



# Benchmarking and Best Practices Research: Making it Real

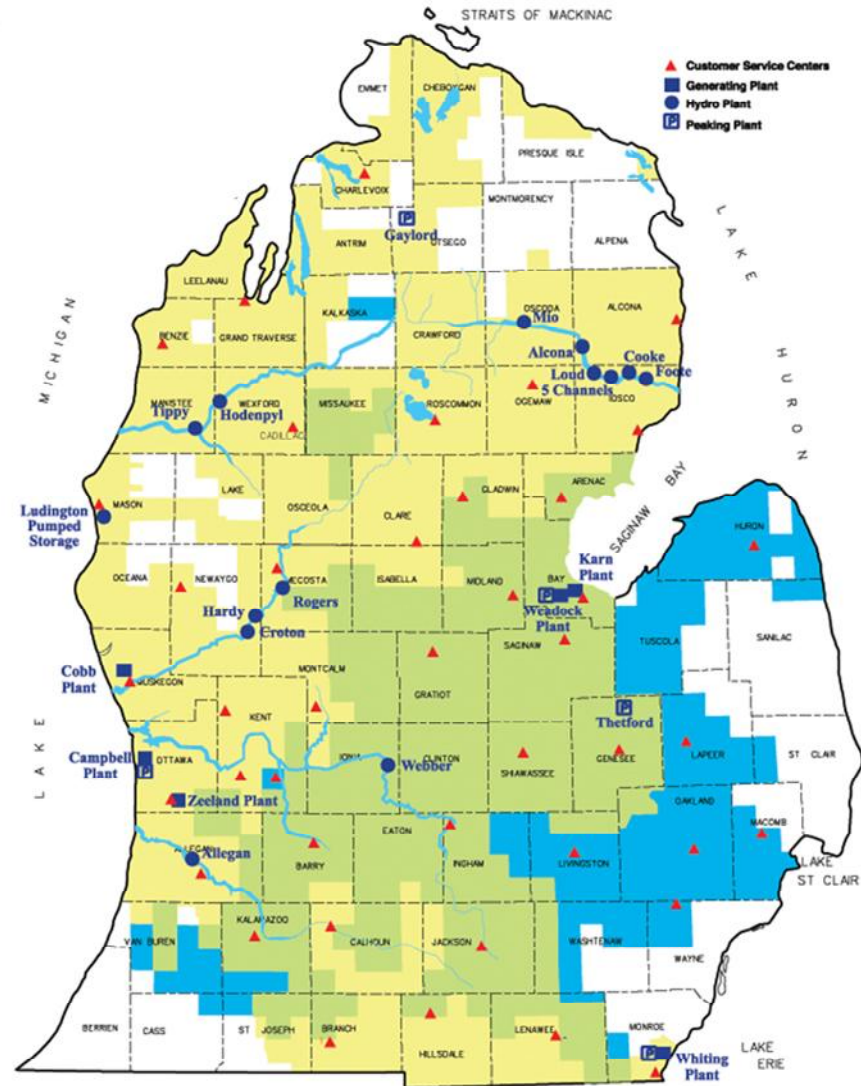
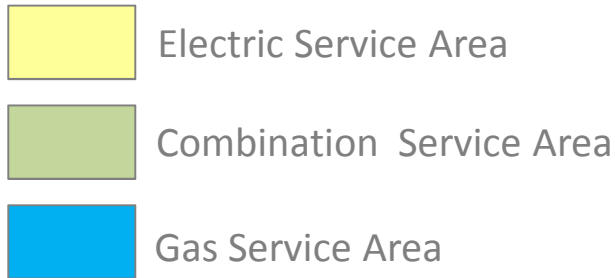
Jill Steiner, Cadmus

Joe Forcillo, Consumers Energy

August 11, 2015

# About Consumers Energy

- Among largest U.S. combination utilities
- Serves 6.6 million customers across Michigan's lower peninsula



# Residential Program Expansion

- ENERGY STAR Lighting and Appliances
- HVAC and Water Heating
- Income Qualified
- Multifamily Direct Install
- Appliance Recycling

## Annual Savings

- 156,000 MWh
- 926,000 MCF

**2009**

**2014**

## Annual Savings

- 46,000 MWh
- 225,000 MCF

- *Doubled number of program offerings*
- *3X increase in electric savings*
- *4X increase in gas savings*

- ENERGY STAR Lighting and Appliances
- HVAC and Water Heating
- Income Qualified: Helping Neighbors
- Multifamily Solutions
- Appliance Recycling
- Think! Energy
- Home Performance with ENERGY STAR
- Insulation and Windows
- New Home Construction
- Home Energy Reports

