

Synapse
Energy Economics, Inc.

Energy Efficiency Cost-Effectiveness: National Perspectives and Developments

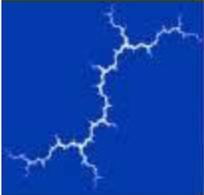
Technical Conference
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Tim Woolf

How to Define What is Cost-Effective

- California Standard Practice Manual – three standard tests.
 - Utility Cost test
 - Total Resource Cost test
 - Societal Cost test
- Many states are currently debating which is the right test to use.
- Efficiency experts continue to debate which test is “best.”
- Why is this so difficult?
 - Most states / debates are unduly constrained by the California Standard Practice Manual.

The California Standard Practice Manual

- The CA Standard Practice Manual is used in almost every state.
- However, the Manual is woefully inadequate for today's needs.
- Approach to energy policy goals is not well addressed.
- Non-energy benefits are barely addressed.
- The difference between the TRC and Societal tests is not well defined.
- The RIM test should not be used for screening.
 - Other approaches should be used to assess rate impacts.
- States should not be confined to the CA tests.



The National Efficiency Screening Project (NESP)

- **Organizers:**
 - Home Performance Coalition, with funding from the Energy Foundation and several EE companies.
- **Steering Committee:**
 - Home Performance Coalition, Conservation Services Group, Tim Woolf
- **Project Advisors:**
 - Philippe Dunsky, Dunsky Energy Consulting; Tom Eckman, Northwest Power and Conservation Council; Sami Khawaja, Cadmus; Marty Kushler, American Council for an Energy Efficient Economy; Julie Michals, Northeast Energy Efficiency Partnerships; Peter Miller, Natural Resources Defense Council; Steve Schiller, Lawrence Berkeley National Laboratory; Rodney Sobin, Alliance to Save Energy.
- **Members:**
 - National Home Performance Council / Home Performance Coalition; Alliance to Save Energy; American Council for an Energy Efficient Economy; Clinton Foundation: Home Energy Affordability Program; Conservation Services Group; Energy Federation Inc.; National Resources Defense Council; Northeast Energy Efficiency Council; Performance Systems Development; Retrofit Software; Sierra Club; Truveon Corporation; Wisconsin Energy Center

