

「香港優質LED研討會 - 推廣品質認受與驗證 以提升香港LED產業知名度」

Smart Living, Green Lighting
綠色智能家居・綠色照明

Basil Wai , CEO, The Hong Kong Electronic Industries Association
香港電子業商會 總裁 衛紹邦

- 綠色智能家居 綠色照明的內地發展情況
- 上海國際智能建築展覽會
- 產品認證計劃 -
LED照明產品 (PCS - LED- LP)

2013年1月30日

國家發展改革委 科技部 工業和資訊化部 財政部
住房城鄉建設部 國家質檢總局
聯合發佈了《半導體照明節能產業規劃》。

規劃要求，LED照明節能產業產值年均增長30%左右，2015年達到4500億元 其中LED照明應用產品1800億元。

2013年8月

國務院關於加快發展節能環保產業的意見
國發〔2013〕30號

- 三、發揮政府帶動作用，引領社會資金投入節能環保工程建設

（一）加強節能技術改造。發揮財政資金的引導帶動作用，採取補助、獎勵、貼息等方式，推動……、綠色照明、流通零售領域節能等節能重點工程，提高傳統行業的工程技術節能能力，加快節能技術裝備的推廣應用。開展資料中心節能改造，降低資料中心、超算中心伺服器、大型電腦冷卻耗能。

- (五) 開展綠色建築行動。到2015年，新增綠色建築面積10億平方米以上，城鎮新建建築中二星級及以上綠色建築比例超過20%。提高新建建築節能標準，推動政府投資建築、保障性住房及大型公共建築率先執行綠色建築標準，



LED照明產品的市場滲透是分層次的

- 層次分級又主要取決於使用者對價格的敏感度、能源緊迫程度等。
- 長時間的工廠照明、商業照明
- 局部照明應用
- 最終將逐漸走向家庭照明。

- 智能家居照明系統 –
- 配上物聯網無線智能插座，
- 能夠實時監控家里的用電量，
- 從而實現計劃用電，節約用電。

- 在智能家居系統中，智能照明作為其核心部分，
- 變成如今：智能感應燈光
- 智能場景燈光
- 智能遠程控制燈光
- 冷暖燈光搭配
- 高低壓調光
- **LED**全彩色譜調光等。

但仍有一些技術挑戰克服

- 包括提升燈泡亮度和色溫調控的精準度、改善系統散熱結構、增強電源及驅動電路能源使用效率，以及降低整體物料清單(BOM)成本等。
- 另外，照明系統與ZigBee/Zwave、無線區域網路(Wi-Fi)或電力線通訊(PLC)等有線/無線連結方案的整合，亦是建構智慧照明系統的重要環節。

上海國際智能建築展覽會

2013年9月25-27日

Supporters

Association of Intelligent Buildings

Engineering Magazine

(CCTEAM) of Information Communication
Association of China Engineering Construction

