ACEEE
American Council for an Energy-Efficient Economy

the grapevine

Thursday, August 16, 2012 ACEEE Summer Study at Asilomar, California

Major Oil Savings in Sight from New Fuel Economy Standards

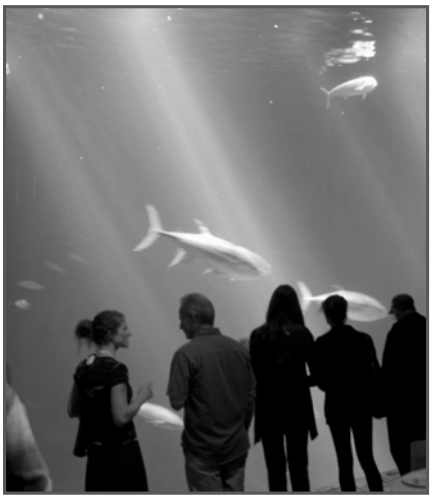
Therese Langer
ACEEE Transportation Program Director

This month federal agencies are expected to finalize new fuel economy and greenhouse gas emissions standards that will raise average car and light truck fuel economy to 49.6 miles per gallon by 2025. We estimate the new standards together with the model year 2012-2016 standards adopted in 2010 will reduce oil consumption by 3.1 million barrels per day by 2030. As a result, personal vehicles will be consuming under 7 million barrels of oil per day in 2030, levels last seen in the mid-1980s.

The new standards, which the automakers support, are among those recently attacked by anti-regulatory economists claiming that "current energy efficiency initiatives do very little to address climate change." In fact, the standards will reduce vehicles' greenhouse gas emissions by 35 percent. As for the consumer economics of the rule, EPA and DOT calculate that model year 2025 vehicle prices will rise $2,000 on average as a result of the higher standards. Fuel savings will pay back that price increase in less than four years and deliver $3,000 to $4,400 in net savings over the life of the vehicle, assuming gas prices remain at today's levels. And a joint ACEEE-BlueGreen Alliance report found the standards would create more than a half million jobs by 2030.

Of course, fuel consumption in 2030 depends upon factors beyond the efficiency of the vehicle fleet. Our projections of consumption adopt the Energy Information Administration's assumption that the U.S. will return to about 1.3 percent annual growth in vehicle miles traveled once the economy recovers. But an alternative scenario is presaged by recent articles on the behavioral aspects of vehicle use: young people are learning to drive later, and driving less, for a variety of reasons: they're more likely to live in urban areas, they socialize online; and for the time being, many can't afford to drive. The trend toward less driving began before the recession did, though, and is expected to outlast it. According to University of Michigan researchers, if recent vehicle licensing declines were to persist over the next twenty years, those in their peak driving years in the 2030s would be about 10 percent less likely to have a license than those in the same age group are today. That shift could add 50 percent to the oil savings delivered by better vehicle fuel economy.

Summer Study Takes Over the Monterey Bay Aquarium



Trolling for epicurian delights, the visitors were only outnumbered by sardines and jelly fish.

ANNOUNCEMENTS

JOB OPPORTUNITIES

Northeast Energy Efficiency Partnerships, Inc. (NEEP) is seeking a full-time manager for the Regional Evaluation, Measurement and Verification Forum ('the Forum'), a project launched in 2008 to facilitate the development of consistent EM&V savings and reporting protocols across the Northeast and mid-Atlantic region for demand-side resources, with focus on energy efficiency resources. The primary responsibility of the Manager is to oversee the Regional Energy Efficiency Database (REED), a project of the Forum being launched in fall 2012 – which aims to collect, aggregate, compare and analyze EE program data from all 10 Forum jurisdictions in a consistent and transparent format. REED management involves overseeing the launch of REED in late 2012, managing project contractors, providing technical support to the states and program administrators to provide and use REED data, facilitating a project committee, conducting/overseeing analyses and report preparation, managing NEEP's interface with REED users and other key stakeholders (e.g., regional transmission organizations, state and federal agencies), presenting briefings to target audiences, and assisting REED planning and product development. For more information, see the full job description.

