

Tuesday, August 14, 2018

ACEEE Summer Study at Asilomar, California

Second SEM Summit

This Wednesday afternoon here at Asilomar, I hope you will join me for the SEM Collaborative's second SEM Summit. This gathering will build on the success of the first summit, held last year prior to our Summer Study on Energy Efficiency in Industry, because we know that a lot of efficiency professionals in the commercial and industrial sectors are becoming involved in strategic energy management (SEM) programs.

These programs focus on people—those working in factories, office buildings, hotels, hospitals, water treatment facilities, you name it. Although as director of ACEEE's Industry program, I might geek out over smart manufacturing, I never lose focus on our priority of enabling people to manage energy.

Dozens of SEM programs exist across North America, involving hundreds of people. They do many great things for participating organizations, helping to train employees to manage energy in a systematic way by embedding efficiency into planning and developing energy management skills and knowledge. The SEM Collaborative brings together these people and their organizations to share best practices, improve their skills, and broaden their networks.

The SEM Summit occurs at 1:00–5:00 pm in the Chapel building. Everyone is welcome. The summit is free to Summer Study attendees so feel free to just show up. Others will need to register ahead of time or at the door and submit a payment of \$50.

In addition to tomorrow's summit, we are holding more SEM-related sessions this week. A Panel 8 session this morning includes two presentations on making SEM programs more effective and an informal session this afternoon looks at marketing these programs.

I would be remiss if I didn't also mention intelligent efficiency—the use of information and communications technologies to achieve new levels of energy savings. The conference program



**Ethan Rogers, Director,
Industry Program, ACEEE**

Continued on page 2

Tech: Does it Hurt or Help?

In last night's plenary, moderator Paul Mathew navigated a panel conversation discussing the adoption of available technologies to realize widespread energy efficiency opportunities.

Mathew asked the four panelists to identify barriers to the dissemination of their respective products. Fatima Crerar, from the smart thermostat manufacturer Ecobee, explained to the befuddled audience that outside this room most people don't think a lot about their thermostats. She stressed the importance of empathy when working with non-tech literate users, as well as providing support before, during, and after installation. Emma Bassein, from Carbon Lighthouse, cited the difficulty in getting and keeping the attention of large commercial building owners so that her firm can make their business case for a deep energy retrofit, or "prospecting for efficiency," as she colorfully termed it.

Following up, Mathew asked how we can make energy efficiency exciting to people who do not naturally find it so. Colin Sng, from FirstFuel, explained that medium, small, and micro businesses are especially hard to reach when attempting to suggest low and no-cost strategies for reducing energy consumption and energy costs. FirstFuel has developed automated suggestions that target business owners when energy issues are most salient to them—such as after having just received a large energy bill.

YeYe Zhang from Google explained their "convenience is queen" approach to the design of their Nest smart thermostat. Its smooth round design is intended as both an approachable and familiar homage to the venerable mercury thermostats of yore, as well as a designed item conveying beauty and allure. This desirability extends to efficiency, the thinking goes.

The floor was opened to audience questions, which touched on issues including cyber security and privacy, demand response, and the prickly (in)compatibility of utilities and growth tech company collaborations. One audience member asked: "Am I the only one who feels icky when I hear a technology company say they want to be omnipresent?" Another inquired about efforts to make these technologies available to people at all income levels. One question seemed to reiterate the panel's titular, fundamental question about whether tech helps or hurts efficiency, which seemed to go unanswered.

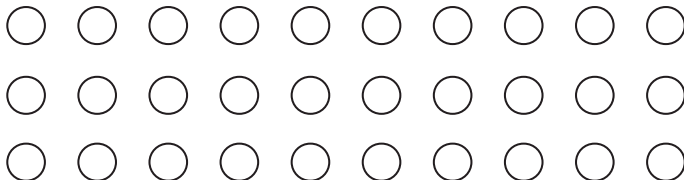
Second SEM Summit continued

reflects how much this topic now permeates all aspects of energy efficiency. It includes a Panel 8 session on data analytics in behavior programs and a Panel 11 session on these analytics in resiliency planning. Panel 12 sessions explore cloud computing, smart building technologies, the Internet of Things, artificial intelligence, and blockchain. Intelligent efficiency has certainly come of age, and we can pause for a minute and recognize our collective success in reaching this milestone.

