



**REGIONAL EVALUATION,  
MEASUREMENT & VERIFICATION FORUM**

## **OVERVIEW OF EM&V FORUM PURPOSE, GOALS AND VALUE PROPOSITION**

**ACCOMPLISHMENTS TO DATE  
OCTOBER 2011**



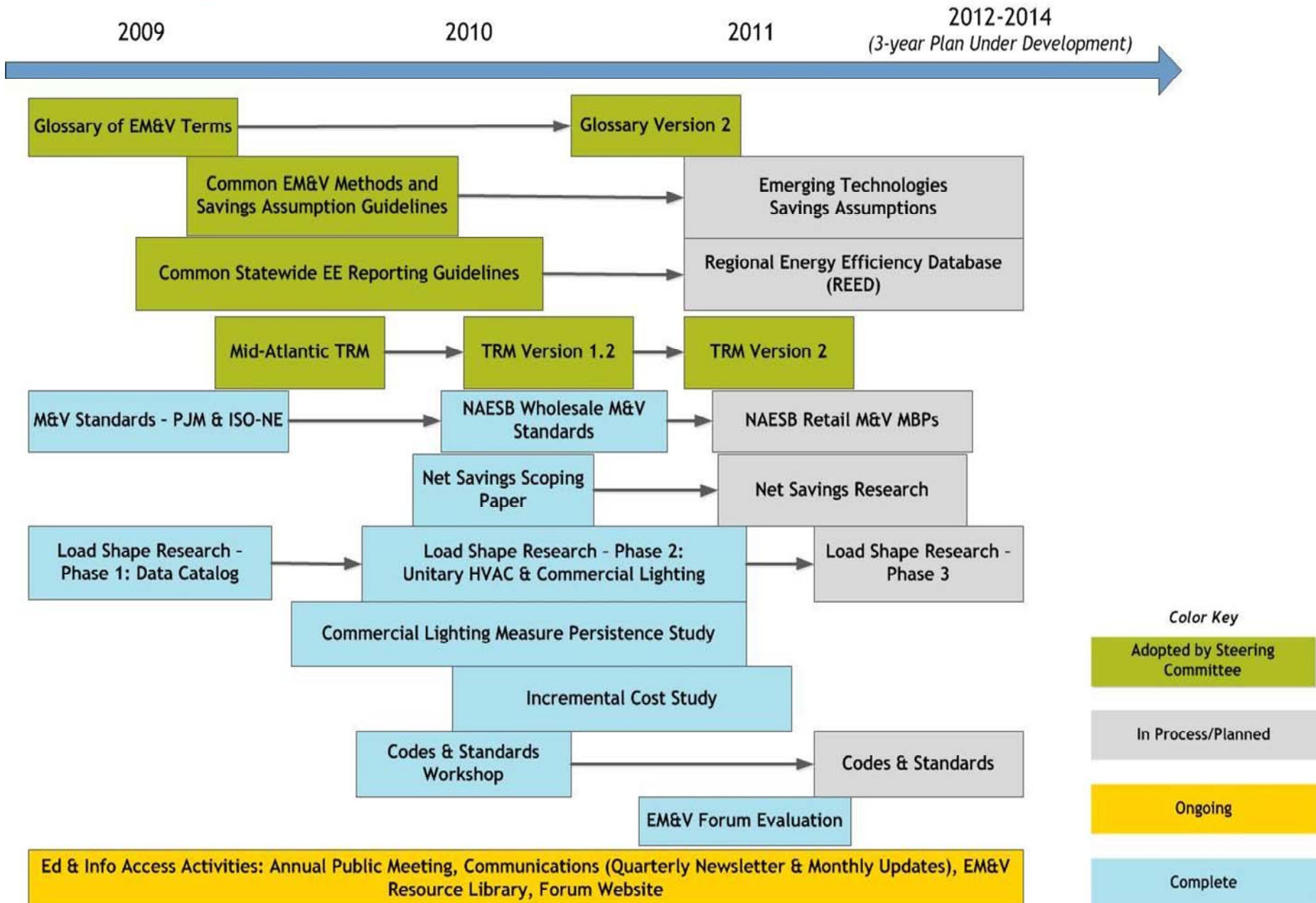
### EM&V FORUM VALUE PROPOSITION - ACCOMPLISHMENTS TO DATE (JUNE 2011)

The Forum’s main activities over the past three years have focused on: developing common statewide energy efficiency reporting guidelines, common EM&V methods guidelines for calculating gross energy savings, conducting joint research and evaluation projects to develop common savings assumptions, informing national protocol development and serving as an EM&V information resource through its Resource Library. These Forum efforts and associated products, when implemented and used by the Forum states, are intended to lead to the Forum’s desired outcomes, presented below.



