

Consumers Energy C&I Research & Evaluation Highlights

Presented to the MPSC EO Collaborative



HIGHLIGHTS

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

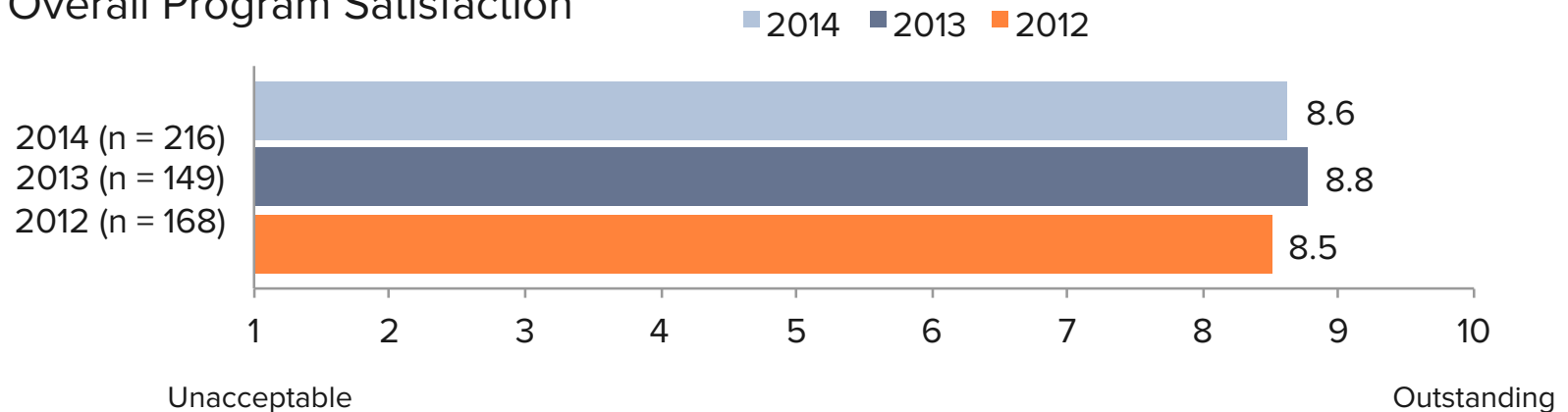
- C&I Participant Satisfaction
- Trade Ally Engagement and Market Effects
- 2014 Impact Evaluation Results

