

Survey of Current EE Program Evaluation Practices and Emerging Issues Across the United States

**Michael Messenger, Itron
Steve Schiller, Schiller Consulting Inc.
Chuck Goldman, Lawrence Berkeley Natl. Laboratory**

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Overview

- Study Objectives and Approach
- Review Evaluation Planning Structures and Budgets
- Key Differences in Evaluation Approach and Reporting Conventions across States
- Identify Emerging Evaluation Issues
- Recommendations to Improve Consistency and Coordination of Practices

Study Objectives

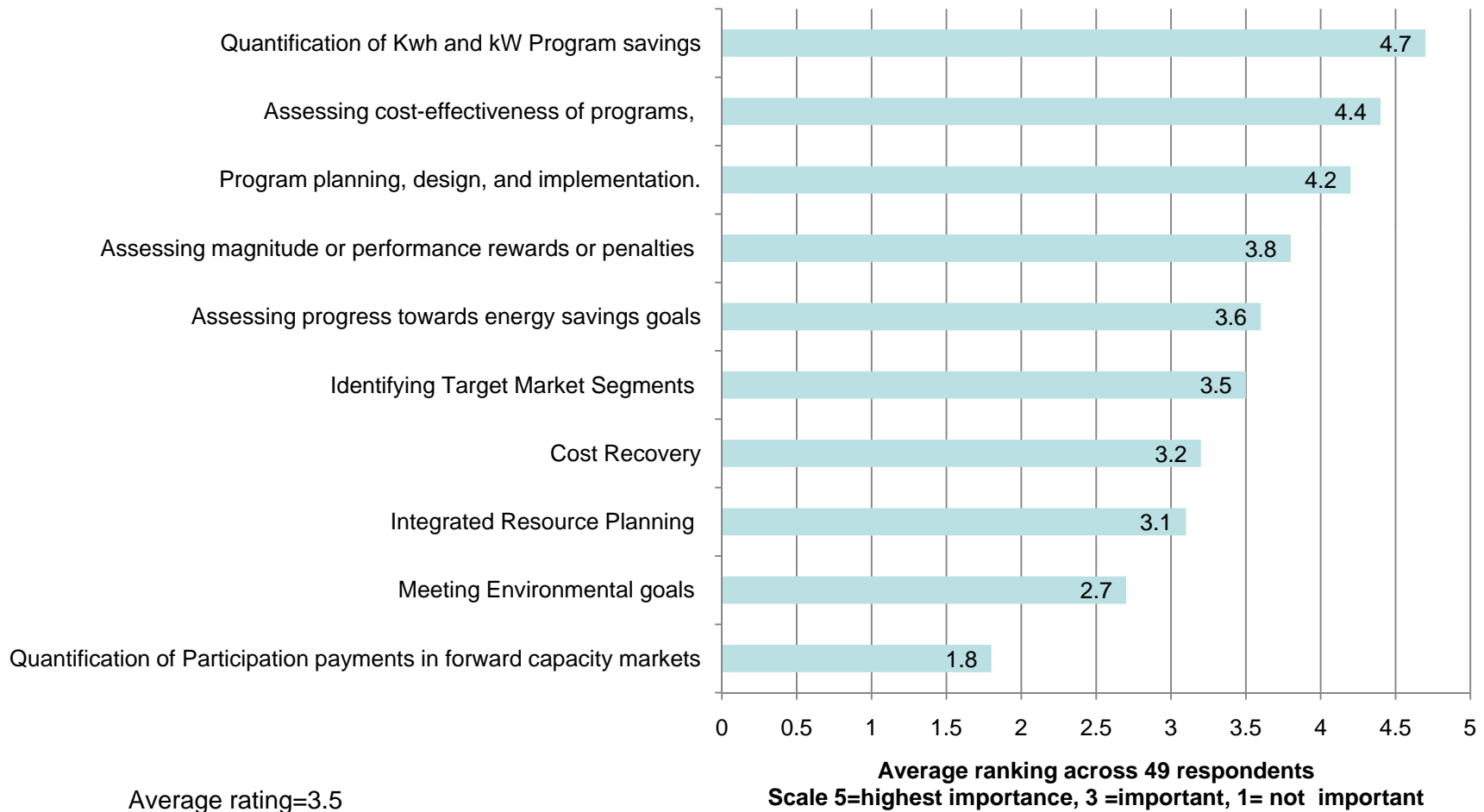
- Inventory current energy efficiency (EE) program evaluation planning practices and spending in selected (14) states and NEEA
- Identify most important uses and users of evaluation studies
- Compare and contrast differences across states in EM&V planning, methods, and reporting of program success metrics (gross or net savings, others)
- Identify emerging issues based on differences between states
- Solicit expert views on what approaches should be pursued to address emerging issues and their relative priority under alternative energy futures