Engineering Alliance

Home Industry Alliance

Automated Buildings Association

Association of China Energy Conservation

Institute of Architects

International

Smart Building Association

Alliance

shanghai intelligent
building technology
上海国际智能建筑展览会



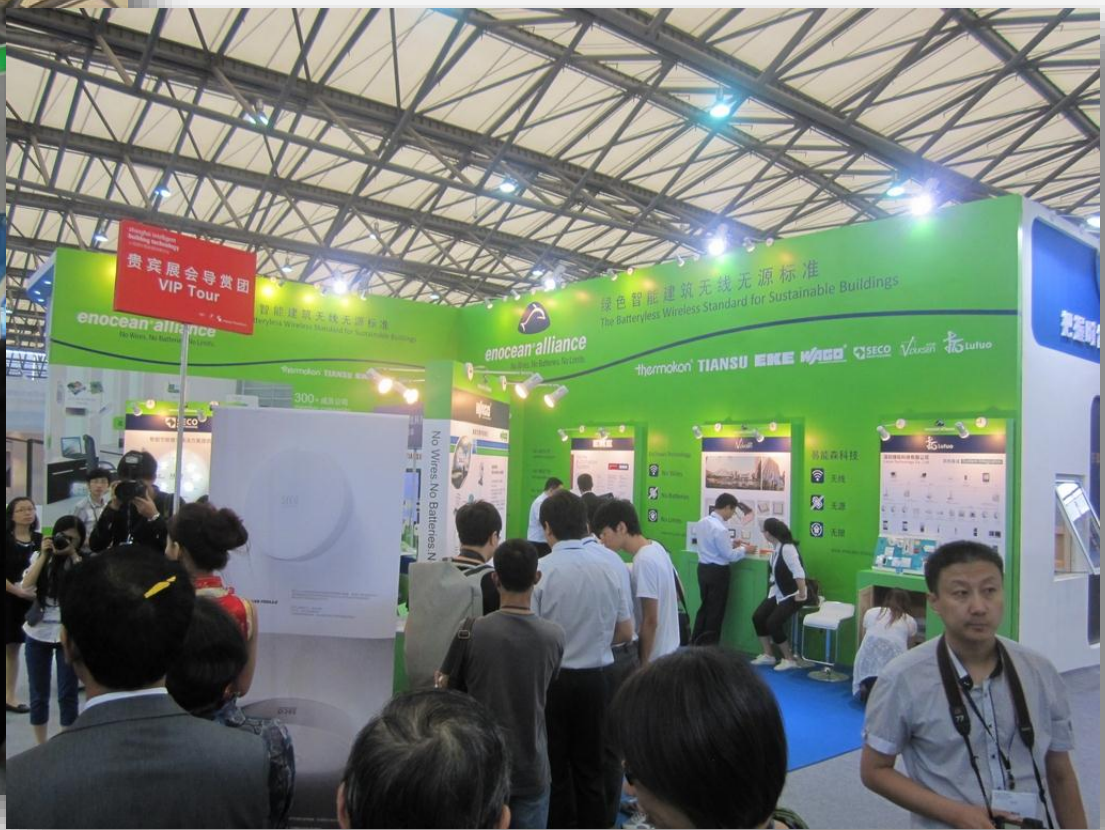
messe frankfurt

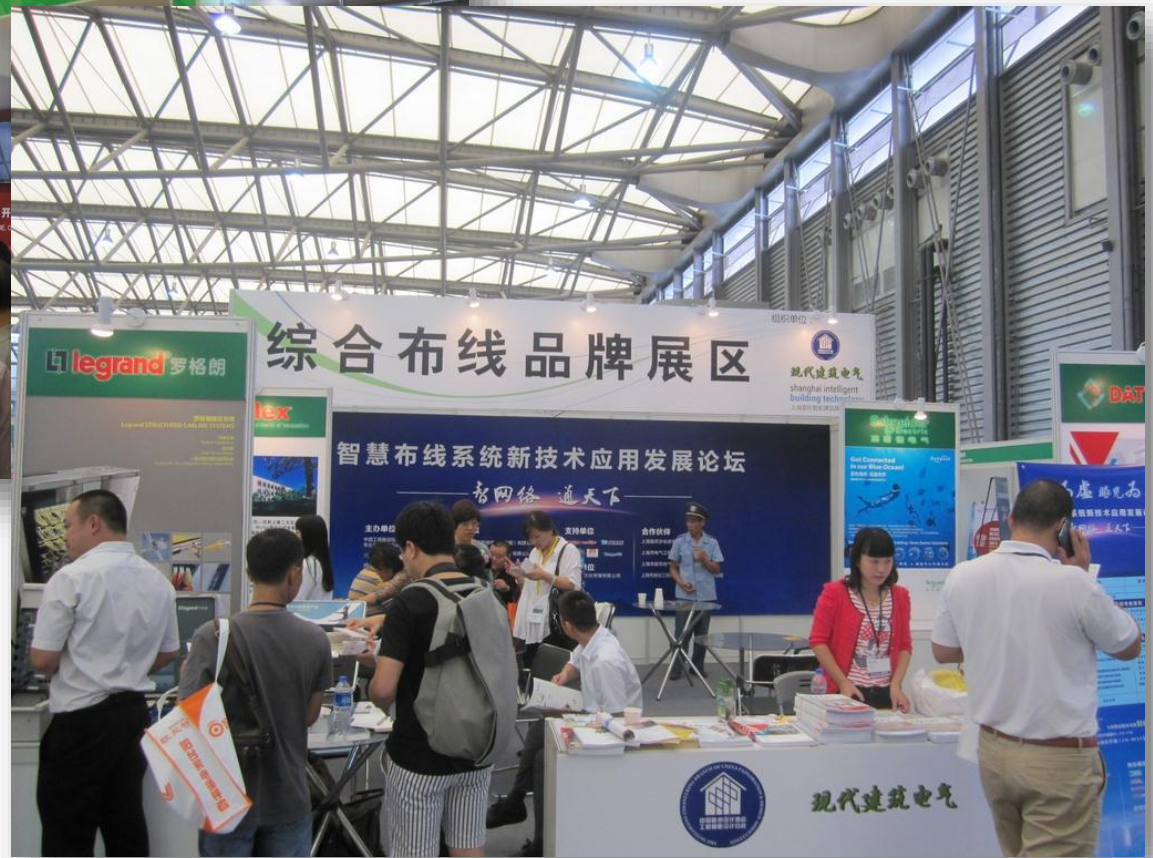
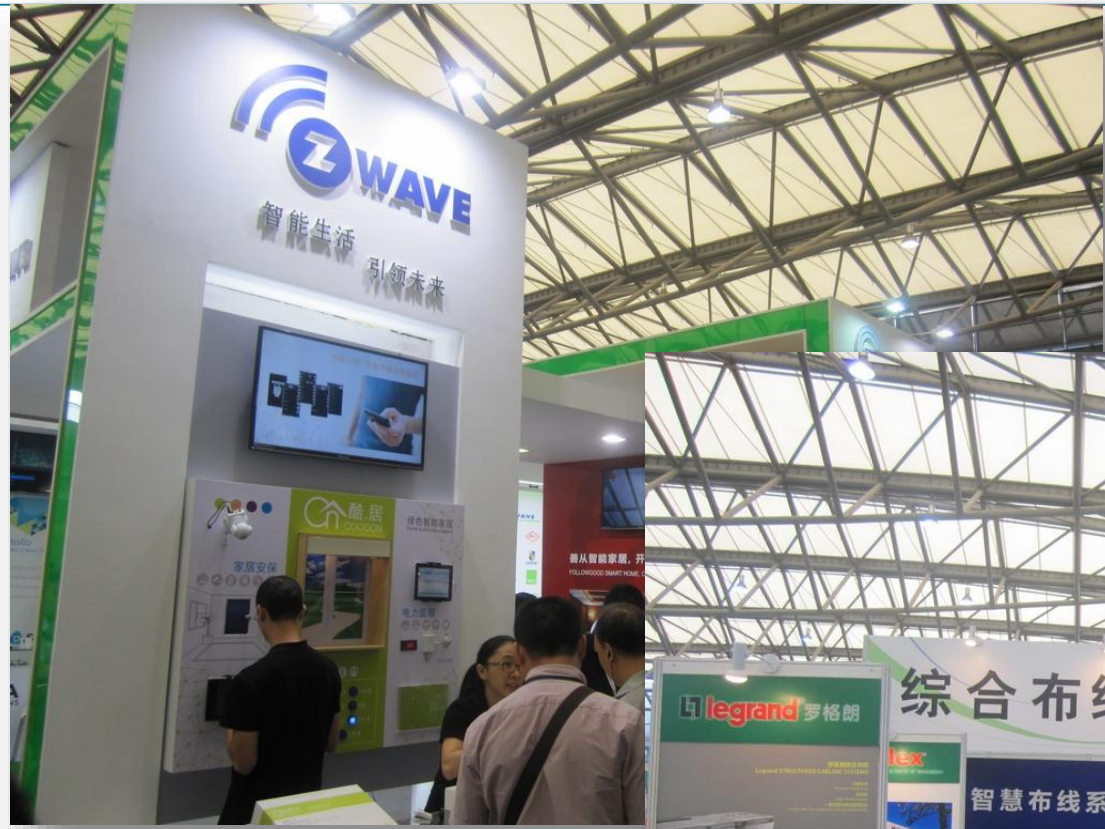
开幕典礼

