ADD $44 ON THIS MASS SAVERS' CHOICE BUNDLE!

PERFECT FOR YOUR LIVING ROOM!

Save money with this special, limited-time offer from Mass Saver.

Get two (2) Philips LED bulbs and four (4) Motion CFLs for just $44.

DO YOU LIKE TO SAVE?

If you replace the incandescent light bulbs in your home with ENERGY STAR certified models, you can save $79 a year in energy costs.

TECHNIART
ADAM TARDIF, PRESIDENT

POP-UP RETAIL

ONLINE PROMOTIONS

WHOLESALE DISTRIBUTION
WHICH LIGHTING TECHNOLOGY WILL WIN AND WHY?
INCANDESCENT, HALOGEN, FLUORESCENT, LED, OLED, PLASMA, INDUCTION
LED TECHNOLOGY IS MOVING AT THE SPEED OF… LIGHT
DO UTILITY INCENTIVES INFLUENCE THE MARKET?

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>$50+</td>
<td>$40</td>
<td>$30</td>
<td>$20</td>
<td>$15</td>
</tr>
</tbody>
</table>
Customer Strategies

Who are the customers?

How are we getting to these customers?

How are we educating these customers?

All residential customers
- General marketing working with retailers, manufacturers, and other trade allies

Whole house retrofit customers
- General marketing on whole house efforts and one-on-one dialogue with customers at site visits

New construction customers
- Targeted marketing with builders and design teams with HERS raters
MA Lighting Program

CFL - 2008
57 gross/
55 net kWh

CFL - 2015
43 gross/
24.5 net kWh

Attributed savings are decreasing…

…while production goals are increasing.
Education Approach

- Sponsors focusing on marketing and promotion efforts that educate customers beyond benefits
  - *Mass Save Room By Room Promotion*
    - Executing in October 2013 in partnership with GE
    - Designed to reduce purchase barriers on specialty CFL lighting by telling customers where to use which specialty CFLs in the home
    - Campaign has social media contest in addition to customer POP in Wal-Mart, Sam’s Club, ACE, True Value, Aubuchon Hardware, and Price Chopper
Statewide RFP led by NU for competitive bulk procurement
- 2013 – Over 1.7M bulbs directly installed across program partners
- Awarded to EFI in May with over 20% reductions in pricing over existing product
- Facilitates movement toward more LEDs
Future of Lighting Offerings

General trend toward more LEDs. Savings potential could increase.

Balance with competitive pricing.
Emerging Technologies on the Horizon

Organic LEDs are quickly developing. These Philips Lumiblades are anticipated to ship in spring 2015.

http://www.lighting.philips.com/main/led/oled/LumibladeOLEDFL300.wpd

Headlines from Recent Evaluation Findings

• Massachusetts homes still have significant levels of inefficient lighting
  • Opportunities for increased lighting penetration still exist

• Massachusetts residents are using their lights at a comparatively high level
  • Significantly more than many other regions.

• Stores participating in our program have fewer inefficient bulbs on their shelves and significantly more LEDs.
  • EISA bulbs still available in 2014
What is the Opportunity for Residential Lighting?

• What percent of residential sockets do you think have CFLs in them in 2013?
  • A - More than 66%
  • B - About 50%
  • C - Less than 33%

• What percent of residential sockets do you think have LEDs in them?
  • A – More than 25%
  • B – About 15%
  • C – Less than 5%
Socket Saturation from 2003 to 2013

- The answer for both was “C”
- Only 30% of sockets have program supported CFLs and LEDs
- There are still lots of inefficient sockets in homes.
The Market Potential

Socket Saturation by Bulb Type

- The blue and red sections include CFL, LEDs, and fluorescent tubes
- Green and purple sections include halogens and incandescent bulbs, areas of opportunity.
- As of 2013, 62% of bulbs remain inefficient
How Are Customer Using Their Lights?

Massachusetts Results

- Customers are using lights as much, or possibly more than we thought. (2.7-2.9 HOU)
  - The impact means the same or higher annual savings from lighting
  - Significant finding of more kW savings because of more peak usage

- Lighting is a very important end use to continue to target.

Regional Results

- Why is the Northeast different?
  - Previous Northeast regional studies had an HOU around 2.8
  - Recent California studies had HOU between 1.9-2.3
  - Pacific Northwest had HOU between 1.5-1.9
Population Density Affects Lighting Usage

- The picture to the right shows light pollution - the orange, red, and white represent high concentration of lighting usage.
- Very little of southern New England is below green – indicating consistently high usage.
Not the Same Pattern Nationally

- Lighting usage in the Northeast does not appear to be representative of national usage patterns
Household HOU by Area

<table>
<thead>
<tr>
<th>Area</th>
<th>Hours of Use</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>2.8</td>
<td>549</td>
</tr>
<tr>
<td>MA</td>
<td>2.7</td>
<td>2175</td>
</tr>
<tr>
<td>RI</td>
<td>2.6</td>
<td>232</td>
</tr>
<tr>
<td>UNY</td>
<td>2.6</td>
<td>721</td>
</tr>
<tr>
<td>Overall</td>
<td>2.7</td>
<td>3677</td>
</tr>
<tr>
<td>MHT</td>
<td>3.9</td>
<td>544</td>
</tr>
<tr>
<td>DNY</td>
<td>4.1</td>
<td>965</td>
</tr>
<tr>
<td>NYSERDA</td>
<td>3.3</td>
<td>1686</td>
</tr>
</tbody>
</table>
Our Program is Impacting Stocking Practices in the Retail Market

Bulb Distribution in Participating Stores

- Support for LEDs in participating stores is 3.5 times greater than formerly-participating stores
- Support for CFLs is nearly double that of former-participating stores

Bulb Distribution in Formerly Participating Stores

- The share of incandescent bulbs on store shelves is much greater in formerly-participating stores
Hard to Reach Retailers

- Only Massachusetts and Rhode Island target “hard to reach” customers in New England.

- 16% of sales come from Non-Retail Sales.
  - Special events that targeted HTR communities (examples include Asian and Hispanic festivals)

- Retailers in the chart include Dollar Tree, Goodwill, Ocean State Job Lot, ethnic grocery stores, Family Dollar, etc…
2,013 HTR partners in 2013