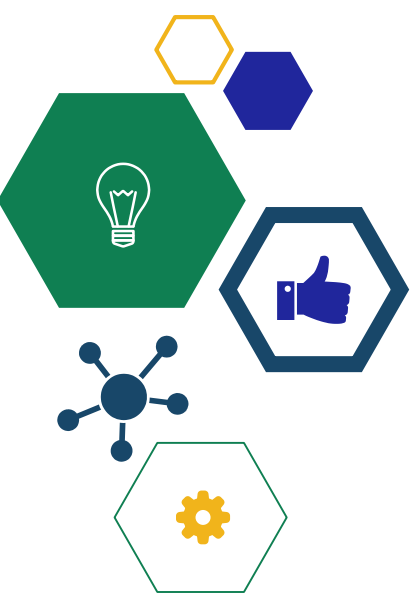


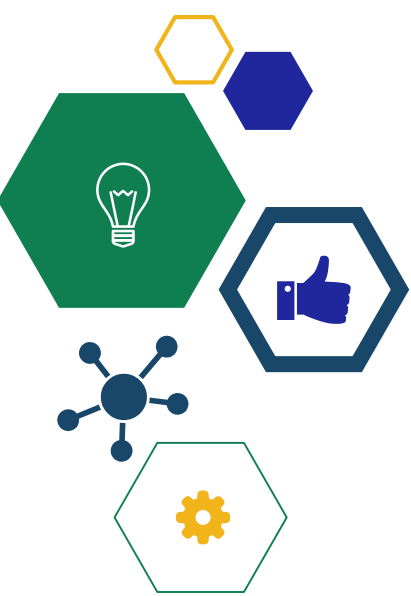
Evaluation by Segmentation

Presented at the
AESP National Conference
Brad Kates
February 3, 2016



Agenda

- Evaluation Industry Today
- Introduce Evaluation by Segmentation
- Explain the Importance of Changing the Status Quo



Goals of This Presentation

- Spark discussion about the next generation of evaluating energy efficiency efforts
- Change the evaluation focus from programs to customers

