



Home Performance Coalition

The Resource Value Framework: A New Approach to Cost-Effectiveness Testing

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Robin LeBaron

Senior Advisor for Policy and Research



The Home Performance Coalition

- National stakeholder and conference organization
- Addresses challenging issues in the residential energy efficiency / home performance industry
 - Supporting interoperability and reducing program costs through development of national data standards
 - Making the value of energy efficient homes visible in the real estate transaction
 - Finding intersections between smart grid and device technologies and home performance
 - Reforming cost-effectiveness screening practices



The Resource Value Framework

- A new approach to cost-effectiveness screening
- A framework – not a single test that replaces the widely-used CSPM screening tests
- Provides a method to “test your test”

OR

- Provides a method to create a new, theoretically coherent test



The RVF Principles

- The ultimate goal of cost-effectiveness testing is to determine whether a program is in the **public interest**
- Energy efficiency screening should account for a state's **energy policy goals**
- Tests should be **symmetrical**, i.e. corresponding costs and benefits should both be accounted for
- Test inputs should be **transparent** to stakeholders
- **Hard-to-quantify benefits** should be **adequately accounted for**
- The principles underlying the RVF should be **applicable to all resources**, both demand- and supply-side

The RVF Template

Resource Value Framework - Template			
Program Name:		Date:	
1. Key Assumptions, Parameters and Summary of Results			
Analysis Level	<input type="checkbox"/> Program <input type="checkbox"/> Portfolio		
Measure Life		Discount Rate	
Projected Annual Savings		Projected Lifetime Utility Savings	
2. Monetized Utility Costs¹³		Monetized Utility Benefits	
Program Administration		Avoided Energy Costs	
Incentives Paid to Participants		Avoided Capacity Costs	
Shareholder Incentive		Avoided T&D Costs	
Evaluation		Wholesale Market Price Suppression	
Other Utility Costs		Avoided Environmental Compliance Costs	
		Other Utility System Benefits	
NPV Total Utility Cost		NPV Total Utility Benefits	
3. Monetized Participant Costs		Monetized Participant Benefits	
Participant Contribution		Participants' Savings of Other Fuels	
Participant's Increased O&M Costs		Participant Non-Energy Benefits:	
Other Participant Costs		Participants' Water and Sewer Savings	
		Participants' Reduced O&M Costs	
		Participants' Health Impacts	
		Participant Employee Productivity	
		Participant Comfort	
		Additional Low-Income Participant Benefits	
		Other Participant Non-Energy Benefits	
NPV Total Participant Cost		NPV Total Participant Benefits	
4. Monetized Public Costs		Monetized Public Benefits	
Public Costs		Public Benefits of Low Income Programs	
		Reduced Environmental Impacts (if monetized)	
		Public Fuel and Water Savings	
		Reduced Public Health Care Costs	
		Other Public Benefits	
NPV Total Public Costs		NPV Total Public Benefits	
Total Monetized Costs and Benefits			
Total Costs		Total Benefits	
Benefit- Cost Ratio		Net Benefits	
5. Non-Monetized Public Costs and Benefits			
Non-Monetized Benefits		Comments	
Promotion of Customer Equity			
Reduced Risk			
Increased Reliability			
Reduced Environmental Impacts (if not monetized)			
Increased Jobs and Economic Development			
6. Determination:			
<input type="checkbox"/> Program is in the public interest		<input type="checkbox"/> Program is not in the Public Interest	



“Public Interest” Test

- A way to develop a test that:
 - Ensures that the state’s policy goals are taken into consideration
 - Reduces the need for hard-to-quality inputs
- A state’s Public Interest Test could include:
 - Utility system costs and benefits
 - Energy policy costs and benefits
 - *Participant cost and benefits optional – not necessary for the test*



The National Efficiency Screening Project (NESP)

- Working to promote the Resource Value Framework nationally
- Working with stakeholders in several states to encourage commissions to adopt RVF principles
- National calls every two months
- Planning to develop a new standard practice manual

<http://nationalefficiencyscreening.org>



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NESP Members

Sign up at <http://nationalefficiencyscreening.org>

and join

The Alliance to Save Energy, ACEEE, Arkansas Advanced Energy Economy, Association for Energy Affordability, Bki, Building Performance Contractors Association, BPI, Clinton Foundation Home Energy Affordability Program, Conservation Connection Consulting, CSG, Democracy and Regulation, Earth Advantage, Efficiency First, Efficiency Vermont, Elevate Energy, Energy Federation Inc., Environment America, Environment Northeast, Habitat for Humanity, Home Performance Guild of Oregon, Local Energy Alliance Program, MaGrann Associates, National Center for Healthy Housing, National Grid, Home Performance Coalition, National Housing Trust, NRDC, Northeast Energy Efficiency Council, PECEI, Performance Systems Development, Retrofit Software, Sealed, Sierra Club, Southeast Energy Efficiency Alliance, Southern Environmental Law Center, Southwest Energy Efficiency Program, Truveon Corporation, Wisconsin Energy Center



Virginia

- New governor supportive energy efficiency: appointed Chief Energy Efficiency Officer
- Commission and staff concerned about rate impacts
- Stakeholder group led by VAEEC recently commissioned white paper from Synapse that recommended:
 - CE screening reform based on RVF principles
 - Approaches for redesigning utility incentives
 - Approaches for addressing concerns about rate impacts
- Commission staff and utility representatives convened to discuss – productive discussions underway



Arkansas

- Stakeholder group (“Parties Working Collaboratively”) required to consider NEBs for inclusion in TRC
- Stakeholders considering:
 - Inclusion of some NEBs, including fuel and water savings and deferred replacement costs, in the next planning cycle
 - Consideration of NEBs that are relatively straightforward to quantify, e.g. arrearage reductions and productivity increases
 - Adder for harder-to-quantify NEBs in the short run, and commitment to quantify them in the longer term



Oregon

- Gas utility residential efficiency measures failing cost-effectiveness screening
 - Ceiling, wall, floor and duct insulation (TRC BCRs of 0.5, 0.2, 0.2, 0.2 respectively)
- Stakeholders make robust case for non-energy benefits
- Commission grants “exemption” for attic insulation with CB ratio of 0.5 by referencing NEBs
- Other measures are scheduled to be cut in spring 2015
- Stakeholders exploring alternative program designs



Big-Picture Take-Aways

- New interest in NEBs across the country – commissions, staff and advocates interested in more research and guidance
- Idea that state public policies should be taken into account resonates, but is slow to actually affect screening methods
- Widespread sense that CE screening practices could / should be improved
- Usually there's *some* common ground
- Cutting-edge states are playing a crucial role



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Thank you!

*For more information
about NESP and the RVF,
contact*

Robin LeBaron

Senior Advisor for
Policy and Research
Home Performance
Coalition

rlebaron@homeperformance.org

g

(646) 416-2650

