



EM&V Forum Progress Report: 2009-2011

This spring, per the Forum's [3-year plan](#) (2009-2011), a 3rd party evaluation will assess the Forum's activities and accomplishments to date, and determine the Forum's scope beyond 2011. As we approach the upcoming evaluation, this newsletter reflects on the Forum's progress towards its goals, including milestones and challenges.

The Forum's main activities over the past three years, illustrated below, focused on: developing [common statewide reporting](#) and [EM&V methods](#) guidelines, conducting joint research and evaluation projects, and serving as an EM&V information resource through its [Resource Library](#). These efforts and associated products, when implemented and used by the states, will lead to the Forum's desired outcomes.



Progress to date towards the Forum's goals are as follows:

- **Reduce evaluation and other research costs by leveraging funding:** The Forum is conducting expensive joint research projects that exceed the resources available in individual states. These studies examine: Unitary HVAC and Commercial Lighting Loadshapes, Commercial Lighting Measure Persistence, Incremental Cost, and [Net Savings](#). Results from these projects will be available early this summer.

In This Issue:

EM&V Forum Progress Report: 2009–2011

Recently Completed Forum Projects—[EM&V Glossary & Mid-Atlantic TRM](#)

Research & Evaluation Projects—Results Coming Soon

Regional EE Online Reporting Database

National EM&V Update-DOE Scoping Study Released

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

Calendar of EM&V and Other Energy Efficiency Meetings

May 4, 2011, 1-4pm: [EM&V Forum State Evaluation Activities Webinar](#)

May 15, 2011: Deadline for Abstracts for [BECC Conference](#)

May 16-19, 2011: [AESP Spring Conference](#) in Atlanta, GA

May 26, 2011: EM&V Forum [Quarterly Project Committees Meeting](#)

June 7-8, 2011: [NEEP Summit](#) in Warwick, RI

July 14, 2011: EM&V Forum [Quarterly Steering Committee Teleconference](#)

July 28, 2011: EM&V Forum [Quarterly Project Committees Meeting](#)

August 15-18, 2011: [IEPEC Conference](#) in Boston, MA



Develop consistent data and methods to support air quality and climate change reporting and planning; and support integration of energy efficiency (EE) into energy system and transmission planning processes: The Forum has completed several projects that move the region towards consistent and transparent EE data and EM&V methods that help air quality and system planners to more fully integrate EE into their planning processes:

- The [EM&V Glossary](#), updated in 2011, helps provide a common language of EM&V terms and acronyms relevant to air quality and energy efficiency stakeholders.
- The [Regional EM&V Methods and Savings Assumptions Guidelines](#), adopted in May 2010, provide clarity, transparency, and a common understanding of methods to consider in determining gross energy and demand savings, as well as savings assumptions for a priority set of EE program types or measures.
- The [Mid-Atlantic TRM](#), updated in 2011, documents savings assumptions for approximately 30 prescriptive residential and commercial/industrial electric EE measures for Maryland, Delaware, and the District of Columbia. Additional electric and gas measures will be added to the TRM this summer.
- The [Common Statewide Energy Efficiency Reporting Guidelines](#), adopted in December 2010, provide recommended state-level reporting templates, process recommendations, and consistent definitions for the reporting of electric and natural gas EE program energy and demand savings and associated costs, and their emission and job impacts across the region.

Coming soon is a regional energy efficiency online database and reporting tool. This tool will allow Forum states to readily report their statewide efficiency impacts using the reporting parameters from the [Reporting Guidelines](#). System planners, air quality planners, and regulators are participating in the project to ensure that the tool provides EE data that meets their reporting and planning needs. For more information about this project, see the Regional EE Online Reporting Database section below.

The Forum has also increased the transparency and accessibility of EM&V data and methods by providing ready web access to [Forum products](#) as well as state, regional, and national EM&V information in its [Resource Library](#).