Energy Efficiency Evaluation Has Changed

Olden days



Low-hanging fruit



Little to no customer data

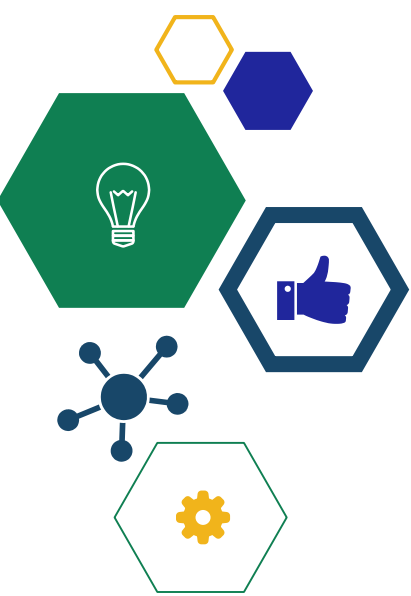


Little to no stakeholder involvement



Duty to serve

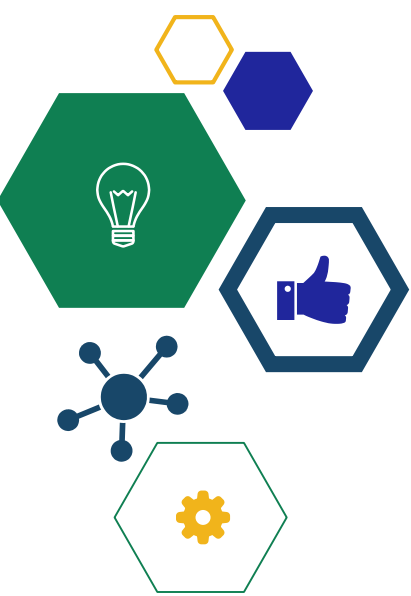
Energy Efficiency Evaluation Today



 Nothing is easy

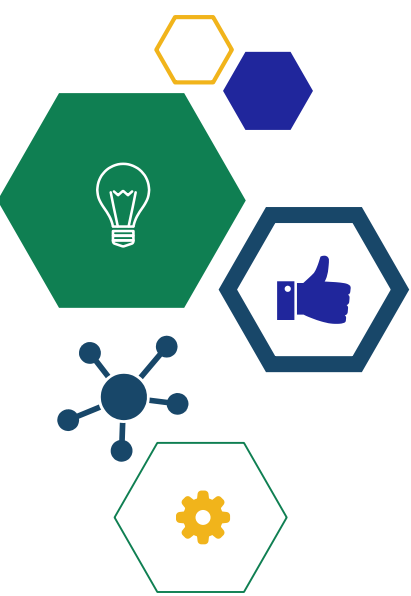
 One size fits all approach does not work for energy efficiency efforts

 The gold rush is essentially over



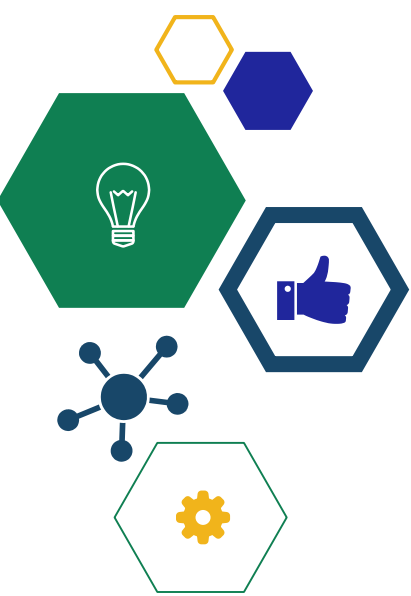
Energy Efficiency Evaluation Today

- Almost exclusively focuses on program-based energy or demand savings
- Mostly energy commission mandated
- Audit function and measurement tool



Evaluation at a Crossroads

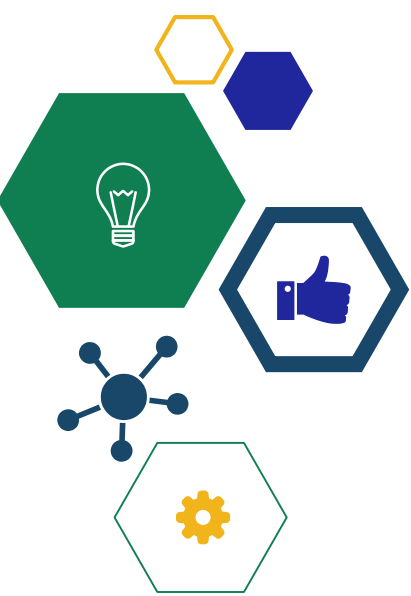
- Savings numbers developed do not mirror actual savings off the grid
 - Savings estimates based on stakeholder process and agreement
- Is that OK in the Clean Power Plan environment?



Imagining Evaluation Differently

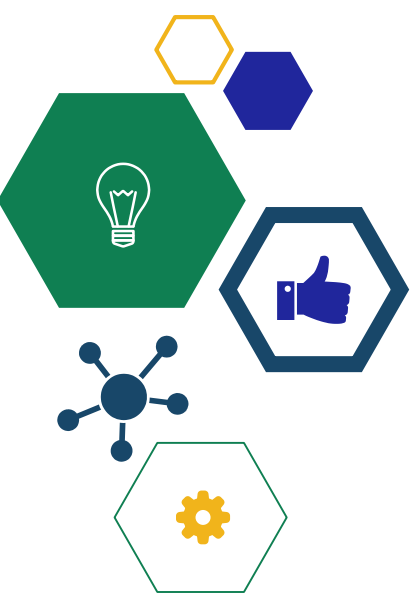
Does assessing savings focusing on programs provide enough depth of information to allow policy makers and decision-makers enough information to determine success?

This paper posits that it does not.



Evaluation by Segmentation

- Premise is that a segmented approach to attracting customers yields the best results
 - Not groundbreaking assertion
 - That’s the method used in almost every industry
- It’s applicable to our work, too.



