

# 2012 Annual Data Report


## Summary of Findings

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- In January 2013, DOE issued an Annual Report Data Call to HPwES Sponsors requesting:
  - Final overall CY 2012 results; and
  - Program plans for CY 2013 and beyond
- Data analysis will attempt to:
  - Detect trends across programs and identify successful strategies to inform program development on the local level
  - Inform the HPwES Program operational support and strategy for on-going development
  - Enlighten DOE's broader residential network strategy and demonstrate the value of residential retrofit



Annual Report for HPwES Sponsor Programs

As an HPwES Program Sponsor, one of your partnership commitments is to provide an annual update on activities. The Department is interested in gathering information on your CY 2012 results as well as plans for CY 2013 and beyond. Please answer the following questions based on what information is readily accessible to your program team. To minimize the burden, the HPwES Team created this PDF-writable template form to facilitate collection of information.

Please complete this form and email it by **XX/XX/XXXX** to your HPwES Account Manager and/or [homeperformance@energystar.gov](mailto:homeperformance@energystar.gov). Alternatively, Sponsors can provide the requested information in an MS WORD or PDF format.

### PROGRAM AND CONTACT INFORMATION

<b>Sponsor Organization Information</b>			
Official Sponsor's Organization Name <i>(as listed on HPwES Partnership Agreement)</i>			
Program Name <i>(public name associated with HPwES platform; note: this is how your program will be listed on the energystar.gov locator map)</i>			
Mailing Address for Sponsor	Address Line 1		
	Address Line 2		
	City		
	State	Zip	
Mailing Address for Implementation Contractor	Address Line 1		
	Address Line 2		
	City		
	State	Zip	
<b>Contact Information (list all that apply)</b>			
1st Administrative POC	Firstname:		Lastname:
	Email:		Phone:
2nd Administrative POC	Firstname:		Lastname:
	Email:		Phone:
Implementation POC	Firstname:		Lastname:
	Email:		Phone:
Reporting/Data POC	Firstname:		Lastname:
	Email:		Phone:
Marketing POC	Firstname:		Lastname:
	Email:		Phone:

## Response Results:

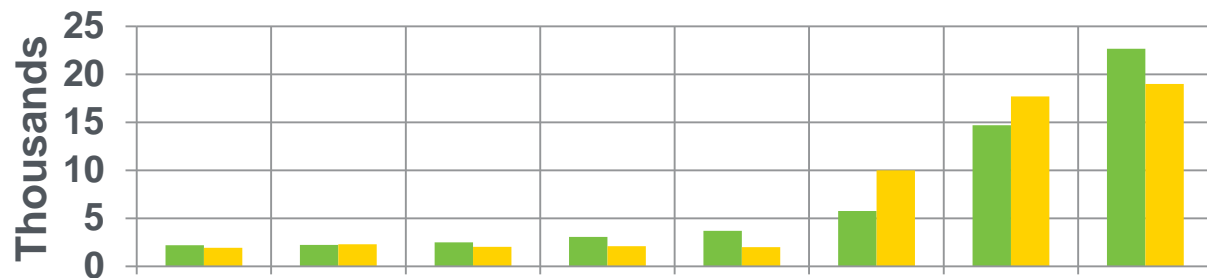
- 44 out of 50 active Sponsors submitted 2012 Annual Reports
- These 44 Sponsors completed **72,944 projects** in 2012. Representing about 93% of all completed projects for the year
- Caution in drawing conclusions:
  - Varied interpretations on data requested
  - Not all questions answered
  - Limited sample size

## Note on Data Quality:

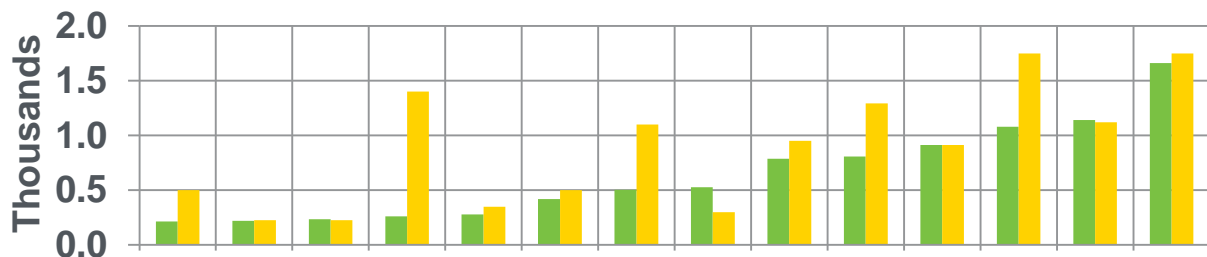
- Variation in the basis for certain key data points including:
  - Reported energy savings may include electric only, electric and gas combined, or all fuels
  - Energy savings estimates may be based on whole-building energy models, deemed savings estimates, or other methods
  - Program costs may include program administration, marketing, QA, EM&V, or a subset of those costs