Inform the likely development of national EM&V standards/protocols: The Forum is actively informing efforts to develop national EM&V standards and protocols by the [North American Energy Standards Board \(NAESB\)](#) and the [US DOE/EPA State Energy Efficiency Action \(SEE Action\) Network](#). Forum staff are participating in the NAESB wholesale and retail M&V working groups, and are also participating in the SEE Action EM&V working group, which recently issued a [scoping study](#) about the feasibility of developing a national EM&V standard for EE activities. As a follow-up to the study, US DOE may develop voluntary EM&V protocols starting in 2011, with guidance from the Forum and other regional and state EM&V experiences. For more information on these activities, see the National EM&V Update section below.

Increase the credibility of EE demand resources: All of the Forum's activities to date, discussed above, feed into the ultimate goal of the Forum, which is to increase the credibility of EE demand resources. The Forum is effectively working towards this goal by providing more consistent savings values for similar measures and programs, increasing the transparency and accessibility of EM&V protocols and inputs, and bringing together a wide variety of EE stakeholders including energy and air regulators, system planners, and efficiency program administrators.

In its first years of operation, with its significant progress towards its goals, the Forum has experienced challenges associated with: bringing a vast group of stakeholders and interests across a broad region to build consensus on adoption of Forum products; fully engaging participants in each state to inform Forum activities given tight resources; and navigating the Forum's extensive review process to ensure full state representation.

To address these challenges, the Forum has built a transparent and accountable system to support its participant driven process for developing and adopting Forum products, including extensive communications and outreach to state stakeholders to ensure input into and understanding of Forum projects. The Forum has also faced funding challenges as several states have ceased their participation due to tight state budgets. The Steering Committee has provided guidance to address these funding challenges without major disruptions to Forum projects and activities.

Please see the [timeline of Forum projects](#) for more information about the Forum's completed, ongoing, and future projects.



Recently Completed Forum Projects

At its March 2011 meeting, the EM&V Forum Steering Committee adopted/accepted two completed protocol development projects as Forum products: the **EM&V Glossary of Terms and Acronyms, V2**, and the **Mid-Atlantic Technical Reference Manual (TRM), V1.2**.

The [Glossary of Terms and Acronyms, Version 2](#) provides definitions for about 60 terms from recently completed Forum projects that were not included in the Version 1 Glossary that was adopted in March 2009.

The [Mid-Atlantic TRM, Version 1.2](#) updates the measure characterizations in the Version 1.1 TRM based on a critical review by stakeholders. The Mid-Atlantic TRM, Version 2 is currently under development, and will add characterizations for about 20 gas and electric measures. Version 2 will be completed this summer.

Research and Evaluation Projects - Results Coming Soon

The following EM&V Forum research and evaluation projects are nearing completion, with results becoming available on the Forum's website early this summer:

Loadshape Studies - Unitary HVAC and Commercial Lighting: Draft spreadsheet tools are currently being reviewed. The tools allow the user to generate 8760 loadshapes that demonstrate the impact of Unitary HVAC and Commercial Lighting energy efficiency programs in reducing energy use and associated emissions. Each spreadsheet tool will be accompanied by a report describing the project and results. The final spreadsheet tools and reports will be available in June.

Commercial Lighting Measure Persistency Study: This project will provide estimates of multi-year measure persistence based on on-site inspections of a sample of lighting measures installed by commercial and industrial lighting programs in the region. Preliminary results have been provided to the project subcommittee for review. The final report will be available in June.

Incremental Cost Study: This project will provide estimates of incremental costs for several priority residential and commercial/industrial gas and electric measures. The incremental cost assumptions will be informed by both secondary and primary research. A draft report will be ready for project subcommittee review in mid-May, with a final report available at the end of June.

View all of the completed
Regional EM&V Forum

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

Net Savings Research Project

The Forum will be conducting a net savings research project in 2011. The scope of the project is being informed by the [Net Savings Scoping Paper](#), the project subcommittee, and the Forum Policy Committee.

Project tasks may include:

- 1) Develop definitions for net and adjusted gross savings
- 2) Share and/or build on recent Massachusetts and other research on methodologies for measuring net savings
- 3) Perform exploratory policy research to catalog the types of savings estimates that are used and/or recommended for different kinds of energy and environmental policies and goals in the region
- 4) Make recommendations regarding development of Common Net Savings Guidelines for 2012.

