ACADIA
CONSULTING GROUP

Home Energy Industry Survey
Acadia Consulting Group - November 30, 2016

E4 THE FUTURE

Background

- This research was conducted by Acadia Consulting Group to support the Home Performance Industry on behalf of the following group of 5 industry organization with generous support from E4TheFurture:

BUILDING PERFORMANCE INSTITUTE INC. BPI

EEBA Energy & Environmental Building Alliance

Home energy The Home Performance Magazine

EfficiencyFirst America's Home Performance Workforce

Home Performance Coalition

Background

- The primary objective of the quantitative research phase was to get market-based feedback and insights in the following areas to assist the the industry in better serving its constituents, including:
  - Insights as to major challenges that industry is facing and potential support the 5 organizations could provide.
  - Feedback on how industry organizations could add value for constituents in the future.

Methodology Overview

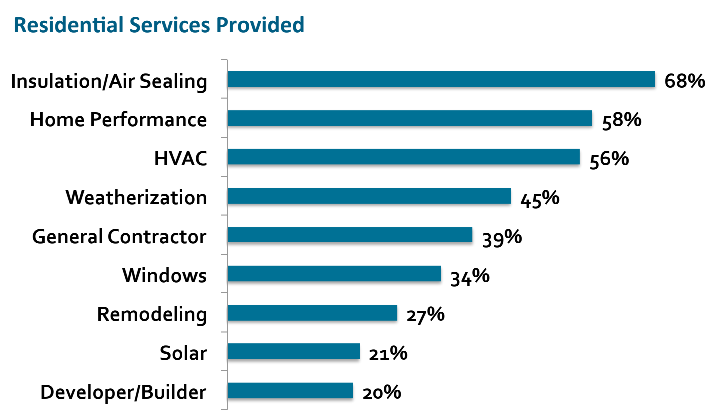
- An online survey was conducted from September 29th through November 7th with constituents of the 5 organizations.
- A total of 1,278 surveys were completed– a 2.6% response rate.
- Overall research results for the constituent universe of 5 organizations are statistically valid at the 90% confidence level with a maximum margin of error of +/- 2.3%.
  - Please note that the statistical projectability will be reduced if the number of people answering a specific question (noted as N) decreases significantly from the survey population and should only be considered directional when there are <100 respondents.
  - Response totals for individual questions may be slightly lower or higher than 100% due to rounding and will total more than 100% when multiple responses are allowed.

Respondent Profile - Segment

Segment/Profession	#	%
Contractor/Builder	273	21%
Energy Auditor, Rater or Consultant	332	26%
Utility or Residential Energy Efficiency Program Sponsor	74	6%
Residential Energy Efficiency or Clean Energy Program Implementer	132	10%
Weatherization Agency	222	17%
Government (Federal/State/Local)	84	7%
Other Building Science Professional (Architect, Engineer, etc.)	69	5%
Manufacturer or Distributor	40	3%
Non-Profit or Trade Association	52	4%
TOTAL	1,278	100%

N=1,278. Which of the following best describes your business/profession as it relates to the Home Energy Industry? (If your business fits into multiple categories, please check the area in which you most frequently provide services for the residential market.)

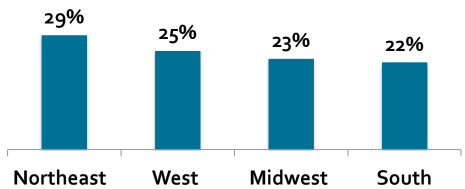
Respondent Profile - Contractor/Builder Services

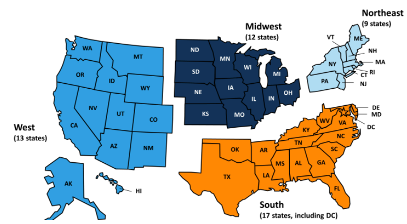


Base: For those that indicated that they were a Contractors/Builders, N=273, they were then asked… Which of the following residential services do you provide? **(Check all that apply)**