# 2013 Anticipated Project Growth

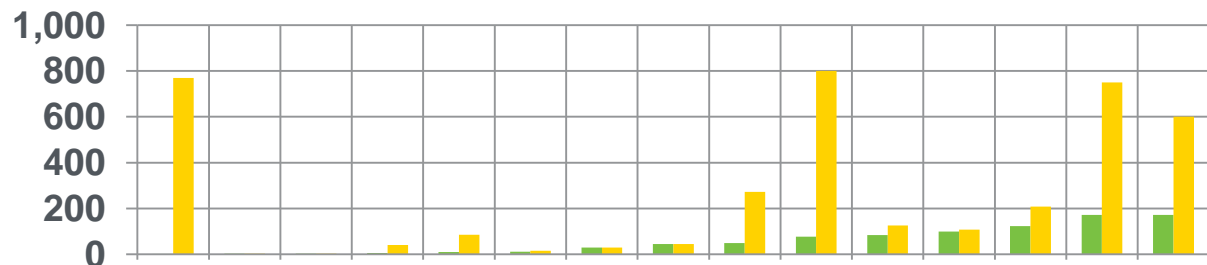
(37 of 50 active Sponsors)



High Volume Sponsors (>2,000 projects per year)



Medium Volume Sponsors (2000>projects per year>500)



Low Volume Sponsors (<500 projects per year)

■ 2012 Projects    ■ 2013 Projects Target

Total 2012 Projects: **56,781**  
Total 2013 Projects Target: **57,008**  
% Projected Growth: **0.5%**

Total 2012 Projects: **9,051**  
Total 2013 Projects Target: **12,378**  
% Projected Growth: **37%**

Total 2012 Projects: **879**  
Total 2013 Projects Target: **3,852**  
% Projected Growth: **340%**

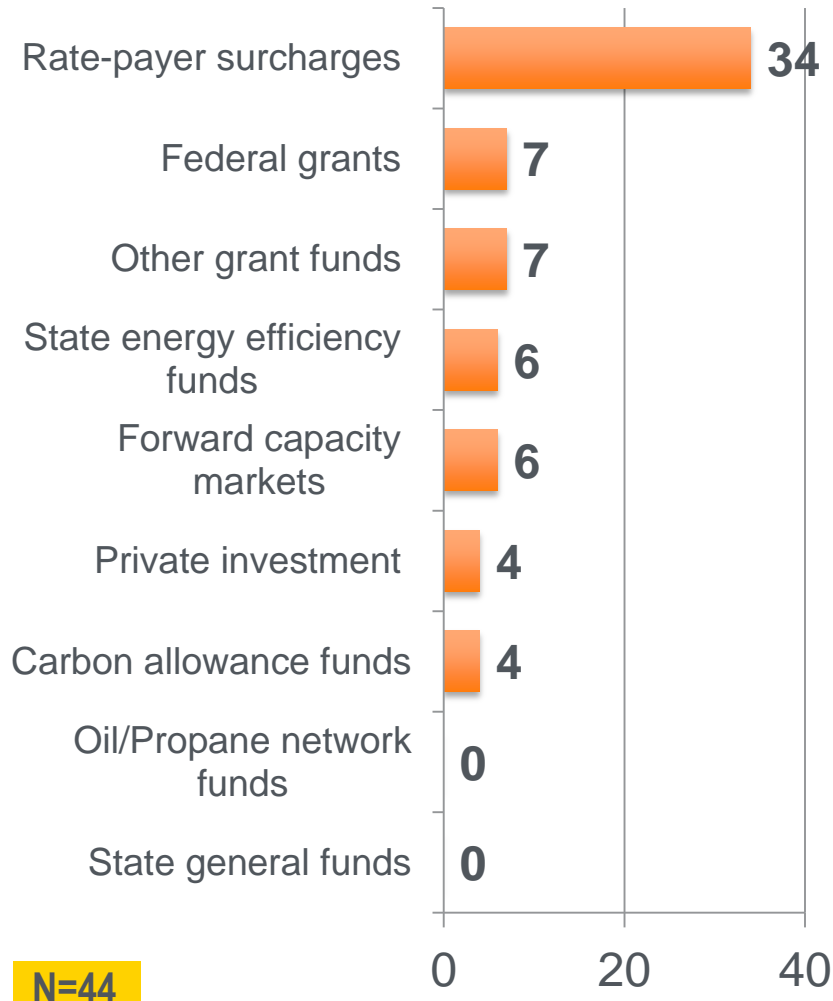
Total 2012 Projects: **66,711**  
Total 2013 Projects Target: **73,238**  
% Projected Growth: **9.1%**