Study Approach

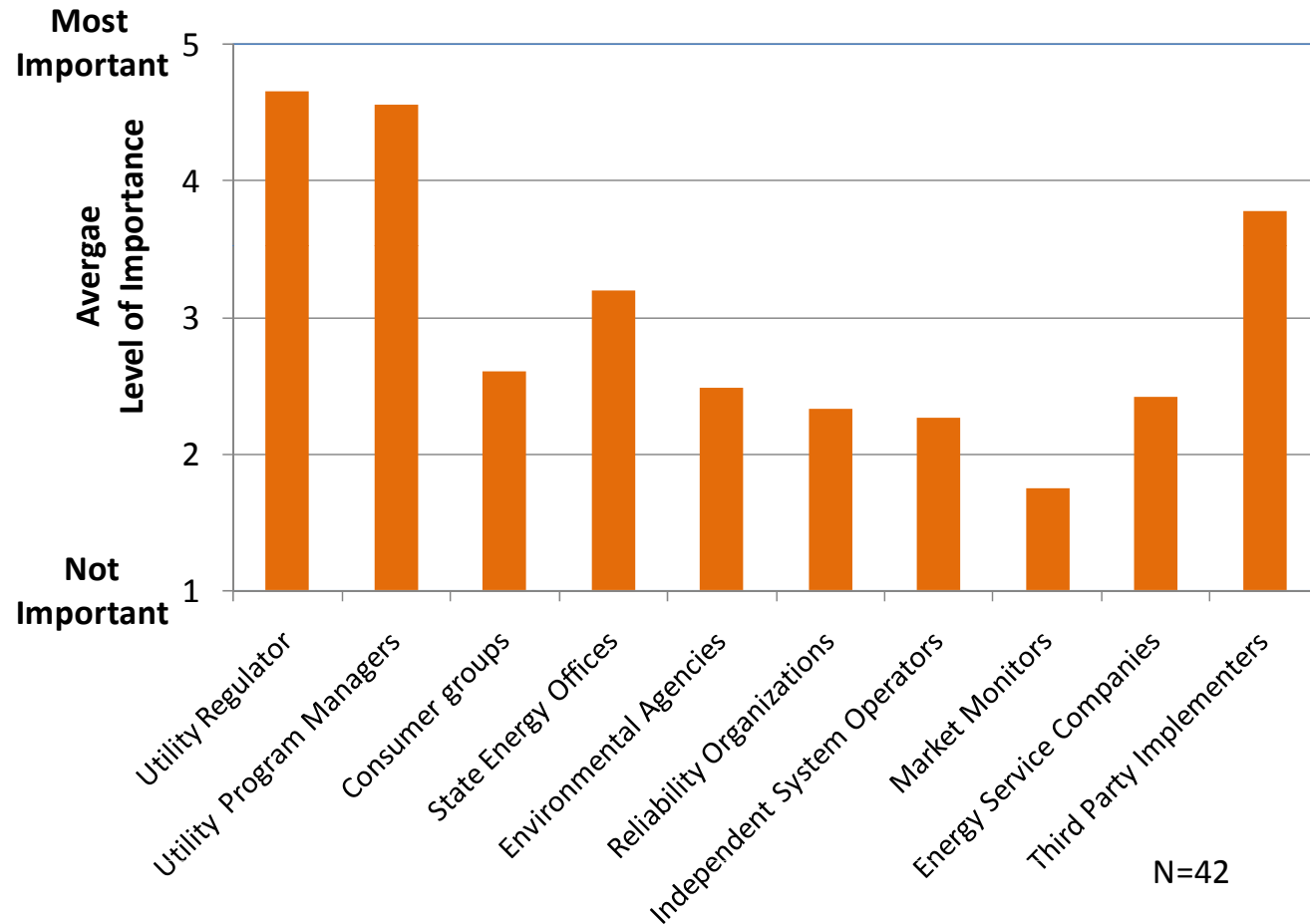
- Select sample of 14 key states and NEEA with active EE programs to inventory evaluation practices
 - Range of experience with ratepayer-funded EE programs (1 to 20 years experience) and different oversight approaches
- Recruit and interview 6 experts per state representing three different perspectives: Policy Makers, Program Evaluation Managers, and Program Evaluators/Practitioners (Sample Size= 90 state & 17 National Experts)
- Collect information via phone and email survey on current approaches to managing and overseeing EM&V in each state and views on emerging issues and potential solutions

