

2010 Midwest Energy Solutions: Opportunity Now!

What is Evaluation Research?



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> Knowledge to Shape Your Future



What is the Definition of Evaluation?

- Evaluation is the systematic measurement or assessment of an energy program
- It is the collection of qualitative and quantitative information to document a program's effects
- It is the process of verifying program effects
- Evaluation studies measure change induced by a program or activity

What are the Goals of Evaluation?

Why Evaluate?

- > Determine if programs are delivering agreed upon energy, and demand savings
- > Determine which programs are offering the highest cost/benefit ratios
- > Improve operational efficiencies for specific programs or program portfolios - (Inform program planners)

What are the Types of Evaluation?

In order to meet your evaluation goals a variety of evaluation studies can be conducted.

- > Impact (or Measurement & Verification)
- > Process
- > Market
- > Non-Energy Benefits

What are Impact Evaluations?

- Impact Evaluations are used to measure the changes in energy usage (kWh, kW and therms) attributable to energy efficiency and demand response programs
- Program results are determined based on changes to baseline (pre-program) levels

What are Impact Evaluations? continued *Itron*

- Impact results are determined using Statistical Comparisons and Engineering Approaches

- Impact Methodologies include:
 - > Metering Approaches
 - > Engineering Models
 - > Billing Analysis
 - > Statistical Analysis

What are Process Evaluations?

- Process evaluations utilize quantitative and qualitative research to examine how well a program has been and is being implemented.
- Research can include:
 - > Efficiency of Program Channels and Delivery
 - > Effectiveness of Promotional Strategies
 - > Levels of Customer Awareness and Adoption
 - > Customer Satisfaction
 - > Best Practices and Lessons Learned

What are Process Evaluations? continued *Itron*

- Process Evaluations are used to improve the design and delivery of energy programs
- Ultimate goal of increasing participation and energy saving
- Can also be used for:
 - > Program redesign
 - > Identifying staffing needs
 - > Restructure management procedures
 - > Redefine program targeting and segmentation

What are Process Evaluations? continued *Itron*

Process Methodologies include:

- Program Documentation
 - > Program Theory and Logic Modeling
 - > Database reviews
- Qualitative In-depth Interviews
 - > Program Managers, Administrators, and Stakeholders
- Quantitative Statistical Surveys
 - > Program Participants, Non-Participants, and Market Actors
- Benchmarking Studies
- Focus Groups
- Secondary Research

What are Market Evaluations?

- Market Evaluations include Market Effect and Market Assessment studies
- Market Effect studies – are conducted to understand the changes that the program is having on the Marketplace
- Methodologies include:
 - > Baseline Analysis
 - > Awareness Studies
 - > Adoption Modeling
 - > Barrier Studies

What are Market Evaluations? continued



- Market effect studies are used to understand:
 - > Reductions in market barriers
 - > Impact of rebates
 - > Free Riders
 - > Changes in product availability and price
- Market Effect Evaluations often conducted when stakeholder goals include market transformation.
- Market Transformation occurs when market barriers are reduced due to market intervention that lasts “after” the intervention has been withdrawn.

What are Market Evaluations? continued *Itron*

- Market Assessment studies – used to investigate the structure, barriers, and baseline associated with the market in which the program is operating
- Methodologies include:
 - > Market Actor Interviews
 - > Sales Data Market Research
 - > Secondary Research Studies

What are Non-Energy Benefits (NEBs) Evaluations? *Itron*

- Non-Energy Benefits (NEBS) studies are used to identify and quantify *non-energy* benefits associated with program implementation and participation
- NEBS studies are used to
 - > Understand public benefits of energy programs
 - > Help programs become more “effective” by providing enhanced reasons for participation
 - > Gain program support from a wider range of stakeholders
 - > Help determine “true” cost/benefit ratios

What are Non-Energy Benefits (NEBs) Evaluations? *Itron*

- Examples of NEBS can include:
 - > Reduced emissions & environmental benefits
 - > Productivity improvements
 - > Reduced debt and lower levels of arrearage
 - > Reduced #'s of disconnects and reconnects
 - > Increased comfort level/convenience of participant
 - > Job creation

Summary



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