LBNL/EETD: Leader, business and program development. The Environmental Energy Technologies Division (EETD) of Lawrence Berkeley National Laboratory seeks an experienced professional to join the division's leadership team to drive strategic program and business development. Please direct all inquiries to aarthi@ceaconsulting.com.

PECI job opportunities include:
Senior Engineering Manager
Technical Manager-Evaluation & Research
Energy Analyst
Engineer/Energy Analyst
Proposal Coordinator
Additional job opportunities from Center for Energy and Environment, Heschong-Mahone Group, PECI as well as other position descriptions are posted on the board at Surf and Sand.

Perry & The Pumpers See Perry & the Pumpers at Thursday Night Dance Party. 8-11pm Merrill Hall. **New Release:** *Movin' at Midnight.* Compact disk $15 Available at ACEEE Registration.

ET Summit

If new technology developments are your thing, don't miss out on the opportunity to register for the 2012 Emerging Technologies Summit (ET Summit) hosted by Southern California Edison at the Pasadena Convention Center, runningMonday, October 15 through Wednesday, October 17. Co-founded by the Emerging Technologies Coordinating Council and ACEEE in 2004, the ET Summit highlights recent developments and best practices to generate and validate new measures and practices for utility and government programs. This year's theme is "Leading the Way to an Energy Efficient Future."

The **ET Summit** is the biennial gathering of thought leaders from across North America in emerging technologies and implementation approaches for the energy efficiency, demand response, customer-facing smart grid, and related topics. The 2012 conference will feature on-site tours, exhibits by 50 leading companies producing cutting edge technologies, plus fourconcurrent session tracks on lighting, HVAC, whole building systems, DR and behavior, and advancing Emerging Technologies. Go to www.ETSummit.com for more details and to register.

Take *The Grapevine* online survey!

Given Asilomar's widespread WiFi and cell coverage, *The Grapevine* staff would like to poll our readers about how you access Summer Study program information. Would you prefer to have a digital edition of *The Grapevine* in addition to, or instead of, the print edition? Do you use your SmartPhone, tablet or laptop at other conferences to access session information and send or receive real-time updates about meeting room assignments and other breaking news? If so, tell us which online meeting resources or features you liked best. Enter your survey responses online at http://conta.cc/QAFduO or contact Tom White, *Grapevine* Managing Editor, at twhite@homeenergy.org.

HEARD IT THROUGH *THE GRAPEVINE*

At his Panel 13 talk on Wednesday, Harvey Sachs wondered whether retrofitting housing is always a good idea, given the time, cost and difficulty of getting deep energy savings. Wouldn't locations with densities too low to support good mass transit, and with thoroughly depreciated infrastructure, be better suited to demolition and rebuilding with quality, precision-built housing where energy efficiency is designed in from the start? And with densities high enough to support transit?

"For water heaters, the magic is the higher EF, not tank vs. tankless."

"I'm more like a trail guide than an instructor. It's not about what I know—it's more about what trainees can learn."

"Non-energy benefits are the biggest motivators for retrofits"

"Deep energy retrofits are not necessarily low energy homes—that's a separate goal"

INFORMAL SESSIONS 2-4 pm

Appliance Efficiency through Standards & Labels: Research from CLASP's Global and Country Programs. My Ton and Debbie Karpay, CLASP. **ROOM:** Acacia

Higher Market Penetration Results: Applying Upstream Program Model to Water Cooled Chillers and Variable Refrigerant Flow Air-Conditioners and Heat Pumps. Jim Hanna, Energy Solutions. **ROOM:** Chapel

New Paradigms for Determining Gross Efficiency Savings: Your Turn. William Miller, Lawrence Berkeley National Laboratory, **ROOM:** Scripps

