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# **Hong Kong LED Lighting Industry from Strategy to Market Penetration**

**Raymond Chiu 招炳耀**  
**Principal Consultant 首席顧問**  
**Automotive & Electronics**  
[raymondchiu@hkpc.org](mailto:raymondchiu@hkpc.org)



# A Strategy Roadmap for Hong Kong LED Lighting Industry

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- ❖ Hong Kong LED Lighting Industry Opportunities
- ❖ Issues facing Hong Kong LED Lighting Industry
- ❖ Support for Hong Kong SME
- ❖ Solutions for Hong Kong SME (Deliverables of Project)

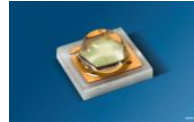
# Hong Kong LED Lighting Industry Opportunities

- LED has become the light source of choice replacing incandescent (鎢絲燈) and CFL (螢光燈/節能燈) because:
    - more energy efficient 90% and 40%
    - much longer life 30,000 hr. vs. 1,200 hr. and 8,000 hr., i.e. low maintenance cost
    - environmental friendly, no mercury
    - many countries are phasing out incandescent and concerned about CFL mercury issues
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- Mainland Governments are piloting with national and local projects
    - national city-wise Street Lamp
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- Hong Kong Government & Utilities Companies are piloting their applications:
    - Housing Department (房屋署): Bulkhead 
    - Highway Department (路政署): Street Lamp 
    - MTR: in Train and on Platform  **MTR 港鐵**
    - Hong Kong International Airport (HKIA): Advertising Board, Bay Light 
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# Issues facing Hong Kong LED Lighting Industry

- LED value chain is relatively long, complex and technology intensive including:

- LED & LED packaging
- Optics design
- Electronics design
- Thermal design
- Luminaires (end-product) design
- Product Quality screening



it will be difficult for the industry to handle especially new comers and SME

- Market adoption and portfolio very diverse

- Mainland market (內銷) vs. International market
- Product portfolio management, direct replacement vs. special design
- Patent and Copyright issues (esp. for Mainland 內銷)
- Branding Strategy



- Lack of Industry Standard (& associated Testing and Certification) . Work in progress:

- CIE (Europe), EnergyStar (U.S.)
- EMSD (機電工程署): VEELS for LED
- GB (國標)



# Hong Kong Voluntary Energy Efficiency Labeling Scheme (VEELS) for LED lamps



机电工程署自願性能源效益标签



Hong Kong  
Productivity Council  
香港生產力促進局

## ■ Scope:

- apply to directional and non-directional LED lamps intended for general lighting purposes having the following characteristics:
  - a rated voltage up to 240 Volt AC or DC; and
  - a rated voltage frequency of 50 Hz for AC; and
  - a rated lamp wattage up to 60 watts
- apply to LED lamps designed with or without dimming operations
- does not cover
  - (i) LED tubes
  - (ii) LED lamps that intentionally produce tinted or coloured light
  - (iii) organic LED (OLED)



■ The scheme is expected to commence in Q3, 2011

■ The scheme will operate as “Recognition Type”



# Support for Hong Kong SME

## Organization & Membership



# Solutions for Hong Kong SME (Deliverables of Project)

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- A Kickoff Conference (target attendance: 250)
- A ready-to-use, practical, in-depth Handbook (Study Report) including:
  - value chain of the LED lighting industry
  - technology and their sources
  - overall market situation with special emphasis for Mainland China (內銷)
  - patent and copyright situation
  - branding strategy for Hong Kong SME
  - Standards and associated test methods, and available test labs
  - Interviews and Capability vs. Gap Analysis with SME
  - (Target Distribution: 1,000)
- Three (3) Workshops covering: (target attendance: 50 each)
  - LED lighting technology, patent and copyright
  - LED lighting standards, testing, and certification, regulation and enforcement
  - LED lighting market status, branding
- Two (2) Dissemination Seminars (target attendance: 100 each)
- Web posting (3 yrs) and Help Desk (6 months) by HKEIA, HKETA, HKPC / HKSSLIC



