



ENERGY STAR®
NEW HOMES

Lessons Learned from Evaluation

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Today's Topics

- Evaluation Methodologies
- Process Review and Improvements
- Attitudinal Insights
- Conclusions

Market Overview



AEP Ohio

32% market share
(by meter installations)

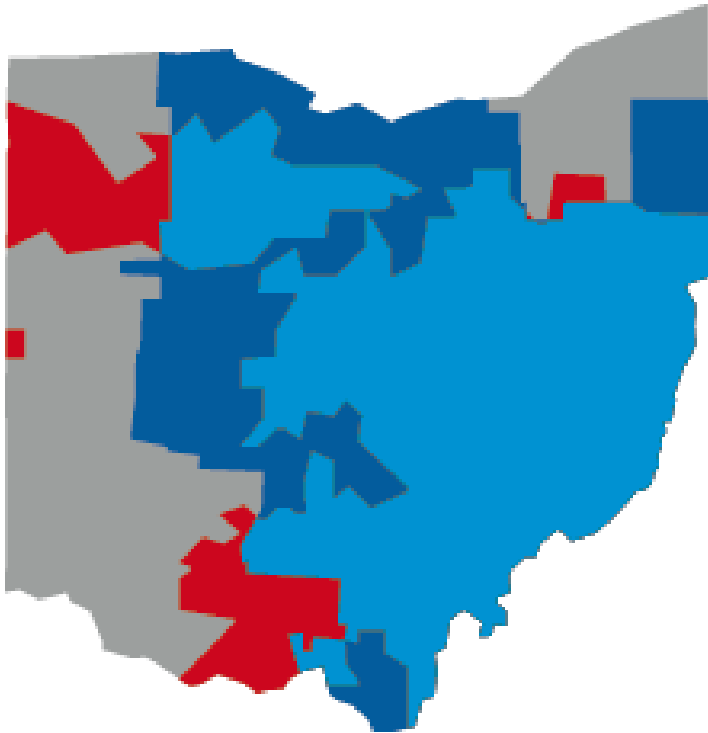
Market Overview



Columbia Gas of Ohio

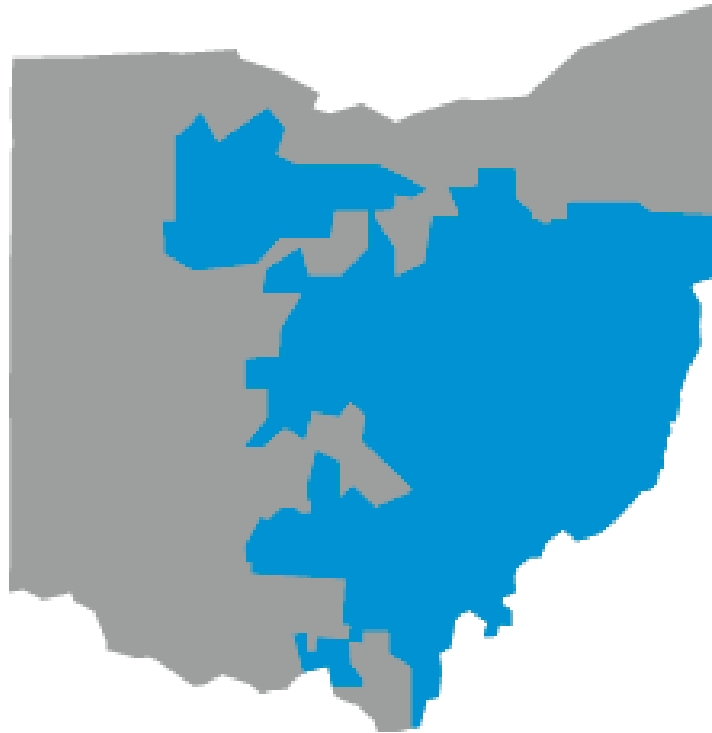
52% market share
(by meter installations)

