office premises, housing estates and residential buildings, schools and tertiary education institutions. Winning organizations will share their experience on the best practices in energy saving and related technologies with relevant trades through sharing meetings, seminars and roving exhibitions so as to promote energy saving in the community. They will also be considered to represent Hong Kong to share their experience at international conferences and workshops.

有關「慳神大比拼」比賽的詳情，請瀏覽

<http://www.energysaving.gov.hk/eschampion/tc/home/index.html>
For all details on the Energy Saving Championship Scheme, please visit <http://www.energysaving.gov.hk/eschampion/en/home/index.html>



環境局局長黃錦星（中間）及機電工程署署長陳帆（右五）與「慳神大比拼」評審委員進行啟動儀式
Secretary for the Environment, Mr Wong Kam-sing (centre) and the Director of Electrical and Mechanical Services, Mr Frank Chan (fifth right), pictured with Judging Panel members of the Championship

政府應對氣候變化的工作

Government's Efforts in Addressing Climate Change



在2016年4月22日「地球日」，175個國家在紐約聯合國總部，共同簽署《巴黎協定》。「第21屆氣候大會後綠色建築集思會」於4月23日在禮賓府舉行，環境局局長黃錦星、相關部門代表和60多位業界代表出席，討論應對氣候變化策略。本港能源使用總量中，電力佔50%以上，而建築物佔用電量約90%。因此，當局一直以推動綠色建築和建築物節能為首要任務。

On the Earth Day, 22 April 2016, 175 countries signed the Paris Agreement at United Nations Headquarters at New York. On 23 April, Secretary for the Environment, Mr Wong Kam-sing, together with more than 60 built environment and energy sector stakeholders, as well as government departments took part in the "Post-COP21 Green Building Imaging" engagement session at Government House. Over 50% of Hong Kong's energy use is in electricity consumption, with buildings accounting for about 90%. Promoting green buildings and enhancing building energy saving is a Government priority.

環境局於7月12日在政府總部會議廳舉行「氣候變化持份者參與論壇」，讓政府與逾600位來自不同界別的持份者交流如何共同應對氣候變化，集思廣益，協助政府制定氣候變化的長遠策略。

On 12 July, the Environment Bureau convened the Climate Change Stakeholder Engagement Forum at the Conference Hall of the Central Government Offices to enable the Government to tap the views of more than 600 stakeholders of various sectors to facilitate formulation of Hong Kong's long-term climate strategy.

論壇由政務司司長林鄭月娥主持。她簡述了特區政府在配合減排方面的工作，包括促進智慧城市發展、推廣環保運輸和推動綠色建築等。

政府將加強宣傳和教育公眾，並會舉辦和參與一系列的活動，鼓勵社會各界攜手應對氣候變化的挑戰。政府亦會繼續積極向學生推動環保教育，特別在氣候變化方面，鼓勵學校參與和舉辦有關氣候變化和綠色生活的學習活動。

The Forum was chaired by the Chief Secretary for Administration, Mrs Carrie Lam Cheng Yuet-ngor. She briefly introduced the Government's work on facilitating emission reduction including the promotion of smart city development, green transportation and green buildings. The Government will enhance publicity and public education, and organise and take part in a series of publicity events to encourage the community to work together to combat climate change. The Government will continue to promote environmental education, with an emphasis on climate change, to students and encourage schools to organise and participate in learning activities on climate change and a green lifestyle.

政府已訂下目標在2020年把碳強度由2005年水平減少50%至60%，及2025年把能源強度減少40%。在多方面的努力下，香港現正穩步邁向達至2020年的減碳目標。由政務司司長擔任主席的氣候變化督導委員會，會統籌及協調相關政府政策局及部門的工作，制定2030年減少碳排放的目標。

The Government has set targets to reduce carbon intensity by 50-60% by 2020, compared with the level in 2005; and reduce Hong Kong's energy intensity by 40% by 2025. Through the various efforts, Hong Kong is on track to meet the carbon reduction target for 2020. The Steering Committee on Climate Change chaired by the Chief Secretary for Administration will steer and co-ordinate the climate actions of relevant bureaux and departments and come up with a carbon reduction target for 2030.

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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