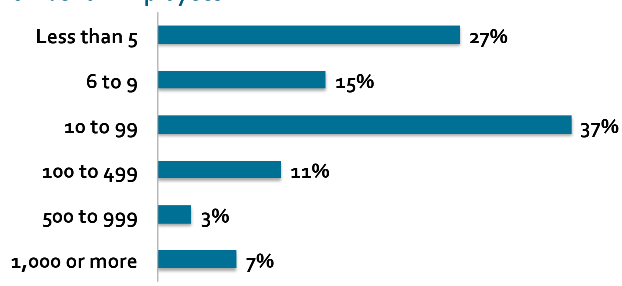
Respondent Profile – Business Demographics

Primary Business Location/Headquarters





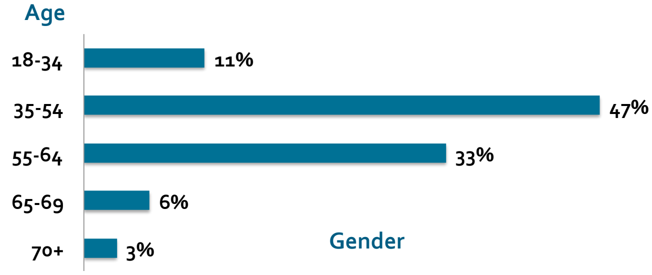
Number of Employees



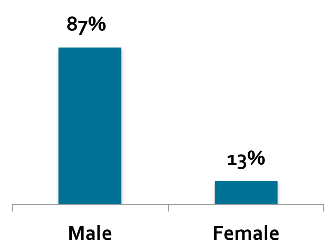
N=1,278

Respondent Profile – Personal Demographics

Age



Gender



N=1,278

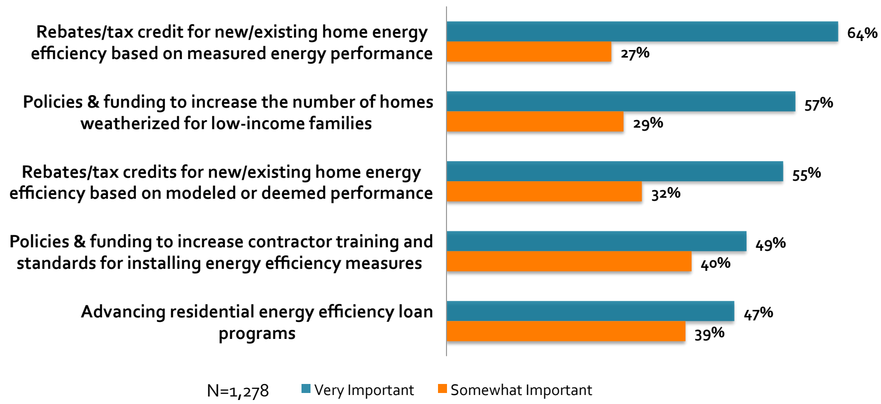
Key Findings

Key Findings – General Industry Insights

- Respondents most frequently reported that homeowners make energy efficiency or clean energy improvements to their home in order to save money (84%) and improve comfort (68%).
- The biggest barrier cited for making home energy improvements was cost (59%).
- The single biggest challenge faced by industry professionals in their market was awareness and education (31% - unaided). When asked on an aided basis, respondents most cited the following areas to be extremely challenging:
  - Finding qualified employees or contractors (47%)
  - Administrative burden required by programs (44%)
  - Customers unwilling to pay a price differential for energy efficiency (42%)
  - Generating homeowner interest (35%)
- Respondents cited that most potential resources and tools from a list presented to them would be helpful in addressing critical business challenges. Long-term, low-cost project financing, advertising/PR on home energy retrofits, policy direction at the national, state and local levels and training support resources were deemed the most helpful.

