

Wisconsin's Approach to Measuring EE Impacts

Evaluating the Focus on Energy Program

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October 2, 2007



Objectives of the Presentation

This presentation summarizes how the Focus on Energy impact evaluations seek to strengthen estimates of savings...helping to establish their credibility for:

- Use in Focus **net** benefit-cost analysis (i.e., the return the state is realizing for investment in EE), and
- Potential future use in the state's **resource planning process**.

Key elements in estimating credible impacts

We think there are about a **dozen elements** that are contributing in Wisconsin to confidence in the reliability and value of EE impacts...and they can be categorized into:

- **Technical** aspects of the evaluation
- **Institutional** factors strengthening the evaluation
- **Policy-level** considerations (potentially) strengthening the evaluation

First, background on the Focus on Energy program

Focus is administered by the Public Services Commission of Wisconsin (PSC), with funding for Focus provided by the Utility Public Benefits fund created by the Wisconsin State Legislature in 1999 and restructured recently by Act 141

- Online information about the Focus programs can be found at the public Focus website (www.focusonenergy.com) – under “About us” and “Evaluation reports”

Energy impacts methods

The evaluation team implements periodic rounds of data collection and document review to estimate verified gross and net energy savings for Focus programs

- Telephone surveys of participants, and/or market sales data
- On-site measurement at some participant sites to verify project information and provide actual measured or metered data to support impact estimates
- Engineering review of program documentation on how the energy savings were calculated

The results of surveys, on-site data, and engineering review are combined to create the gross savings adjustment factor and realization rates.

Annual verified gross and verified net tracked energy savings

	Annual kWh Saved		Annual Therms Saved	
	Verified Gross	Verified Net	Verified Gross	Verified Net
FY07 (July 1, 2006–June 30, 2007)				
Total	248,727,112	180,297,395	15,561,780	7,654,615
Business	157,983,071	109,411,491	13,319,734	6,073,457
Residential	81,365,729	69,037,703	1,524,927	1,348,874
Renewable	9,378,311	1,848,201	717,119	232,283
Program-to-Date (July 1, 2001–June 30, 2007)				
Total	1,190,178,729	853,685,742	63,040,162	38,682,036
Business	697,211,767	418,275,235	50,397,945	28,948,300
Residential	444,433,792	423,500,678	9,299,435	8,752,753
Renewable	48,533,170	11,909,830	3,342,782	980,983



Technical aspects – *net* impact evaluations

The impact evaluations typically consist of two separate estimations – **verified gross** and **verified net**, referring respectively to:

- Independent verification of the implementation of energy efficiency improvements, and the engineering calculations used to estimate the energy saved
- Independent verification of the extent to which energy savings can confidently be attributed to Focus efforts

Performance contracting – *net* targets

After a transition over several years, the program implementer performance contracts are now denominated in **net** targets.

Also, the contract energy impacts performance targets will be assessed **ex post** – this puts a premium on evaluation

- Timeliness of feedback
- Enhanced ability of the evaluation, over time, to estimate indirect effects reliably enough to credit them to the programs
- These indirect effects now need to explicitly address participant spillover

Evaluation planning...

Annual detailed evaluation planning is reviewed and finalized with input from:

