

Sunday, August 12, 2012

ACEEE Summer Study at Asilomar, California

# **Co-Chair's Welcome** Welcome to the 17th Biennial ACEEE Summer Study on Energy Efficiency in Buildings



Michael Brambley Pacific Northwest National Laboratory



Cindy Regnier Lawrence Berkeley National Laboratory

Industrialized nations worldwide must profoundly change their energy supply and demand habits, in part to better use available resources and maintain prosperity, but also to reduce carbon emissions and avoid the negative consequences of climate change.

In 2012 we find ourselves in a growing urgency to deploy energy efficiency in the marketplace, while real market barriers and obstacles continue to inhibit adoption. The world continues to struggle with economic stability, growth, and job creation, pulling attention and resources in other directions, while we continue to face the long-term global environmental threat of unbridled consumption of carbon-based energy sources. Yet in some areas of the world these dire needs are inspiring a shift to a renewables-based infrastructure and a dramatic decrease in energy

use. As we attend this Summer Study, Japan is experiencing a continued energy crisis post-Fukushima, and is in the throes of peak cooling season while their utility infrastructure has decommissioned its nuclear resources without an immediate supply replacement. Our 2012 theme embraces a concept of enabling smart growth within the confines of our current infrastructure by substituting conventional supply with increased efficiency, wise energy management, and changing practices: "Fueling our Future with Efficiency."

Recognizing these issues and the major contribution of the buildings sector to U.S. energy consumption, accounting for

Continued on page 2

# **Director's Welcome** Our Biggest Summer Study Yet!

On behalf of ACEEE I want to welcome all of you to the 17th biennial ACEEE Summer Study on Energy Efficiency in Buildings. This is our biggest Summer Study yet, with 384 papers being presented and about 1,100 participants. I hope you all learn a lot while having a good time.

ACEEE was formed in 1980 to host the first Summer Study and we



Steve Nadel Executive Director, ACEEE

have grown considerably since then. We now number nearly 50 staff who conduct research and engage in a wide variety of policy and educational activities. In 2012 we have already published 32 white papers and research reports and expect to complete nearly 30 more by year's end. If you are not already familiar with our research, I hope you will check out our reports. All of our publications are available for free download at www.aceee.org.

Over the course of this week, various ACEEE staff will be writing about some of our activities in *The Grapevine*. In the remainder of this column I want to talk a little about our policy activities.

ACEEE's policy work spans the gamut from federal to state to local. Much of our policy attention this year has been at the state level. We provide assistance to states to enact new efficiency policies, to help implement recently enacted policies, and to defend policies from attacks. A significant focus is on states that have not yet embraced energy efficiency but show interest in doing so. For example, we're engaged in Missouri, Kentucky, Louisiana, and West Virginia. In October we will publish our 6th annual State Energy Efficiency Scorecard which helps track progress in all 50 states.

At the federal level, Congress has been polarized and generally unable to take action this session, but we continue doing work on bipartisan energy efficiency initiatives that have a stronger chance of success, even in this environment. These initiatives include: building code, industrial, and several other efficiency policies in a bill championed by Senators Shaheen (D-NH) and Portman (R-OH); extensions and improvements to

Continued on back page

#### **Co-Chair's Welcome continued**

over 40% of total consumption and more than 70% of electricity use, the Obama administration announced the Better Buildings Initiative in February 2011. The Initiative aims at making commercial and industrial buildings 20% more energy efficient by 2020 through strategies involving partnering with leaders in industry, universities, and state and local government to showcase the best energy saving strategies, challenging college students to develop solutions to persistent barriers to energy efficiency, providing tools for assessing the value of energy efficiency in the building appraisal process, developing the workforce to deliver energy efficiency services, and assisting state and local governments to upgrade the efficiency of 100,000 buildings. Although ambitious and a critical contribution to improving the efficiency of the buildings sector, these actions represent only a portion of the effort necessary to fully address the challenge before us. Utility programs, codes and standards, research and development, and the commitments of individual companies, investors and homeowners are necessary to address the urgent need for greater energy efficiency and its associated benefits.

We must continue to pursue energy efficiency improvements in areas such as the building envelope, lighting, and HVAC equipment. These measures alone, however, will not enable the "deep" savings that a systems approach can provide and that we need. For example, we must target increasing miscellaneous energy loads (e.g., plug loads) and embrace opportunities at the community-scale. This year we have instituted a new panel on information technology based energy efficiency solutions. A continuing panel on human behavior and social dynamics recognizes that these areas are starting to be recognized as key elements to enabling reductions in energy consumption, yet present their own challenges to leveraging their potential. Training service providers and operators continues to grow as a field, but must be deployed more rapidly and at scale. We must continue to create performance-based codes and standards, pricing strategies, and training programs that facilitate and encourage energy efficiency

through good operation and maintenance practices, energy efficiency retrofits, and system integration in existing buildings. Together, these actions will result in a cleaner, more sustainable environment while paying dividends in terms of job growth related to energy efficiency.