Key Findings – Potential Policy Initiatives

- While the majority of respondents felt that all potential incentives, policies and regulations presented were at least somewhat important, the following 5 were the most highly rated (86%+ of respondents rating them to be important, with 47%+ citing they were very important):



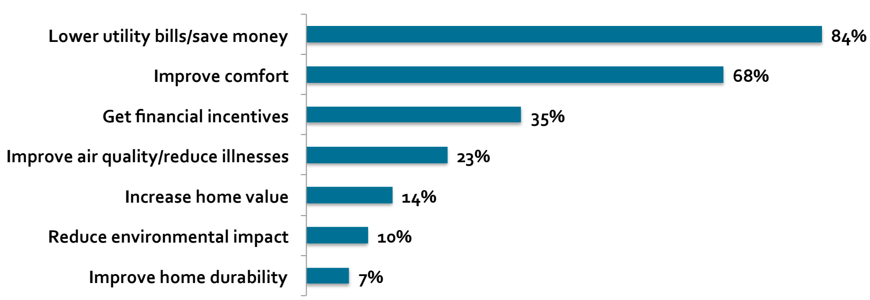
Key Findings – Areas for Collaboration

- A majority of respondents felt it was very important for the industry's non-profit organizations to collaborate in the following areas:
  - Codes & Standard Setting – 72%
  - National Policy Advocacy – 69%
  - Consumer Market Awareness – 66%
  - Training & Workforce Development – 66%
  - Local Policy/Code Advocacy – 63%
  - Outreach & Communications – 57%
- Almost half of respondents indicated it was critical to collaborate in Business Development, Sales/Marketing Training & Support (48%) and a third on Smart Home Automation (33%).

General Industry Insights

Homeowner Motivators

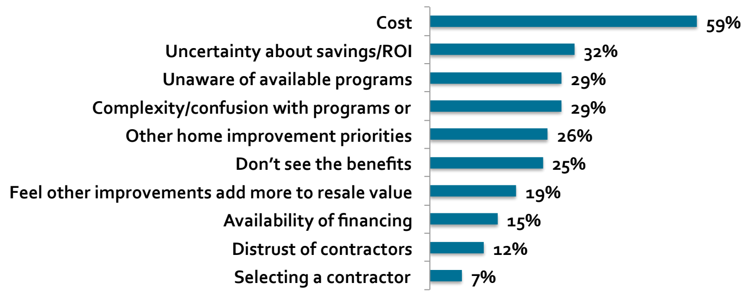
- Survey respondents cited that in their experience homeowners most frequently make energy efficiency or clean energy improvements to their home in order to save money (84%) and improve comfort (68%).
  - This ranking of motivators was consistent across professional segments as well as geographic regions.



N=1,278. In your experience, what best motivates homeowners to make energy efficiency or clean energy improvements to their homes? They want to… **(Choose up to 3)**

Homeowner Barriers

- Cost (59%) was the biggest barrier cited by respondents. While overall the #2 barrier was uncertainty about savings/ROI, this varied somewhat by segment.
  - For weatherization agencies, the #2 barrier was lack of awareness (46%) and for program implementers, it was program complexity/confusion (41%).
  - Note: these were not homeowner responses, but rather industry impressions.



N=1,278. What have you found to be the biggest barriers for homeowners to make energy efficiency or clean energy improvements to their homes? **(Choose up to 3)**

Challenges faced by Industry Professionals

- Respondents most highly rated challenge was finding qualified employees or contractors – almost half (47%) indicated this was a major challenge (8+).

Rating of Challenges Faced by Respondents	Mean	% 8+	% DK
Finding qualified employees or contractors	6.8	47%	4%
Administrative Burden required by programs	6.7	44%	6%
Customers unwilling to pay a price differential for energy efficiency	6.6	42%	7%
Generating homeowner interest	6.1	35%	2%
Identifying good leads	5.7	26%	8%
Availability of financing	5.5	27%	9%
Cost of participating in programs	5.5	25%	8%
Training	5.4	26%	3%
Closing deals	5.4	20%	12%
Access to program incentives	5.2	23%	6%
Pricing the work properly	4.8	17%	7%

N=1,278. How would you rate these challenges that you and your business might encounter in trying to improve the energy efficiency of homes? **(1 = Not a Challenge - 10 = Extremely Challenging)**