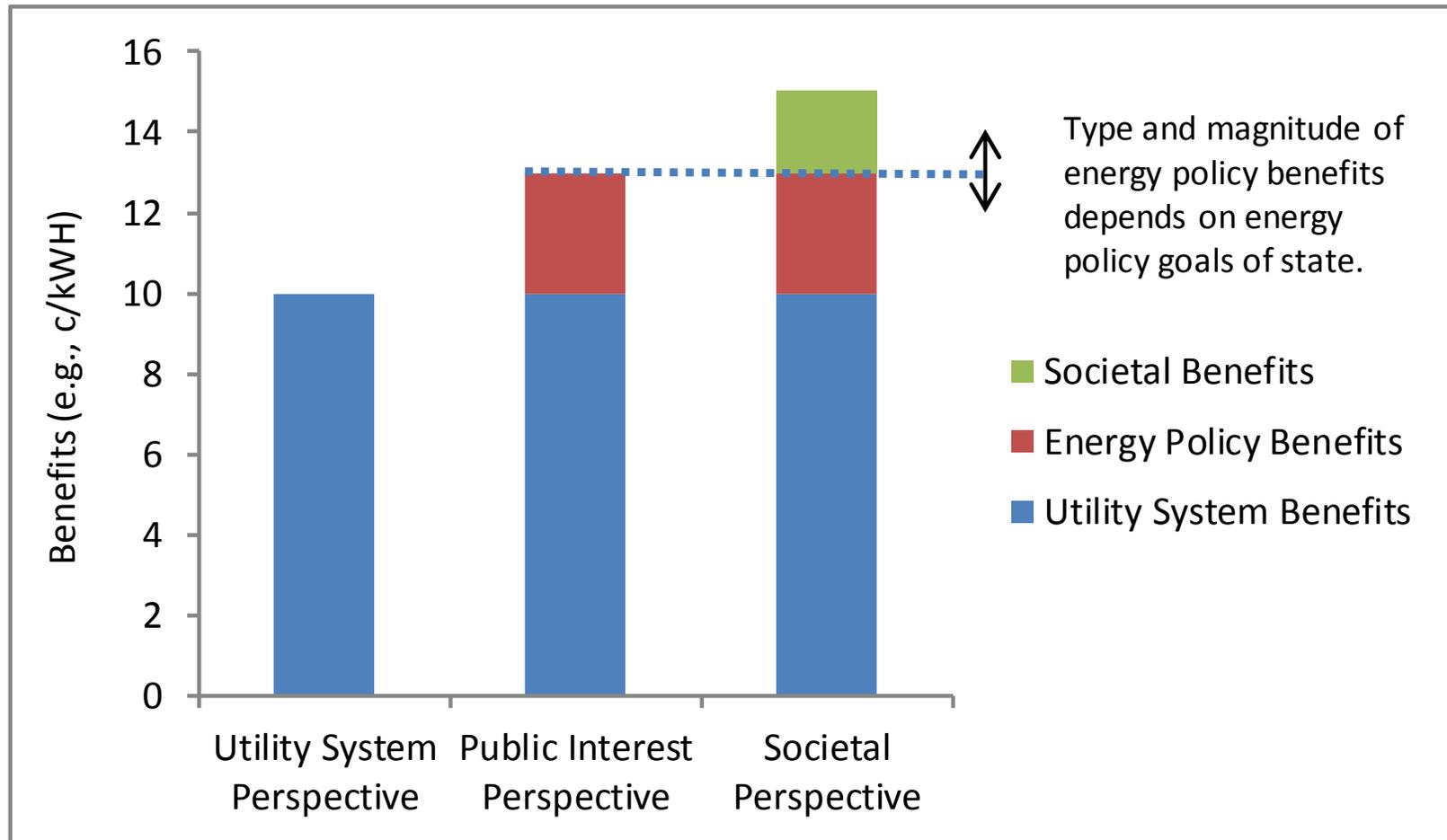
NESP – Key Elements

- Developed the Resource Value Framework.
- A framework of principles and recommendations that allows each state to identify a test that meets its own needs.
 - Clarifies that the goal of energy efficiency screening is to identify those resources that are in the public interest.
 - Accounts for the energy policy goals of each state.
 - Requires that costs and benefits be applied symmetrically.
 - Requires consideration of relevant hard-to-quantify benefits.
 - Provides an explicit, transparent process to identify the appropriate screening test and methodologies for each state.
- Still a work-in-progress.
 - See www.nhpci.org/campaigns.html for more information.

Components of the Three Primary Tests

	Utility Test	TRC Test	Societal Cost Test
Energy Efficiency Program Benefits:			
Avoided Energy Costs	Yes	Yes	Yes
Avoided Capacity Costs	Yes	Yes	Yes
Avoided Transmission and Distribution Costs	Yes	Yes	Yes
Wholesale Market Price Suppression Effects	Yes	Yes	Yes
Avoided Cost of Environmental Compliance	Yes	Yes	Yes
Non-Energy Benefits (utility perspective)	Yes	Yes	Yes
Non-Energy Benefits (participant perspective)	---	Yes	Yes
Non-Energy Benefits (societal perspective)	---	---	Yes
Energy Efficiency Program Costs:			
Program Administrator Costs	Yes	Yes	Yes
EE Measure Cost: Program Financial Incentive	Yes	Yes	Yes
EE Measure Cost: Participant Contribution	---	Yes	Yes