Will More Stringent Codes and Standards Signal the End of the Line for Energy Efficiency? Randal Higa, Southern California Edison. **ROOM:** Evergreen

What's Next for Natural Gas Efficiency Programs and Policies? Getting to 95% Efficient and Beyond… Elizabeth Noll, American Gas Association and Meg Waltner, Natural Resources Defense Council. **ROOM:** Fred Farr Forum

Energy—Efficiency—Education: What Works, What Is Missing In Efficiency Education To Achieve Better Results, Grow Utility Program Participation, and Make a Difference. Cadi Saunders and Glenn Mauney, Everblue. **ROOM:** Kiln

Super Efficient Clothes Dryers for the North American Market. Chris Wold, CLASP. **ROOM:** Oak Shelter

Streamlining Whole Building Commercial Programs Using Energy Information Software. Hannah Kramer, PECI. **ROOM:** Sanderling

HVAC Installation and Maintenance: Challenges and Uncertainties in Field and Laboratory. Kristin Heinemeier, UC Davis Western Cooling Efficiency Center and Robert Mowris, Verified, Inc. **ROOM:** Toyon

Sea Change in Energy Use: How Might Government Support Something Beyond Incremental Conservation and Efficiency? Mithra Moezzi, Portland State University.**ROOM:** Triton

Scaling Multifamily Retrofit Programs: A Discussion of Design, Implementation, and Evaluation Strategies. Sophia Hartkopf, Heschong Mahone Group. **ROOM:** Marlin

Energy Efficiency through Smart Meters and Controls. Garth Torvestad, Benningfield Group. **ROOM:** Afterglow Living Room

The Deep Path to Energy Savings—How Can Our State Of The Art Policies Be Standard Practice by 2020? Peter Graham and Jens Laustsen, Global Buildings Network Performance. **ROOM:** Heather

SEMP: Is It The Next Big Thing in Achieving Deeper, Sustainable Energy Savings in Commercial, Institutional, and Industrial Markets? Jim Volkman, Strategic Energy Group. **ROOM:** Hearth Living Room

Attributing Energy Code Savings to EE Programs. Julie Michals, Northeast Energy Efficiency Partnerships, Inc. **ROOM:** N. Longview

Performance Contracting and Transforming Building Energy Efficiency Markets: Challenges and New Approaches in Russia, China and Other Countries
Sha Yu, Pacific Northwest National Laboratory. **ROOM:** S. Longview

Advancing a Combined Efficiency Specification for Combined Unitary HVAC and Energy Recovery Ventilation Systems. Bjorn Jensen, Consortium for Energy Efficiency. **ROOM:** Embers Living Room

Energy Training for the Buildings Sector: What's Next? Michael Bobker, CUNY Building Performance Lab, **ROOM:** Manzanita 1

Are You Getting the Data You Need? Sharing New and Innovative Approaches
Stephen Bickel, D & R International. **ROOM:** Willow Inn 1

Asilomar's Green Thread® Environmental Program

You may have noticed some changes at Asilomar. Since just before the last Summer Study, the conference grounds are being managed by a new concessionaire, Aramark Parks & Destinations. Aramark was awarded a 20-year contract to operate Asilomar in 2009. When Aramark took over operation of Asilomar they did not retain Delaware North's ISO 14001 environmental management certification. Jane Beattie, Director of Interpretation and Environmental Programs is responsible for developing new procedures that will regain that certification.

According to ISO, the 14001 standard specifies "requirements for an environmental management system to enable an organization to develop and implement a policy and objectives which take into account legal requirements and other requirements to which the organization subscribes, and information about significant environmental aspects. It applies to those environmental aspects that the organization identifies as those which it can control and those which it can influence. It does not itself state specific environmental performance criteria."

Aramark develops and implements environmental stewardship programs and policies within the areas of sustainable food; responsible procurement; green buildings; energy and water conservation; transportation; and waste stream management. They call these programs and policies their Green Thread® Environmental Program.