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](#)



Regional Energy Efficiency Online Reporting Database

As a follow-up to the [Common Statewide Energy Efficiency Reporting Guidelines](#) that were adopted by the EM&V Forum Steering Committee in December 2010, the Forum is conducting a project to develop a regional energy efficiency online database and reporting tool. This tool will allow Forum states to readily report their statewide efficiency impacts using the reporting parameters from the Guidelines. Technical support will also be provided to the states as part of this project.

This project has garnered support from a variety of national and regional energy efficiency stakeholders. US DOE will provide the majority of project funding, and ISO/RTO staff have joined the project subcommittee given system planners' interest in using consistently reported efficiency data.

The project subcommittee is currently refining the scope of work for this project, which will include designing, developing and testing the reporting database/tool, and providing technical support to states and other relevant stakeholders to use the tool. The RFP for a 3rd party contractor competitive solicitation will be issued in May 2011.

National EM&V Update:

Forum staff are participating in two national EM&V projects:

US DOE/EPA SEE Action EM&V Project: The SEE Action EM&V working group recently developed a “blueprint” for meeting SEE Action’s EM&V goal and objectives. The blueprint lays out three strategic pathways to meet its overarching goal: **to transform EM&V to yield more accurate, credible and timely results that accelerate successful energy efficiency deployment and management.** The blueprint’s focus is to: 1) develop a foundation for credibility and cross-jurisdictional comparability of energy efficiency impacts; 2) explore new methods to address emerging issues and technologies; and 3) build capacity and increase adoption of EM&V best practices. The first areas of focus may include developing an updated EM&V resource guide (like the [NAPEE Model Impact Evaluation Guide](#)) and preparing a voluntary set of generally accepted EM&V methods and/or protocols that can be useful for state regulatory bodies and energy offices. The SEE Action EM&V working group informed a scoping study that was recently issued by Lawrence Berkeley National Laboratory: [National Energy Efficiency Evaluation, Measurement, and Verification \(EM&V\) Standard: Scoping Study of Issues and Implementation Requirements](#). The study identifies issues associated with developing a national EM&V standard for energy efficiency activities, identifies the scope of such a standard, and defines EM&V requirements and issues that will need to be addressed. SEE Action is also exploring the development of a national deemed savings database, and a consistent reporting form to collect program impact data. This latter effort is being informed by the Forum’s [Common Reporting Guidelines](#), and the Forum’s 2011 project to develop an online regional EE reporting database and tool.

NAESB M&V Standards/Best Practices: Forum staff have been participating in both the retail and wholesale working groups to develop EE M&V standards/best practices. On the wholesale side, the final draft wholesale EE M&V standards were approved by vote in a NAESB Executive Committee

DOE/LBNL Scoping Study Released

US DOE/Lawrence Berkeley National Laboratory recently released a [scoping study](#) that explores the possible development of a voluntary national EM&V standard for energy efficiency activities.

The scoping paper includes:

- A set of definitions applicable to an EM&V standard
- A literature review of existing guidelines, standards, and initiatives relating to EM&V standards as well as a review of “bottom-up” versus “top-down” evaluation approaches
- A summary of EM&V related provisions of recent Federal legislative proposals that include national efficiency resource requirements
- An annotated list of issues that are likely to be central to, and need to be considered as part of developing a national EM&V standard for energy efficiency



meeting on March 21. The adopted standards are modeled on the ISO-NE Forward Capacity M&V Manual. On the retail side, the draft retail EE M&V model business practices (MBPs) to date have incorporated the Forum [Glossary](#) and elements of the [Common EM&V Methods Guidelines](#). At this juncture, however, the retail working group has reached an impasse on the full scope of the MBPs, and the scope will be revisited at the NAESB Retail Electric Quadrant Executive Committee meeting on May 4 before further work proceeds. Issues of concern include: the extent to which the MBPs address EM&V vs M&V, the appropriate level of detail for the MBPs, and likely duplicity with the SEE Action EM&V project, and potential confusion for intended audiences.

Thank You Forum Funders:
(current and past)

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

Rhode Island
National Grid

Vermont
Department of Public Service

US Department of Energy

US Environmental Protection Agency

The Energy Foundation

Conservation Services Group

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](#).

Consider Joining 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.

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