Market Overview



**Columbia and
AEP** territories
combined
have 4,161
completed units
as of 8/31/13

Market Overview



- ENERGY STAR certified: almost 30% ▲
- Average HERS score (2012): 60.2 ▼
- Average savings 3.0 MWh, 32.9 MCF/unit

Evaluation Methodologies

NAVIGANT



- Territory-specific studies
- Process effectiveness
 - Operational review
 - Builder interviews
 - Rater interviews
- Attitudinal survey
 - Participating builders
 - Non-participating builders
 - Consumers (buyers of program homes)

Process Review / Improvements

Process Review

- Enrollment
- Training
- Completion/incentive submittal
- QA
- Incentive payment
- Marketing support
- Data tracking & reporting

Analysis

Time Period	Calendar Days	Business Days
Rater process & paperwork Project Completion to Incentive Application Submittal	81.1	57.9
Admin & Technical QA Incentive Application Submittal to Application Approval	22.7	16.2
Batching/Invoicing/Check Cutting/Mailing Application Approval to Incentive Payment	59.4	42.4
Project Completion to Incentive Payment	163.0	116.4
Application Submittal to Incentive Payment	82.0	58.6

- 5 months is a long time!
- QA is an essential interruption but not the real bottleneck
- 50% in the Rater's hands
- 36% in incentive processing

Process Improvements

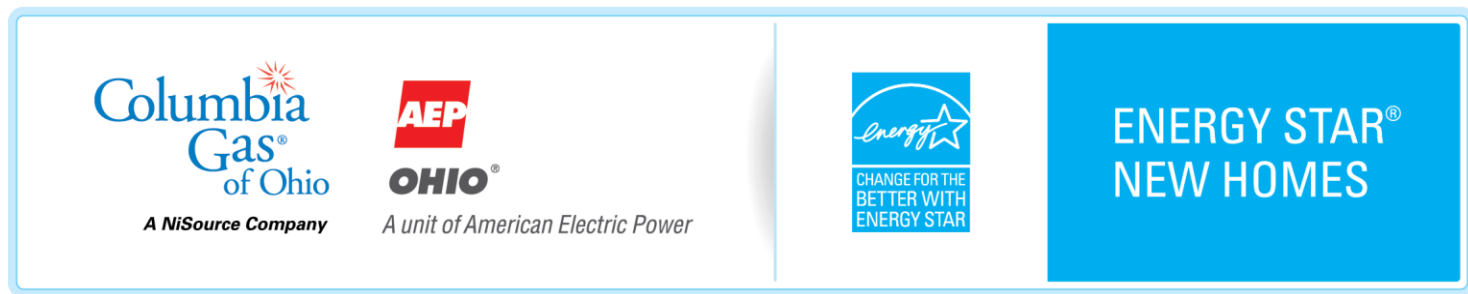
- Program time from submittal: **reduced** by 60%
- Checks drawn on a pre-funded incentive pool
 - Est. 40 days **saved**
- Builder/rater training & communication
 - Common application errors
 - Date for correction to be included in next batch
 - Est. 10 days **saved**

Process Improvements

- Rater time prior to submittal: Impact TBD
- Data simplification
 - Verification of most additional program requirements directly from REM rather than separate data entry
- Feedback on unit “aging”
 - Time from completion to submittal (determined post-processing)
 - Enrollments outstanding

