Emerging Programs & Policies in Customer Information and Behavior

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BECC 2011
Washington D.C.
Categories of Behavior-based Energy Efficiency

Behavior-based Energy Efficiency Strategies

- **Education and Outreach**: provides consumers with energy efficiency information independent of their own energy use.
- **Feedback**: provides consumers with specific and personalized information about their energy use.
  - **Indirect Feedback**
  - **Direct Feedback**

Behavior-based and Energy Feedback Approaches

- **Household focus**
- **Peer/comparative focus**
- **Community focus**
What are Energy Feedback Programs?

+ Energy feedback programs provide more detailed, instructive and/or more frequent information to a customer regarding energy usage patterns
  - Energy feedback programs can be high-tech or low-tech, frequent or one-time only

+ The premise: the right information will lead people to choose behaviors that will reduce their energy consumption
  - Savings between 2 – 7% are commonly reported, depending on the program & type of information
Overcoming Barriers to Energy Efficiency

Agency
Ownership transfer issue

Transaction barriers: Behavioral EE can help the customer take the first steps to motivate action.

Pricing distortions

Risk and uncertainty: Behavioral EE can increase certainty that bill savings are achieved through more transparent billing information.

Lack of awareness/information

Custom and habit: Behavioral EE can support changes to “default” practices and habits.

Elevated hurdle rate: Increased awareness of energy use and choices can help overcome elevated hurdle rate

Adverse bundling

Capital constraints

Product availability

Installation and use: Energy feedback programs can help educate customer about energy use, device operation
## The Energy Feedback Industry

<table>
<thead>
<tr>
<th>Common Feedback Approaches</th>
<th>Type of Feedback and Duration</th>
<th>Companies in the Market</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administered Feedback Programs</strong></td>
<td>Peer/comparative focus and household focus</td>
<td>Indirect Feedback provided on an ongoing basis</td>
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<tr>
<td><strong>Social Marketing and Education</strong></td>
<td>Community focus, peer/comparative focus, and household focus</td>
<td>Indirect Feedback provided one-time or ongoing basis</td>
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<tr>
<td><strong>New Consumer Products</strong></td>
<td>Household focus (emerging activity in areas of community and peer/comparative focus)</td>
<td>Direct feedback on an ongoing basis</td>
</tr>
</tbody>
</table>

Note: Companies categorizations are approximate; company approaches are constantly evolving and may cover multiple categories. This is not an exhaustive list.
Government and Regulatory Programs and Actions

+ **Standards and Protocols**
  - NIST is developing smart meter & data access standards
  - 3 states have protocols to count energy feedback savings as part of utility efficiency programs (CA, MA, MN), over 11 other states are counting savings on a case-by-case basis

+ **Utility programs**
  - Approximately 1.5% of U.S. residential households are offered utility administered comparative feedback programs, expected to increase to almost 5% by the end of 2011

+ **Public Utility Commissions**
  - At least 8 state Commissions have proceedings related to smart meter deployment, home energy displays and use of customer energy data
How States and Regulators Can Encourage Feedback Programs

- Data access, data transfer and privacy rules must be clarified, especially as they pertain to smart meter data collection.

- Training in, and access to the latest results of energy feedback research and pilot programs is critical for localities.

- Funding for larger and longer-duration studies and utility pilots is needed across the country.

- Appropriate measurement and verification protocols, such as the use of experimental design, must be adopted to count savings.
Thank you

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For full report see: