Lighting Industry In China

Chen Yansheng

25 June 2013, KINTEX Korea

China Association of Lighting Industry
1. Lighting Industry Introduction
1.1 overview

- China Lighting Industry has maintained a rapid, stable and sustainable development over the last decade.

- In 2012, the sales volume of lighting industry is more than RMB 420 billion ($68.5 billion USD), with exports amounting to $30.04 billion USD.
1.1 overview

Sales Volum in 2003-2012

Year

$ Billion USD

Sales volume

Sales Volum in 2003-2012


130 148 190 210 270 337 380 460 556 665
There are more than 10,000 lighting manufacturers in China. Geographically concentrated in the southeastern coastal provinces, such as Guangdong, Fujian, Zhejiang, Shanghai, Jiangsu etc.
1.1 overview

- Chinese lighting manufacturers have been able to produce all kinds of lighting products, and its product quality has improved greatly.

- China has become the world lighting products production and export base.
1.2 Enterprises

- The features of Chinese lighting enterprises are:
  - Small-scale and large numbers.
- How enterprises grow bigger and stronger is the challenge of our Chinese “twelve-five year plan”.
- We encourage mergers and acquisitions of our Chinese enterprises, expand their scale and strength.
- We encourage qualified enterprises listed on the capital market, take capital advantage to become bigger and stronger.
1.3 Products

The structure of electric light source product undergone tremendous changes.

The total production of fluorescent lamps has exceeded incandescent lamps, as incandescent lamps are gradually phasing out worldwide.

In terms HID lamps, high pressure sodium and metal halide lamps have developed rapidly, high-pressure mercury lamp will gradually be eliminated.

LED as a lighting source begins to enter the general lighting field.
2012 lighting products exports reached $30.04 billion, a record. Imports reached $2.63 billion.
1.5 International prestige

- China is currently the world's largest producer of lighting products, lighting products produced in China are exported to nearly 200 countries and regions.

- Internationally renowned lighting companies such as PHILIPS, OSRAM, GE, etc., in the nineties, after entering China, now has China as a major production base.
1.5 International prestige

<table>
<thead>
<tr>
<th>Type of products</th>
<th>Impact in the world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact fluorescent lamps (CFL)</td>
<td>Over 80% of the global market</td>
</tr>
<tr>
<td>Christmas lamps</td>
<td></td>
</tr>
<tr>
<td>Incandescent</td>
<td>1/3 --one-third of the world's</td>
</tr>
<tr>
<td>Lighting fixtures</td>
<td>Trade exports account 30% of the world</td>
</tr>
<tr>
<td>LED lighting products</td>
<td>✓ Many foreign brands of LED lighting products are manufactured in China. ✓ Become the production base.</td>
</tr>
</tbody>
</table>
1.5 International prestige

Chinese lighting enterprises

- Through years of development, there are many brand names with scale production emerged in China.
- With the scale expansion, enterprises pay more attention to product quality and brand.
- In addition to a large number of export OEM production, in recent years, the independent brand of export growth trend is obvious.
2. Lighting Industry situation in 2012
# 2.1 2012 Export & Import Data

<table>
<thead>
<tr>
<th></th>
<th>Total Lighting Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Export</strong></td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>30.04 Billion US Dollars</td>
</tr>
<tr>
<td></td>
<td><strong>Light Sources</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Light Fixtures</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Other Lighting Products</strong></td>
</tr>
<tr>
<td><strong>Import</strong></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>2.63 Billion US Dollars</td>
</tr>
</tbody>
</table>
2.2 2012 Annual Exports Data

Electric light source products

- Incandescent lamp is flat with last year, amount to 3.15 billion
- CFL is decreased 2.4% over last year, amount to 2.75 billion
- Other fluorescent lamps fell 7.1% last year, amount to 710 million
- Halogen lamps increase 6.7% over last year, amount to 1.02 billion
### 2.3 2012 export volume of the top ten countries and regions