Findings:
Most Important Uses and Users
of EM&V studies

Relative Importance of EM&V Objectives



Most Important EM&V Audiences



Findings: Evaluation Planning Practices

Three Distinct Evaluation Planning Approaches Across States

1. Internal process led by program administrator (PA) develops program and portfolio level evaluation objectives, evaluators provide project specific evaluation plans and PA approves final budget- (30% identify as prevalent practice in their state)
2. Public process led by PA- PA initiates evaluation planning for a proposed portfolio of research projects within regulatory approved budget. Project specific planning is performed by consultants after final projects selected. (38% identify as prevalent practice in their state)

Evaluation Planning Approaches Across States (continued)

3. Public Process for Evaluation Planning led by regulatory body Regulator initiates evaluation planning at portfolio level, sets broad EM&V budgets and ultimately approves list of research projects. Project specific evaluation planning is an internal process between project manager and evaluation consultants. (21% identify as prevalent practice in their state)

Evaluation Methods and Execution

- What types of organization typically perform program evaluations?
- What types of Program Impacts are reported?
- Are there Requirements to Estimate Gross savings, Net Savings or both?
- What factors should be included in estimates of net program savings?

Who currently evaluates energy savings and/or the effectiveness of Energy Efficiency programs?

	Utility Internal Staff	3 rd Party Contractors	State Agency	Other
CA	X	X	X	
CT		X		X (Collab.)
FL	X	X	X	
IA	X	X	X	
ID	X	X		
IL		X		
MA		X		
ME			X	
MN	X	X	X	
NEEA		X		X
NY		X		
OR		X		
PA			X	
TX	X	X		
WI		X		

What is Reported: Program Gross or Net Savings or Both?

States	Standardized Definition of Gross Program Savings?	Standardized Definition of Net Program Savings?	Does Net savings include spillover and or Market Effects caused by program?	Requirement to report Gross or Net Program Savings or both ?	Support Need to Standardize Definitions of Gross and Net savings at National level?
California	Yes	Yes	Yes	Both	Yes
Connecticut	Yes	Yes	?	Net	Maybe
Idaho	No	No	No	Gross	No
Illinois	Not yet	No	yes	Both	??
Iowa	No	No	No	Sometimes	3 of 4 say yes
Maine	Gross=Net	Gross=Net	Gross=Net	Gross=Net	Yes
Massachusetts	Yes	Yes	Yes	Both	Maybe
Minnesota	Yes	No	NA	Gross only	Maybe
NEEA	No	No	No	Gross and Net	Measurement focuses on total market effects
New York	Yes	Yes	It can	Net	Yes
Oregon	No	No	No	NA	Yes if not forced
Pennsylvania	Under Review	Under Review	Under Review	Under Review	Yes
Texas	Yes	No	NA	Gross	??
Wisconsin	No	No	Yes	Both	Yes

Who sets the precision, accuracy, or robustness requirements for developing savings estimates?