Achieving aggressive goals rapidly on a large scale will require well-coordinated, multi-disciplinary, public-private partnerships, and substantial investments in research, development, and deployment. At this year's Summer Study, we'll once again discuss state-of-the-art technology, policy, and regulatory options for increasing energy efficiency in the built environment, and celebrate those who have demonstrated key achievements in these areas. Keynote speakers will likely challenge conventional wisdom in these areas and provide new perspectives. The Summer Study is possible because of the tremendous efforts by the panel co-leaders, the paper and poster authors, and the peer reviewers who worked with the largest number of abstracts and final papers in the history of the Summer Study. We'd like to thank these volunteers in particular for their dedication and efforts in supporting this event-their contributions are essential to the success of the Summer Study. We'd also like to thank the dedicated ACEEE staff, in particular Rebecca Lunetta, Glee Murray, Lynn Pyle, Steve Nadel, and Mallory Werthamer who along with many others helped assure that all who attend the Summer Study are given every opportunity to participate, learn, and network with the very best in the energy efficiency business.

Enjoy this opportunity to interact as part of the Summer Study's unprecedented gathering of building efficiency leaders among the inspiring natural beauty of Asilomar! **Michael Brambley** *Conference Co-Chair Pacific Northwest National Laboratory* **Cindy Regnier** *Conference Co-Chair Lawrence Berkeley National Laboratory* 

# 

#### **INFORMAL SESSIONS**

Participants are welcome to schedule informal discussions during designated afternoons of the Summer Study. Sessions are typically two-hour discussions about topics that relate to the theme of the Summer Study but do not have published papers or formal presentations. These sessions encourage group participation about topics that Informal Session organizers want to discuss. Organizers are encouraged to prepare brief introductions about the discussion themes to present at the beginning of their sessions. A sign-up sheet is posted (for time and room assignments) in the Summer Study office (Surf and Sand building). A list of Informal Sessions with times and locations will be announced daily in The Grapevine.

Informal Session times are:

Informal Sessions times are:	
Monday	2:00 pm – 4:00 pm
	4:00 pm – 6:00 pm
Tuesday	2:00 pm – 4:00 pm
Thursday	2:00 pm – 4:00 pm

# Welcome to Asilomar

# SUMMER STUDY OFFICE

The Summer Study office is located in the Surf and Sand building. At the Summer Study office you may check on daily events; pick up and leave messages; sign up for informal sessions; and clear up administrative details. Office hours are 8:00 am – 12:30 pm and 1:30 pm – 6:00 pm.

## **INTERNET LOUNGE**

The Internet Lounge is located in Curlew, a quiet space set up for speakers to prepare their presentations or for attendees to surf the Internet, check e-mails, or review a copy of the proceedings on CD. Four laptops with Internet connections will be available, as well as at least 4 wireless Internet connections for personal laptops. An additional laptop will be provided and will also be online as well as connected to a printer. Wireless connections will also be provided in and near the lounge. Hours for the Internet Lounge are 7:30 am – 8:00 pm.

#### **HOSPITALITY SUITE**

A Summer Study tradition, the evening Hospitality Suite is open to all participants in the Fred Farr Forum after plenary sessions. Snacks, beer, wine, and non–alcoholic beverages will be available.

## **TELEPHONE/FAX SERVICES**

Phone: (831) 372-8016 Fax: (831) 372-7227

Phones are not available in sleeping rooms, but there is a house telephone in each building for on-site calls. In case of emergency, an operator is available by dialing "0" from any house phone. A pay phone is located in the Hearst Social Hall and is available for local and long distance calls.

Faxes may be sent at the Asilomar Front Desk in the Hearst Social Hall, paying charges directly to Asilomar at the time. The cost is \$1.00 per page (no maximum) to send faxes within the U.S., and \$5.00 per page to send international faxes. The cost for fax transmittal is: Outgoing (local) \$1.50 first page, \$1.00 each additional page. Outgoing (within the U.S. & International) \$2.50 first page, \$1.50 each additional page. Incoming (all) \$1.50 first page, \$1.00 each additional page.

Any telephone messages received by the Front Desk will be

# **OPENING PLENARY SPEAKERS**

**Amory Lovins** () "Reinventing Fire: The Business Led Transition to Efficiency and Renewables"

Dr. Lovins is cofounder, Chairman, and Chief Scientist of Rocky Mountain Institute—an independent, entrepreneurial, nonprofit think-and-do tank that drives the efficient and restorative use of resources. His new book, *Reinventing Fire*, maps pathways for running a 158%-bigger U.S. economy in 2050, but needing no oil, no coal, and no nuclear energy. delivered to your room. If an emergency message is received, every attempt will be made to locate you immediately. There is also complimentary Wi-Fi service available in all our guest rooms at Asilomar.

Cell phone usage: due to the fact that cell phone and Asilomar's in-room fire alarm system operate on radio frequencies, occasionally a false alarm will sound if a guest is using his or her cell phone directly under under the alarm. If this occurs, security will arrive shortly to disarm the alarm.

## **BUSINESS CENTER**

The Business Center is located next to the Asilomar Front Desk in the Hearst Social Hall and is open from 6:30 am – 12 midnight daily. Wi-Fi service is offered complimentary in the Business Center and the Hearst Social Hall.

