



Tuesday, August 19, 2008

ACEEE Summer Study at Asilomar, California

NATIONAL ENERGY POLICY: Somewhere Over the Horizon



Susan Watson,
ACEEE Energy Policy
Director

by Suzanne Watson

Next month, once lawmakers return from their August vacation, ACEEE expects a push by Congress for an energy bill. With an expensive heating season approaching and gasoline prices not likely to go much below the \$4 mark, voters are demanding action from Congress. Neither Democrats nor Republicans are going very far in this election season without supplying some form

of response. The response may come in the form of an economic stimulus bill (funding for low-income weatherization and allotting funds to taxpayers to offset the cost of energy) and/or a bill combining the renewable and energy efficiency tax extensions and limited off-shore oil drilling. Already ACEEE has been called on by Senate and House staff to analyze various energy-saving initiatives. ACEEE has testified before at least two Senate committees as recently as July on “how big efficiency” in the electric and transportation sectors. We expect our expertise will again be in high demand come September and extending into the following months.

Next year, climate policy will likely be one of the biggest issues on the agenda for the new administration and Congress. Both McCain and Obama have pledged to make climate change legislation a priority. Our best estimate right now is that a climate bill (cap and trade) is not likely early in 2009 due to the regional and inter-industry complexities involved and the need to put together a package that can garner 60 votes in the Senate. Given these difficulties with climate legislation, we think that a national cap and trade law is more likely to be enacted in 2010.

If climate change legislation is delayed until 2010, a significant energy bill could be enacted in 2009 as a first step. This bill will likely include some type of Renewable Energy Standard, quite possibly combined with an Energy Efficiency Resource Standard (for example, requirements for renewables and efficiency to equal a specific portion of electricity sales). Building code requirements and new equipment efficiency standards could be included as well.

ACEEE will continue its role as the facilitator and coordinator of

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Monday's Plenary Give Him a Good Night's Sleep!



**Kevin Dowling, VP
Innovation**

Philips Lighting was the first manufacturer to commercialize CFL bulbs in the 1970s, and has long been an innovator, as well as being the largest manufacturer of lighting products in the world. Last night's plenary speaker, Kevin Dowling, Philip's VP of Innovation, carries on that tradition through his work in developing solid-state lighting. “We aren't even near the

limits to this technology,” said Dowling. Technically, solid-state lighting, or LED lighting, is ready to be the next big thing after CFLs. The challenge that remains is making LED lighting affordable and ubiquitous. That is a challenge when you consider that today's incandescents work in 1880s-style fixtures. Dowling proved it in a backroom of the Smithsonian in Washington D.C. And in the progressive Pacific Northwest, after 15 years on the market, CFLs have achieved only 8% market penetration.

But LEDs are an easy sell. Compared to incandescent lights, which produce 10–12 lumens per watt (lpw), and fluorescents, which produce 90–100 lpw, the best LEDs produce approximately 100 lpw, have the potential to reach the 150–200 lpw level, can last 35 years and don't release any mercury into the environment. History has shown that the cost of LED technology has decreased, while performance has increased, both exponentially. Dowling expects LED lighting performance to continue increasing 35% per year while the price decreases about 20% per year, and that in 24–36 months LED lighting will reach the level of linear fluorescent lights in light output per watt of energy use.

LEDs have evolved from mostly lighting that attracts attention to lighting that illuminates. LEDs can produce a range of color temperatures, from cool to warm. It has been installed in the Old



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Champions of Energy Efficiency

Steve Nadel, Executive Director of ACEEE, introduced two out of the four 2008 Champion of Energy Efficiency award recipients before last night's plenary talk. He will introduce the other two award winners before tonight's plenary. This year there were 76 nominations put forward for the award, more than ever before.

The first Champion of Energy Efficiency award was presented to Environment Northeast. Dan Sosland received the award for the not-for-profit

organization that among other things led the effort in its region to begin a GHG cap and trade program. The organization is also largely responsible for a doubling in spending for energy efficiency in the region. For shepherding policies that engage stakeholders, substantially increasing energy efficiency investments, and institutionalizing support for energy efficiency in



Randy Moorhead of Philips Lighting and ACEEE's Steve Nadel

New England, Environment Northeast is a 2008 Champion of Energy Efficiency.

The second award was presented to Randy Moorhead, VP of Government Relations for Philips Lighting, on behalf of Philips Lighting, the leading manufacturer of lighting products in the world. Philips was the first to commercialize CFLs in the 1970s and has led the way in Europe and in the United States to ban the use of incandescent bulbs all together. Philips Lighting's efforts, along with that of ACEEE

and others, culminated in a provision to the U.S. Congress' 2007 Energy Independence and Security Act that in effect phases out the use of incandescents between 2012 and 2014. In legislative time, that's lightning fast! For leading the way toward replacement of conventional incandescent lamps in the U.S. market, Philips Lighting is a 2008 Champion of Energy Efficiency.

