Consumers Energy
C&I Research & Evaluation
Highlights

Presented to the MPSC EO Collaborative

September 16, 2014
OBJECTIVE

Share insights and results from recent C&I research including selected findings from program evaluations and participant satisfaction studies.
TODAY’S AGENDA

• C&I Participant Satisfaction
• Trade Ally Engagement and Market Effects
• 2014 Impact Evaluation Results
PARTICIPANT SATISFACTION
OVERALL PROGRAM SATISFACTION

- Overall satisfaction with the Consumers Energy Business Solutions program was high – 8.6 out of 10.
- Based on 216 surveys with participants who completed CEBS projects between July 2013 and February 2014.

![Overall Program Satisfaction Chart]

<table>
<thead>
<tr>
<th>Year</th>
<th>Satisfaction Level</th>
<th>Number of Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>8.6</td>
<td>216</td>
</tr>
<tr>
<td>2013</td>
<td>8.8</td>
<td>149</td>
</tr>
<tr>
<td>2012</td>
<td>8.5</td>
<td>168</td>
</tr>
</tbody>
</table>

Unacceptable

Outstanding
OVERALL PROGRAM SATISFACTION

Satisfaction with individual program elements was also high.

Satisfaction by Program Element

- Performance of the equipment (n=211)
  - 2014: 9.2
  - 2013: 9.0
  - 2012: 8.9
  - **statistically significant change

- Interactions with contractors (n=133)
  - 2014: 8.6**
  - 2013: 9.0
  - 2012: 8.8

- Energy savings achieved (n=200)
  - 2014: 8.3
  - 2013: 8.1
  - 2012: 8.1

- Length of time to receive rebate (n=197)
  - 2014: 8.5
  - 2013: 8.2
  - 2012: 8.5

- Interactions with CE representatives (n=175)
  - 2014: 8.5
  - 2013: 8.5
  - 2012: 8.5

**statistically significant change**
Satisfaction with energy savings was significantly higher than the 2013 evaluation.

Participants who implemented a project with both gas and electric savings had higher satisfaction with the energy savings.

Findings suggest that recent changes in trade ally outreach, facility assessment, and custom metering are improving customers’ experiences.
PARTICIPATION AND SATISFACTION WITH CONSUMERS ENERGY

Based on customer panel research, program participants are consistently more satisfied with Consumers Energy than non-participants.
TRADE ALLY ENGAGEMENT AND MARKET EFFECTS
MARKET EFFECTS

Contractors indicated that their experience with the programs has enhanced their business and changed their attitudes towards energy efficient products, even when working with customers outside of the program.

*Working with the programs...*

- We are more likely to discuss energy efficient options with all of our customers: Small Business Direct Install 7.6, Business Solutions 8.6
- Has convinced us that the equipment is cost effective or beneficial even without a program incentive: Small Business Direct Install 7.6, Business Solutions 8.1
- Increased my firm’s ability to identify opportunities: Small Business Direct Install 7.3, Business Solutions 7.9
- Resulted in increased revenue for my business: Small Business Direct Install 7.2, Business Solutions 7.9
- Resulted in an increased volume of work for my business: Small Business Direct Install 7.1, Business Solutions 7.8
- Changed the type of jobs my business pursues and completes: Small Business Direct Install 5.5, Business Solutions 6.9
Majority of contractors agreed with all statements, but have more confidence in customer-centric benefits than societal benefits.

Energy efficiency saves our customers money.

Energy efficiency has additional benefits beyond saving our customers money.

After participating in an energy efficiency program, our customers can invest the money they save back into their businesses.

Energy efficiency reduces the amount of power generation (i.e., power plants) a utility has to build or buy.

By saving energy, energy efficiency reduces air pollution.

By reducing the need for power generation, energy efficiency helps keep utility rates lower than they would be otherwise.

By saving energy, energy efficiency reduces greenhouse gas emissions.
METHODS

• **Installation Rates:** The evaluation team verified installation of measures through on-site visits of large projects and desk review of small projects.
  – Measures installed and operational
  – Measures adhere to MEMD guidelines

• **Engineering Adjustment Factors:** The evaluation team verified key inputs such as hours-of-use, size, and efficiency of equipment through on-site data collection and metering.
GROSS ADJUSTMENT FACTORS

- The evaluation team calculated estimates for each program.
- Results from the 2013 program are used during 2014 Certification process.
- Annual improvement for 3 of the 4 programs.
- Decline for Prescriptive Gas though realization rate is still high.

<table>
<thead>
<tr>
<th>Program</th>
<th>Gross Adjustment Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Prescriptive kWh (n=91)</td>
<td>1.027</td>
</tr>
<tr>
<td>Custom kWh (n=9)</td>
<td>1.088</td>
</tr>
<tr>
<td>Prescriptive Gas (n=41)</td>
<td>0.801</td>
</tr>
<tr>
<td>Custom Gas (n=11)</td>
<td>1.191</td>
</tr>
</tbody>
</table>
COMPONENT FACTORS

- High installation rate for prescriptive electric measures improved due to conservative estimates of operating hours for equipment.
- Low installation rate for prescriptive gas measures due to equipment varying from program requirements.

<table>
<thead>
<tr>
<th>2013 Program</th>
<th>Installation Rates (IR)</th>
<th>Engineering Adjustment Factors (EAF)</th>
<th>Gross Adjustment Factor (IR x EAF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescriptive kWh (n=91)</td>
<td>1.027</td>
<td>N/A</td>
<td>1.027</td>
</tr>
<tr>
<td>Custom kWh (n=9)</td>
<td>1.000</td>
<td>1.088</td>
<td>1.088</td>
</tr>
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<td>Prescriptive Gas (n=41)</td>
<td>0.801</td>
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- *Prescriptive GAF = only Installation Rate due to MEMD pre-evaluation*
- *Custom GAF = Installation Rate × Engineering Adjustment Factor*
RECOMMENDATIONS FOR GAS MEASURES

• **Work with customers and trade allies to educate them on the need to set lower setpoints for infrared heaters.** The savings for infrared heaters are dependent on reducing thermostat settings. Without lower setpoints, customers will not realize all potential energy savings.

• **Collect heating equipment fuel type on applications for HVAC efficiency measures such as DCV, EMS and GREM.** Savings for several projects were incorrectly estimated due to adjustments in baseline fuel type.
SUMMARY

• **Participant satisfaction is high.**
  • 8.6 out of 10 for Business Solutions program.
  • Changes to energy savings estimates have improved experience for participants.
  • Positive impact on Consumers Energy overall.

• **Programs have an secondary benefit of positive market effects.**
  • Contractors have changed their business as a result of the programs.
  • Understand the benefits of energy efficiency.

• **Impact realization rates are improving for most measures.**
  • Three of the four Business Solutions program have improved.
  • We have implemented improvements to improve Prescriptive Gas program.
QUESTIONS?

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