

End-Use Energy Efficiency Evaluation, Measurement and Verification (EM&V) Resources

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These resource lists are intended as an indication of some, but not all, of public EM&V resources that are available via the Internet. Resources are not listed in a particular order and should not be presumed to include all available documents and websites.

General Evaluation Resources Websites

- US EPA Evaluating Clean Energy Programs Website:
<http://epa.gov/statelocalclimate/state/activities/measuring-savings.html>
- US EPA EM&V Webinar Website:
<http://www.emvwebinar.org/>
- Consortium for Energy Efficiency EM&V Resources Website:
<http://www.cee1.org/eval/eval-res.php3>
- International Energy Program Evaluation Conference Website:
<http://www.iepec.org/IEPECHome.htm?programsabstracts.htm>
- International Performance Measurement and Verification Protocol (IPMVP) – Efficiency Valuation Organization (EVO) website:
www.evo-world.org
- Federal Energy Management Program M&V website:
<http://ateam.lbl.gov/mv/>
- California Measurement Advisory Council (CALMAC):
<http://www.calmac.org>
- **Northwest Energy Efficiency Alliance:**
<http://www.nwalliance.org/research/evaluationreports.aspx>
- **National Action Plan database of documents:**
http://cfpub.epa.gov/ceird/index.cfm?fuseaction=napee.search_js
- **California Institute of Energy and Environment, Planning and Evaluation Library:**
<http://uc-ciee.org/planning-evaluation/7/lbrsearch>

- ACEEE Summer Studies Proceedings: <http://www.aceee.org>

Select Reference Documents

- 2007 NAPEE Model Energy Efficiency Program Impact Evaluation Guide:
http://www.epa.gov/cleanenergy/documents/suca/evaluation_guide.pdf
- 2006 California Energy Efficiency Evaluation Protocols:
http://www.calmac.org/publications/EvaluatorsProtocols_Final_AdoptedviaRuling_06-19-2006ES.pdf
- 2004 The California Evaluation Framework.
http://www.calmac.org/publications/California_Evaluation_Framework_June_2004.pdf
- 2007 US DOE Impact Evaluation Framework for Technology Deployment Programs.
http://www.eere.energy.gov/ba/pba/km_portal/docs/pdf/2007/impact_framework_tech_deploy_2007_main.pdf
- 2006 US DOE Guide for Managing General Program Evaluation Studies.
http://www1.eere.energy.gov/ba/pba/pdfs/evl_mg_app.pdf
- 2010 LBNL Study: Review of Evaluation, Measurement and Verification Approaches Used to Estimate the Load Impacts and Effectiveness of Energy Efficiency Programs:
<http://eetd.lbl.gov/ea/emp/reports/lbnl-3277e.pdf>
- 2011 LBNL Study: National Energy Efficiency Evaluation, Measurement and Verification (EM&V) Standard: Scoping Study of Issues and Implementation Requirements:
<http://eetd.lbl.gov/ea/ems/reports/lbnl-4265e.pdf>
- 2011 SEE Action Report: Scoping Study to Evaluate Feasibility of National Databases for EM&V Documents and Measure Savings:
- California Institute for Energy and Environment – report on EM&V training opportunities:
<http://uc-ciee.org/planning-evaluation/7/342/105/nested>

Technical Reference Manual Resources¹

Scope	Resource Name	Format	Information Included	Administrator
National	ENERGY STAR®	Online Calculators	<i>Ex ante</i> savings based on algorithms	Agency
Regional – Northwest	Regional Technical Forum (RTF) Deemed Measures	Online Database	<i>Ex ante</i> savings based on algorithms	Advisory Committee
Regional - Midatlantic	Mid-Atlantic TRM	PDF	Algorithms and <i>Ex ante</i> savings	Non-Profit Organization
Arkansas	Arkansas Deemed Savings Quick Start Programs	PDF	Algorithms	Public Utility
California	Database for Energy Efficient Resources (DEER)	Software Program	<i>Ex ante</i> savings	State Commission
Connecticut	Connecticut Light & Power and United Illuminating Company Program Savings Documentation	PDF	Algorithms and <i>Ex ante</i> savings	Public Utility
Hawaii	Hawaii Energy Efficiency Program TRM	PDF	Algorithms and <i>Ex ante</i> savings	State Commission
Maine	Efficiency Maine TRM – Commercial Efficiency Maine TRM – Residential	PDF	Algorithms and <i>Ex ante</i> savings	Trust
Massachusetts	Massachusetts Statewide TRM for Estimating Savings from Energy Efficiency Measures	PDF	Algorithms and <i>Ex ante</i> savings	Agency
Michigan	Michigan Energy Measures Database	Excel Database	<i>Ex ante</i> savings	State Commission
New Jersey	New Jersey Clean Energy Program Protocols to Measure Resource Savings	PDF	Algorithms and <i>Ex ante</i> savings	Agency
New York	New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs	PDF	Algorithms and <i>Ex ante</i> savings	Agency
Ohio	Ohio TRM	Online Database	Algorithms and <i>Ex ante</i> savings	State Commission
Pennsylvania	Pennsylvania TRM	DOC	Algorithms and <i>Ex ante</i> savings	State Commission
Texas	Deemed Savings, Installation, and Efficiency Standards	PDF	Algorithms and <i>Ex ante</i> savings	State Commission
Vermont	Efficiency Vermont Technical Reference User Manual	PDF	Algorithms and <i>Ex ante</i> savings	Non-Profit Organization
Wisconsin	Focus on Energy Evaluation Business Programs: Deemed Savings Manual V1.0	PDF	Algorithms and <i>Ex ante</i> savings	State Commission

¹ This table is from the SEE Action and LBNL Report: Scoping Study to Evaluate Feasibility of National Databases for EM&V Documents and Measure Savings, by the Cadmus Group (tables are current as of Spring 2011)

EM&V Document (Plans, Reports and Market Studies) Resources²

State	Organization Type	Organization Name	Web Location	EM&V Plans	EM&V Reports	Market Studies	Other Database Features
National	PUC	EE Best Practices	http://www.eebestpractices.com/find.asp	No	No	No	Reports for best practices studies and program profiles.
	Nonprofit	CEE	http://www.cee1.org/search/search.php	No	Yes	Yes	Includes conference proceedings and large numbers of EM&V and other report types.
	Nonprofit	ACEEE	http://www.aceee.org/about	No	No	No	Contains papers on EMV practices and general topics, also contains potential studies
Regional NE	Nonprofit	NEEP	http://neep.org/uploads/EMV%20Forum/EMV%20Studies/Repository%20of%20State%20&%20Topical%20EM&V%20Studies%20-%20CURRENT%20-%202012-1-10.xls	No	Yes	Yes	Repository of studies for NEEP states, also contains info for each state regarding status of EMV and legislation, links to TRM's, and includes a topical database on load shape studies.
Regional PNW	Nonprofit	NEEA	http://neea.org/research/index.aspx	No	Yes	Yes	Repository of reports for NEEA utilities.
Regional MidWest	Nonprofit	MEEA	http://www.mwaliance.org/resources/meea-publications/archive/programs	No	No	Yes	Case study and best practice database.
Regional SE	Nonprofit	SEEA	http://www.seealiance.org/programs/research.php	No	No	No	Contains best practices and other studies.
Regional SW	Nonprofit/Public Interest	SWEEP	http://www.swenergy.org/publications/index.html	No	No	No	Website includes links to SWEEP-published reports and presentations on Regional & State Policy, Building Efficiency, Utilities, but is not a database.
Regional	Public Organization/Power Producer	Bonneville Power Administration	http://www.bpa.gov/Energy/N/reports/evaluation/index.cfm	No	Yes	Yes	Appears to be a complete repository, although some reports are not posted on site and are only listed by title.

² This table is from the SEE Action and LBNL Report: Scoping Study to Evaluate Feasibility of National Databases for EM&V Documents and Measure Savings, by the Cadmus Group (tables are current as of Spring 2011)

State	Organization Type	Organization Name	Web Location	EM&V Plans	EM&V Reports	Market Studies	Other Database Features
Arizona	Commission	Arizona Corporation Commission (See SWEEP for more info)	http://www.azcc.gov/	No	No	No	
California	Utility	SCE	http://www.sce.com/AboutSCE/Regulatory/ee filings/proposals/default.htm	No	No	No	
	Public University	University of California, California Institute for Energy and Environment	http://uc-ciee.org/pubs/ref_market.html	No	Yes	Yes	Also research papers.
	PUC	CPUC ED	http://www.energydataweb.com/cpuc/default.aspx	Yes	Yes	Yes	
	PUC	CALMAC	http://www.calmac.org/	No	Yes	Yes	
Colorado	PUC	Colorado PUC	http://www.dora.state.co.us/puc/	No	No	No	References at least one DSM Annual Report, but unable to find anything other than proceedings page.
Connecticut	State Utility Partnership	Connecticut Energy Efficiency Fund (CEEF)	http://www.ctsaveenergy.org/ecmb/documents.php?section=22	No	Yes	Yes	Committee and Board agendas and minutes, other documents, presentations, potential studies.
Delaware	3rd Party Administrator	Sustainable Energy Utility	http://www.seu-de.org/	No	No	No	
Florida	PUC	FL PSC	http://www.floridapsc.com/publications/pdf/electricgas/FEECA2010.pdf	No	No	No	
Hawaii	3rd Party Administrator	Hawaii Energy	http://www.hawaiienergy.com/	No	No	No	Began admin of EE programs after July 2009, in process of having evaluation done, but too new to have evaluation reports posted.
Indiana	Regulatory Commission	Indiana Utility Regulatory Commission	https://myweb.in.gov/IURC/eds/Guest.aspx?tabid=28&dn=SEARCHDOCKETEDCASE	No	No	No	Docketed cases only, not able to locate actual reports.
Iowa	Regulatory Board	Iowa Utilities Board (Utility association doesn't post documents)	http://www.state.ia.us/government/com/util/index.html	No	No	No	Regulatory plans available.

State	Organization Type	Organization Name	Web Location	EM&V Plans	EM&V Reports	Market Studies	Other Database Features
Maine	Program Administrator	Efficiency Maine	http://www.efficiencymaine.com/documents-services/evaluations	No	Yes	Yes	RFPs on site. Market studies include baseline study and CFL report.
Maryland	Government	Maryland Energy Administration	http://energy.maryland.gov/home.html	No	No	No	Devoted Web page to Reports and Documents, but limited resources posted. Strategic Energy Plan available.
Massachusetts	Nonprofit	NEEP(see regional listing above for details)	http://neep.org/emv-forum/emv-library/research-evaluation-studies	No	Yes	No	Includes a few documents with information on evaluation methodologies, review of EE plans and reports.
	Public Utility Commission	DPU	http://www.ma-eeac.org/	No	No	No	Includes efficiency reports as well.
Missouri	Nonprofit	Missouri Public Utility Alliance	http://www.mpua.org/	No	No	No	
	Utility	Ameren	http://www.ameren.com/sites/ameren/Pages/home.aspx	No	Yes	Yes	You have to have a log in to access a repository of the EM&V reports or market studies. You can, however, access them by using the search feature and using the term "evaluation" or "study." Website includes an integrated resource plan.
Nevada	Public Utility Commission	PUCN	http://pucweb1.state.nv.us/pucn/PUCHome.aspx	No	No	No	Includes some efficiency goals in a strategic plan, but has no separate plan.
New York	Nonprofit	NYSERDA	http://www.nyserda.org/Energy_Information/evaluation.asp	No	Yes	Yes	
	State Department	New York Department of Public Service	http://documents.dps.state.ny.us/public/Common/SearchResults.aspx?MC=0&DFF=2/1/2011&CI=0	Yes	Yes	Yes	
Oregon	3rd Party Administrator	Energy Trust of Oregon	http://energytrust.org/About/policy-and-reports/Reports.aspx	No	Yes	Yes	Dropdown lists for "Report type" (impact, process, market, etc.) and "Program" allow filtering.
Pennsylvania	PUC	PUC	http://www.puc.state.pa.us/electric/Act_129_info.aspx	No	No	No	PUC will evaluate the EE programs as per Act 129, and they sought a statewide evaluator, GDS, which has a contract through Oct 2011.

State	Organization Type	Organization Name	Web Location	EM&V Plans	EM&V Reports	Market Studies	Other Database Features
Texas	Other	Electric Utility Marketing Managers of Texas	http://www.texas-efficiency.com/layout/inside.php?pgID=42&sn=Reports	No	Yes	Yes	Very small list of four reports done for the Texas PUC.
Texas	PUC	Texas PUC	http://www.puc.state.tx.us/electric/reports/index.cfm	No	Yes	Yes	
Vermont	3rd Party Administrator	Efficiency Vermont	http://www.efficiencyvermont.com/pages/Common/AboutUs/AnnualReport/	No	No	No	Includes: oversight table listing verifications, evaluation, audit requirements, who performs it and frequency.
	PUC	Vermont DPS	http://publicservice.vermont.gov/energy/ee_performanceevaluation.html	No	No	No	
Washington	Utility	Seattle City Light	http://www.seattle.gov/light/Conserve/cv5_pub.htm	No	Yes	Yes	List of links with embedded reports, listed chronologically.
	Commission	Washington Utilities and Transportation Commission	http://www.wutc.wa.gov/home	No	No	No	
Wisconsin	Utility Organization	Focus on Energy for Wisconsin Utilities	http://www.focusonenergy.com/Evaluation-Reports/default.aspx	No	Yes	Yes	List of links with embedded reports.