National Energy Policy, continued

a larger energy efficiency-related partnership of NGOs and private sector companies/associations working to define a plan of action to insure energy efficiency's role in a national cap and trade program. The recent Lieberman-Warner legislation, followed by the Boxer Amendment language, prompted ACEEE to convene a group of organizations to expressly promote energy efficiency in future cap and trade funding allocations. The Lieberman-Warner and Boxer bills addressed energy efficiency, but not nearly as comprehensively as we would like. Our analyses show that a more robust set of efficiency provisions (including funding for efficiency investments and R&D, as well as complementary policies such as building codes, appliance standards, and steps to reduce vehicle miles traveled) can help moderate the cost of climate change legislation. Since efficiency investments bring down the cost of emissions allowances, efficiency is one of the most effective ways to control costs.

Monday Plenary, continued

North Church in Boston to rave reviews from the curators of the historic church. Legislation is supporting the evolution of the lighting technology. Legislation and guidelines will raise lighting efficacy to at least 45 lpw by 2020, according to Dowling.

"I lose sleep over one thing," says Dowling. "That is that inferior LED products will find their way into the market and poison people against the technology." It's up to us to educate the public about the technology and to promote quality LED lighting in the marketplace to ensure that that doesn't happen; and that people like Dowling have a good night's sleep so that they can continue to innovate for us all.

ANNOUNCEMENTS

Canadian's Gathering

There will be a chance for the Canadians here at Summer Study to gather and socialize today beginning at 7:30 pm in room 810, Whitecaps. Beer and wine will be served. Please let Dennis or Pat Nelson, the hosts, know if you will be attending. You can e-mail Dennis at dennis.nelson@bchydro.com.

Left Out of Program Guide

The Summer Study program left out important information regarding the Panel 10 Roundtable today at 8:30 am in Chapel. Moderators are Anne Arquit Neiderberger of Policy Solutions and Bill Prindle of ICF International. The panelists for the discussion, "Leveraging Carbon Finance for Green Buildings" are Diane Grueneich of the California Public Utilities Commission, Roy McBrayer from the State of California, Bill Miller of PG&E, and Marc Stuart of Eco Securities.

Call for Abstracts

The International Energy Program Evaluation Conference (IEPEC) just released their Call for Abstracts! The conference will be held in Portland, Oregon for the first time! It will be held from August 11-14. Proposals are due December 5. Copies of the Call for Papers are available at the ACEEE Office at the Sand & Surf building.

New Magazine Called *Energy Efficiency*

There is a new journal strictly devoted to energy efficiency called *Energy Efficiency*! Copies of the first volume are available at the ACEEE Office at the Sand & Surf building—first come,

Announcements, continued

first serve! The Editorial Board welcomes submittals from all Summer Study attendees. In many cases, it may be some fine tuning of your ACEEE paper! Go publish!

Change In Order of Presentations

The order of presentation for today's Panel 11 session, beginning at 8:30 am in Dolphin, "Smart Growth for GHG Reduction," has been changed to:

Angela Morin Allen – Smart Mobility

Amanda Eaken – Quantifying the Third Leg

Joe Di Stefano – Green Location

MYTHBUSTING FACT #3

Don't spend time warming up the car when it's cold outside. While it is best to avoid stressing the car while the engine is cold, simply drive a bit more "gently" for the first few minutes. Also, idling a modern car always wastes more energy than turning it off (even for short periods of time).

Tonight's Plenary



Jamais Cascio, Research Affiliate with The Institute for the Future, will speak at tonight's plenary on "Things to Come: Foresight, Implications and Opportunities."

Cascio covers the intersection of emerging technologies and cultural transformation, focusing on the importance of long-term, systemic thinking. Cascio speaks around the world on issues including the global environment, technological transformation, and social change. Cascio is an affiliate at the Institute for the Future, the Director of Impacts Analysis for The Center for Responsible Nanotechnology, and a fellow at the Institute for Ethics and Emerging Technologies. Cascio co-founded WorldChanging.com, the award-winning website identifying models, tools, and ideas for building a "bright green" future, and now blogs at OpenTheFuture.com.

PANEL 12: DISPLAYS & POSTERS

Tuesday, August 19

4:00 pm - 6:00 pm

All Displays and Posters are located in MERRILL HALL

The Pursuit of Affordable Zero Energy Homes

Patricia Love, Oak Ridge National Laboratory, and Elizabeth Brown, National Renewable Energy Laboratory

Lighting for Tomorrow: Solid State Lighting (SSL)

Kelly Gordon, Battelle Pacific Northwest National Laboratory

Savings by Design: A Retrospective from 1999-2005

Kevin Cracknell, RLW Analytics, Inc.