The graphic below provides a timeline view of the Forum’s completed, ongoing, and planned projects. Completed EM&V Forum products are available on the Forum’s Products and Guidelines website at: <http://neep.org/emv-forum/forum-products-and-guidelines>.

# Regional Evaluation, Measurement & Verification Forum



## FORUM PROJECT DESCRIPTIONS AND STATUS

Forum projects include Protocol Development, Research & Evaluation and Education and Information Access. Descriptions of projects, activities and schedules for 2009-2011 are as follows:

### 2009 Forum Projects

**Project A2: EM&V Methods Guidelines (Complete).** This project developed EM&V methods guidelines for calculating electric and gas energy efficiency savings across the region and surveyed savings assumptions for priority measures to identify where greater consistency is needed or where differences are warranted due to variations in programs.

**Project A3: Common Statewide Reporting Guidelines (Complete).** These Guidelines include recommended state-level reporting templates and several process recommendations that provide for consistent definitions and the reporting of electric and natural gas energy-efficiency program energy and demand savings and associated costs, and their emission and job impacts across the region.

**Project A4: PJM and ISO-NE M&V Manual Comments (Complete).** This project informed the development of M&V standards in the context of the ISO New England and PJM Interconnection wholesale capacity markets, to ensure that protocols/standards are sufficiently rigorous and reasonable, based on best practice in the evaluation industry. **Inform NAESB National M&V Standards and US DOE EM&V Projects (In Progress):** Forum/NEEP staff is participating in both national EM&V working groups to inform development of EE M&V standards/best practices using Forum products, and to help ensure coordination across efforts.

**Project A5: Mid-Atlantic Technical Reference Manual, Version 1 (Complete).** This project developed a technical reference manual (TRM) for the Mid-Atlantic states with common savings assumptions, input parameters, and algorithms for priority end-use measures. The TRM supports calculations of energy efficiency savings for the purpose of planning and tracking against state goals, supporting PJM M&V Plans, and supporting environmental regulations.

**Project B1: Unitary HVAC Loadshape Study (Complete).** This project developed a spreadsheet tool that allows the user to generate 8760 loadshapes that demonstrate the impact of Unitary HVAC energy efficiency programs in reducing energy use and associated emissions. The spreadsheet tool is accompanied by a report describing the project and results.

**Project B2: Commercial Lighting Measure Persistence Study (Complete).** This project provides 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.

**Project B3.1: Net Savings Scoping Paper (Complete).** This paper is intended to improve Forum members' understanding of how net energy savings is defined, how stakeholders use net savings, and the opportunities and barriers to increasing the consistency of and quality in net savings definitions and measurement in the region.

**Project B3.2: Impact of EE Programs on Advancing Codes & Standards Workshop (Complete).** This workshop, held on September 28, 2010 in Marlborough, MA, provided an opportunity for regulators, program administrators 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 claim benefits associated with building energy codes and appliance standards.

## 2010 Forum Projects

**Project PD1: Methods for Estimating Net Savings (RFP issued October 2011).** This project will develop definitions for adjusted gross savings and net savings, hold a series of webinars to share information with Forum stakeholders about recent net savings research and related developments, and catalog policies related to net savings throughout the region. A follow on task may include determining whether to proceed with future net savings research, including development of guidelines in 2012.

**Project PD5: Mid-Atlantic Technical Reference Manual, Version 2 (Complete).** This project adds approximately 20 gas and electric measures to the Version 1 Mid-Atlantic TRM (see project A5 above).

**Project RE1/RE5: Incremental Cost Assumptions (Complete).** This project provides 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.

**Project RE2: Commercial Lighting Loadshape Study (Complete).** This project developed a spreadsheet tool that allows the user to generate 8760 loadshapes that demonstrate the impact of Commercial Lighting energy efficiency programs in reducing energy use and associated emissions. The spreadsheet tool is accompanied by a report describing the project and results.