## GUEST RECREATION

Bikes can be rented from the Asilomar Park Store in the Hearst Social Hall from 9:00 am – 6:00 pm daily. Bikes are available for full day rental at \$26.00 or for half-day rental at \$18.00 (4 hours). Rental includes a map of the area and a helmet. Volleyballs, pool cues & balls, and board games can be found at the Asilomar Front Desk.

## **ASILOMAR FACILITIES**

Asilomar's 107 acres are dedicated to a natural ecological environment. Please walk on paved areas only. The dunes are a particularly fragile environment, and we request that you use the boardwalk that leads you to a vista point and to the beach. Please be aware that Poison Oak is abundant on the Asilomar grounds. We appreciate your use of the trash and recycling receptacles located throughout the grounds, as well as your efforts to conserve water.

Camping facilities are not available onsite, and sleeping bags are not allowed on the grounds. In addition, bikes are not allowed in the sleeping or meeting rooms. Recreational vehicles or any type are not permitted on site. No open fires are permitted on the beach. Wood cannot be collected in the forest. Asilomar State Beach is within the Pacific Grove Marine Refuge. Collecting of animals, rocks, shells and sand is not permitted.

Jane Long 🔘 "California's Energy Future: The View to 2050"

Dr. Long currently co-chairs the "California's Energy Future" study conducted by the California Council on Science and Technology, where she was recently elected as a Senior Fellow. Her work is in strategy for climate change including reinvention of the energy system, adaptation and geoengineering.

#### **Director's Welcome, continued**

energy efficiency tax credits; and consensus energy efficiency standards that have been negotiated with industry. We are also working on administrative actions that agencies can take under existing law, such as new fuel economy standards for passenger vehicles, appliance standards, improvements to building codes for manufactured housing, and incorporating energy bills into mortgage underwriting criteria. We've started preparing for next year's debates on tax reform by publishing a series of working papers on ways the tax code could be more "efficiency friendly." We're also beginning a new project on policies that address barriers to energy efficiency by leveraging the power of markets.

We also continue to expand our local policy activities. We recently published a report on sustainable funding strategies for many of the local efficiency programs that were begun with federal stimulus funding. We have an on-line calculator that can be used to develop first-cut estimates of the energy savings and economic development benefits of several specific local policies, and we are now expanding this to include more policies. And we are getting ready to produce our first Local Energy Efficiency Scorecard that will examine energy efficiency policies and accomplishments in the 25 largest metropolitan areas.

By working at all three levels of government, we believe we can maximize opportunities to advance energy efficiency policies.

#### THE GRAPEVINE DAILY NEWSLETTER

*The Grapevine* is published daily to highlight upcoming presen- tations and events, review events of the previous day, and list important announcements. It will be distributed each morning at breakfast in the **Crocker Dining Hall**, and in the **Surf and Sand** room. We welcome suggestions for the next day's newsletter.

#### Got Something to Report?

If you have any announcements, updates, or information related to events here at ACEEE, drop them off at the Surf and Sand room to the attention of *The Grapevine* Staff in "Report Basket" or email them by 3:30 pm to jpgunshinan@ 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

Tom White, Managing Editor

Steve Greenberg, and Jim Gunshinan, Reporters

Kate Henke, Production

# Sunday, August 12

3:00 pm – 8:00 pm

CONFERENCE REGISTRATION Surf and Sand Meeting Room

4:00 pm – 6:00 pm

#### OPENING RECEPTION

Hearst Social Hall, West Deck

All participants, families, and guests are invited to enjoy an informal reception on the West Deck of the Hearst Social Hall facing the Pacific Ocean. Greet your friends in the energy efficiency community after you register for the 2012 Summer Study.

# 6:00 pm – 7:00 pm **DI**

#### pm DINNER FOR REGISTRANTS Crocker Dining Hall

All Summer Study registrants staying at Asilomar are welcome to enjoy a special dinner at the Crocker Dining Hall. Off–site registrants are also welcome, but must purchase dinner ticketsfrom ACEEE Staff in the Surf and Sand Meeting Room.

7:30 pm – 9:00 pm

#### WELCOME AND OPENING PLENARY Merrill Hall

#### WELCOMING REMARKS

Carl Blumstein, California Institute for Energy and Environment Co–Chairs – 2012 Summer Study Michael Brambley, Pacific Northwest National Laboratory Cindy Regnier, Lawrence Berkeley National Laboratory

#### INTRODUCTION

**Steve Nadel**, *Executive Director American Council for an Energy-Efficient Economy* 

#### PLENARY

Amory Lovins, Chief Executive Officer Rocky Mountain Institute Reinventing Fire: The Business Led Transition to Efficiency and Renewables Jane Long, Chair, California's Energy Future Project (sponsored by California Council on Science and Technology Lawrence Livermore National Laboratory California's Energy Future: The View to 2050 SOCIALIZE

9:00 pm – 11:00 pm

#### Fred Farr Forum

The Hospitality Suite will be open in Fred Farr Forum following the plenary.