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

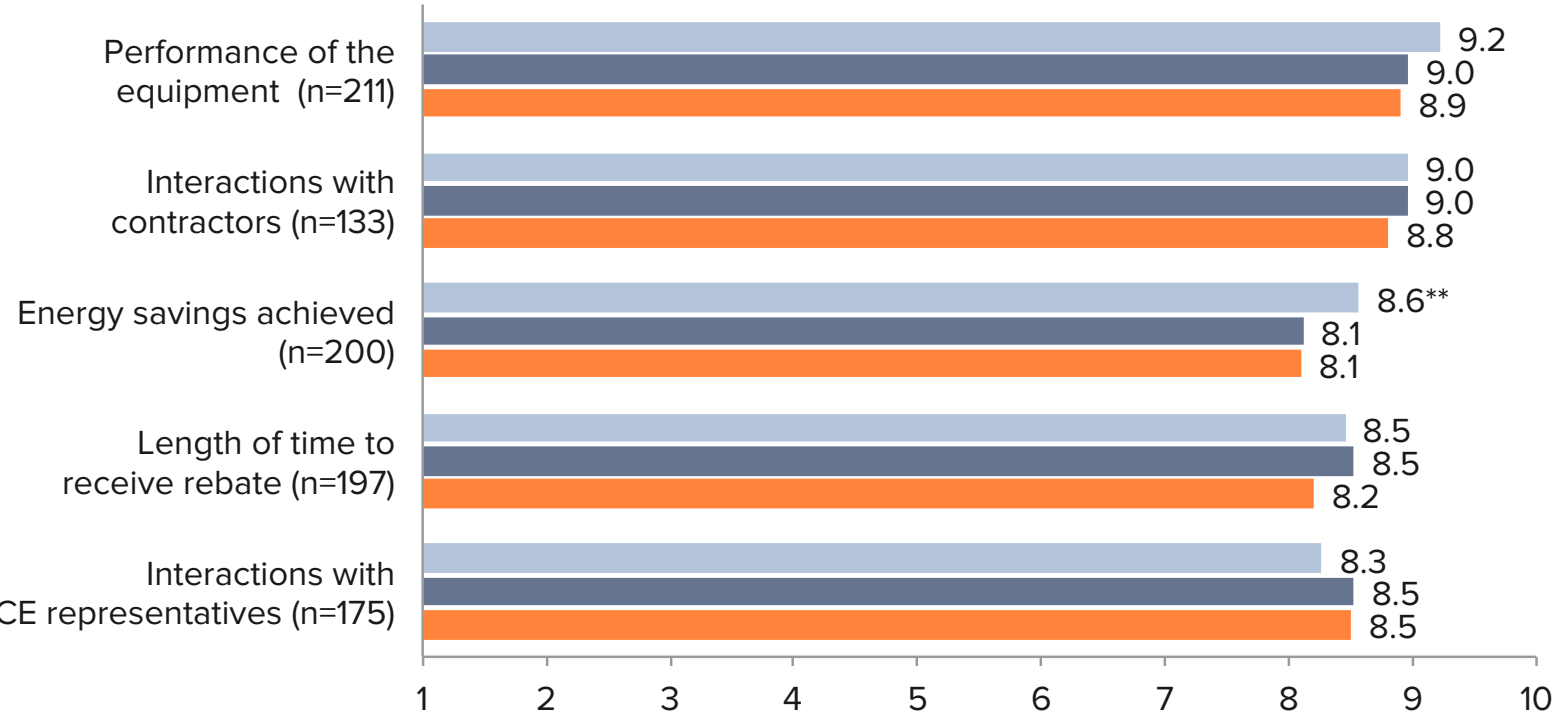


OVERALL PROGRAM SATISFACTION

Satisfaction with individual program elements was also high.

Satisfaction by Program Element

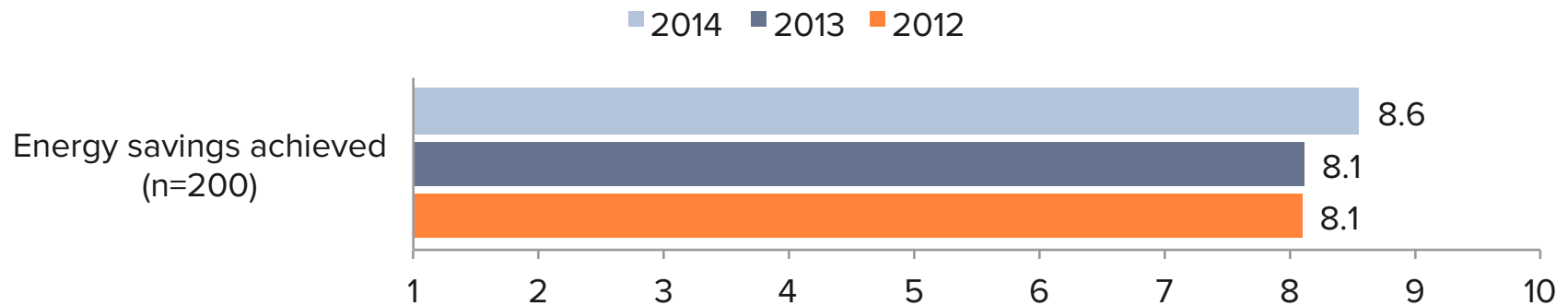
■ 2014 ■ 2013 ■ 2012



**statistically significant change

SATISFACTION WITH ENERGY SAVINGS

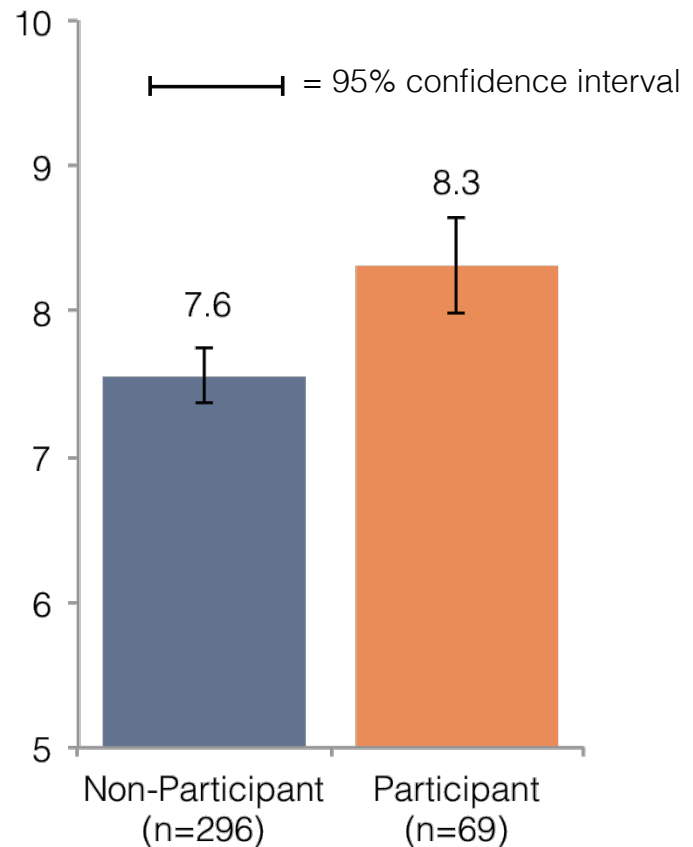
- Satisfaction with energy savings was significantly higher than the 2013 evaluation.
- Participants who implemented a project with both gas and electric savings had higher satisfaction with the energy savings.
- Findings suggest that recent changes in trade ally outreach, facility assessment, and custom 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.