	By Oversight Body and codified in protocols	By Program Administrators on a case by case basis	By the evaluator based on professional judgment, prior experience and/or budget constraints
CA	Program & Portfolio		Program & Portfolio
CT			By evaluator but reviewed by Collaborative Board
FL	Program		Program
IA	Program	Program	
ID		Program & Portfolio	Program
IL	Program & Portfolio	Program & Portfolio	Program & Portfolio
MA	Program & Portfolio		
ME		Program	
MN		Program & Portfolio	
NEEA		Program & Portfolio	Program
NY	Program & Portfolio		
OR	Program	Program & Portfolio	Program
PA		Program & Portfolio	
TX		Program & Portfolio	
WI	Program	Program & Portfolio	Program & Portfolio

What types of guidance is provided on what impacts to measure and how to estimate them?

Statewide Inventory of Guidance on Evaluation Methods

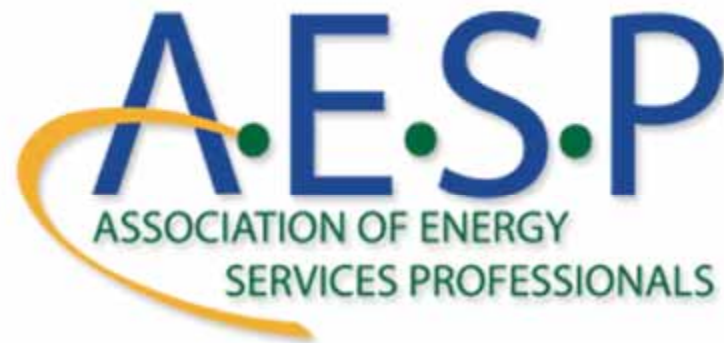
States	Technical Resource Manual or Deemed Savings database for PA use in developing ex ante program estimates?	Requirement to identify range of uncertainty in program savings estimates?	Audit requirement to verify sample of installations?	EM&V protocols exist to guide or require use of specific methods to evaluate program or market savings?	Requirement to report Gross or Net Savings or both?
California	Yes	Yes	Yes	Yes	Both
Connecticut	Yes	80/20	Part of program	No	Gross
Idaho	No	No	No	No	No
Illinois	Not yet	No, but likely	Yes	Not yet, in process	Both
Iowa	No	No	No	No	Sometimes
Maine	Yes	No	No	No	Gross only
Massachusetts	Yes, in next 2 months	Yes	Yes for most programs	No	Net savings
Minnesota	Yes	No	Yes	Yes for custom projects	Gross
NEEA	No	No	No	No	Sometimes
New York	Yes	Not yet	Yes	Yes	Net only
Oregon	Yes	No	No	No	Sometimes
Pennsylvania	Planned	No	Under review	Not yet	Under review
Texas	Yes	No	In Practice yes	No	Gross only
Wisconsin	No	No	Yes	Yes	Yes

Emerging Evaluation Issues

1. Consistency in Reported Program Savings
2. Disagreement on What (types of effects) should be included in Net Program Saving Evaluation Designs
3. Wide Range of Requirements and Processes Used to Ensure Quality Control and Accuracy
4. Evaluation Resource Allocation (priority of process, impact , or market effects; estimate measure and or program level savings; and integrated vs. independent process and impact evaluations)
5. Methods to Ensure Evaluator Independence/Objectivity
6. Integration of EE evaluation load impact results in utility planning and forecasting

Recommendations

- National organizations should work with regional and state oversight bodies to ensure more consistency in program savings terms and program reporting (gross and net)
- Training needed to ensure better integration of EE program load impact estimates into different types of load forecasts (e.g., inconsistent baselines, double counting)
- National (or regional) organizations should take lead in developing best practices or case studies to increase the current levels of quality control and consistent reporting of saving results: focus on accuracy and potential for bias.



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