N= 37

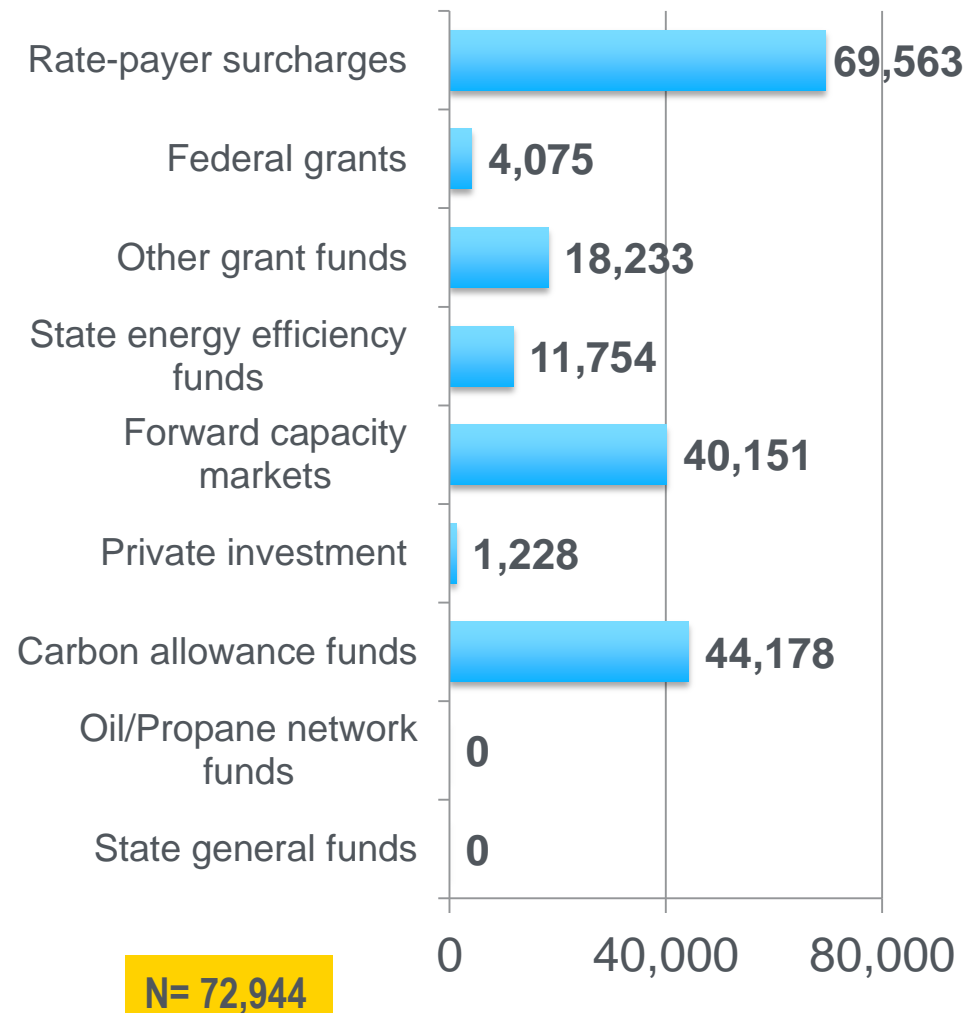
Confidence in data content is limited due to variance in respondents interpretation of questions posed in the 2012 annual data call. Additionally, error may be compounded by limited dataset.