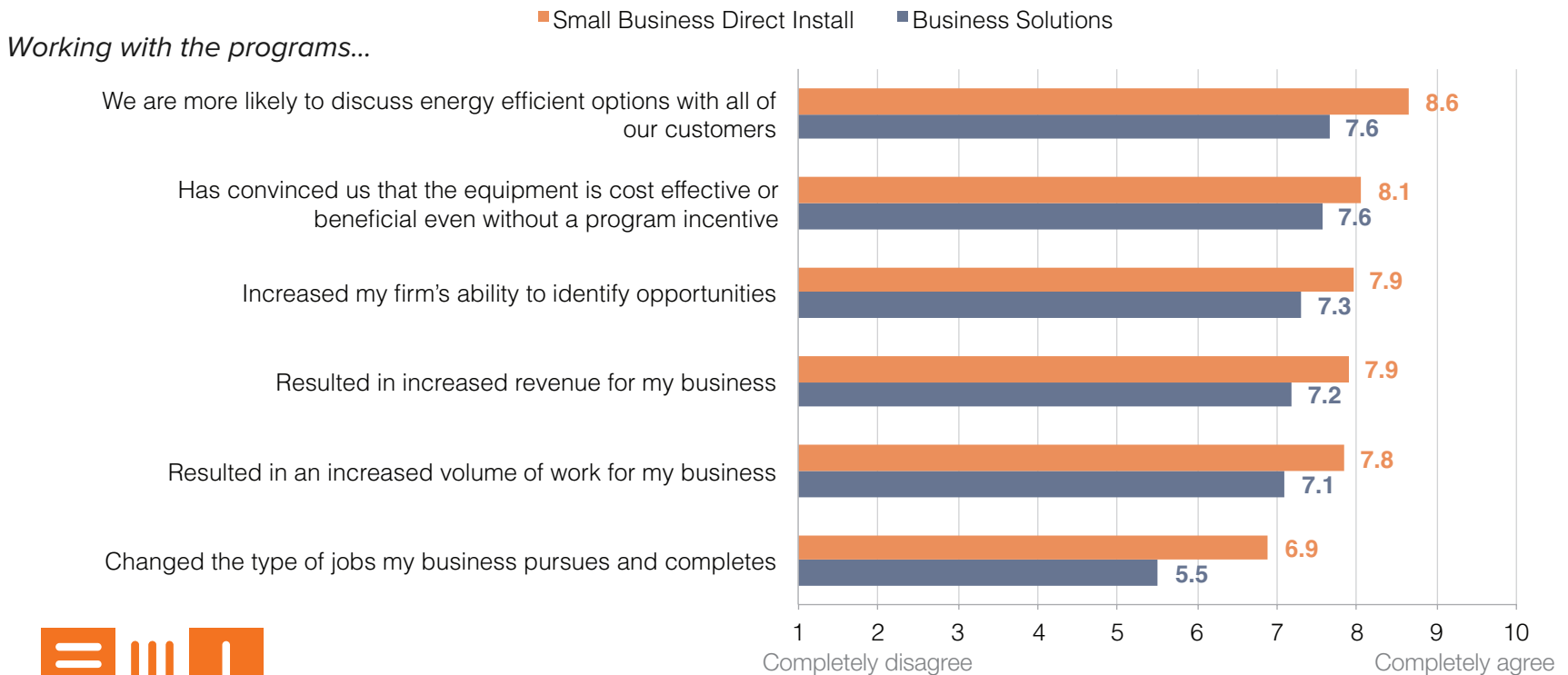
Overall Satisfaction with Consumers Energy on a 1-10 scale