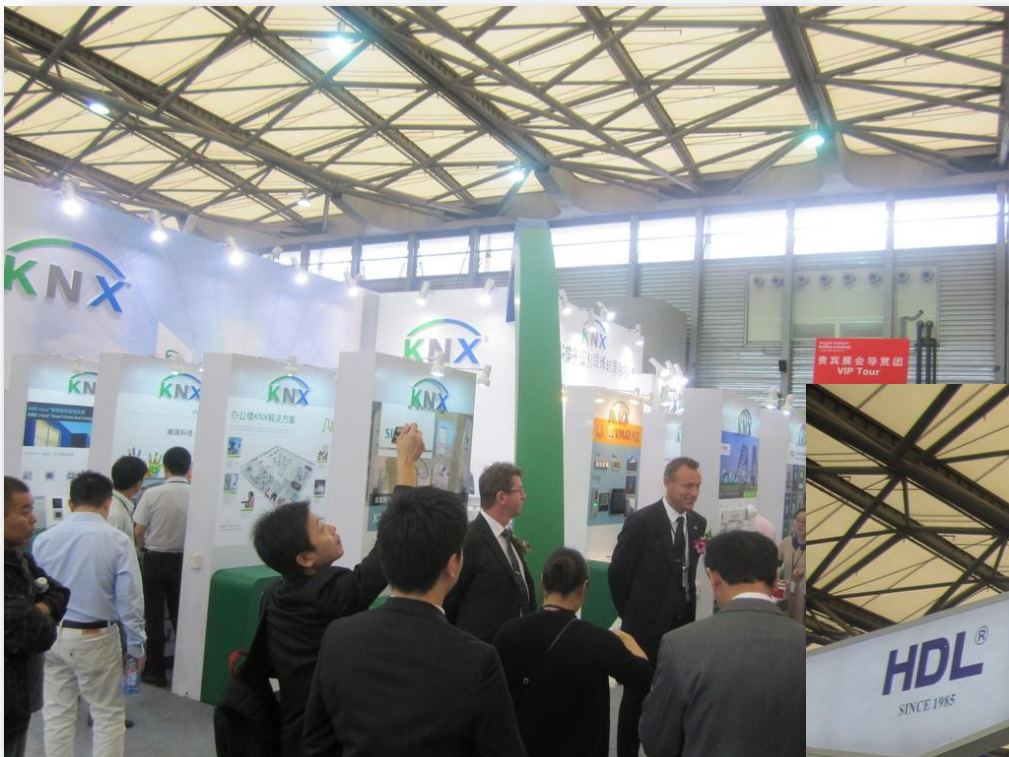
Opening Ceremony

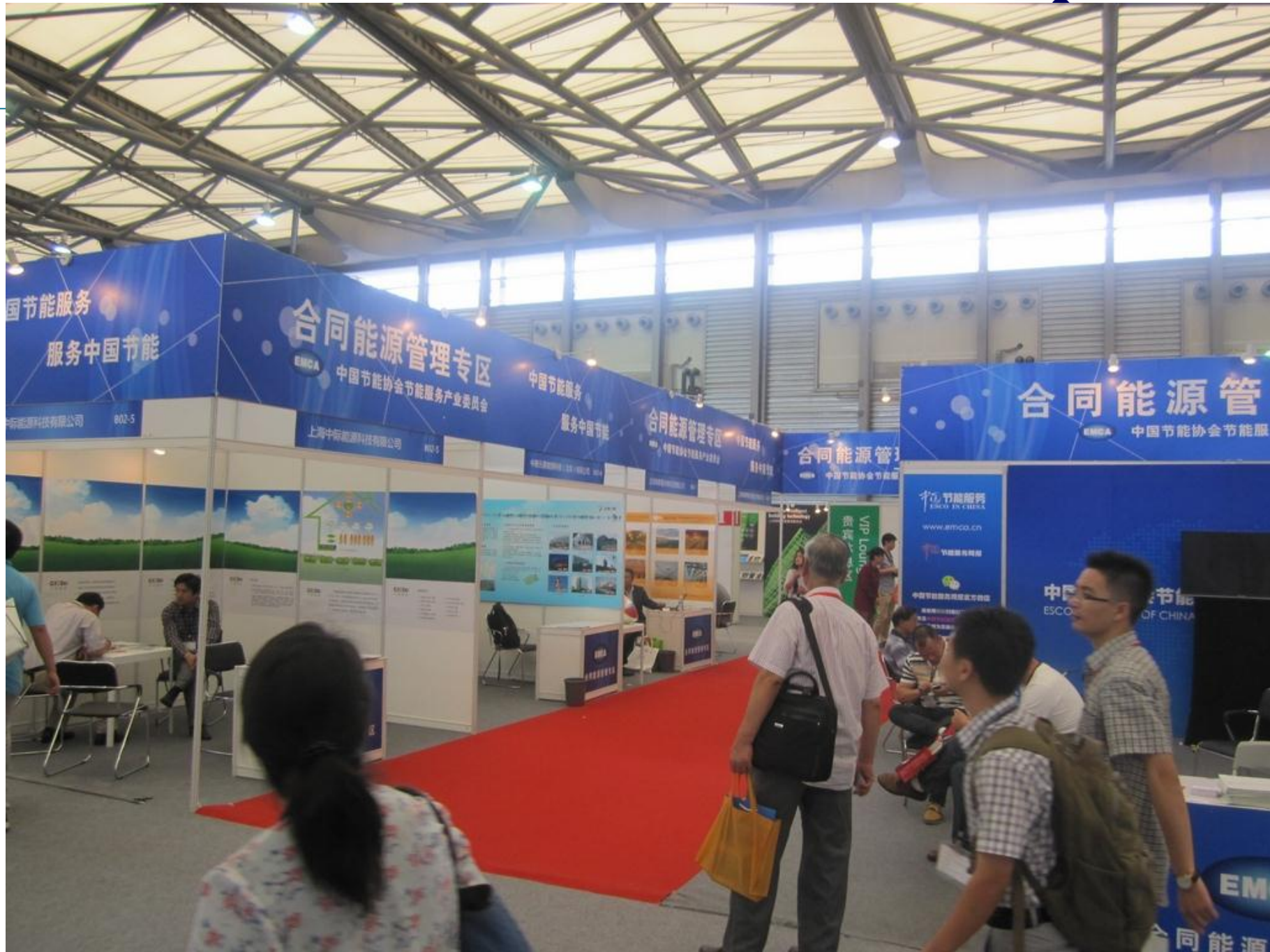
25/20











中国节能服务
服务中国节能

合同能源管理专区
EMCA 中国节能协会节能服务产业委员会

中国节能服务
服务中国节能

合同能源管理专区

合同能源管

合同能源管
中国节能协会节能服

际能源科技有限公司 802-5

上海际能源科技有限公司 802-5

中国节能服务产业委员会

中国节能服务产业委员会

中国节能服务产业委员会

节能服务
EMCA IN CHINA

www.emca.cn

节能服务产业委员会

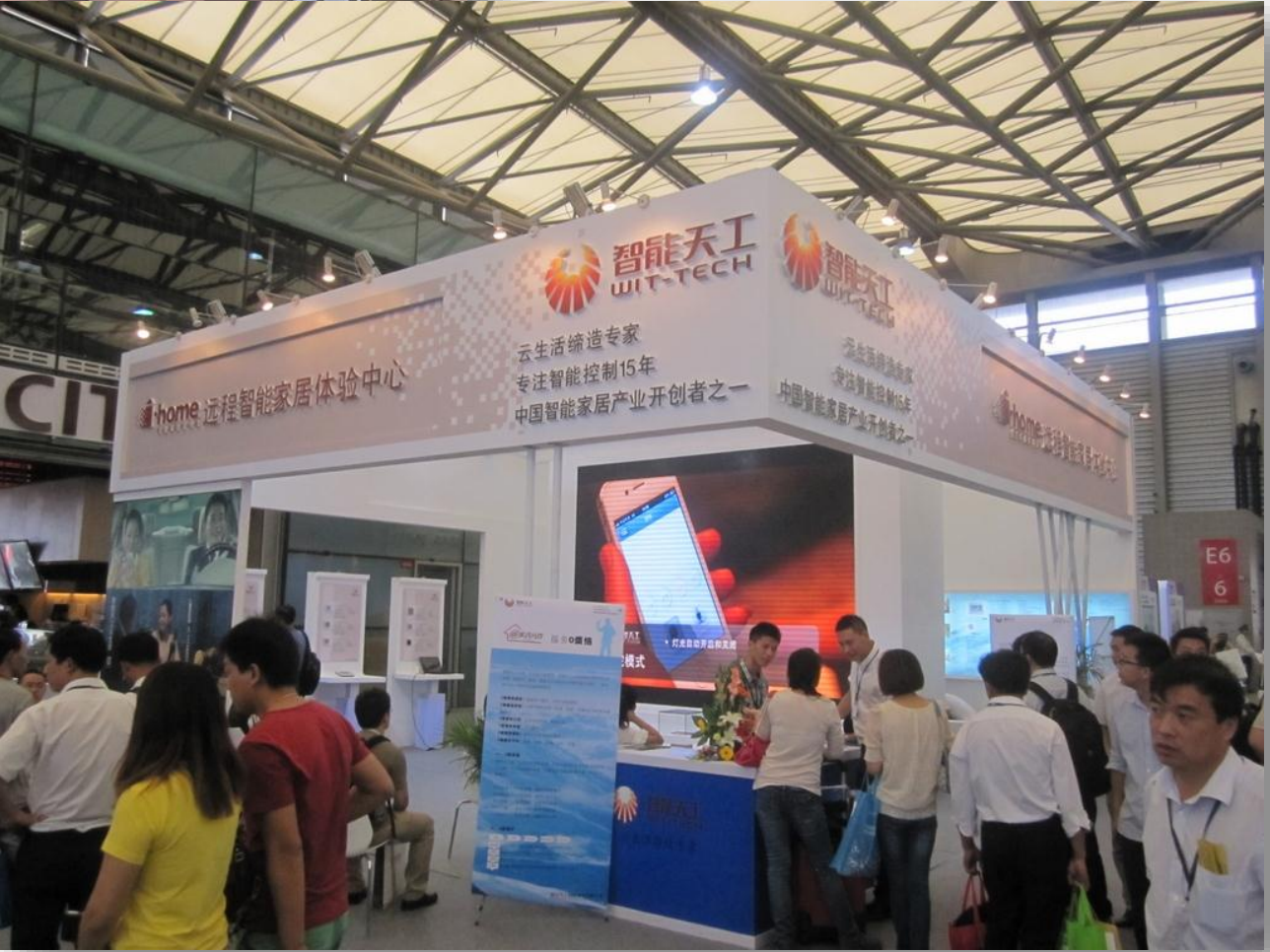
中国节能服务产业委员会

中国节能服务
ESCO OF CHINA

EM

合同能源





Product Certification Scheme – LED Lighting Products (PCS-LED-LP)

**(Bulkhead Type LED Light Fittings)
(LED Downlight)
(LED Floodlight)**

- In 2010/2011,
- *Promoting quality assurance through upstream control, Hong Kong Housing Authority (HA) 香港房屋委員會 (房委會) is in support of the Product Certification in its construction projects in stages for seven major building materials. They include:*

七大建材產品認證



- May 2010,

Fire-rated timber doors (防火門)* + Panel Wall Partitions (板間牆)*;

- August 2010,

Cement Products (for architectural use) (袋裝水泥)# + Tile Adhesives (磁磚黏合劑)#;

- December 2010,

Ceramic Tiles (磁磚)#+ Repair Mortars (修葺砂漿)#;

- April, 2011,

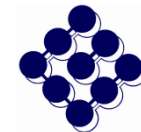
Aluminum Windows and 4-Bar Hinges Assembly (鋁窗及窗鉸組件)*

- #The Schemes are developed and owned by **Hong Kong Concrete Institute (HKCI)**
- *The Schemes are developed and owned by **Hong Kong Institute of Steel Construction (HKISC)**