Energy Smackdown – Where Carbon Emissions Hit the Mat

Angela Li, National Grid

Too Many to Measure: In-Situ Sample Design and Data Collection for Residential Plug Loads

Jarred Metoyer, RLW Analytics

Energy Savings and Costs of Different Architecture 2030 Scenarios

Tina Kaarsberg, U.S. DOE

Interactive Software Display: BEopt and SEAT

Craig Christensen, National Renewable Energy Laboratory

High Performance High-Rise Multifamily in California

Heather Larson, Heschong-Mahone Group, Inc.

A Cooperative Process for Developing and Adopting "Green" Building Codes at the Local Level

Lisa Skumatz, Skumatz Economic Research Associates

EnergyPlus

Drury Crawley, U.S. DOE

New EnergyPlus Model Generation Tools: Example File Generator and Sketch Up Plugin

Shanti Pless, National Renewable Energy Laboratory

Promoting Combined Heat and Power for Multifamily Properties

Robert Groberg, HUD

Breaking Down the Barriers to Efficiency Improvements in the Rental Housing Market: One Utility's Approach

Michael Volker, Midwest Energy

Best Practices and Lessons Learned from EPA/DOE's Home Performance with Energy Star Program

Chandler Von Schrader, U.S. EPA

Adapting to Serve the Commercial New Construction Market in Oregon

Tom Giffin, Science Applications International Corporation

Implementing a Resource Conservation Manager Program at Puget Sound Energy

Bobbi Wilhelm, Puget Sound Energy

INFORMAL SESSIONS

2:00 pm - 4:00 pm

Residential Plug Loads and Controls: What's New, What's Next?

Ryan Kerr, Consol (**Dolphin**)

Methods of Achieving Widespread Adoption of Energy Efficiency

Kendra Tupper, Rocky Mountain Institute (**Evergreen**)

Clothes Dryers and TopTen: New Savings from Emerging Technologies

Chris Calwell, Ecos Consulting (**Heather**)

Energy Star for Solid State Lighting

Jeff McCullough, Pacific Northwest National Laboratory (**Fred Farr Forum**)

RESNET International Initiatives Advisory Group Meeting

Steve Baden, RESNET (**Kiln**)

What Role Should Utilities Play in the Coming Smart Energy World?

Harvey Michaels, Michaels Energy Strategy and Analysis (**Oak Shelter**)

Moving Toward Zero Carbon Communities (ZCCs)

John "Skip" Laitner, ACEEE; George Burmeister, Colorado Energy Group, Inc. (**Nautilus**)

Innovation in Energy Research and Development - and Deployment: What If Money Didn't Matter?

Suzanne Watson, ACEEE (**Triton**)

New Frontiers in Building Energy Codes – Part 2

Harry Misuriello, ACEEE (**Toyon**)

Program for the Evaluation and Assessment of Residential Lighting (PEARL) Board meeting

Chris Granda, Vermont Energy Investment Corporation (**Curlew**)

Emerging Technologies Update – Are we Ready for Regional / (Inter)national Collaboration?

Jonathan Livingston, Ecos Consulting (**Sanderling**)

Public Housing Benchmarking Project

Richard D. Santangelo, HUD, Office of Public and Indian Housing (**Chapel**)

Does Early Replacement of Residential Central Air Conditioners Represent A Viable Energy Efficiency Program Opportunity?

John Taylor, Consortium for Energy Efficiency (**Acacia**)

Presidential Election: Energy Efficiency Community Mobilizing for Obama

Steve Schiller, Cleantech and Green Business for Obama
Steve Cowell, Conservation Services Group (**Marlin**)

Closing the Loop: Improving Measured Performance Feedback for Commercial Buildings

Cathy Turner, New Buildings Institute (**Scripps**)

The Energy Efficiency Workforce

Chuck Goldman, Lawrence Berkeley National Lab (**Pirates Den/Tide Inn**)

NEB Valuation in TRC Calculations

Christine Gustafson and Jillian Mallory, BC Hydro (**Scripps Living Room**)

Closing the Loop—Feedback on Measured Performance

New Buildings Institute (**Lodge Living Room**)

>70% Water and >30% Energy Savings in Europe—The U.S. Challenge

WSP Environmental, Sweden (**Hearth**)

Home Performance with Energy Star—the rest of the story...marketing, financing, real estate, professionals, workforce development, reducing rigor on contractors, etc.

Patricia Plympton, Navigant Consulting, Inc. (**Embers**)

Integrating Externalities and Customer Behavior with Traditional Cost/Benefit Analyses: California Demand Response Cost-Effectiveness Protocols

Joy Morgenstern, CPUC (**After Glow**)

BOX LUNCHES

Planning a lunch outing? If you'd like to order a box lunch for Thursday and/or Friday, sign up at least 48 hours in advance in the ACEEE Surf and Sand Office.



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Got Something to Report?

If you have any announcements, updates, or important information related to events here at ACEEE, drop them off at the Grapevine Office (Room 509 in the Pirates' Den) or email them by 3:30 pm to jgunshinan@homeenergy.org.