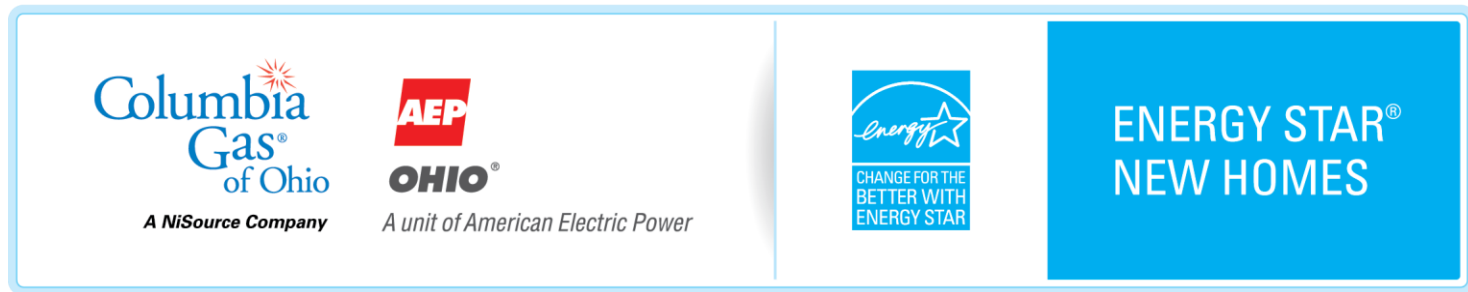
Name Confusion

- The AEP OHIO / Columbia Gas of Ohio ENERGY STAR[®] New Homes Program
- Logo



Name Confusion

- Two brand lines within the program
 - ENERGY STAR®
 - Energy Path



Attitudinal Insights

Non-Participant Builder Feedback

- Program awareness is high
- All claim:
 - to be building above code

Non-Participant Builder Feedback

- Reasons cited for not participating
 - Requirements too restrictive
 - Incremental material/equipment and labor costs too high; incentives amounts too low
 - Verification process too disruptive
 - Belief that energy efficient homes are less price competitive (fear of losing sale) in general

Non-Participant Builder Feedback

- Reasons cited for not participating
 - Specifically, production/national builders are building only to “bare minimum” (code) so would not be able to compete with production builders on price
 - Consumers don’t demand or value the benefits, especially if only buying for a few years

Builder/Rater **Participant** Feedback

- Builders said they enrolled in the program for the rebate dollars, but rate external recognition and marketing as the #1 benefit of the program
- Builder's own knowledge and ability of sales to explain to buyers rated lowest!

Builder/Rater Participant Feedback

- Most builders believe buyers are “showing more interest in buying certified homes”
- But builders of ENERGY STAR tier homes cited the greatest need for marketing support
- Tying incentives to HERS scores makes sense, but help needed to explain to buyers the potential savings based on improved HERS Scores

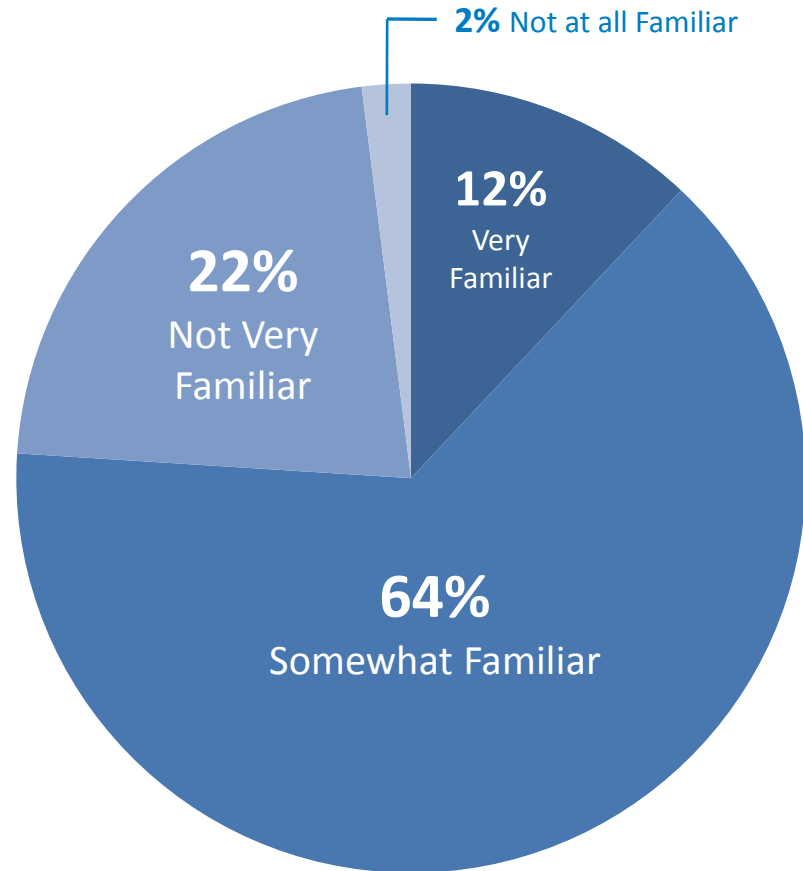
“Well, a lot of times it is just the stereotype of the big bad builder, and verifying that it is from a third party and a third party that everyone recognizes, AEP and Columbia Gas, makes them [buyers] a little more comfortable with it. That we are being held to a standard that we are not making up on our own [can give buyers confidence].”