# 2012 Sources of Program Funding

## Number of Sponsors

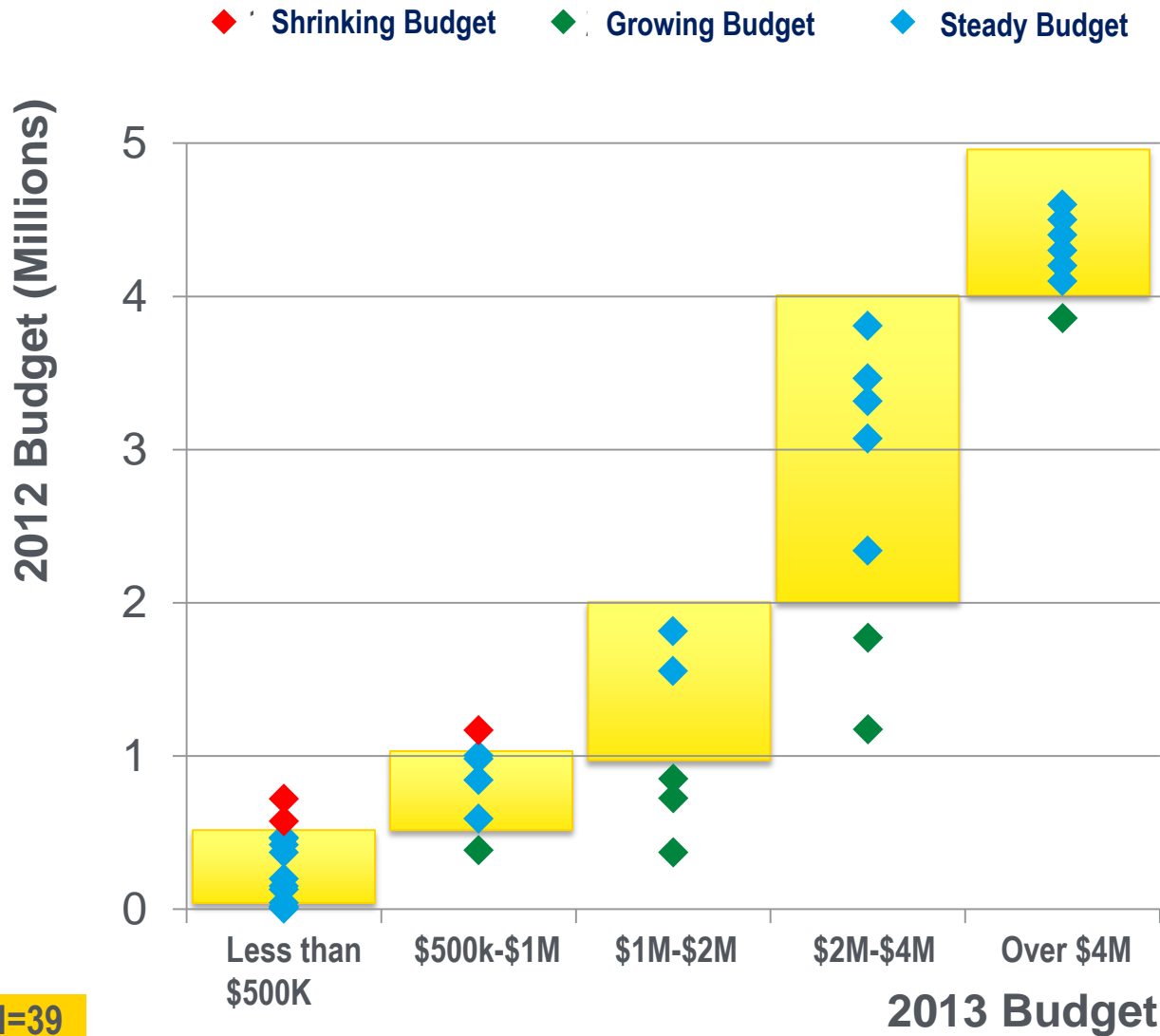


## Projects Completed 2012



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# Sponsor Program Budget Projections