OK, that was long enough. I'd also like to invite you to our next Industrial Summer Study—in Portland, Oregon August 12-15th. We will focus on empowering people, establishing policies, enhancing processes, and inspiring action to achieve a sustainable future. And, yes, we will focus again on smart manufacturing, intelligent efficiency, and SEM. The SEM Collaborative will hold its next summit there, followed by a gathering of several US Department of Energy's Manufacturing USA innovation institutes. Leaders from Clean Energy Smart Manufacturing Innovation Institute (CESMII), Power America, and Rapid Advancement in Process Intensification Deployment Institute (RAPID) and other institutes will meet for the first time to discuss how they can collaborate.

I look forward to meeting with you this week and seeing you again at next year's Summer Study.

Ethan Rogers, Director, Industry Program, ACEEE



Linda Latham Scholarship

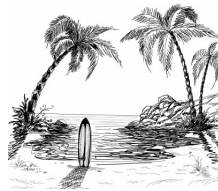
ACEEE grants a number of Linda Latham Scholarships to attend the biennial Summer Study on Energy Efficiency in Buildings. The scholarship was established in memory of Linda Latham who served as ACEEE's Chief Operating Officer until her untimely death in September 2011. Linda, who helped found the US government's ENERGY STAR® program, believed that students bring talent and creativity to the field of energy efficiency especially if we provide a venue to inspire and educate them.

2018 Class

Jamal Lewis – Columbia University
Claire McIlvennie – University of Vermont
Adam Hasz – MIT
Shoaib Azizi – Umea University (Sweden).
Conor Deane – National University of Ireland
Mary-Michael Robertson – University of Virginia

A FEW UPDATES TO THE SCHEDULE!

- Please note Safdar Chaudhry's poster "Smart Meter Data: Finding the Buried Treasure Within" will move to an oral presentation in Panel 6 (**Merrill Hall**) on Tuesday, August 14 8:30 am session. Presented by Ben Brown (PG&E) and Brandon Blitzman (RHA).
- Panel 10 update: Rachel Romero, originally scheduled for Friday 10:30 am session, has moved to Wednesday 8:30 am session (replacing Blake Herrschaft presentation).
- Panel 12 update: Panel Leader Larry Brackney will not be able to attend the Summer Study. Ramin Faramizi, from the National Renewable Energy Laboratory, will step in to help.



Be sure to check out the bulletin board in Surf and Sand for new job announcements.



40th Anniversary Video Booth

Help us celebrate ACEEE's upcoming 40th anniversary by telling your story on camera. We want to know why you got involved in energy efficiency and where you see the field going over the next 40 years. Come to Surf 'n Sand during your lunch break (12:00-1:30) on Monday, Tuesday, or Wednesday.

Aditya Keskar – University of Michigan
Hamed Hakim – University of Florida
Saranya Anbarasu – CEPT University (India)
Elaina Present - UC Berkeley
Arfa Aijazi - UC Berkeley
Neda Askari Tari -- Arizona State University
Carly Asadi -- Penn State University
Leopoldo Molina – Universidad Central de Venezuela.

Fourteen is the largest class they've ever had, double last year's class of 7. Clay Nesler, of the ACEEE Board, did the ask for funding for the scholarship; the ACEEE board provided matching funds of \$15,900, and many members of the audience dropped pledge cards in the baskets circulated by the Scholars.

TODAY'S INFORMAL SESSIONS 2-4 pm

Update on the Development of California's New eTRM

Jennifer Barnes, Future Energy Enterprises, LLC

ROOM: Nautilus

NMEC: How Routine are Non-Routine Events?

Faith DeBolt, SBW Consulting

ROOM: Oak Shelter

Challenges, Successes, and Experiences in Utilizing Advanced Analytics to Achieve Energy Savings

Bryce Dvorak, Michaels Energy

ROOM: Scripps

Choose Your Own Adventure: What Taxonomy Should Be Used for Residential End Uses?