TRADE ALLY ENGAGEMENT AND MARKET EFFECTS

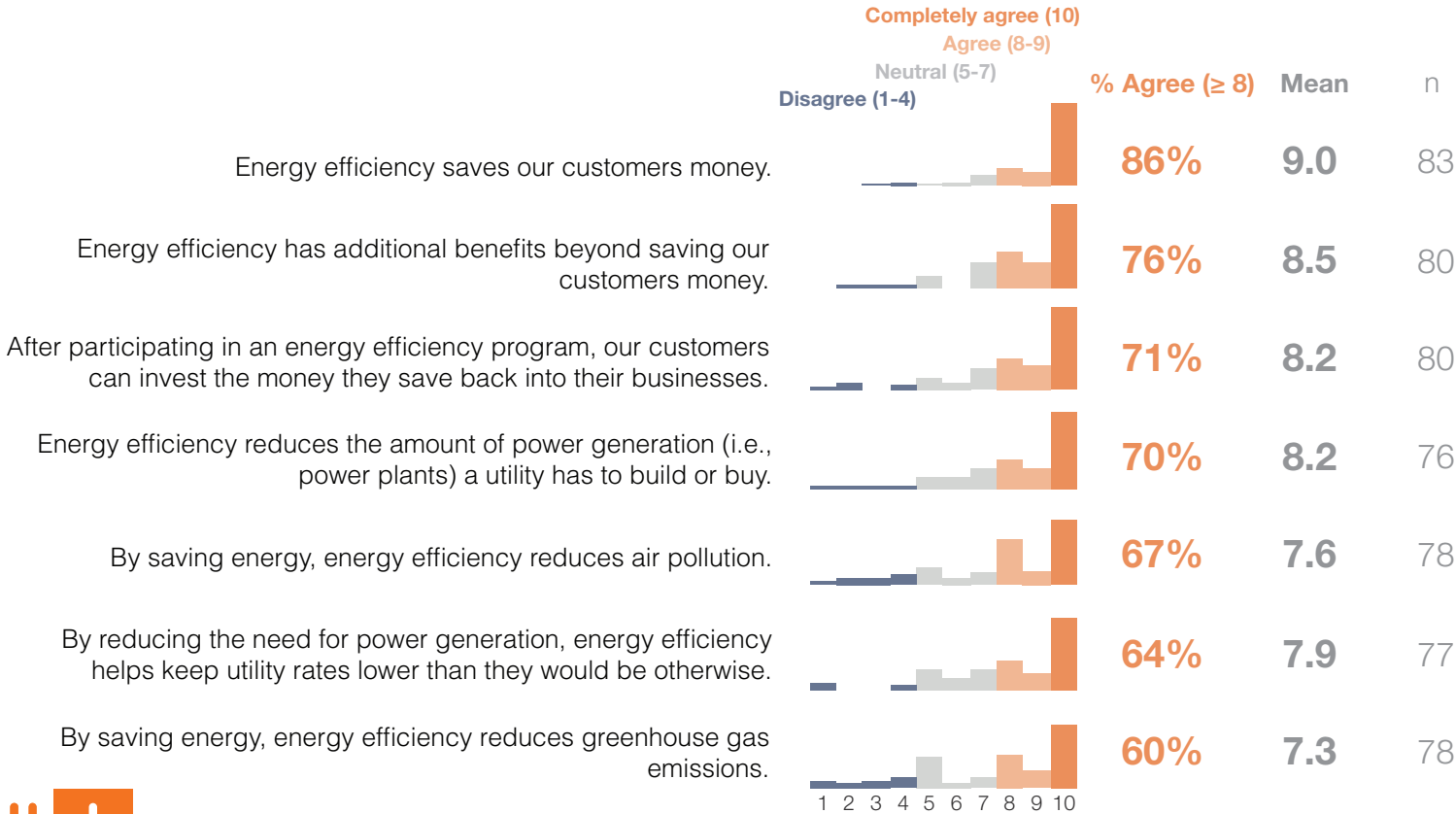
MARKET EFFECTS

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.



ENERGY EFFICIENCY BENEFITS

Majority of contractors agreed with all statements, but have more confidence in customer-centric benefits than societal benefits.



BUSINESS SOLUTIONS 2014 IMPACT EVALUATION RESULTS

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.

Program (n=2013 sample)	Gross Adjustment Factor		
	2013	2012	2011
Prescriptive kWh (n=91)	1.027	0.954	0.957
Custom kWh (n=9)	1.088	1.024	0.859
Prescriptive Gas (n=41)	0.801	0.881	0.922
Custom Gas (n=11)	1.191	1.106	1.291

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 equipment varying from program requirements.

2013 Program	Installation Rates (IR)	Engineering Adjustment Factors (EAF)	Gross Adjustment Factor (IR x EAF)
Prescriptive kWh (n=91)	1.027	N/A	1.027
Custom kWh (n=9)	1.000	1.088	1.088
Prescriptive Gas (n=41)	0.801	N/A	.801
Custom Gas (n=11)	1.000	1.191	1.191

- *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 GEM.** 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?

Joe Forcillo – Consumers Energy

joseph.forcillo@cmsenergy.com

(517) 788-2576

Jeremy Kraft – EMI Consulting

jkraft@emiconsulting.com

(206) 621-1160