Challenges faced by Industry Professionals
Segment insights

- The magnitude of many challenges varied by respondent segment:
  - Contractors/builders
    - Even more likely to find the administrative burden challenging. (7.1 mean rating)
    - Even more likely to cite finding qualified employees to be challenging. (7.0 mean)
  - Program Implementers
    - Even more likely to cite finding qualified employees/contractors challenging. (7.1 mean)
    - Even more likely to find the administrative burden challenging. (7.0 mean rating)
  - Utilities/program sponsors
    - Even more likely to rate customers unwillingness to pay a price differential for higher energy efficiency as a challenge. (7.2 mean)
    - Less likely to cite the administrative burden required by programs. (5.8 mean)
    - Less likely to cite access to program incentives. (4.4 mean)
  - Weatherization agencies
    - Less likely to cite all of the challenges presented. In fact, the only challenges receiving a mean rating of 6+ were the administrative burden (6.7 mean) and finding qualified employees/contractors. (6.3 mean)

Contractors/builders N=273, Program Implementer N=132, Utility/Program Sponsor N=74, Weatherization Agency N=222

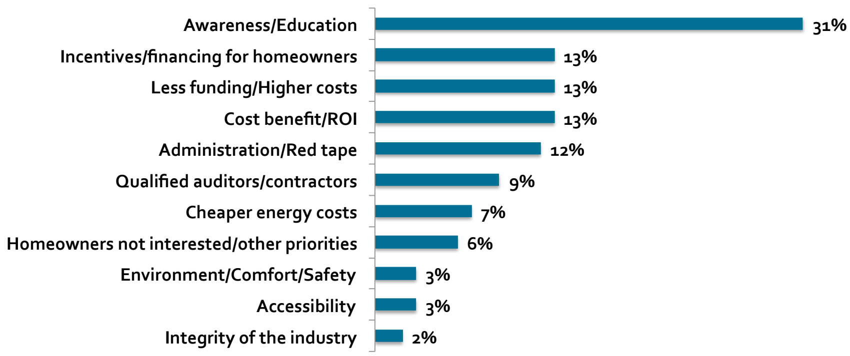
Challenges faced by Industry Professionals (unaided)

- 175 of 1,278 respondents cited additional major challenges to the 11 they rated. Most frequently cited other challenges included:
  - Consumers don't care/aren't interested – 24%
  - Competition – 17%
  - Consistency – 16%
  - Industry misinformation/communications – 15%
  - Contractor performance – 10%
  - Funding – 9%

N=175. **Any other major challenges?**

Single Biggest Market Challenge (unaided)

- Awareness/education (31%) was the single biggest market challenge cited by respondents on an unaided basis.
  - This was consistent across both professional segments and geographic regions.



N=1,066 – Respondents citing challenges. What do you consider to be the single biggest challenge to residential energy efficiency and clean energy improvements in your market today?

Reaction to Potential Resources and Tools

- A significant percentage of respondents were receptive to most resources and tools presented. Over half cited that long-term, low-cost project financing, advertising/PR, policy direction and best practices training would be very helpful.

How helpful would the following tools/resources be?	Mean	% 8+
Availability of long-term, low-cost financing for projects	7.3	55%
Advertising/PR/communications on home energy retrofits	7.3	52%
Providing policy direction at the national, state & local levels	7.2	53%
Ongoing employee training/education on best practices	7.2	52%
Technical training	7.0	48%
Local advocacy to help overcome legislative & code issues	6.9	47%
More learning opportunities – workshops, webinars, regional conferences	6.8	43%
Recruiting support/help in finding qualified employees	6.6	41%
Sales & Lead Generation Training	6.0	33%
Roadmap on integrating EE offerings into your existing business	5.6	27%

N=1,278. How helpful would the following resources or tools be in helping you address the critical challenges/barriers in your business? **(1 = Not Helpful - 10 = Extremely Helpful)**

