



Roadmap to Claiming Energy Savings from Building Codes and Appliance Standards Workshop

On September 28, the EM&V Forum and the NEEP policy team hosted a one-day workshop in Marlborough, Massachusetts: "Roadmap to Claiming Energy Savings from Building Codes and Appliance Standards." The workshop drew over 90 participants and provided an opportunity for regulators, energy efficiency program administrators (PAs), and other energy efficiency stakeholders in the Northeast and mid-Atlantic to interact and learn about ongoing codes and standards policies, programs and evaluation plans, with the goal of helping the region achieve more aggressive savings goals and for PAs to claim benefits/savings associated with building energy codes and appliance standards.

The workshop featured several engaging presentations and lively question and answer periods that helped meet the workshop's main objectives: to learn about and discuss methods to incorporate codes and standards into efficiency programs, create a forum for dialogue, share perspectives from a broad range of stakeholders, and inform the development of a future EM&V Forum project on this topic.

"It's time to pull people together to have a more structured discussion about these issues [related to Codes and Standards programs]. NEEP is on top of this and is supporting needed discussions by facilitating this forum."

Jeff Schlegel, Consultant to MA EEAC, CT EEB, and SWEEP

"The workshop was very informative and beneficial in keeping this moving."

Gail Azulay, NSTAR

The sessions throughout the day stressed that codes and standards have significant benefits, but there are also some issues and drawbacks that need to be addressed. Codes and standards have the potential to affect the entire market and minimize lost opportunities for efficiency, their scale decreases the costs of energy efficiency, the effects are persistent, and ongoing incentives are not required. But they require an authority/enforcer, and they also raise the baseline against which efficiency program impacts are measured.

The workshop began with an introduction by Jeff Schlegel, a consultant to Massachusetts, Connecticut, and Arizona, about the opportunity to realize significant energy savings from Codes and Standards programs, as well as the issues, uncertainties, and barriers associated with these types of programs. He emphasized that codes and standards are a hot topic of discussion and commended NEEP for bringing together a variety of stakeholders to discuss this timely issue.

In the next session, Allen Lee from Cadmus Group presented the approaches to claiming savings from codes and standards activities in California, Arizona, and the northwest. The California model rewards PAs

This Issue of the Forum's Quarterly Newsletter Includes:

Roadmap to Claiming Energy Savings from Building Codes and Appliance Standards Workshop

Forum Projects Update

- Protocol Development
- Research & Evaluation
- EM&V Resource Library

To learn more about the EM&V Forum, visit the [Regional EM&V Forum Website](#)

Calendar of EM&V and Other Energy Efficiency Meetings

October 19, 2010: [EM&V Forum Annual Public Meeting](#) in Baltimore, MD

November 3, 2010: [AESP-NEEC Annual Conference](#) in Westborough, MA

November 14-17, 2010: [Behavior, Energy & Climate Change Conference](#) in Sacramento, CA

December 1, 2010: Deadline to [Submit Abstracts](#) for the IEPEC 2011 Conference to be held August 15-18, 2011 in Boston, MA

December 1, 2010: NAESB DSM-EE Meeting in Richmond, VA, 10am–4pm. Meeting information will be posted [here](#).



based on demonstrated energy savings from codes and standards activities, the Arizona model rewards PAs based on intent and effort, and in the northwest, estimated savings from codes and standards are included in forecasting and later verified. Some of the activities undertaken by efficiency programs in support of codes and standards in these areas include: developing technical reports to guide standards proposals, holding workshops with stakeholders, advocating for codes and standards at the state and federal levels, and supporting code compliance and enforcement.

In the final morning session, Betty Tolkin from NMR Group, Inc. discussed the process underway to develop protocols for codes and standards activities in Massachusetts. She also shared preliminary draft results from an NMR study to estimate potential energy savings from enhanced code compliance. The analyses done to date point to sizeable benefits from codes and standards work. The full enhanced compliance potential savings alone may be 20 to 30 percent of the 2011 Massachusetts residential new construction savings goal. While the benefits of codes and standards activities are considerable, Ms. Tolkin also noted that the cost of the activities and related EM&V are significant.

The discussion following Ms. Tolkin's presentation highlighted the importance of communication between regulators and PAs in developing Codes and Standards programs. Commissioner Tim Woolf of the Massachusetts DPU stressed the importance of involving regulators early in the process of program development so that regulators can help shape programs well before they are presented to the DPU for approval.