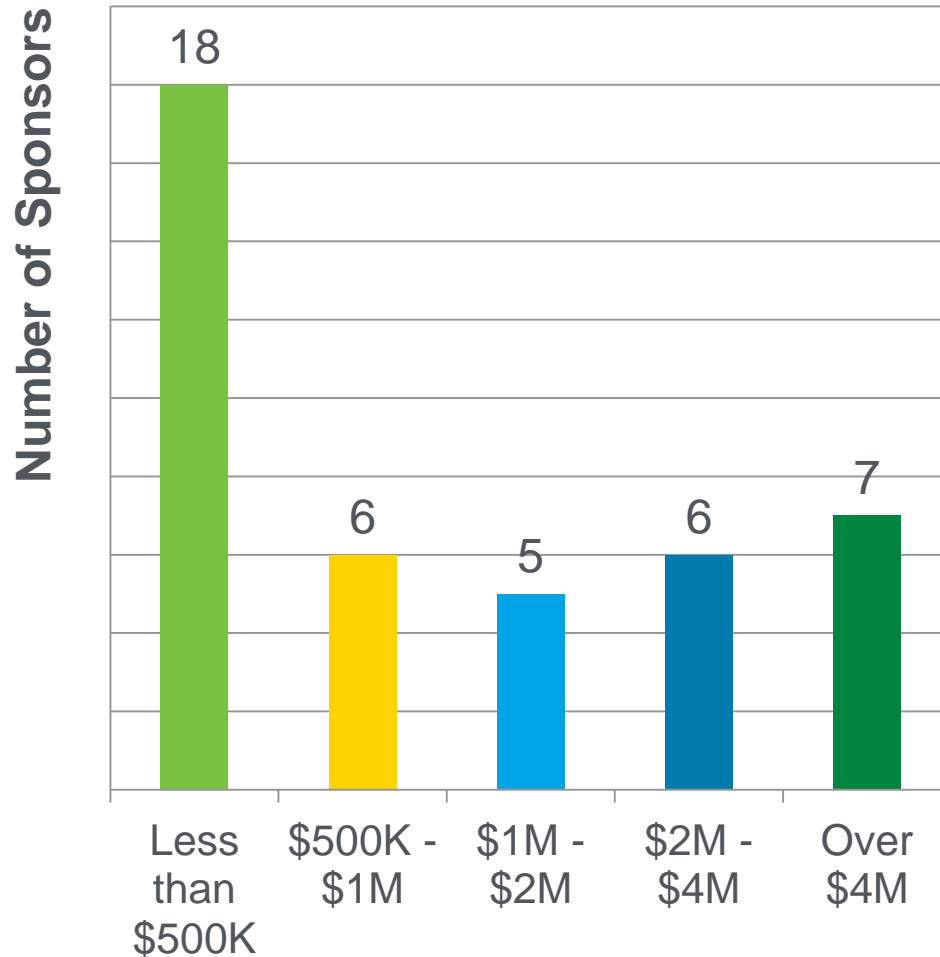


N=39

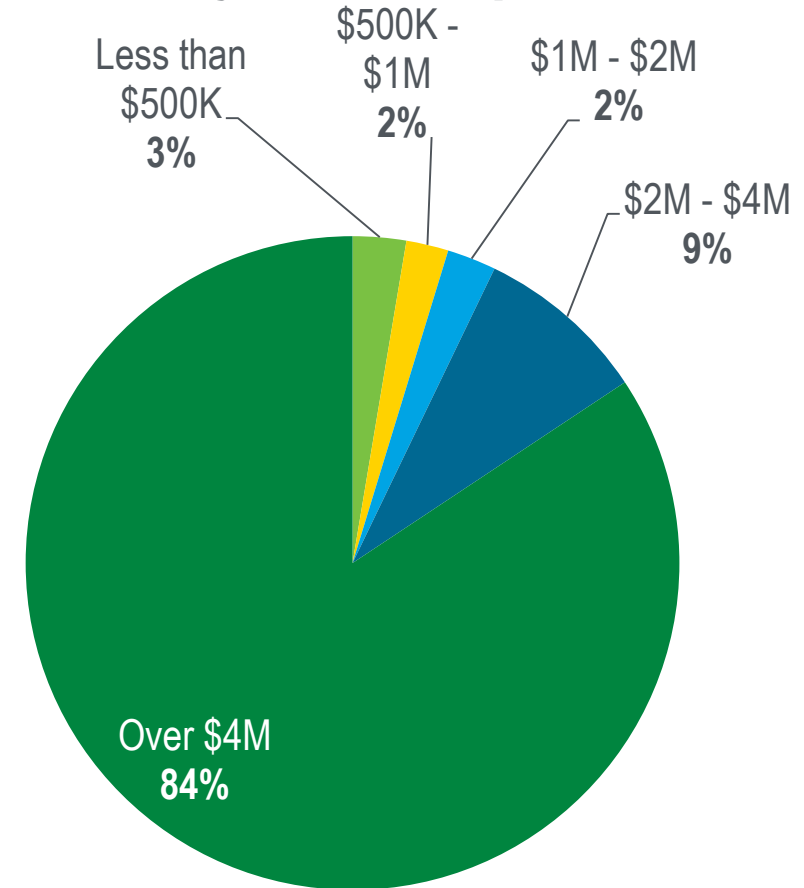
- Programs reporting shrinking budgets, are all Rate-Payer funded
- Programs with growing budgets, tend to diversify their sources of funding