## 2011 Forum Projects

**Project PD11-1: Savings Assumptions & Methods Guidelines for Emerging Technologies (In progress).** This project will add a second set of priority measures/program types to the Forum EM&V Methods & Savings Assumptions Guidelines adopted in May 2010, by recommending EM&V methods and savings algorithms and assumptions to estimate initial gross savings for a set of emerging technologies/program designs.

**Project PD11-3: Reporting Tool and Online EE Database (In progress).** This project will support the implementation of the Common Statewide Reporting Guidelines (see project A3 above) by developing an online tool that will allow states to readily use the Guidelines' reporting tables and providing supporting technical assistance for use of the online tool.

**Project PD11-5: Mid-Atlantic Technical Reference Manual, Version 1.2 (Complete).** This project updated the Version 1 TRM (see project A5 above) based on a critical review by stakeholders.

**Project RE11-1: Loadshape Study Phase 3 (RFP to be issued Nov/Dec 2011).** This project will expand on the Forum loadshape research that was conducted as part of the 2009-2010 projects. It will involve primary research, including metering, throughout the region on a measure or set of measures. Data will be analyzed and 8760 loadshapes and coincidence factors will be provided as a result.

**Project RE11-2: Impact of EE Program on Codes & Standards (RFP to be issued Nov/Dec).** This project will support sponsors/states interested in attributing and claiming savings associated with energy efficiency program activities directed at improving codes and standards and compliance. This project will serve as a next step after the September 28, 2010 workshop on this subject (see project B3.2 above).

**Project RE11-3: Add-on Research (TBD).** This project provides additional funding to support possible project expansions for existing Forum research studies e.g., adding additional priority measures for incremental cost, measure persistence, or other research, as identified and approved by Forum participants during the year.

**Forum Evaluation: Report with recommendations for 2012-2014 (Complete).** This independent evaluation of the Forum was conducted, per the Forum 3-Year Plan, to assess the Forum's performance and continued role and scope going forward beyond 2011.

## FORUM OPERATIONS & MANAGEMENT (BASE COSTS)

Forum Base Costs include a range of Forum operational, management and education, information and communications activities, and are funded through Forum Base costs. Annual activities include:

1. Facilitating Forum Steering Committee, Project Committees, and subcommittees;
2. Managing range of third-party contracts and projects;
3. Updating and maintaining [EM&V library of studies/research](#) and other EM&V resources;
4. Maintaining and improving EM&V Forum website;
5. Holding Forum Annual Public Meeting;
6. Conducting Forum communications and outreach to Forum participants through monthly updates and quarterly newsletters;
7. Monitoring and participating in state, regional (ISO-NE, PJM), and national M&V meetings/efforts (NAPEE, NAESB M&V projects);
8. Conducting outreach to states to support state adoption of Forum products approved by Steering Committee (e.g., presentations, attend state evaluation meetings, public comments);
9. Assisting with coordinating/facilitating state PUC, PA and air regulatory efforts regarding access to energy efficiency data to support air quality and climate change planning;
10. Maintaining Forum operational policies, including ensuring access to Forum materials and protecting confidential information; and
11. Planning and developing annual Forum agendas and budgets with outreach to Forum participants, grant funders, and other stakeholders.

## FORUM 2009-2011 BUDGET SUMMARY

YEAR	BASE COST COMPONENTS			PROJECT COSTS		TOTAL FORUM COSTS
	Forum Operations <sup>1</sup>	Project Management <sup>2</sup>	Educ & Info Access <sup>3</sup>	Protocol Development	Research & Evaluation	
2009	\$163,779	\$213,409	\$119,112	\$606,971	\$1,078,000	\$2,181,271
2010	\$186,450	\$242,950	\$135,600	\$275,000	\$1,163,408	\$2,003,408
2011	\$214,500	\$279,500	\$156,000	\$380,000	\$870,000	\$1,900,000
Total	\$564,729	\$735,859	\$410,712	\$1,261,971	\$3,111,408	\$6,084,679
% of TOTAL	9%	12%	7%	21%	51%	100%

<sup>1</sup> Forum Operations: NEEP facilitation of range of Forum committees, and serving as fiscal agent

<sup>2</sup> Project Management: NEEP management of Forum projects, retaining technical advisors, and NEEP monitoring and involvement in national EM&V projects

<sup>3</sup> Educ & Info Access: Building/maintaining online EM&V Resource Library, holding Annual Public Meeting, and supporting all Forum communications