- The state's program sponsor (PSC) and,
- The program implementers

...and the plans must specify the *NTG method*

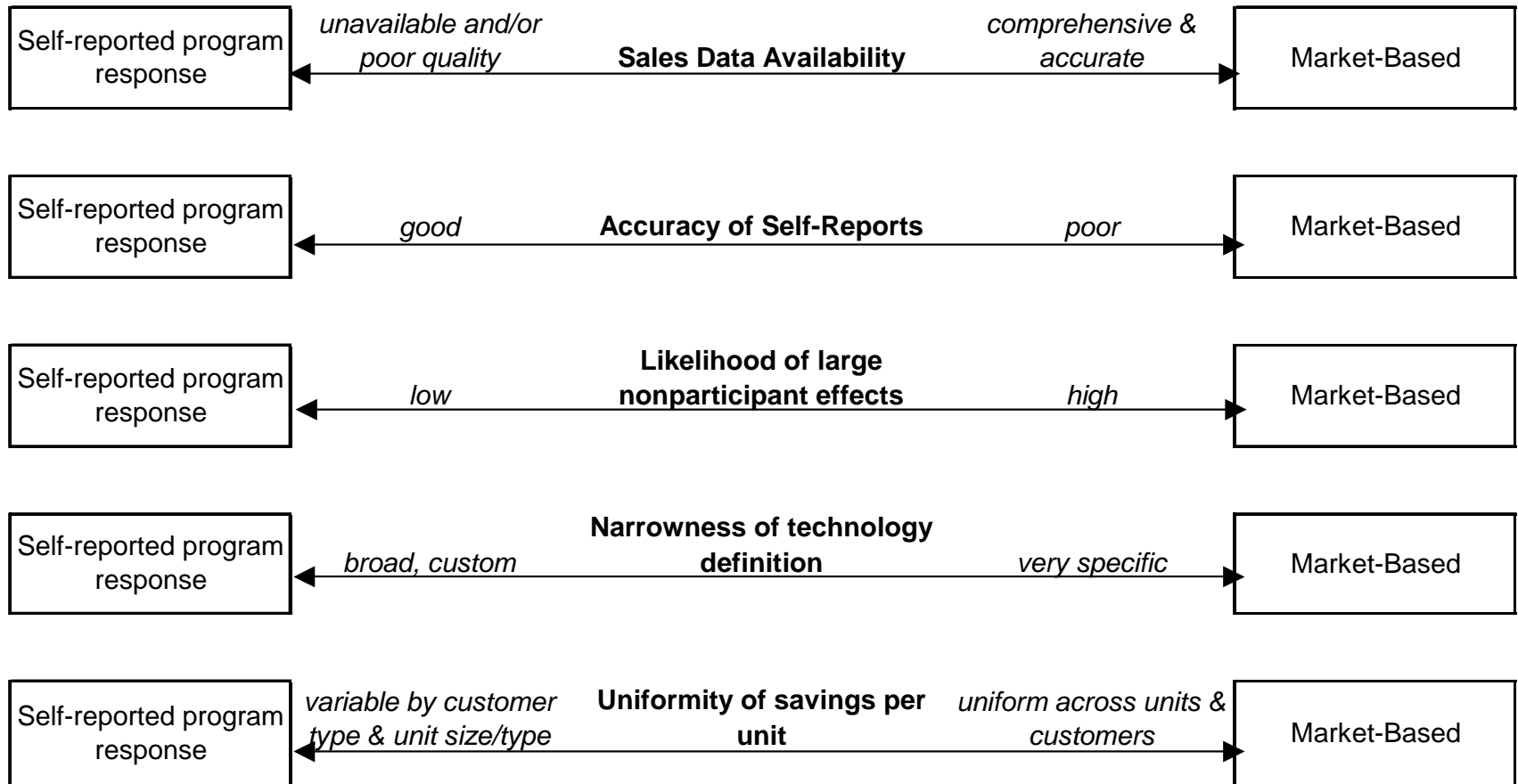
In our program and funding level environment, two NTG methods are used:

- Self-reported program response
- Market-based

We developed a “Net-to-Gross Method Selection Framework for Evaluating Focus on Energy Programs”

As depicted on the next slide, detailed evaluation plans must address method selection screening criteria

...and the plans must specify the *NTG method*



Use of *deemed savings* values/assumptions

Close coordination between program implementers and evaluation on:

- Scrutiny and use of deemed savings values and assumptions in impact evaluations (and program planning)
- Timely ability of implementers to get new (or existing) measure-specific deemed savings values assessed for use

Adequate *funding* for impact evaluations

For FY08 the evaluation budget is adequate for conducting the impact evaluations...keeping in mind that what can't be done in one year can be done in another (i.e., staging of certain expensive impact tasks)

- The budget is currently 3.7% of annual program implementation costs
- Which are estimated at \$63.1M on an annual basis

Institutional factors strengthening evaluation

Continuous, systematically planned and coordinated impact evaluation activities – covering all programs – over 7 years

Long-term evaluation planning – so everyone becomes very familiar with the impact issues:

- From the perspectives of the markets, the program implementers, and the state's interests in independent evaluation

Similar continuity in state contract management, with (hopefully) clear and consistent policy objectives

Policy-level considerations

Wisconsin is embarking on a Quadrennial Planning Process...

- As part of this process, the PSC may consider the issue of “reliability and adequacy of energy” as this relates to EE and RE resources (as part of the optimal mix of resources to meet forecasted demand in the planning), and...
- The PSC may also consider the issue of establishing state-wide standards for measurement and verification of cost-effective gross and net energy impacts (from EE, RE, and DR)

This all furthers the policy objective of getting EE (and RE) regarded as a reliable and valued resource