# Drivers for Benchmarking and Best Practices Research

- Consumers Energy committed to ongoing quality improvement & innovation
- Creates mutual learning opportunities with other utilities and programs implementers
- Provides comparison performance metrics that have credibility with management
- Helps clarify key program strengths and opportunities
- Identifies programs in portfolio with greatest opportunity for improvement

# Benchmarking and Best Practices Research Approach

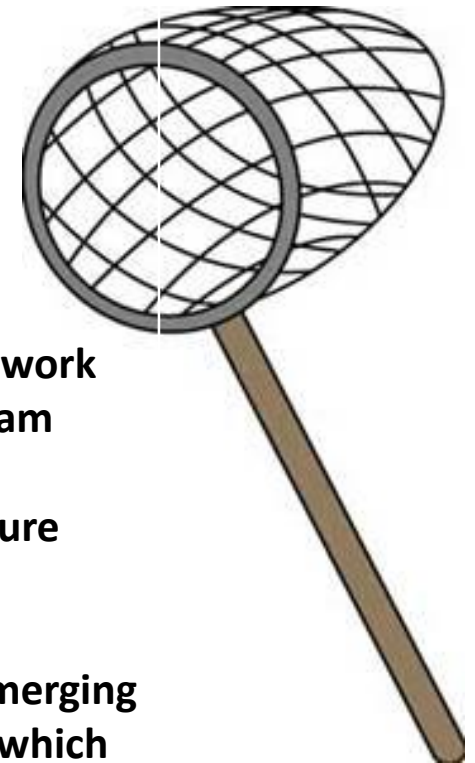


# Selecting Comparison Utilities

- Recognized as exemplary programs
  - For example, American Council for an Energy Efficient Economy or ENERGY STAR<sup>®</sup> awards
- Comparable size or geography
- Demonstrate innovative unique program measures and implementation strategies
- Program maturation

# Benchmarking Data Elements

- Program initiation date
- Published evaluations
- Participation targets and eligibility criteria
- Program offerings (equipment, services, and/or measures)
- Incentives
- Type of incentive (e.g., fixed, calculated based on savings, percentage of cost)
- Incentive levels
- Delivery strategy (direct install, prescriptive, custom, and/or comprehensive)
- Savings goals
- Net-to-gross reporting and method for determining (e.g., deemed, customer self-report)
- Cost-effectiveness
- Application processes and requirements
- Trade ally/contractor network
- Notable program features
- Efforts to capture hard-to-reach markets
- Inclusion of emerging technologies (which ones)
- Leveraged funding



# Best Practices

- Program history
- Budget and spending drivers
- Drivers for programmatic approaches and measure inclusion
- Non-energy savings performance metrics, e.g. customer satisfaction
- Implementation barriers and lessons learned





# Program Comparisons - What and Why?

- Quantitative comparisons are valuable, but can present challenges
  - Wide variation in reporting content, timing, and detail
  - Often requires “normalizing” to compare across utilities
  - Some useful common metrics include program costs, savings targets or achievements, cost-effectiveness, program attribution (net-to-gross)
- Qualitative comparisons provide additional insight and ideas for innovation

# One Example – Benchmarking Consumers Energy Multifamily Solutions

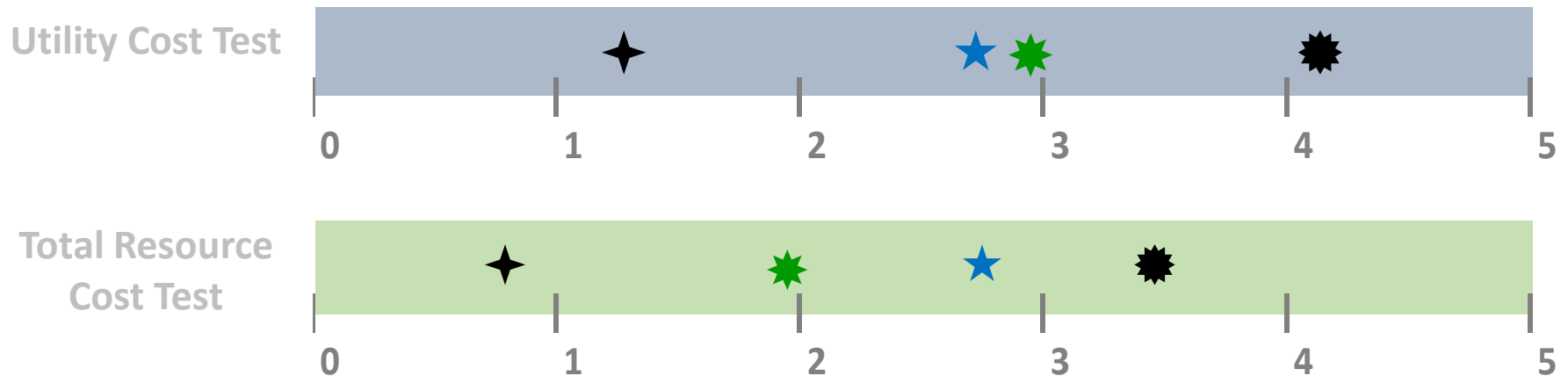
- Strong direct-install component – over 230,000 units served to date
- Increasing focus on common area and comprehensive savings opportunities
- Benchmarked against 16 peer programs and conducted in-depth interviews with managers of 3 leading programs