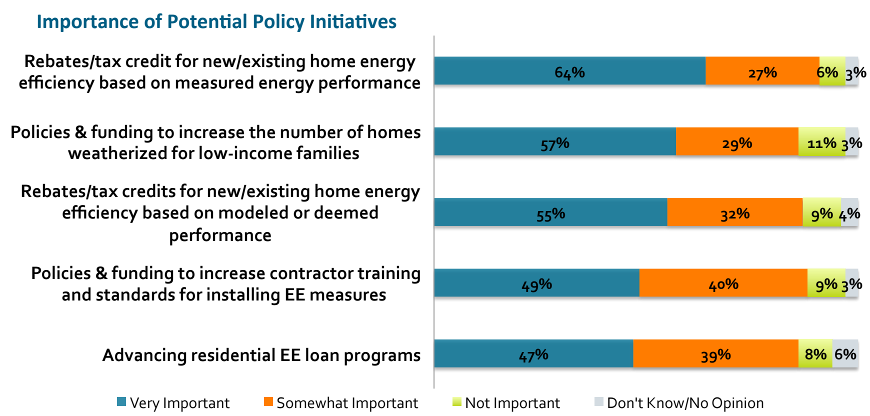
Reaction to Potential Resources and Tools (cont'd)

- The following segments were even more likely find the following resources and tools to be very helpful, with significantly higher percentages rating them 8+.
  - Availability of long-term, low-cost financing for projects – Overall 55%
    - Contractors – 63%
  - Advertising/PR/Communications on Retrofits – Overall 52%
    - Energy Auditors/Raters/Consultants – 59%, Contractors – 58%
  - Recruiting Support – Overall – 41%
    - Program implementers – 51%, Weatherization agencies – 46%, Contractors – 45%
  - More learning opportunities – workshops, webinars, regional conferences – Overall 43%
    - Weatherization agencies – 48%
  - Sales & Lead Generation Training– Overall – 33%
    - Program Implementers – 42%, Contractors – 38%

N=1,278. How helpful would the following resources or tools be in helping you address the critical challenges/ barriers in your business? **(1 = Not Helpful - 10 = Extremely Helpful)**

Importance of Potential Policy Initiatives

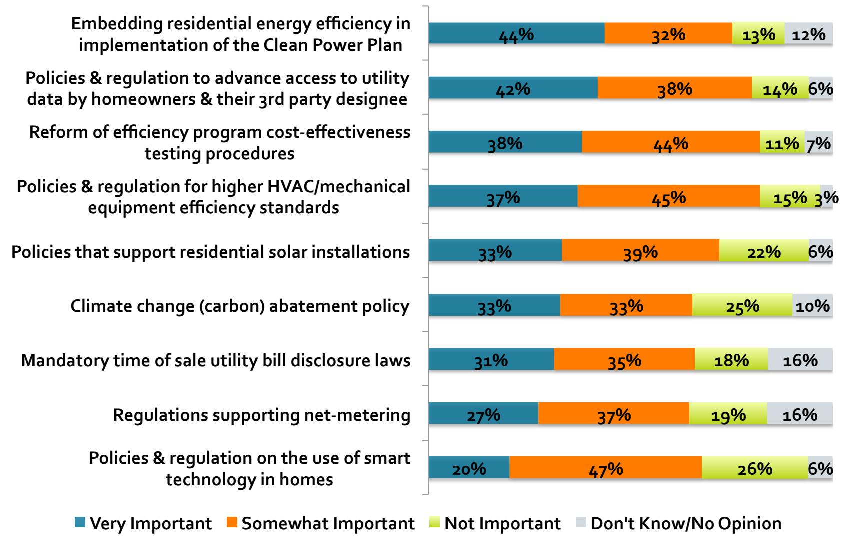
- While the majority of respondents cited that all 14 potential incentives, policies and regulations presented were at least somewhat important, the following 5 were the most highly rated. (86%+ important and 47%+ very important)



N=1,278. Following is a list of potential incentives, policies and regulations designed to accelerate the residential energy efficiency retrofit market. Please let us know how important you think they are…

Importance of Potential Policy Initiatives (cont'd)

Importance of Other Potential Policy Initiatives Presented



Thank you for generously taking your time to participate in the survey and share your insights! We look forward to serving you in the future.