

---

# INFORMAL SESSIONS

---

**TUESDAY 2:00 PM – 4:00 PM**

**International Collaborations in Buildings Energy Efficiency with China and India**

Reshma Singh, *Lawrence Berkeley National Laboratory*; [reshmasingh@lbl.gov](mailto:reshmasingh@lbl.gov)

Two bilateral building energy R&D programs such as the US-China Clean Energy Research Center (CERC) and US-India Joint Center for Building Energy Research & Development (CBERD) are housed at Lawrence Berkeley National Lab. What are some of the opportunities and challenges, highlights and outcomes of these programs? Join our interactive panel and presentations about these programs and enjoy some international flavor.

**CEIP: An Opportunity for Low-Income Energy Efficiency under the Clean Power Plan**

Martin Kushler and Sara Hayes, *American Council for an Energy-Efficient Economy*; [MGKushler@aceee.org](mailto:MGKushler@aceee.org); [SHayes@aceee.org](mailto:SHayes@aceee.org)

In spite of the Supreme Court “stay” on the implementation of the Clean Power Plan (CPP), much activity is proceeding regarding the Clean Energy Incentive Program (CEIP) provisions of the proposed CPP. This session will provide an overview of this potentially excellent opportunity to advance energy efficiency in the low-income sector, including summarizing the latest information from the federal government (EPA, OMB) as well as presenting examples of activity in leading states. Come to hear the updates, and share information on plans and activities in your state(s).

**When the Rubber Hits the Road: EE Impact Measurement in an All-source Procurement Framework**

Christina Lawson (Torok), *Evergreen Economics*; [Lawson@evergreenecon.com](mailto:Lawson@evergreenecon.com)

This informal discussion will consider emerging EE performance requirements associated with DER competitive solicitations, and current EM&V methodologies. These worlds are fairly disconnected, but they attempt the same thing, to measure and verify savings. We will share examples of RFO-based contract performance requirements for EE grid services, and outline analogous protocol compliant evaluation methods. Participants are encouraged to present examples and will be invited to share their observations of key differences. How are the risk, cost, benefit and uncertainties different? How does this look to different stakeholders: implementer, administrator, regulator and ratepayer. What are differences in underlying information needs?

## **Strategies, Methods, and Best Practices for Estimating Behavior-based Energy-efficiency Potential**

Karen Ehrhardt-Martinez, *Navigant* and Michael Li, *United States Department of Energy*

[Karen.ehrhardt.martinez@navigant.com](mailto:Karen.ehrhardt.martinez@navigant.com); [Michael.Li@EE.doe.gov](mailto:Michael.Li@EE.doe.gov)

Come learn about methods used to account for behavioral savings in energy efficiency potential studies. The US Department of Energy recently held a workshop examining different approaches to estimate potential energy or carbon savings through behavior changes. We will share a little from this workshop, talk about the pros and cons of different approaches, their costs, and things to consider for future potential studies.

## **Supporting Industry Advancements in Next-Generation M&V (M&V 2.0) Methods, Tools, and Applications**

Ellen Franconi, *Rocky Mountain Institute*; [efranconi@rmi.org](mailto:efranconi@rmi.org)

“M&V 2.0” is a catchall phrase for how M&V tools and methods are leveraging ubiquitous data and powerful computing to enable broader industry changes. What this hot-button phrase means isn’t always clear. This open-discussion session will examine key considerations for understanding M&V advances; improving energy efficiency valuation methods; and supporting industry efforts to develop, apply, and advance the next stages of M&V methods/tools. A diverse team of stakeholders (RMI, DNV GL, PG&E, EnergySavvy, Open Energy Efficiency, LBNL and DOE) have collaboratively drafted a white paper on emerging M&V capabilities, and they will frame the issues and questions for discussion.

## **Leveraging Geo-Targeting and Data Integration to Tailor Energy Efficiency Program Delivery and Strategy**

Rich Crowley, *DNV GL*; [Richard.Crowley@dnvgl.com](mailto:Richard.Crowley@dnvgl.com)

During the first half of this Informal Session, the DNV GL team, utilities, and program administrators will present explanations of how we have used integrated data streams across program portfolios to conduct valuable spatial analysis, data visualization, and strategy development followed by Q&A. In the second half, the presenters will invite audience members to engage with us in an open discussion about how the above methods represent opportunities for expanding understanding of their own markets and customers.

## **Shining a Spotlight on the Shadow Economy HVAC Changeouts in California**

Amber Watkins, *DNV GL*; [Amber.Watkins@dnvgl.com](mailto:Amber.Watkins@dnvgl.com)

California law requires permits and code compliance (P&C) for new residential HVAC change outs. However, stakeholders characterize HVAC change outs as an “underground economy” with an assumed P&C rate of 10%. It is also assumed that increasing the P&C rate will result in improved efficiency. The CPUC commissioned this study to start establishing and estimating metrics to assess progress toward the state’s goal to improve P&C. This discussion includes: the studies multiple applied methods and metrics, qualifying the level of savings (or lost opportunities) for HVAC change outs, managing response bias in an underground economy, and variability of code requirements and access to date.

## **Where are the Deltas? — Opportunities for Energy Efficiency Programs in a Time of Rising Baselines**

Chris Granda, *Appliance Standards Awareness Project (ASAP)* and Chris Neme, *Energy Futures Group*

[CGranda@standardsasap.org](mailto:CGranda@standardsasap.org); [CNeme@energyfuturesgroup.com](mailto:CNeme@energyfuturesgroup.com)

The 30 year partnership between mandatory standards and voluntary programs has been dynamic and productive without being particularly coordinated. For the last eight years we have seen steady support for state and local energy efficiency programs, for federal appliance labeling programs, for federal efficiency standards and for state-level standards in California. These positive and sustained trends have helped flatten the growth in national electricity sales, and have contributed to the decoupling of electricity consumption from economic growth in the US.

Success is now challenging the established models for both voluntary programs and mandatory standards. Rising baselines are taking some popular energy efficiency measures out of play for voluntary programs. Rapid technology change and the diversity of the marketplace is pushing against the constraints of the standard setting process.

How do both advocates of mandatory standards and providers of voluntary programs adapt to these changing conditions while continuing to drive energy efficiency forward? In this informal session Chris Granda from the Appliance Standards Awareness Project (ASAP) and Chris Neme of Energy Futures Group (EFG) will lead a discussion exploring technology development, market changes and the need for regulatory innovation.

## **Tackling Climate Change through Zero-Energy Urban Districts**

Chuck Kutscher, *National Renewable Energy Laboratory* ([Chuck.Kutscher@nrel.gov](mailto:Chuck.Kutscher@nrel.gov))

Buildings are responsible for approximately 40% of US carbon emissions and consume 75% of US electricity. Rapidly growing cities are responsible for 70% of the world's fossil fuel emissions and over 1,000 US mayors have endorsed a climate change agreement. Great progress has been made in developing zero energy buildings. Extending these to high-efficiency zero energy urban districts is the key to addressing climate change. This informal session will be an opportunity for researchers, building designers, city planners, and others to share their knowledge in creating these districts, which are now occurring in California, Colorado, and around the country.