# Comparisons with Other Multifamily Programs

- Consumers Energy's programs was one of the largest programs in terms of:
  - Market penetration – > 80%
  - Savings achievement – gas savings as a percent of residential sales double that of comparison utilities
  - Focus – gas savings represented 20% of residential portfolio savings

# Program Cost-Effectiveness



Both Utility Cost Test (UCT) and Total Resource Cost (TRC) test for residential and commercial components of the Consumers Energy fall within the range of the peer utilities

- ★ Consumers Energy Residential
- ★ Consumers Energy Business
- ★ Peer Utility Minimum
- ★ Peer Utility Maximum

# Best Practices Insights

- Barriers to participation for multifamily programs are widely recognized
  - Split incentives
  - Limited trade ally infrastructure
  - Property owner/manager (PMO) engagement
  - Variation in building configuration and applicability of energy efficiency measures

# Lessons Learned:

## Overcoming Barrier of Split Incentive

Barrier	Strategies
<b>Split Incentive:</b> While the cost of energy-efficiency upgrades fall on the property owner or manager to make, tenants realize some or all of the energy savings.	Promote the ancillary or non-energy benefits from making energy-efficiency improvements
	Encourage PMOs to reduce whole-building energy use, not just in-unit consumption
	Offer bonus incentives, e.g., performance incentives for achieving or sustaining energy savings

# Lessons Learned:

## Solutions to Trade Ally Network Barrier

Barrier	Strategies
<b>Limited trade ally network addressing multifamily housing:</b> The multifamily segment is a hybrid of commercial and residential segments, which requires the skills of both commercial and residential contractors.	Create a market-based network of building-performance specialists (trade allies) to deliver quality services to PMOs
	Expand the engagement of existing trade ally members participating in residential or commercial programs
	Provide training to contractors on program features and technologies specific to multifamily buildings

# Lessons Learned: Property Manager/Owner (PMO) Engagement

Barrier	Strategies
<b>PMO engagement:</b> The owners and managers of multifamily properties often juggle a wide range of responsibilities and lack the knowledge to plan and implement large-scale energy efficiency upgrades. High transaction costs can deter participation by PMOs.	Be a single point of contact, providing information and guidance and helping PMOs reduce transaction costs of energy-efficient upgrades
	Bundle prescriptive measures to capture deeper savings and reduce transaction costs
	Where different utilities provide gas and electric service, create partnerships to provide comprehensive assessment and implementation of energy-savings opportunities
	Address both residential and commercial components of multifamily properties.