Robert Fares, US Department of Energy Building Technologies Office

ROOM: Evergreen

Towards Collaborative Smart Thermostat Data Analytics

Ethan Goldman, VEIC

ROOM: Marlin

How Many Climate Change Deniers Does it Take to Screw in a Light Bulb? What Do We Know about the 2020 Light Bulb Energy Efficiency Standards?

Chris Granda, Appliance Standards Awareness Project

ROOM: Acacia

Zenarios – Setting Context to the ZNE Solution Space

Smita Gupta, Itron

ROOM: Toyon

Introduction to the New National Standard Practice Manual (NSPM) for Assessing the Cost-effectiveness of Energy Efficiency Programs

Martin Kushler, American Council for an Energy-Efficient Economy

ROOM: Heather

California Third Party Workpapers for Innovative New Technologies

Robert Mowris, Verified@, Inc.

ROOM: Willow Inn 1 Livingroom

My Campus is My Lab

Joel Swisher, Western Washington University

ROOM: Dolphin

Electrification of Residential Space and Water Heating: What's Happening and How Do We Address Some Challenging Issues?

Steve Nadel, American Council for an Energy-Efficient Economy

ROOM: Chapel

Data Access Solutions for Benchmarking: ENERGY STAR® Update

Tracy Narel, U.S. Environmental Protection Agency

ROOM: Fred Farr Forum

Energy Efficiency in Affordable Multifamily House

Stefan Samarripas, American Council for an Energy-Efficient Economy

ROOM: Triton

A New Funding Solution for Energy Infrastructure Replacement

Richard Santangelo, Apollo Engineering Solutions

ROOM: Kiln

Network for Energy, Water and Health in Affordable Buildings Meet Up

Faith Graham, NEWHAB

ROOM: Afterglow Living Room

SPECIAL EVENT RATES!

Summer Study attendees receive a special **\$100 registration discount** for the **Behavior, Energy & Climate Change conference** (October, Washington, DC), which is the premier international event on how human behavior and decision-making can spur the transition to an energy-efficient, low-carbon future. To register, go to the BECC website beccconference.org and choose the "SS" registration rate and enter code "Sustainable." This offer ends Thursday, August 16.

SSB attendees can also take advantage of **early-bird rates** this week to register for two new exciting ACEEE events: the Rural Energy Conference (October, Atlanta) and the **Conference on Health, Environment and Energy** (early December, New Orleans.) You can register on ACEEE's conference website aceee.org/conferences.

Got Something to Report?

We welcome suggestions for the next day's newsletter. If you have any announcements, updates, or information related to ACEEE events, drop them off at **Surf and Sand** to the attention of *The Grapevine* Staff in "Report Basket" or email them by 3:30 pm to ljackson@homeenergy.org. *The Grapevine* will also appear on the ACEEE Blog at www.ACEEE.org/blog.

the grapevine

is published by Home Energy Magazine

www.homeenergy.org

Jim Gunshinan & Leslie Jackson, Co-Managing Editors

Steve Greenberg, Chris Stratton, Reporters

Leslie Jackson, Production



PANEL 14: DISPLAYS & POSTERS – MERRILL HALL

4:00 pm – 6:00 pm Tuesday, August 14

The Air Source Heat Pump's Transformative Potential

Christopher Dymond, Northwest Energy Efficiency Alliance

A Toolbox Necessity: Finding Best Practices in High-Performance Homes with the Building America Solution Center

Chrissi Antonopoulos, Pacific Northwest National Laboratory

Teaching a New Thermostat New Tricks: Results from Four Runtime Optimization Pilots

Jonathan Koliner, Illume Advising

Tier 2 Advanced Power Strips – Advancing the Tool, Advancing the Customer

Amy Buege, Itron, Inc.