“Ten years ago, yes they might have cared [about energy efficiency]. If they like the floor plan and the square footage price was right then they really didn't care if it was ENERGY STAR. Now with all the information that is out there, absolutely. These homeowners are definitely wanting it and if you are not doing it you are missing out on a huge chunk of opportunity, because most customers are definitely wanting that rating because they see the benefits of it.”

“ It is not a priority to a number of them [our sales staff] because a lot of our homes sell because of the aesthetics of the home...Right now it mostly only comes up if the homeowner asks the question”

Homebuyer Awareness

High familiarity with the ENERGY STAR brand



Homebuyer Awareness

40%

60% had heard of our
ENERGY STAR New Homes
Program

were **not aware** that they had
bought a program home

Program Homebuyer Feedback

Feature Importance ▲

Certified by ESNH Program 30%

Certified by ESNH Program 30%

Program Homebuyer Feedback

▲
Feature Importance

Efficient Appliances/Equipment	61%
Being “Green”	44%
Certified by ESNH Program	30%
Certified by ESNH Program	30%

Program Homebuyer Feedback

Feature Importance ▲

Health and Safety	73%
Efficient Appliances/Equipment	61%
Being “Green”	44%
Certified by ESNH Program	30%
Certified by ESNH Program	30%

Program Homebuyer Feedback

▲
Feature Importance

Indoor Air Quality	78%
Amenities	75%
Affordable Utility Bills	73%
Health and Safety	73%
Efficient Appliances/Equipment	61%
Being “Green”	44%
Certified by ESNH Program	30%

Program Homebuyer Feedback

Feature Importance ▲

Quality Construction	93%
The Home's Comfort	88%
Cost of Home	88%
Indoor Air Quality	78%
Amenities	75%
Affordable Utility Bills	73%
Health and Safety	73%
Efficient Appliances/Equipment	61%
Being "Green"	44%
Certified by ESNH Program	30%

“ [The home being certified] wasn't really a factor in deciding to buy the house. ”

Buyers don't seem to be correlating benefits with energy efficiency or the program...

“ It was a part of the overall package, but it wasn't the top [priority]. ”

“ I just never thought of it before. ”

...but when prompted...

“It’s quiet, maintains the temperature well, and is well designed for everyday use.”

“The temperature and comfort have been well regulated and cozy.”