The Public Interest Perspective



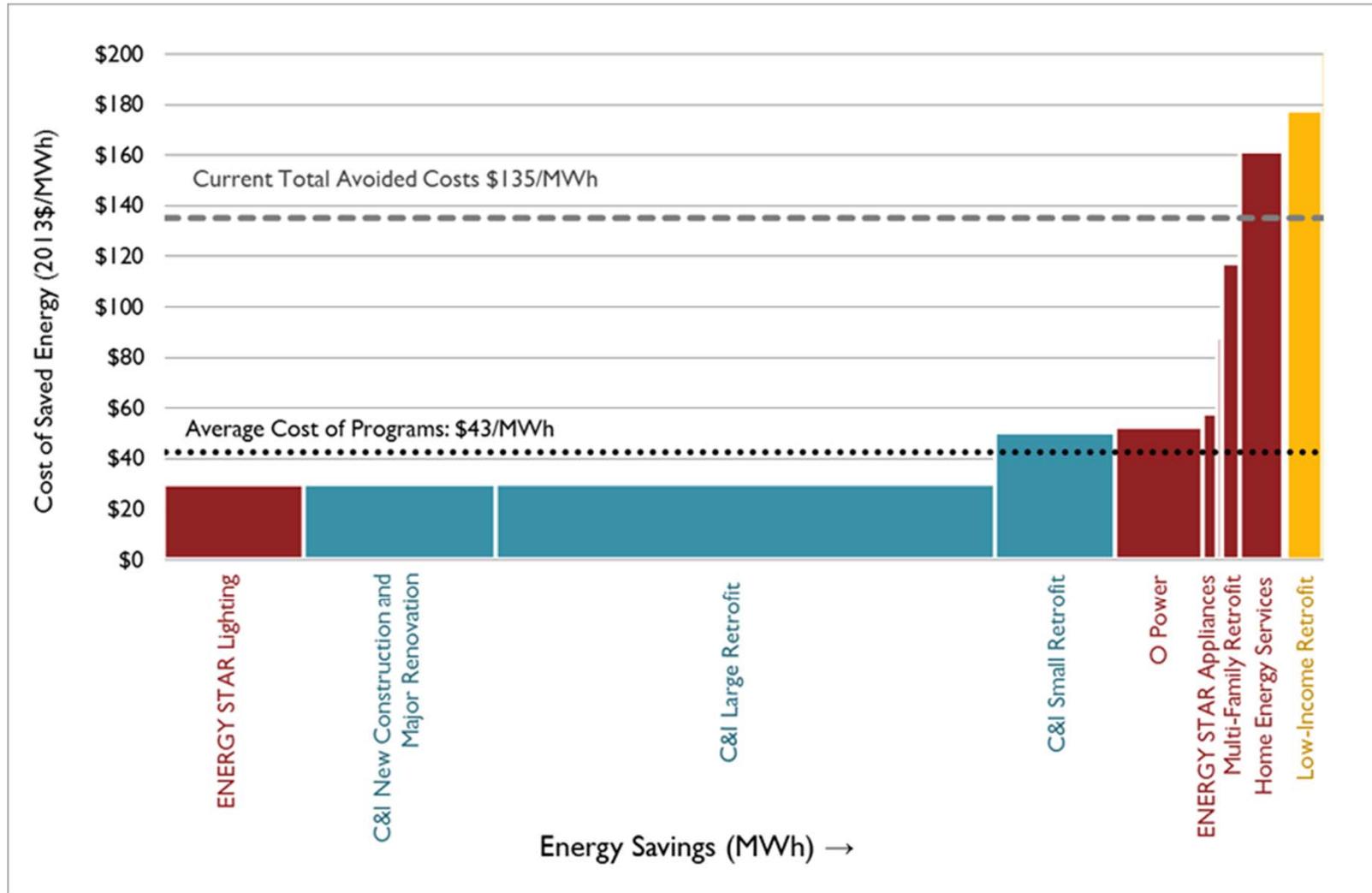
Applying the Resource Value Framework to Rhode Island

- Rhode Island already applies many of the principles and recommendations in the RVF.
 - EE screening is based on relevant statutes.
 - EE screening methodology is further clarified in LCP standards.
 - Commission orders are consistent with statutes and standards.
 - Collaborative provides input on the methodologies and assumptions.
 - Company uses appropriate methodologies and assumptions.
 - Screening test and results are a good representation of whether EE is in the public interest.
- The NESP recommendations do not indicate the need to make significant changes to the LCP standards in RI.

Rates, Bills, Participants and Cross-Subsidization

- Concerns about rate impacts are primarily concerns about customer equity and cross-subsidization.
- RI Rate & Bill Impact analysis indicates that:
 - Long term average rate impacts are relatively small.
 - Average customer bills will be reduced significantly.
 - The majority of customers will participate and see lower bills.
 - There are actions we can take to increase participation.
- Cross-subsidization is fairly common with supply-side resources.
- Eliminating cross-subsidization can lead to perverse outcomes:
 - For example, zero cross-subsidization → higher costs for all.
- Ultimate goal is to balance reduced costs and increased rates.

Comparison of Costs and Benefits (Avoided Costs)



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