In the first afternoon session, Jim O'Reilly from NEEP provided an overview of building codes policy in the EM&V Forum region. This session also included a panel of discussants including Dan Cleverdon from the District of Columbia, Bill Saxonis from New York, Tim Simmonds from Connecticut, and Richard Faesy from Vermont, who commented on the activities underway in their jurisdictions related to establishing Codes and Standards programs. Two main themes were raised: 1) communication and cooperation within the region is extremely important, and 2) it is timely/urgent to move Codes and Standards programs forward.

The final workshop session focused on appliance standards. Allen Lee provided an overview of the history and growth of appliance standards activities. Following Mr. Lee's presentation, Andrew deLaski from Appliance Standards Awareness Project commented on the huge opportunity to establish and/or enhance appliance standards given the high level of support from the Obama administration for these efforts. He encouraged standards advocates to engage at a technical level in federal rulemakings and state standards opportunities, focus on research and development, and address compliance.

NEEP would like to thank the workshop funders, speakers, and attendees for making the workshop such a successful event. The presentations and dialogue will inform a future EM&V Forum research project related to codes and standards attribution. The final Forum products from the workshop, including the agenda, presentations, recent papers, and regional summaries are now available on the [Forum Products and Guidelines](#) website.

EM&V Forum Annual Public Meeting—October 19 in Baltimore, MD

The [2010 EM&V Forum Annual Public Meeting](#) is scheduled for Tuesday, October 19 from 9:30am—4:15pm at the [Sheraton City Center Hotel](#) in Baltimore, Maryland.

The purpose of the meeting is to increase understanding of the EM&V Forum scope and projects, and provide a venue for information exchange and networking among key stakeholders on EM&V issues and perspectives across the region and beyond.

This year's meeting includes panel sessions on:

- State of the Forum
- Common Statewide Energy Efficiency Reporting Guidelines
- Integrating Energy Efficiency into System Planning
- What's Next for Net Savings

View the [final agenda](#) and [register](#) today!

Meeting notes and action items from previous quarterly Steering Committee meetings and quarterly Project Committees meetings are posted to the EM&V Forum website:

[Steering Committee Meeting Notes & Action Items](#)

[Project Committees Meeting Notes & Action Items](#)



EM&V Forum Projects Update

The EM&V Forum has completed several projects and continues to conduct a wide variety of Protocol Development, Research and Evaluation, and Education and Information Access projects. The following sections provide more information about the status of EM&V Forum projects.

Protocol Development Projects

A1: *Glossary of EM&V Terms & Definitions*: [Version 1 of the Glossary](#), which was completed in 2009, is now being updated with terms that are used in recently completed Forum products but were not included in the first version of the Glossary. For more information, contact [Cecily McChalicher](#).

A3: *Common Statewide Energy Efficiency Reporting Guidelines*: The proposed Forum reporting guidelines include templates for energy efficiency savings, costs, jobs and emission impacts, with process recommendations for improved collaboration and information sharing between key stakeholders and users of the statewide reported data. The guidelines reflect extensive input from Forum participants to date, including feedback from the Forum Steering Committee at their September quarterly meeting. A final draft version is now posted for final comment by all Forum states before being presented to the Steering Committee for adoption in December. For more information, contact [Julie Michals](#).

A4: *M&V Protocol Development in Wholesale Capacity Markets*: NEEP is participating in the North American Energy Standards Board (NAESB) M&V project, which includes developing proposed model business practices/standards for retail and wholesale energy efficiency M&V. The retail work group is developing M&V MBPs for calculating gross energy and demand savings, and may consider net savings in future efforts. The level of detail for the MBPs is expected to be high and is building from the [NAPEE Model Impact Evaluation Guide](#) as a starting point. NEEP anticipates that the Forum's [Common EM&V Methods and Savings Assumptions Guidelines](#) will be a key resource referenced in the NAESB MBPs. The wholesale working group has drafted a first version of M&V standards, building from the ISO New England and PJM M&V manuals for demand resources/energy efficiency. The next DSM/EE meeting is scheduled for December 1, 2010. Meeting information can be found at the [NAESB DSM/EE website](#) or contact [Julie Michals](#).

PD5: *Mid-Atlantic Technical Reference Manual (TRM) - Version 2*: [Version 1 of the mid-Atlantic TRM](#), developed for Maryland, Delaware and the District of Columbia in spring 2010, is being updated by the project contractor, Vermont Energy Investment Corp, to include twenty additional gas and electric measures. The TRM includes algorithms and savings input assumptions for a broad range of measures. Version 2 completion is expected in early 2011. For more information, contact [Elizabeth Titus](#).

Protocol Development Projects Highlights

The *Glossary of EM&V Terms and Definitions* update will be completed by the end of the year.

The final *Statewide Common Energy Efficiency Reporting Guidelines* will be presented to the Steering Committee for review and adoption in December.