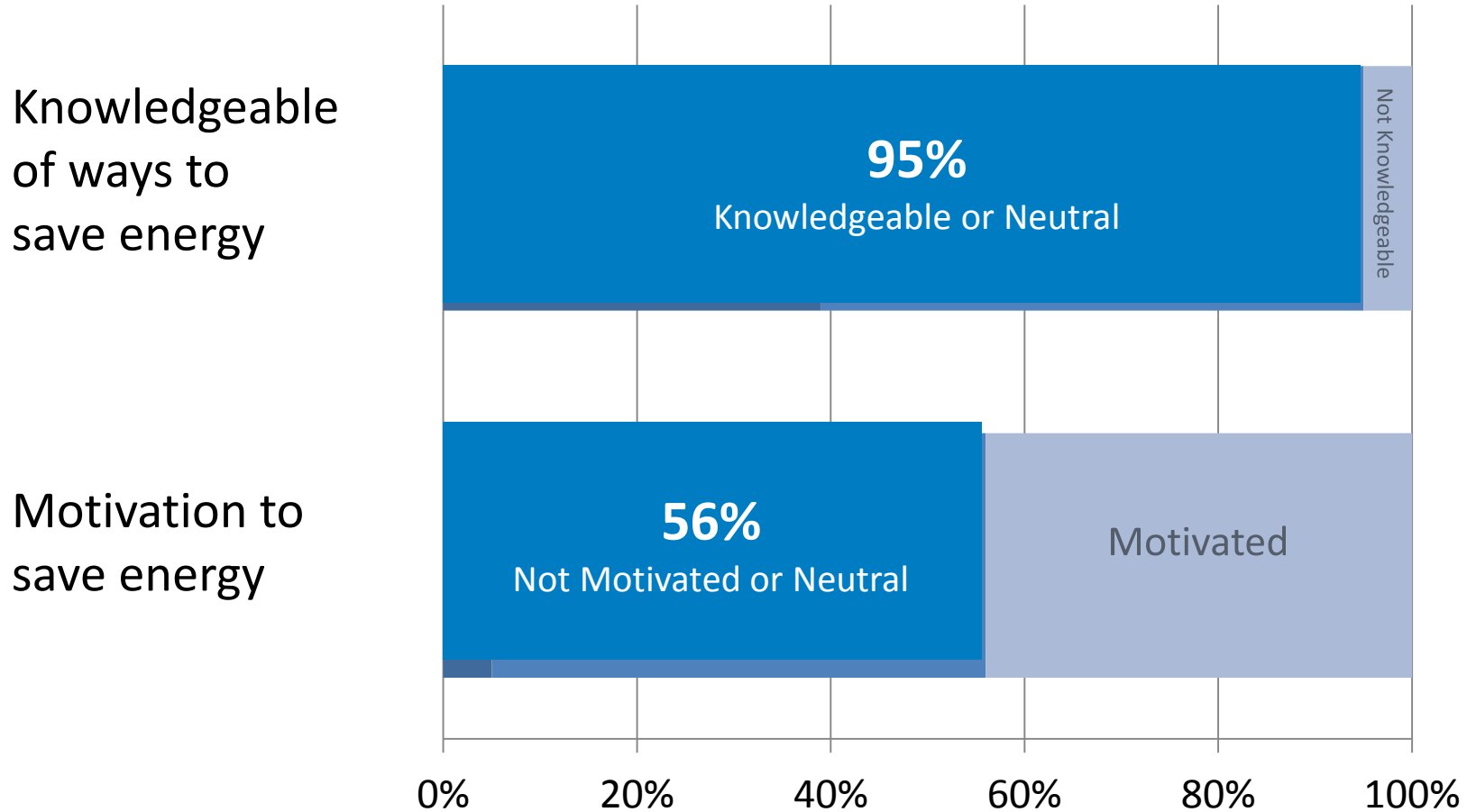
“It’s a very nice home and it’s well built.”

“Even though our house is three times as large as our last home, our bill has not gone up.”

