



# Efficient Lighting: Background and Discussion

May 29, 2014



# Agenda

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- Introductions
- Roadmap Background
- Consumer Research Background
  - References
  - Library
- Discussion
- Framework

# Roadmap Background



- Stakeholders re-activated the need for consumer lighting research in a road mapping discussion in Fall 2013. The top points identified on furthering consumer research to inform the ENERGY STAR lighting program included:
  - Selecting the right, more efficient lighting products.
  - Working together to assist consumers.
  - Identifying the critical challenges facing consumers in making a lighting selection.
  - Most effective avenues and tools for addressing those challenges.
  - The stakeholders participating in this discussion group would focusing on funding and designing the research tasks and desired outcomes for the research project(s).

# CA CEC LED Report Reference



...the amount of effort and research spent on understanding what product characteristics consumers wanted, and how CFLs should be improved, has been very small.

In California, consumer preference studies have been limited to telephone surveys and shopper-intercept surveys... they do not provide enough depth to reveal the reasons why consumers decide to purchase or not purchase CFLs in the long run.

...the studies conducted in California have indicated that consumers have had a consistently *high* opinion of CFLs since the beginning of utility incentive programs, and that a majority (81%) of consumers would like to use either CFL or LED lighting rather than incandescent... These findings are clearly at odds with the fact that CFLs have not achieved wider acceptance, which suggests that the surveys used to date have been unsuccessful in accurately identifying areas for product or marketing improvement.

This is not surprising in the context of the general inaccuracy of consumers' self-reported behavior... a study by EMI found that consumers were not even aware of how many CFLs they had in their home (they underestimated the number of lamps by more than 40%). The same study found that consumer estimates of how many CFLs they would install in their home varied by a factor of 3, depending on whether they were asked the question on a written survey or asked in person by a utility representative.



# NEEA Lighting Study Reference



Regional stakeholders have conducted little research on consumer lighting knowledge, preferences, and purchasing motivations, and such research may be necessary to continue pushing consumers toward energy-efficient lamp choices.

**Consistent regional messaging regarding energy-efficient lamps.** NEEA should consider working with the region's utilities, other EEPS, lamp MFGs and retailers to develop consistent, region-wide messaging to support energy-efficient lamp sales. A third of the utility program representatives interviewed requested this support. Half of the region's stores display promotional materials and the messages of energy or money savings and long life dominate. Since consumers already appear to be aware about these benefits among CFLs, there may be an opportunity to include other messages that will further drive consumers toward purchasing energy-efficient replacement lamps, such as raising consumer awareness of lumens, color temperature, and color rendering.

**Consumer knowledge, preferences, and purchasing motivations.** Related to the above recommendation, consider conducting further and more extensive research to understand consumer knowledge, preferences, and purchasing motivations for replacement lamps. This will enable the region's EEPS to develop more effective marketing messages to support energy-efficient lamp sales, and will enable NEEA to more effectively address the objective of "better understand drivers of customer decision-making regarding lamp purchases and influences on those decisions".

# NEEP RLS Report Reference



Nearly all PAs have educational materials helping consumers interpret and use the Federal Trade Commission's Lighting Facts Label and to use lumens, rather than watts, as the primary means to select the right lamp. Several PAs provide, or plan to provide, consumer point-of-sale information on LED dimming and dimmer compatibility.

The proposed Connecticut Energy Plan... Increased need for customer marketing and education to target customer segments that have not been installing efficient lighting

Partner with manufacturers, retailers, and ENERGY STAR to improve marketing, messaging, and education on key issues, including dimmer compatibility, using the right lamp for the application, and the most efficient lamp choices... consumer education is a significant barrier to success. Deeper, more collaborative, and more strategic marketing and messaging is necessary to overcome this barrier.

- All parties work with LUMEN and regional groups to develop consistent consumer messages informed by ongoing market research to understand how to build consumer acceptance of and satisfaction with high efficiency lighting products
- PA messaging may need to be more targeted on driving consumers to efficient product choices and/or value of ENERGY STAR label
- All parties leverage EISA standards and new FTC lamp labeling as an opportunity to move consumers to efficient lighting choices

# D&R Res Lighting Market Profile



- Review and compilation of research, market and program history specifically focused on promoting efficient lighting
- Suggests understanding choice architecture is important to ensuring program success
- Power of suggestion
  - “Buy 5 bulbs and save \$30 a year” vs “buy some bulbs for your home and save”

## Valuable Research finding:

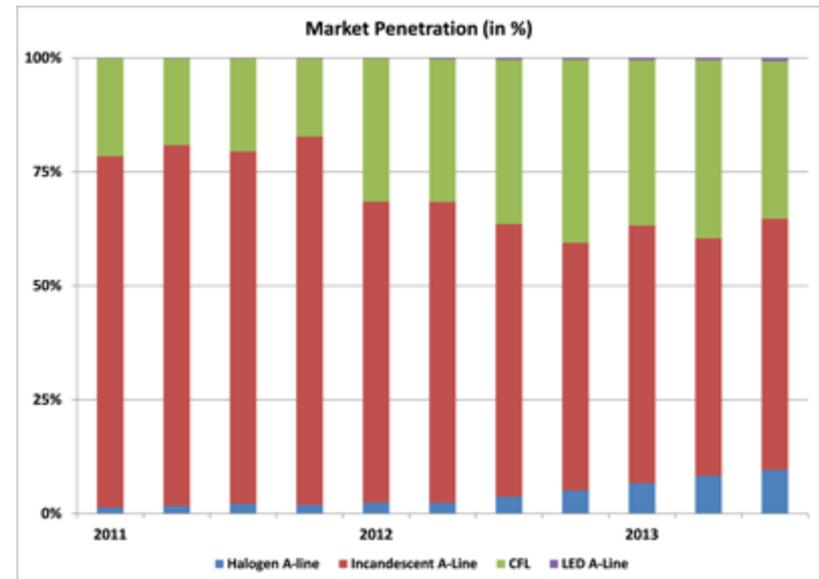
- 10-15% sales increase from good POP
  - 300-700% sales increase from an in-aisle stack out offer of \$0.99 CFLs
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- Source: 2012 D&R International, Ltd [betterdatabetterdesign.com](http://betterdatabetterdesign.com)

# Other research insights



- “One study from Duke University estimated that habits, rather than conscious decision-making, shape 45 percent of the choices we make every day”  
[http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html?pagewanted=2&\\_r=2&hp](http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html?pagewanted=2&_r=2&hp)
  - The majority of consumers habitually buy incandescent bulbs

- Yours?



- Consumer lighting research on marketing and communication:
  - EEPS studies
  - Lighting MFG studies
  - Academic approaches

# Discussion



- Guiding Principles
  - It is not enough to confirm what we already know, that people are confused with what is out there and the features that drive their lighting purchase decisions.
  - Stakeholders need practical applications such as what messages and ways of displaying information are most effective and what are not effective.
- Example of Desired Outcome
  - Messages of XZY are more useful in driving X consumer segments (lowest common denominator audience) to buy efficient lighting.
- Potential Research Approaches
  - Past research consolidation
  - Identify consumer segments
  - Qualitative
  - Quantitative

# Source Contributors



- Program/Product Managers, Marketers, and Market Researchers
- Lighting manufacturers
- EPA lighting research library
- LUMEN
- Academic: Lighting Research Center & CLTC
- Others?

# Framework

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- Research pathways
- Vendor suggestions
- Parameters
- Timeline
- Next steps

# Next Steps

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- Advisory committee?
- Funding?
- Research?

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