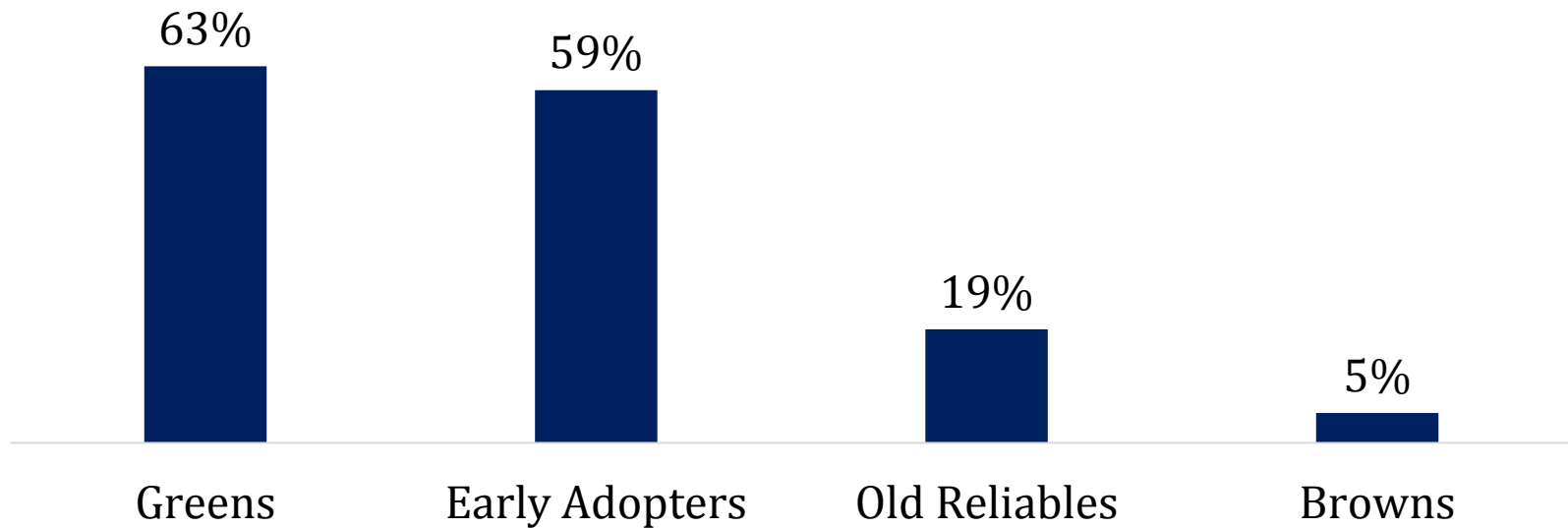
The Tail Can Wag the Dog

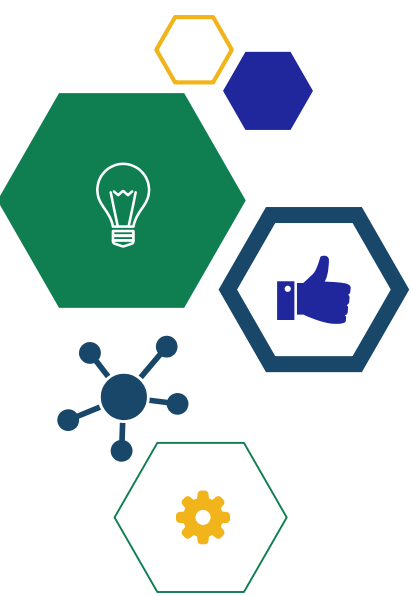
- The way we evaluate success impacts the implementation strategy
 - Setting bonus metrics for staff
 - 3-point line
 - Setting a deadline
- We've defaulted into measuring energy savings using programs (often measure based) as the unit of measure to determine success

