

2013 DOE SOLID-STATE LIGHTING MARKET INTRODUCTION WORKSHOP

November 13–14, 2013 • The Benson Hotel • Portland, OR

Workshop Agenda

DAY 1 — Wednesday, November 13

7:00 a.m. *Registration Opens and Continental Breakfast*

8:00 a.m. **Welcome & Introduction**

In just a few short years, the lighting world has changed from familiar and predictable to dynamic and complex. Utility and energy efficiency program managers today must master a flood of information on ever-changing LED products in order to evaluate when and how to include these products in their programs. New-generation products are emerging continuously, prices are dropping rapidly, and performance and quality continue to improve. So how do you create programs that accurately reflect the dynamics of today's lighting market?

James Brodrick, Lighting Program Manager, U.S. Department of Energy

8:30 a.m. **Cost Effectiveness—Utility Perspective**

Despite falling prices, justifying cost effectiveness for LED products remains a challenge. Find out which products meet cost-effectiveness requirements, and why. Learn how others estimate cost effectiveness, and what data and assumptions they use. This panel will share perspectives and analysis from the Northwest Power and Conservation Council and Commonwealth Edison, plus a preview of a forthcoming DOE study that will provide useful price and performance forecasting to aid utility program planning.

Moderator: *Marc Ledbetter, Manager, Advanced Lighting, Pacific Northwest National Laboratory*

Jason Tuenge, Lighting Engineer, Pacific Northwest National Laboratory

Charlie Grist, Senior Analyst, Northwest Power and Conservation Council

John Delany, Program Manager, Commonwealth Edison

10:00 a.m. *Refreshment Break*

10:30 a.m. **Cost Effectiveness—Buyer/User Perspective**

This panel will continue the conversation on cost effectiveness, sharing perspectives from a large buyer and a local designer, and the Bay Area Climate Collaborative will share experiences using the DOE Municipal Consortium Financial Tool to help multiple cities evaluate the cost effectiveness of LED streetlights.

Moderator: *Kelly Gordon, Program Manager, Pacific Northwest National Laboratory*

Alison Erlenbach, Program Associate, Bay Area Climate Collaborative

Denise Fong, Principal, Candela Lighting Design and Consulting

Chris Magee, Executive Director of Sustainable Facilities, MGM Resorts International

12:00 p.m. *Lunch*

1:00 p.m. **Product Evolution**
Huge changes in the last few years have led to reduced costs and improved quality and performance for LED lighting products. This panel will explore the evolution of LED chips, product designs, optics, heat sink, and more, as lighting industry leaders discuss how their products have evolved and what's next on the horizon. When will the timing be right to move beyond replacement lamps, and what will the next wave bring?
Moderator: Jeff McCullough, Senior Research Engineer, Pacific Northwest National Laboratory
Marc Ledbetter, Manager, Advanced Lighting, Pacific Northwest National Laboratory
Fred Maxik, Founder and Chief Technology Officer, Lighting Science Group
Mike Watson, Vice President of Corporate Marketing, Cree, Inc.

2:30 p.m. *Refreshment Break*

3:00 p.m. **LED Lighting Facts® Recognition**
DOE will recognize a few select LED Lighting Facts partners who have demonstrated their commitment to actively and creatively integrate LED Lighting Facts into their selection process for LED products.

3:00 p.m. **Market Evolution**
This panel will take a closer look at the LED lighting market, sharing the latest DOE analysis on LED adoption trends. What market segments are taking off, and how does that impact energy savings? Plus hear industry experts share varied perspectives on market evolution: what changes have we seen in the last five years, what products sell, and why?
Moderator/Presenter: Dan Chwastyk, LED Program Lead, Navigant
Chris Brown, Chief Executive Officer, Wiedenbach Brown
Mark Voykovic, Merchant—Light Bulbs, The Home Depot

4:30 p.m. **L Prize®—What Time Tells Us**
The 60W lighting category is experiencing rapid changes spurred in part by the L Prize and now carried onward by market forces. Will the L Prize have the same impact in the PAR38 category? A look back—and a look ahead to what the future may hold.

5:00–7:00 p.m. **Networking Reception**

DAY 2 — Thursday, November 14

7:30 a.m. *Continental Breakfast*

8:00 a.m. **Resources and Tools—National Programs**

Find out how national programs and state requirements are evolving to keep pace with the lighting market, meet the needs of users, and drive greater energy savings. This panel will share updates from LED Lighting Facts®, ENERGY STAR®, the DesignLights Consortium®, and the California Energy Commission.

Moderator/Presenter: *Marci Sanders, LED Lighting Facts Program Director, D&R International*

Jon Linn, Manager, DesignLights Consortium

Taylor Jantz-Sell, Lighting Program Manager, ENERGY STAR

Mike McGaraghan, Senior Project Manager, Energy Solutions

10:00 a.m. *Refreshment Break*

10:30 a.m. **Resources and Tools—Regional Programs**

This panel will zero in on regional resources in the Pacific Northwest, and look at how the Northwest Energy Efficiency Alliance, Bonneville Power Administration, Energy Trust of Oregon, and Seattle Lighting Design Lab are evolving their programs to meet user needs and drive energy savings.

Moderator/Presenter: *Elaine Miller, Senior Initiative Manager, Northwest Energy Efficiency Alliance*

John Wilson, Non-Residential Lighting Programs Manager, Bonneville Power Administration

Fred Gordon, Director of Planning and Evaluation, Energy Trust of Oregon

Kurt Nielsen, Manager, Seattle Lighting Design Lab

12:00 p.m. *Lunch*

1:00 p.m. **Managing Risks**

Despite rapid improvements in LED lighting products, questions remain about product lifetime and reliability, color shift, flicker, dimming, and power quality. Learn more about these issues, and how to manage the risks they present.

Moderator: *Bruce Kinzey, Senior Research Engineer, Pacific Northwest National Laboratory*

Fred Welsh, President, Radcliffe Advisors

Michael Royer, Lighting Engineer, Pacific Northwest National Laboratory

Naomi Miller, Designer and Senior Scientist, Pacific Northwest National Laboratory

Michael Poplawski, Senior Lighting Engineer, Pacific Northwest National Laboratory

3:00 p.m. *Wrap-Up and Adjourn*