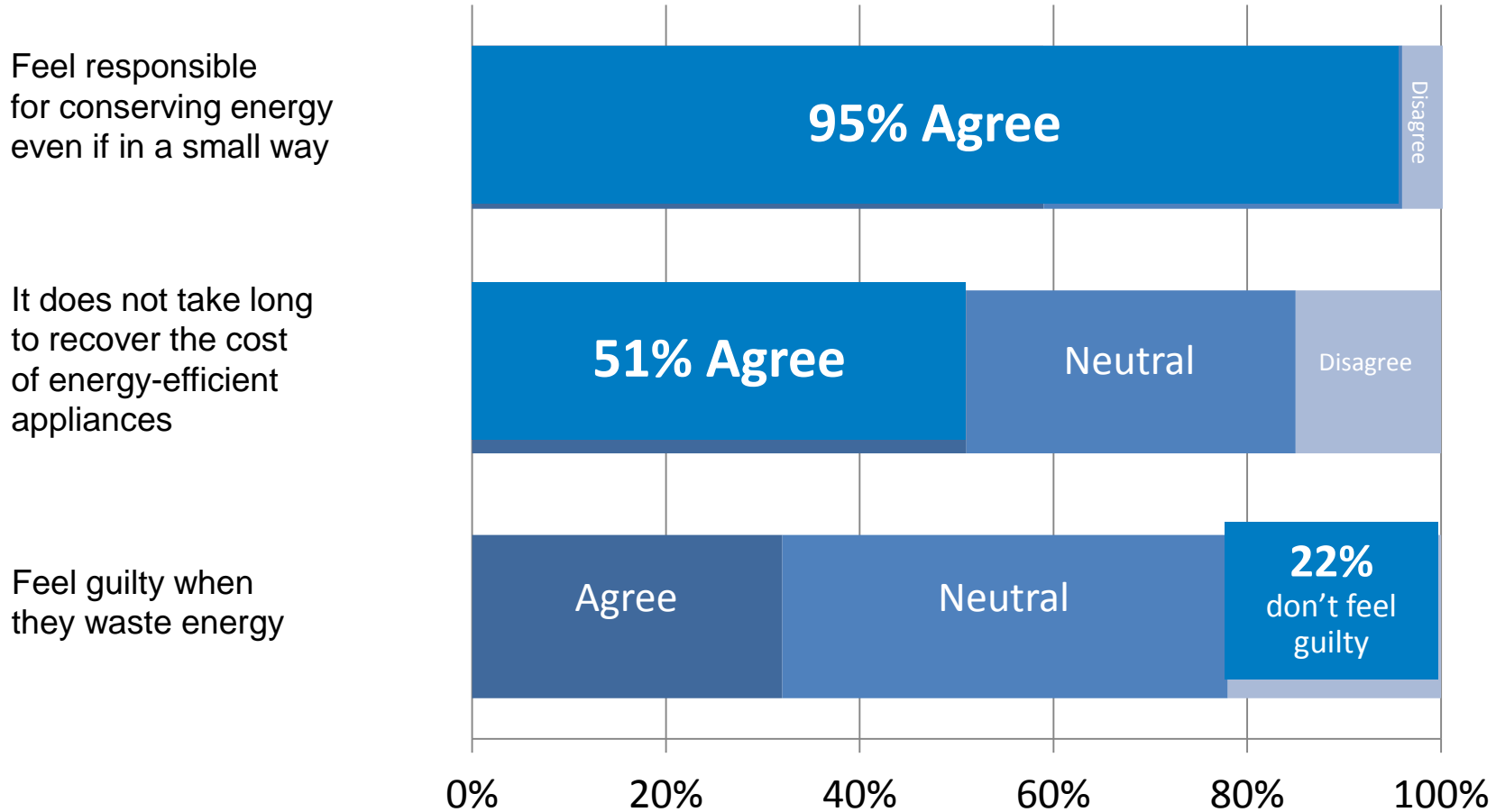
“The bills have actually been surprisingly lower with the size of the home that I have.”

“It (energy bill) is a lot lower than it was in my old house.”