Introducing Evaluation by Segmentation

- Focus on customer, not on programs
- Granularity of segments

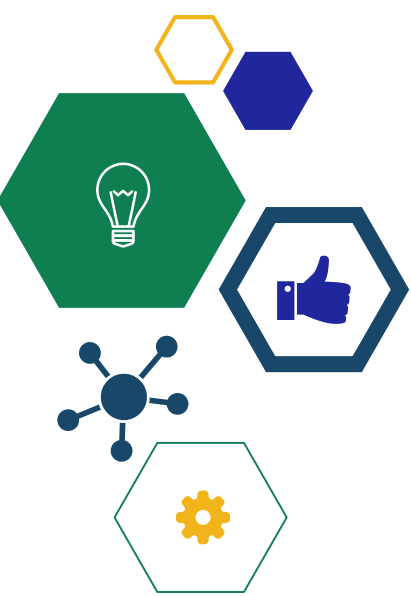
Likely to Intall Energy Efficient Equipment





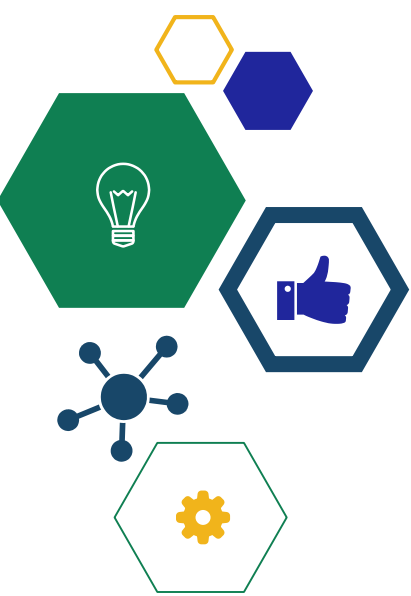
Develop Baselines by Segment

- Collect likelihood to take energy efficient action BEFORE intervention
- Identify potential marketing approaches to reach segments
- Identify barriers to participation for various segments
- Allow implementers to decide how best to allocate funds



Evaluation by Segmentation

- Helps implementers by measuring success as they do
- Renders net effects less important
- Requires regulatory buy-in



For Program Implementers

- Most, if not all, are segmenting customers now
- Evaluating by segment would be a game changer—focus away from free ridership and individual programs, and towards looking at the customer as a whole

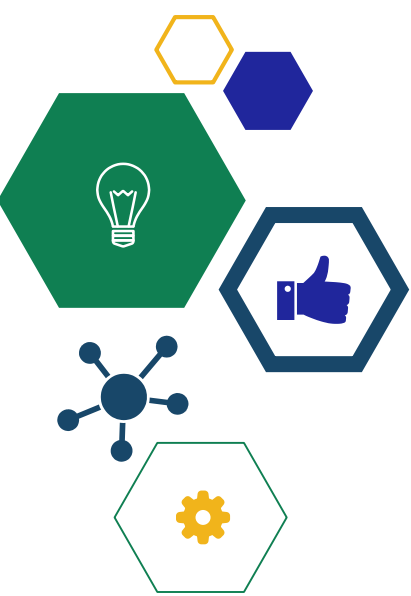
Customer's Prior Behaviors Likely Dictate Future Energy-Saving Actions

- Recent analysis indicates that some customers are predisposed to take actions:
 - Treatment and control group respondents who took high-cost actions before the program are more likely to make energy efficient purchases during the program period
 - Participants engaged in no-cost energy efficient behaviors are more likely to install additional measures during the program period

Actions

Predict

Behavior



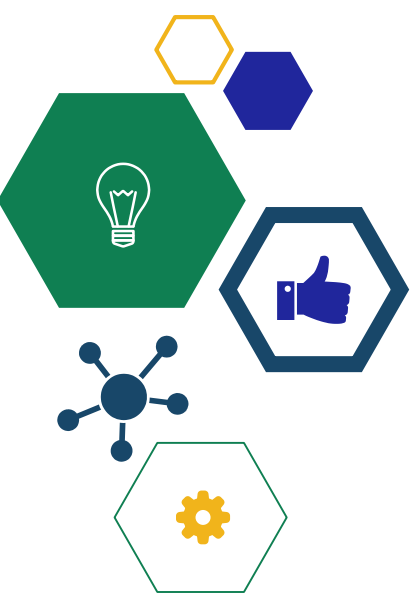
Net Effects

- The logic of the approach is to design, implement, and evaluate programs based on an understanding of how energy efficiency actions vary by customer segment
 - If we know that “Greens” have a high rate of energy efficient actions, then success for all “Greens” should be judged against that rate
 - If we know that “Browns” have a low rate of energy efficient actions, then all “Browns” should be judged against that rate