Getting Ahead of the Savings Curve: Utility Pay-For-Performance Program Design for Commercial Real Estate Customers

Emily Pearce, Waypoint Building Group

The BayREN Integrated Commercial Retrofits Project: An Introduction and Preliminary Results

Barry Hooper, Department of Environment, City of San Francisco

Preparing for Illumageddon: A Survivalist's Guide

Michelle Licthenfels, Bonneville Power Administration

Avoiding the Unintended Consequences of a Zero Net Energy Building Code

Rory Cox, California Public Utilities Commission

Things Aren't As Bad (or Good) as They Seem: Lessons from the DOE Residential Energy Code Field Studies

Jeremy Williams, US Department of Energy

Updating Home Energy Score Quality Assurance Procedures to Reduce Cost, Improve Quality, and Increase Program Scalability

Madeline Salzman, US Department of Energy

Who Wins the Pay-For-Performance Game? Measuring and Controlling Performance Risk

Hassan Shaban, Open Energy Efficiency

When the Lights Went Out: Achieving Residential Program Savings in a New Era
Michael Strom, NMR Group, Inc.

Market Transformation of Electronic Thermostats for Baseboard Heating in the Residential Sector: From Vision to Reality
Martin Poirier, Dunsky Energy Consulting

Building a Foundation on Moving Ground: Five Easy Steps to a Market Transformation Baseline

Joe Van Clock, Research Into Action, Inc.

Buy All the Shiny Things: Understanding Consumers' Purchase Behavior in a Transforming Market

Kiersten von Trapp, NMR Group, Inc.

Ceiling Fans in Commercial Buildings: Identifying Common Obstacles and Sharing Lessons Learned from Experience

Elaina Present, University of California, Berkeley

Commercial Building Energy Saver: An Open Web-based Energy Retrofit Analysis Toolkit
Tianzhen Hong, Lawrence Berkeley National Laboratory

An Easy Zero! Enabling Zero Net Energy Retrofits for Small Commercial Offices

Cindy Regnier, Lawrence Berkeley National Laboratory

Looking Ahead Can Be Easier: A New Approach to Efficiency Forecasting in Today's Changing Energy Landscape

Jay Pilliod, Vermont Energy Investment Corporation

Celebrating 40 Years of the Residential Energy Consumption Survey (RECS)

James Berry, US Energy Information Administration

Familiar Paths Can Lead to New Insights: Adding a Building Systems Efficiency Toolkit to the Whole Building Design Guide

Mikelann Scerbo, Alliance to Save Energy

Zero Energy Ready: Just Add Solar Panels
Theresa Gilbride, Pacific Northwest National Laboratory

Using Metered Plug Load Data to Sense Occupancy and Implement Controls

Rois Langner, National Renewable Energy Laboratory

Visualizing program impacts using GIS – Real data in action that people care about
Laurel Rothschild, The Energy Coalition

Local Power Distribution
Bruce Nordman, Lawrence Berkeley National Laboratory

Load Shifting in an Office Building Using PCM: A Case Study
Neda Askari

Technical Reference Manual (TRM) Power Rankings
Zack Tamble, QuadROI

Embedded Evaluation and Data Mining to Increase Audit Conversions
Jeff Ihnen, Michaels Energy

Using Machine Learning to Tackle Uncertainty of Deemed Savings
Zhing Zhang, DNV GL

Time to Move On: An Examination of Metering Periods for Small Business Direct Install Participants
Julian Ricardo, NMR Group

Energy Efficiency is Being Treated like a Resource!
Pace Goodman, Navigant Research

Using Evaluation Findings to Refine Energy Efficiency Program Design and Implementation
Jacqueline Berger, APPRISE

Building SEM into a Marketing Brand
Genevieve London, Stillwater Energy

The Path to Zero Net Energy and Achieving Zero Net Grid
Heidi Von Korff, Stanford University

More Reasons Why Outcome-Based Rebates and Changes to M&V are Needed
Eric Boxer, Go Sustainable Energy, LLC

Updating Rating Methods to Better Reflect Equipment Performance
Chris Perry, ACEEE

Polishing a Hidden Gem: A Novel Evaluation Method for Energy Codes & Standards Programs
Alyssa Na'im, NMR Group, Inc.