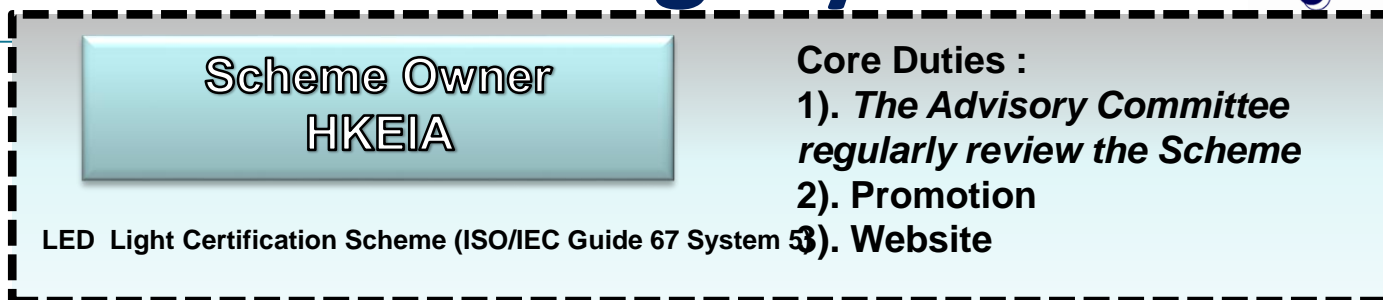
- ***Today,***
- *Product Certification Scheme (Voluntary) for LED Lighting Products is advocated in the Industry*
自願性產品認證計劃，LED照明產品在同行業中提倡。
- *Users Demand a Scheme for Procurement --- Too many products*
用家要求計劃協助採購--市場有太多的產品
- *Schemes need to be developed to realize the Product Certification for LED Lighting Products, such that:*
 - *Hong Kong Accreditation Service (HKAS) 香港認可處 could accredit Certification Bodies according to the standards and the regulation of the scheme.*
 - *Independent Certification Bodies could execute regular factory surveillance (監察) on process and testing of products for the quality assurance*
 - *The initiatives from the industry could be echoed.*
-

- Scheme Owner : HKEIA
- Scheme Independent LED Lighting Advisory Committee:
Representatives from local academics, engineers, LED lighting manufacturers, contractors, government bodies and users
- Certification Body: ISO/IEC Guide 65 or ISO/IEC 17065
- Applicant: Supplier / manufacturer of product
- User Group: eg. Hong Kong Housing Authority (HA) 香港房屋委員會 (房委會)

Stakeholder Category



HKEIA



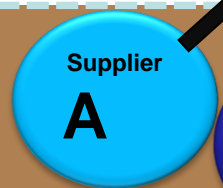
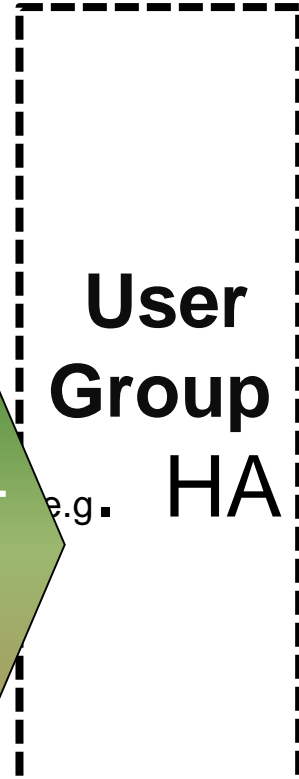
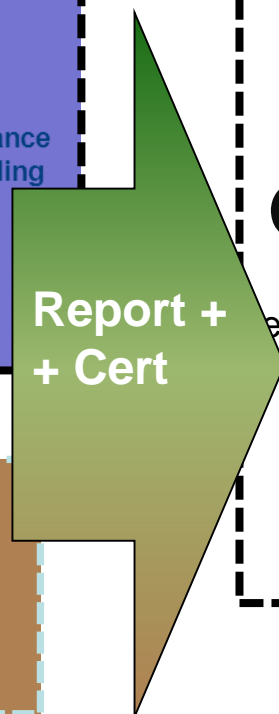
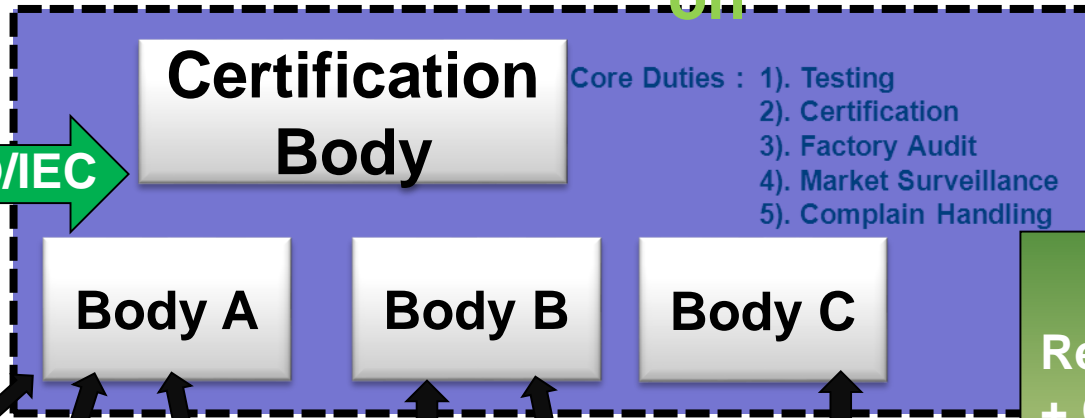
Registrati