NEEP continues its involvement in the NAESB M&V project, which is developing model business practices for retail energy efficiency and standards for wholesale energy efficiency markets.

Version 2 of the *Mid-Atlantic Tri-State TRM* is underway and will add about 20 additional gas and electric measures to Version 1 of the TRM.

View all of the completed
Regional EM&V Forum

[Protocol Development and
Research and Evaluation
Products](#)



Research and Evaluation Projects

B1: Phase 2 - Loadshape Research Project: This project includes two studies, the Unitary HVAC Study and the Commercial Lighting Study, both of which are being conducted by KEMA. Each project will deliver a spreadsheet tool that enables program administrators to calculate coincidence factors for time periods they specify, and to develop weighted average 8760 loadshapes. *For the Unitary HVAC study*, primary data collection/metering took place from May through September in order to capture the cooling season, and draft deliverables are being reviewed by the project subcommittee. *For the Commercial Lighting study*, secondary data collection is complete, and draft deliverables are under development. For more information, contact [Elizabeth Titus](#).

B2: C&I Lighting Measure Life and Persistence Project: This project will result in measure life estimates developed from models informed by primary data collected from programs that have been in existence and measures that have been installed for many years. The project schedule was recently extended to accommodate a change in available program data. Onsite data collection is nearly half complete, and data analysis will take place this fall/winter, with a final report expected in early 2011. For more information, contact [Elizabeth Titus](#).

B3: Net Savings Scoping Paper: The contractor for this project, NMR Group, Inc., recently completed a final draft scoping paper based on secondary research and in-depth interviews with experts and input from Forum participants. Forum participants are currently reviewing the draft paper. As a follow up to the paper, NEEP is convening a net savings policy subcommittee consisting of Forum Steering Committee members and other key stakeholders that will guide the development of a Forum net savings research project based on the results of the scoping paper. For more information, contact [Elizabeth Titus](#).

RE1: Incremental Cost Study: This project will provide updated incremental cost data for selected efficiency measures that will help inform cost effectiveness analysis, measure screening, and program design. The RFP for this project was issued in July, and the project subcommittee recently selected Navigant Consulting as the project contractor. The project kick-off meeting took place in early October. Denise Rouleau is assisting the Forum with this project. For more information, contact [Elizabeth Titus](#).

RE3: Codes and Standards Workshop: NEEP hosted a one-day workshop on September 28: "Roadmap to Claiming Savings from Building Energy Codes and Appliance Standards." For more information, please see the [feature article](#) in this newsletter or contact [Elizabeth Titus](#).

RE5: Natural Gas Research Project: NEEP convened project subcommittee calls in July and September to scope the 2010 natural gas efficiency research project. The subcommittee selected market characterization and early replacement as the two topics of greatest interest, and more detailed project scopes for these two topic areas are being developed. The project subcommittee will meet again this fall to shape the development of an RFP for this project. Denise Rouleau is assisting the Forum with this project. For more information, contact [Julie Michals](#).

Research and Evaluation Projects Highlights

Data collection is complete for the *Unitary HVAC Loadshape* project and draft deliverables are being reviewed.

Fieldwork for the *C&I Lighting Measure Persistence* project continued throughout the summer and into the fall.

The final draft *Net Savings Scoping Paper* is complete and is under review by Forum participants.

The Forum held a successful *Codes and Standards* workshop on September 28 in Marlborough, MA.

A contractor has been selected for the *Incremental Cost Study*, and the kick-off meeting took place in early October.



EM&V Resource Library

The EM&V Forum maintains and regularly updates its online [EM&V Resource Library](#). The Library includes information about national, regional, and state EM&V policies and activities.

One of the main components of the Resource Library is a [repository](#) of state and topical EM&V studies that provides access to energy efficiency data across the northeast and Mid-Atlantic regions. The repository includes state Technical Reference Manuals or equivalent, as well as evaluation studies and reports for all jurisdictions that participate in the Regional EM&V Forum.

For more information, contact [Cecily McChalicher](#).

Thank You Forum Funders:

Connecticut
CT Energy Efficiency Fund

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District of Columbia
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District Department of the Environment

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New Jersey (2009 Projects)
Board of Public Utilities

New York
NY State Energy Research & Development Authority
New York Power Authority
Long Island Power Authority

Rhode Island
National Grid

Vermont
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The Energy Foundation

The Forum also includes many participants beyond the Forum funders who serve an important role in advising and informing Forum projects and plans. View a list of [Forum Participants](#).

Join the NEEP Partners Program

NEEP's Partners Program provides your organization with visibility, affiliation and an opportunity to support the work and mission of NEEP.

For more information about joining the NEEP Partners Program, please contact:

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