Measure by Segment not Program

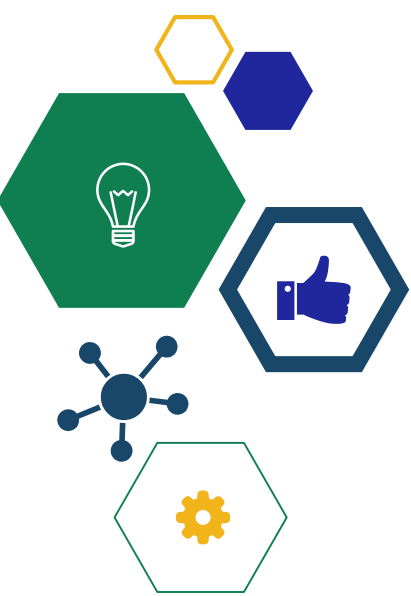
- Overall success measured by segment
 - Results by segment
 - Program results de-emphasized
 - Portfolio savings still important
- Focus on the customer, not on the program





Net Effects Redefined

- Measure net effects by segment
- Revolutionizes program design
 - Must consider segments
 - Focus on lower achieving segments?
 - Focus on higher achieving segments?
- Evaluating by segments allows the implementer to target, and claim success differently

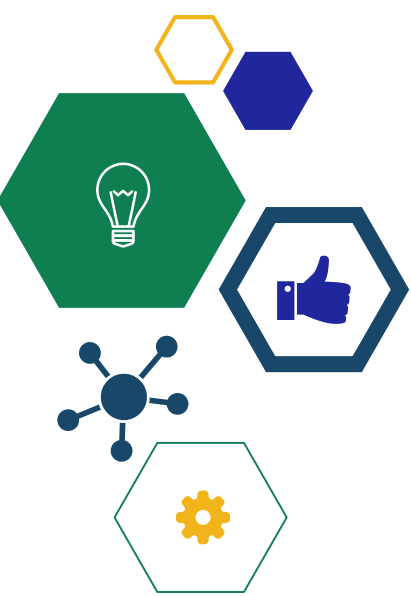


Regulatory Buy-In

- Tough to change the status quo
- Start in one place and move to others
- This presentation lays down the challenge to all of us

Summary

- Measuring success by customer instead of program helps change the implementation approach
- Doing business the same way isn't going to work long term
- Evaluation by segmentation is one way to help move the industry



Thanks.

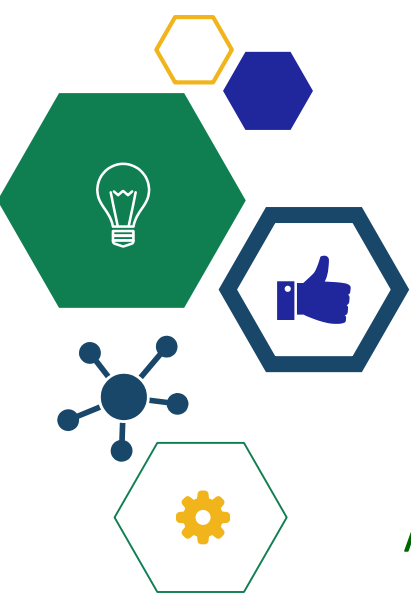
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Save The Dates

May 10-12, 2016

AESP's Spring Conference
Philadelphia, PA

August 16-18, 2016

AESP's Summer Conference
Chicago, IL

February 13-16, 2017

AESP's National Conference
Orlando, FL

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