on

HKAS
香港認可署

ISO/IEC

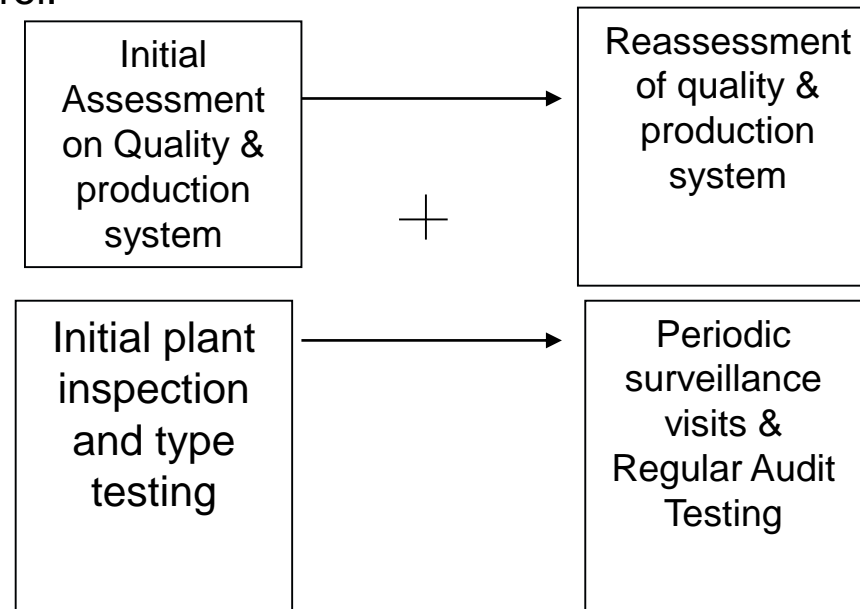


- *To ensure that LED Lighting Products produced by **LED Lighting Manufacturers of the Supplier meet:***
- ***The Requirements Specified in the Scheme***
- ***including Safety, ElectroMagnetic Compatibility (EMC), and Performance/Reliability.***
- 包括安全，電磁兼容（ EMC ）和性能/可靠性。
- 這是一種產品認證計劃，要求LED燈具製造商的質量體系符合ISO 9001和計劃條例
- *This is a product certification scheme that requires LED Lighting Manufacturers to operate a quality system which complies with **ISO 9001** and the Regulations of the Scheme.*

What is the Scheme?

• - **A System 5 product certification scheme** in accordance with **ISO/IEC Guide 67** includes:

- => Initial assessment of quality and production systems,
- => Initial plant inspection and type testing,
- => Periodic surveillance assessments involving quality system, product evaluation & Plant Production Control.



- **Certification Body**
 - *Accredited by HKAS/its MRA partners in accordance with this Scheme, ISO/IEC Guide 65.*
 - **Overall assessment** of the quality management and production systems, through Certification from Certification Body

- *The Scheme is voluntarily developed to provide only a framework for the certification of the LED Lightings products.*
- **Obligation**
 - *The Scheme shall be **kept alive**, once adopted, to avoid causing any confusion to the Industry*
 - *The Scheme would be **regularly reviewed and updated** for the demand of the market or users, say when the related regulations are revised*

Thank you !



<http://www.hkeia.org>