Lighting: Has the market transformed?

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Installing energy efficient lighting is one of the most effective, sustainable design strategies available today.
Market Transformation Definition

Is the strategic process of **intervening in a market to create lasting change in market behavior** by removing identified barriers or exploiting opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice.

Through collaboration and pooling of resources, the region’s utilities and stakeholders have harnessed their collective influence to drive **market adoption of energy efficiency products**, services and practices for the benefit of utilities, consumers and the region.
Forces driving market transformation

- Education
- Cost of new technology vs incumbent
  - LED vs Halogen lamps
- Confusion
  - EISA - Does not ban incandescent or any specific bulb type; they say that bulbs need to use about 25% less energy
- Regulations and legislation
  - EPACT
  - Energy Independence and Security Act
- Risk adverse
  - Objectives
  - Standards
    - DLC, CEE, CA CEC volunteer LEDr specification and Energy Star
    - CFLs learning curve
Example - T12 is 43% of INSTALLED US SOCKET BASE

Total Fluorescent Sockets in US

- T12: 43%
- T8: 52%
- T5: 5%

2.2 Billion Sockets

NEMA Lighting Results

**NEMA Fixture Dollars Market Trend**

<table>
<thead>
<tr>
<th>Quarter Ending</th>
<th>Jun-12</th>
<th>Sep-12</th>
<th>Dec-12</th>
<th>Mar-13</th>
<th>Jun-13</th>
<th>Sep-13</th>
<th>Dec-13</th>
<th>Mar-14</th>
<th>Jun-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSL</td>
<td>21%</td>
<td>23%</td>
<td>26%</td>
<td>27%</td>
<td>29%</td>
<td>37%</td>
<td>42%</td>
<td>43%</td>
<td>45%</td>
</tr>
<tr>
<td>Classic (INC, HAL, CFLi)</td>
<td>79%</td>
<td>77%</td>
<td>74%</td>
<td>73%</td>
<td>71%</td>
<td>63%</td>
<td>58%</td>
<td>57%</td>
<td>55%</td>
</tr>
</tbody>
</table>

**NEMA Lamp Dollars Market Trend (Including ballast)**

<table>
<thead>
<tr>
<th>Quarter Ending</th>
<th>Jun-12</th>
<th>Sep-12</th>
<th>Dec-12</th>
<th>Mar-13</th>
<th>Jun-13</th>
<th>Sep-13</th>
<th>Dec-13</th>
<th>Mar-14</th>
<th>Jun-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED</td>
<td>11%</td>
<td>13%</td>
<td>12%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>14%</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>Classic (INC, HAL, CFLi) (Includes ECG)</td>
<td>89%</td>
<td>87%</td>
<td>88%</td>
<td>87%</td>
<td>87%</td>
<td>86%</td>
<td>84%</td>
<td>83%</td>
<td>78%</td>
</tr>
</tbody>
</table>

Source: NEMA
Breakout session

• Incentives driving new technology
  • When is the time to stop?

• Specifications – performance vs energy efficiency
  • DLC, CEE, CA CEC volunteer LEDr and Energy Star

• Mid stream programs

• Internet

• Controls