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country/Region</th>
<th>Total Amount</th>
<th>Rank</th>
<th>Country/Region</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>America</td>
<td>43912</td>
<td>1</td>
<td>America</td>
<td>90653</td>
</tr>
<tr>
<td>2</td>
<td>Brazil</td>
<td>18369</td>
<td>2</td>
<td>Nigeria</td>
<td>19019</td>
</tr>
<tr>
<td>3</td>
<td>Indonesia</td>
<td>17782</td>
<td>3</td>
<td>Venezuela</td>
<td>14852</td>
</tr>
<tr>
<td>4</td>
<td>The United Arab Emirates</td>
<td>12914</td>
<td>4</td>
<td>The United Arab Emirates</td>
<td>10553</td>
</tr>
<tr>
<td>5</td>
<td>Mexico</td>
<td>10968</td>
<td>5</td>
<td>The United Kingdom</td>
<td>9834</td>
</tr>
<tr>
<td>6</td>
<td>Malaysia</td>
<td>9166</td>
<td>6</td>
<td>Turkey</td>
<td>9135</td>
</tr>
<tr>
<td>7</td>
<td>Turkey</td>
<td>9046</td>
<td>7</td>
<td>Egypt</td>
<td>8595</td>
</tr>
<tr>
<td>8</td>
<td>Russia</td>
<td>8348</td>
<td>8</td>
<td>Canada</td>
<td>7485</td>
</tr>
<tr>
<td>9</td>
<td>Philippines</td>
<td>7870</td>
<td>9</td>
<td>Germany</td>
<td>7007</td>
</tr>
<tr>
<td>10</td>
<td>Korea</td>
<td>7520</td>
<td>10</td>
<td>Saudi Arabia</td>
<td>6533</td>
</tr>
</tbody>
</table>
### Pre-export ten countries and regions (Ten thousand U.S. dollars)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Countries and Regions</th>
<th>Export Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>America</td>
<td>142980</td>
</tr>
<tr>
<td>2</td>
<td>Japan</td>
<td>72426</td>
</tr>
<tr>
<td>3</td>
<td>Germany</td>
<td>46842</td>
</tr>
<tr>
<td>4</td>
<td>Hongkong</td>
<td>26692</td>
</tr>
<tr>
<td>5</td>
<td>The United Kingdom</td>
<td>22884</td>
</tr>
<tr>
<td>6</td>
<td>The Netherlands</td>
<td>20286</td>
</tr>
<tr>
<td>7</td>
<td>France</td>
<td>18767</td>
</tr>
<tr>
<td>8</td>
<td>Russia</td>
<td>16727</td>
</tr>
<tr>
<td>9</td>
<td>Canada</td>
<td>14160</td>
</tr>
<tr>
<td>10</td>
<td>Italy</td>
<td>13103</td>
</tr>
</tbody>
</table>
2.5 Export lighting products

A slight increase in indoor and outdoor lighting

Lighting accessories increase largely:
- 4 times in glass pieces
- 4 times in plastic parts
- 2 times in other parts

LED lighting products increased by around 40%.
3. Lighting Situation Analysis
3.1 Development Trend Analysis

- For a long period of time, traditional lighting products, especially energy efficient lighting products and LED lighting products will co-exist.
- But the LED lighting products will increased year by year.
3.2 Exports data of First quarter in 2013

<table>
<thead>
<tr>
<th>Lighting Type</th>
<th>Export Quantity</th>
<th>Export Value</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incandescent lamps</td>
<td>Export 639 million Pics</td>
<td>A slight decrease over last year</td>
<td></td>
</tr>
<tr>
<td>CFL</td>
<td>Export 614 million Pics</td>
<td>Increase 5.5%</td>
<td></td>
</tr>
<tr>
<td>Fluorescent lamps</td>
<td>Export 168 million Pics</td>
<td>Increase 9.0%</td>
<td></td>
</tr>
<tr>
<td>Tungsten halogen lamps lighting</td>
<td>Export 268 million Pics</td>
<td>Increase 24.3%</td>
<td></td>
</tr>
<tr>
<td>LED lighting products</td>
<td>Export 1.6 billion US Dollars</td>
<td>Increase 31.8%</td>
<td></td>
</tr>
</tbody>
</table>
3.3 2012 LED Market by Application