# Partnership in support to SME





## **“Hong Kong Quality LED”**

**a campaign to leverage on HK brand to broaden the exposure of  
Hong Kong LED Industry’s SME in the Mainland**



香港電子業商會

The Hong Kong Electronic Industries Association



Hong Kong  
Productivity Council  
香港生產力促進局

# Project Objectives

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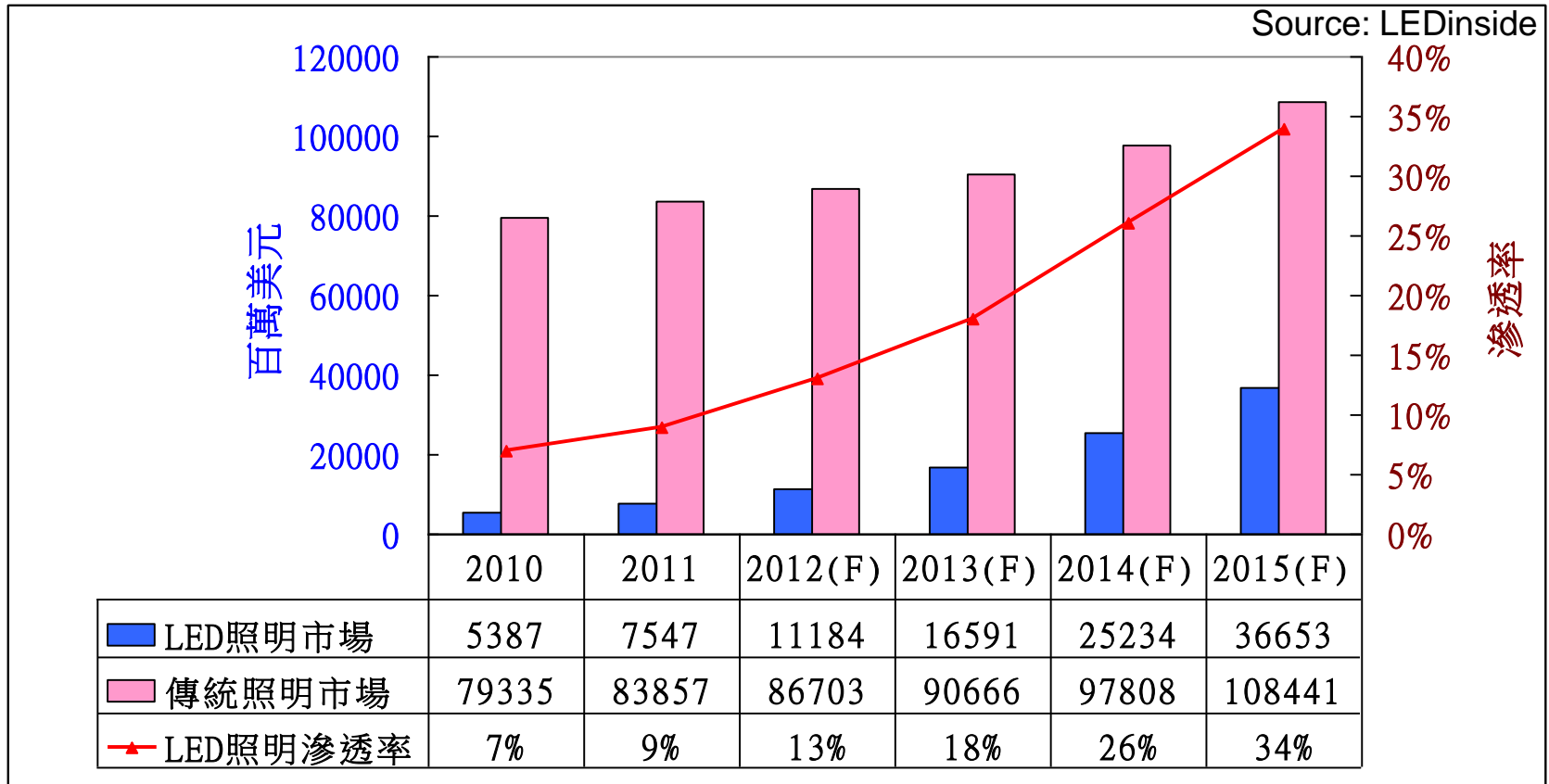
- To carry out a “HK Quality LED” campaign in the Mainland to promote the quality brand image of Hong Kong LED Industry
- To provide a platform and coordinated effort for Hong Kong LED Industry to demonstrate and show off their product or solution, individually and as a group.