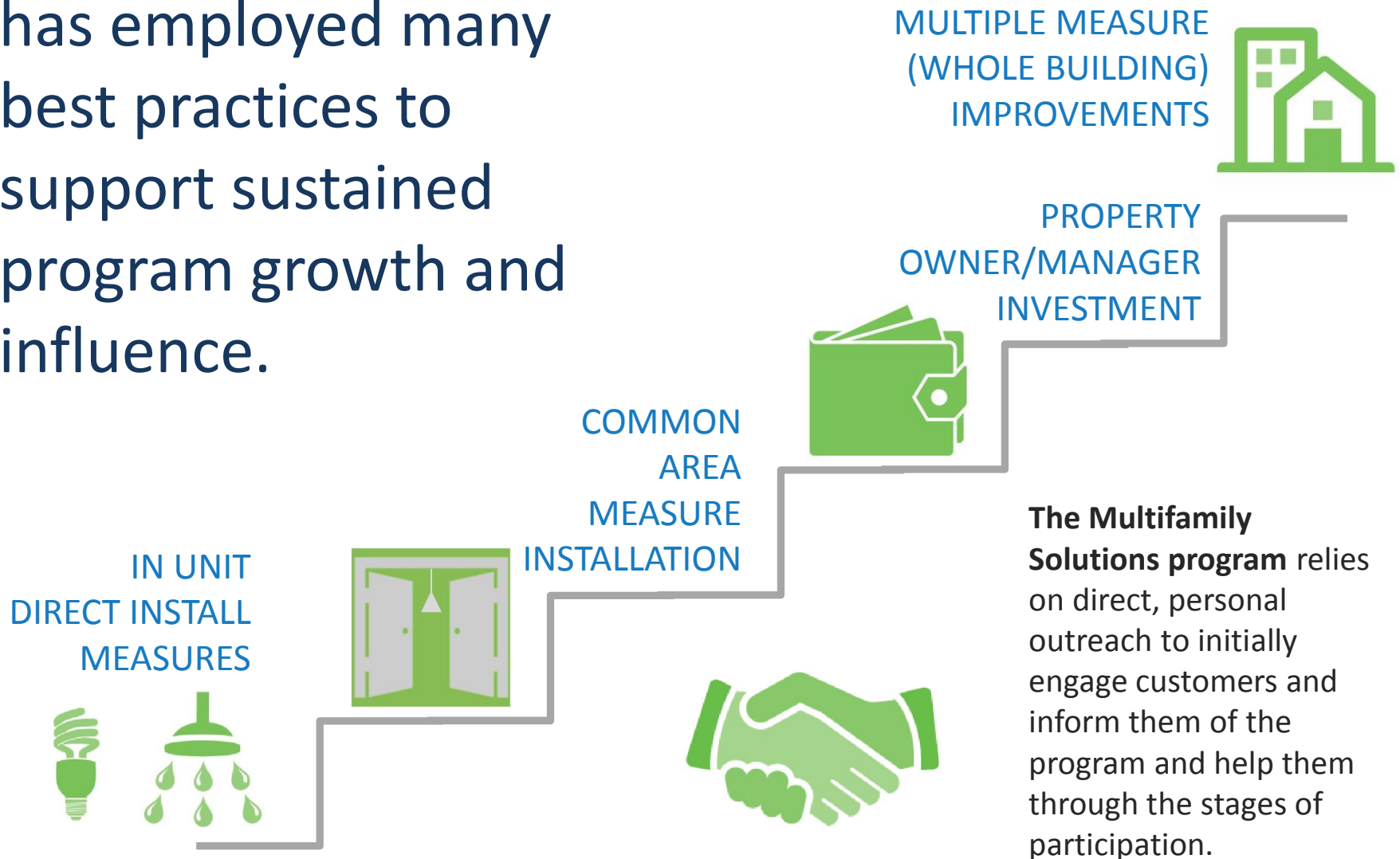


# Lessons Learned:

## Improving Awareness & Participation

- Participate in local apartment associations to increase program staff's knowledge of the broad range of issues concerning PMOs and to identify possible areas of coordination
- Publish case studies of properties that have successfully participated in the program to help PMOs see the benefits of the program
- Educate tenants directly by sending mailers or conducting other outreach about energy-efficient measures available in their buildings
- Engage trade allies who serve multifamily buildings to help educate PMOs
- Develop relationships with utility representatives who work with multifamily properties and encourage them to direct the PMOs toward the multifamily program

Consumers Energy  
has employed many  
best practices to  
support sustained  
program growth and  
influence.



# Best Practices in Place

- Multiple participation paths
- Increased incentives for deeper savings
  - Bonuses for multi-measure installations
- Multi-sector funding base
  - Residential and C&I
- Partnership with DTE Energy and others
- Adoption of new technologies
  - Example: direct installation of LEDs
- Growing trade ally network
  - <http://www.consumersmultifamilysavings.com/trade-ally.html>

# Benchmarking and Best Practices: Lessons & Conclusions

- Useful process for assessing the strengths and opportunities of programs
- Labor and time intensive
- Helps target finite program resources in the areas most likely to improve or optimize program performance
- Validates key program design parameters such as qualifying measures, rebate levels, and savings targets
- Provides more nuanced insights and ways to address barriers to increased participation



**Jill Steiner**  
Cadmus

**Office (517) 325-9472**  
**JILL.STEINER@**  
**cadmusgroup.com**

**Joe Forcillo**  
Consumers Energy

**Office (517) 788-2576**  
**JOSEPH.FORCILLO@**  
**cmsenergy.com**