2012 LED Market by Application

- Backlight: TV/Monitor 22%
- Mobile: 19%
- Lighting: 23%
- Sign: 13%
- Auto: 10%
- Others: 13%

2012 LED package is $ 13.7 billion worldwide
Current market demand is more alternative sources, such as bulbs, MR16, PAR lamps, lamp and so on.

Future trends will develop gradually to light, such as an office with a plate lights, household ceiling and versatile downlight.
3.5 Lighting Associations

Due to LED lighting application, the and boundaries of the light source and light fixture are becoming vague.

**ELC and CELMA merged into LIGHTING EUROPE in December 2012**

**JELMA and JLA merger in April 2013**
Many companies start to focus on the wireless network control system. Last September, six lighting companies initiated “The Connected Lighting Alliance”.

Six founding companies, including GE, LUTRON, OSRAM, PANASONIC, PHILIPS, TOSHIBA.
3.7 Intelligent Luminaires & Building Management

- New applications to reduce operational expense
- Higher productivity through enhanced comfort

High-performance LED digital light sources

Cost-effective control and networking systems

LED Sources

LED Luminaires

Area Controls

Local Controls

LED Control Network

Smart Wireless Buildings

HVAC, Security, Safety Controls

Source: Daintree Networks
3.8 Domestic Situation

✓ The financial subsidies of LED lighting project, carried out by China Development and Reform Commission, Ministry of Finance, will promote LED lighting applications in the domestic market.
✓ Tender includes outdoor lights, tunnel lights, indoor downlights and PAR lamps.
✓ It is estimated that the project will continue this year.
3.9 Industry Chain- Upstream

- The operating rate of Chips Extension enterprises is about 50%.
- Some imported MOCVD equipment have not carried out preliminary test.
- Some are finished preliminary test but not engaged in mass production due to market oversupply.
Some of the packaging companies are expanded to the downstream.

Engaged in lighting product development and production.
3.9 Industry Chain- Downstream

- LED lighting companies are facing terminal market.
- Some of them are relatively stable because they have good product quality and enough orders.
- Because there are many lighting companies in China, the competition are intense.
Currently there are three categories for LED lighting enterprises in China.
3.9 Traditional lighting companies

✔ Most traditional lighting companies are developing and producing LED lighting products.

✔ They have advantage in their existing customers, channels, understanding of lighting products and foundation of CFL electronic ballast production.
3.9 LED-related companies

- LED chip extension companies and packaging companies are expanding to downstream.

- Currently few of them are success.

- The main reason is they lack of customer channels, distracted by many factors.
3.9 New players

These consumer electronics companies are a strong force as new players.

They have advantage in supply channels, technology, production and equipments.

Once they have appropriate customers, they will launch LED lighting products soon and formed scale production.
### Xiamen Model

- They originally produce CFLs.
- Their clients are unchanged.
- Their clients demand for LED lighting products.
- They have a solid foundation in electronic ballast production.
- They have scale production in LED lighting products soon.

### Shenzhen Model

- They have solid foundation in consumer electronics production.
- They have advantages in accessory procurement, production technology, and equipment.
- They will launch LED lighting products quickly.
Korea Companies are expanding Chinese market.

Their main products are LED chips and components.
3.12 China & Korea

- It is estimated that Chinese LED lighting products will continue to export to South Korea in the future for price and quality advantages.
- We hope that Korea could use more Chinese LED lighting products.
THANK YOU

Chen Yansheng

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