# Project Plan

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- ♦ Organize **cohesive groups** of HK LED Industry SME to show case HK Quality & Brand
  - ♦ Ambassador SME selected by independent judging panel;
  - ♦ Involvement of Testing & Certification organizations;
  - ♦ Involvement of HK Industry Experts
- ♦ **Exhibition** as a Group to attract attention and build critical mass for business promotion and matching
- ♦ Target **Tier-One Cities** and **Trade Specific** Exhibitions
  - ♦ Guangzhou (Guangzhou Lighting Fair)
  - ♦ Shanghai (Shanghai Building Fair)
  - ♦ Beijing (Beijing Green Building Fair)

# Why Now ? – Growth in LED Global Market



- LED lighting **market share** growing fast;
- LED lighting penetration rate in 2015 will be **34%**.

# Why Now ? – Growth in Mainland Market

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	2010 industry output growth rate	Average annual growth rate in “12 <sup>th</sup> five year”
General Lighting	150%	>55%

- **Key industry** in “12th five year” plan;
- Mainland government launched **policies** to accelerate LED deployment;
- **Similar products** in mainland market, **no outstanding feature**;
- Many **low-cost and low-quality** LED lighting suppliers dominate the market.

# Why Now ? – Needs of HK LED Industry

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- A golden **opportunity** for HK LED Industry with a Good Quality Brand
- Survey shows 72% Mainlanders **preferred HK Products** because of their good quality and significantly
- 62% are willing to pay more for **Hong Kong brand** quality products.
- Opportunity lost if not pursued now
- SMEs lack **resources and knowhow** to capture this opportunity on its own
- Project provides essential market information, practical knowledge as well as a marketing platform for all SMEs in the LED market



# Why these Exhibitions ?

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	Guangzhou Lighting Fair	Shanghai Building Fair	Beijing Green Building Fair
Location	Tier-1 city in Southern China	Tier-1 city in Central-Eastern China	Tier-1 city in Northern China
Exhibition	China's largest lighting oriented exhibition, since 1996	Building oriented exhibition with a major extension to cover lighting esp. LED, since 2006	Building and Green oriented exhibition bringing new initiatives in Green
Total Area (HK Pavilion)	252 sq.m.	108 sq.m.	108 sq.m.
Schedule	June, 2013 June, 2014	Sept. 2014	April, 2015

# Project Deliverables

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1. One Free Kickoff Seminar on “Hong Kong Pavilion” for HK LED Industry (target: 200 attendance)
  - ⇒ Introduce the promotion campaign
  - ⇒ Recruit inclusion in the Promotion Pamphlet / Booklet and participation in the Exhibitions
2. Preparation of Promotion Pamphlet / Booklet of HK LED Industry, (including interview with 10 SME)
  - ⇒ 5,000 printed copies for distribution in exhibitions and other events
  - ⇒ “HK Pavilion” participating SME promotion appendix for each exhibition
3. Free Promotion Seminar for HK LED Industry in HK (target: 200 attendance)
  - ⇒ release of the Promotion Pamphlet / Booklet.

# Project Deliverables

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## 4. Organize “Hong Kong Pavilion” in Exhibitions

- ⇒ with talks to promote HK related support services and Standards
- ⇒ twice in Guangzhou (target: 12 – 15 exhibitors X 2)
- ⇒ once in Shanghai (target: 5 – 7 exhibitors)
- ⇒ once in Beijing (target: 5 – 7 exhibitors)

## 5. Organize Four Free Post-event Workshops in HK

(target: 150 attendance each)

- ⇒ Experience sharing
- ⇒ Printed report (600 copies each) for HK SME not able to attend the exhibition

## 6. Preparation of Final Report

- ⇒ 1,000 copies summarizing experience for HK LED Industry

## 7. Post Project Results at HKEIA web-sites

- ⇒ Promotion Pamphlet / Booklet
- ⇒ Four post-event reports
- ⇒ project final report.

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# Partnership in support of SME



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# THANK YOU

# 謝謝



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The Hong Kong Electronic Industries Association



Raymond Chiu 招炳耀  
r16704@yahoo.com