PANEL 14: DISPLAYS & POSTERS – MERRILL HALL

4:00 pm – 6:00 pm Thursday, August 16

ORNL MAXLAB Flexible Research Platforms
Heather Buckberry, Oak Ridge National Laboratory

Energy Management Control Framework of Optimization Control and Operation for Energy Efficient Buildings
Kun Ji, Siemens

An In-Depth Analysis of Space Heating Energy Use in Office Buildings
Hung-Wen Lin, Industrial Technology Research Institute

Playing Together in the Sandbox: A Collaborative Model for Estimating Regional Impacts from Codes and Standards
Ryan Firestone, Navigant Consulting, Inc.

A Win-Win-Win for Municipal Street Lighting: Converting Two-Thirds of Vermont's Street Lights to LED by 2014
Gabe Arnold, Optimal Energy

Simulations without Experts: ECOnirman: A Whole Building Code Compliance Tool for India
Prasad Vaidya, The Weidt Group

Top List of Excellent Energy-Saving Products and Manufacturers Program in China
Peng Yanyan, China National Institute of Standardization

Development of LED Standards in India
Eric Gibbs, CLASP

Lighting Controls Savings: Pre-and Post-Install Metering Results
Lauren Mattison, The Cadmus Group, Inc.

Energy Management Controls: How Much Can They Save?
Joe St. John and Karen Maoz, DNV Kema

Architecture 2030 Goals Right Now
Alan D'Souza, The Weidt Group

Status and Opportunities for Improving the Consistency of Technical Reference Manuals
Tina Jayaweera, The Cadmus Group

Online Communities for Creating Change: Home Energy Pros
Diane Chojnowski, Usability.org

Relationship between Energy Labels and Actual Energy Usage in Dutch Dwellings
Dasa Majcen, OTB Research Institute

Raising the Bar: Getting Large Energy Savings through Programs that Support Energy-Efficiency Codes and Standards
Allen Lee, The Cadmus Group

Electrifying China's Power Sector with Efficiency: Quantifying the Potential Impacts of Power Sector Policies
Nina Zheng, Lawrence Berkeley National Laboratory

How Do In-Home Energy Displays Facilitate Energy Reduction Behavior
Claudia Barriga, UC Davis – Western Cooling Efficiency Center

The Price of Business-as-Usual: Two Energy Futures for the Carolinas
Jonathan Kelman and Bridget Herring, Mathis Consulting Company

Defining Devices: A Revised Typology of Energy Feedback Technology
Beth Karlin, University of California, Irvine

HOT WATER: How Cool Can It Keep Us? The Potential Contribution of Cutting-Edge Water Heating Technologies and Practices to GHG Mitigation: A Scenario Analysis
Jens Laustsen, Global Buildings Network Performance

An Empirical Model for Predicting Electric Energy Resource Acquisition Costs in North America: Analysis and Application
John Plunkett, Theodore Love, Green Energy Economics Group, Inc.

Smart Grid Research: Building Infrastructure for the Future
Cris Love, Peter Douglas, ASERTTI

A Regional Assessment of Solar Heat Management via Dynamic Window Coatings
Nicholas DeForest, Lawrence Berkeley National Laboratory

Amnesty for Ancient Boilers
Matthew Greco, City and County of San Francisco, Department of the Environment

Software Demonstration—Operationalized ASHRAE/ACCA Quality Maintenance Standards Including Diagnostics and Reporting
Brian Kohler, Field Diagnostics, Inc.

Controlling Capital Costs in High Performance Office Buildings: A Review of Best Practices for Overcoming Cost
Paul Torcellini, Shanti Pless, National Renewable Energy Laboratory

Scaling Up: Community-Wide Residential Building Energy Modeling
Craig Christensen, National Renewable Energy Laboratory

"Never turn down a job because you think it's too small; you don't know where it can lead"

Julia Morgan, 1872-1957
the original YWCA architect for Asilomar

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