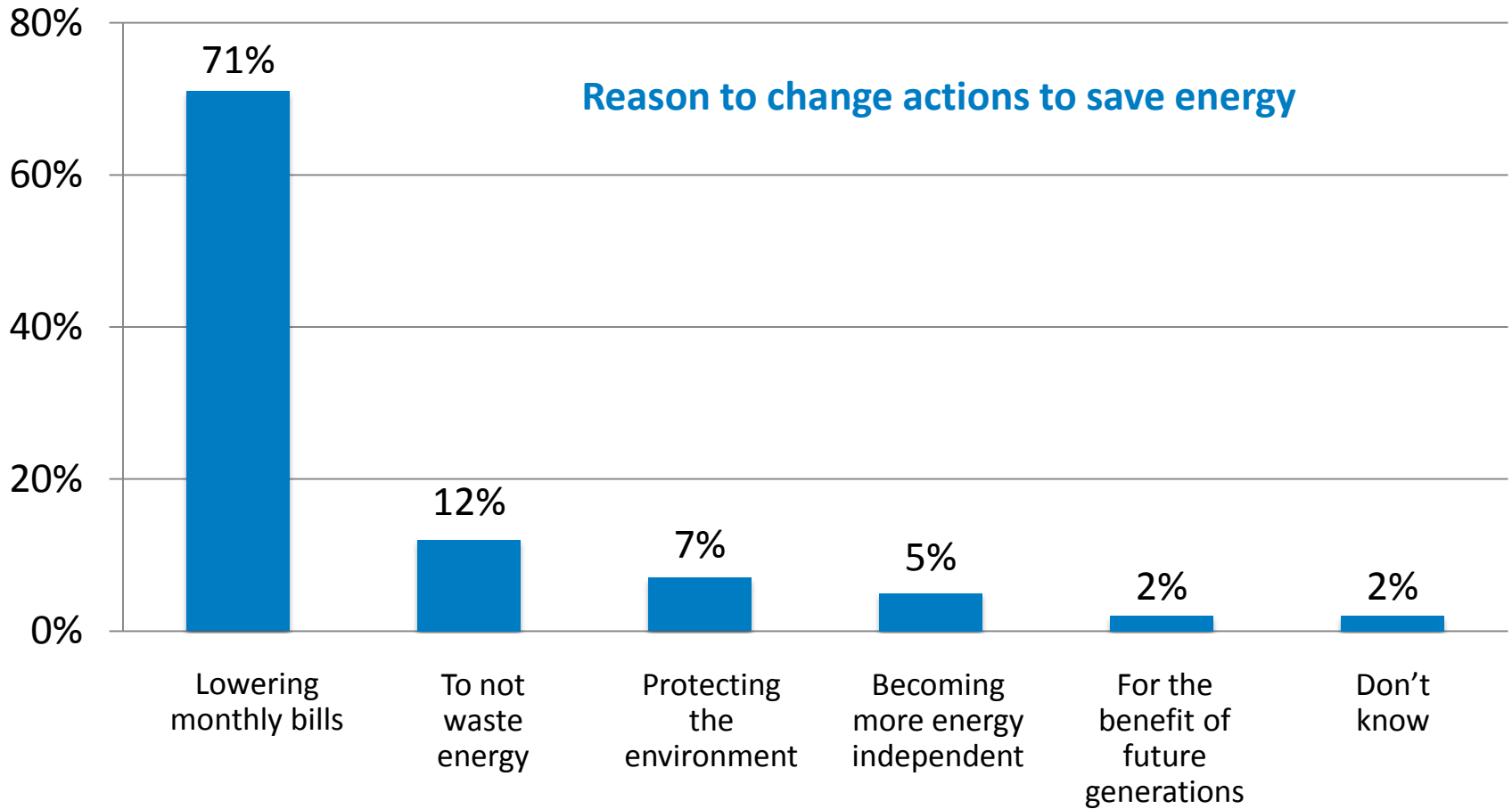
Ambivalence



Contradiction



Cost over Altruism



Conclusions

Strong Fundamentals

- Program fundamentals are strong
 - Areas identified for improvement linked to process tweaks rather than technical standards, QA or incentives
 - Program builders are demonstrating an ability to drive for higher performance and institutionalize upgrades

Entrenched Perceptions

- Non-participating builders are entrenched in their perceptions
 - Cost is the only value they see a need to compete on

Conflicted Customers

- Customers are conflicted and inconsistent when it comes to program benefits and motivations
 - But they value the outcomes in terms of the performance and operating cost of their home

Builders are Not Messengers

- Relying on builders to communicate how these outcomes are linked to the program may have reached the limit of its potential
 - Even with enhanced sales training (including role playing), builder sales staff appear to be either unmotivated, unwilling or unable to engage effectively with customers on these topics
- We need more marketing to help builders take the program to the next plateau
 - Even with enhanced sales training

Consideration

- Is it time to shift to a demand side strategy rather than a supply side strategy?

Discussion