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# 2013 Sponsor Programs by Budget



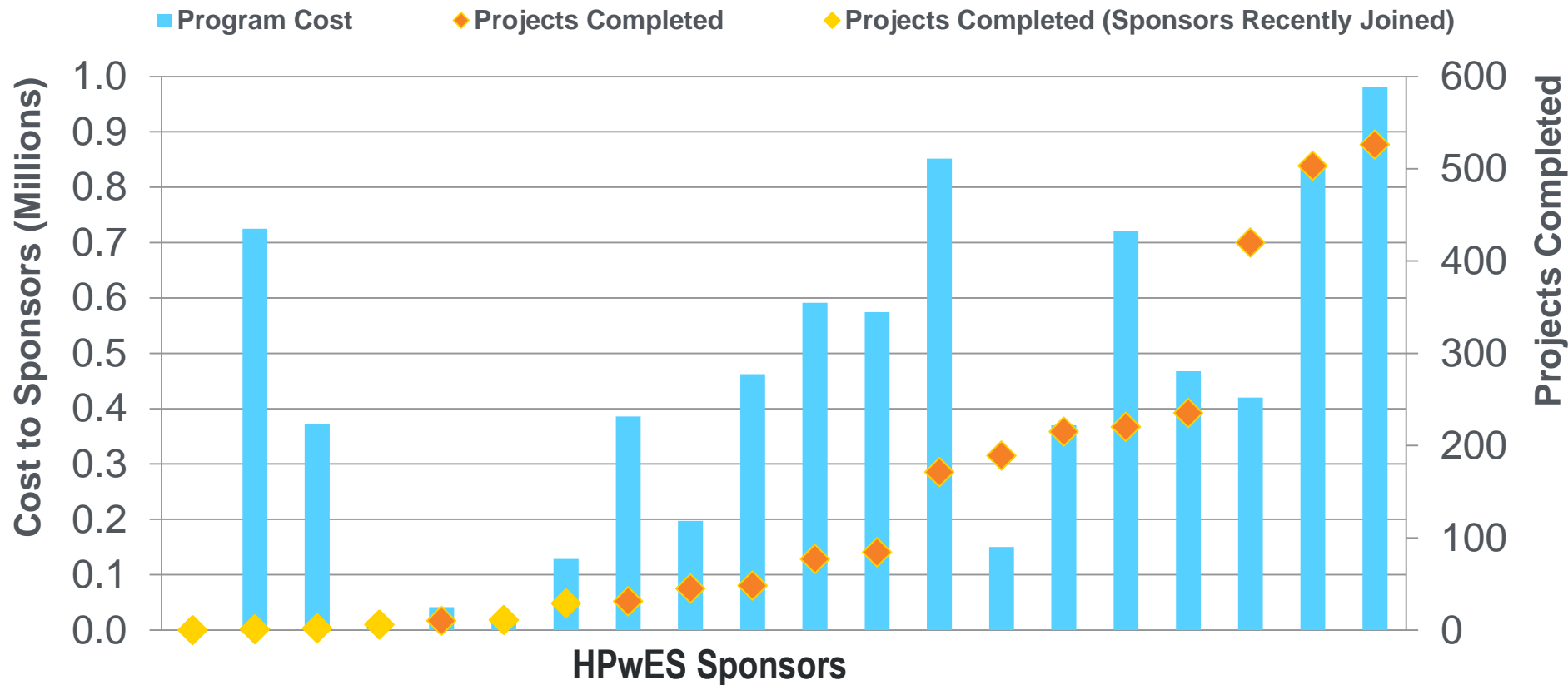
## % of Projects Completed 2012



N=42

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# Sponsor Programs with $\leq$ \$1M Budgets

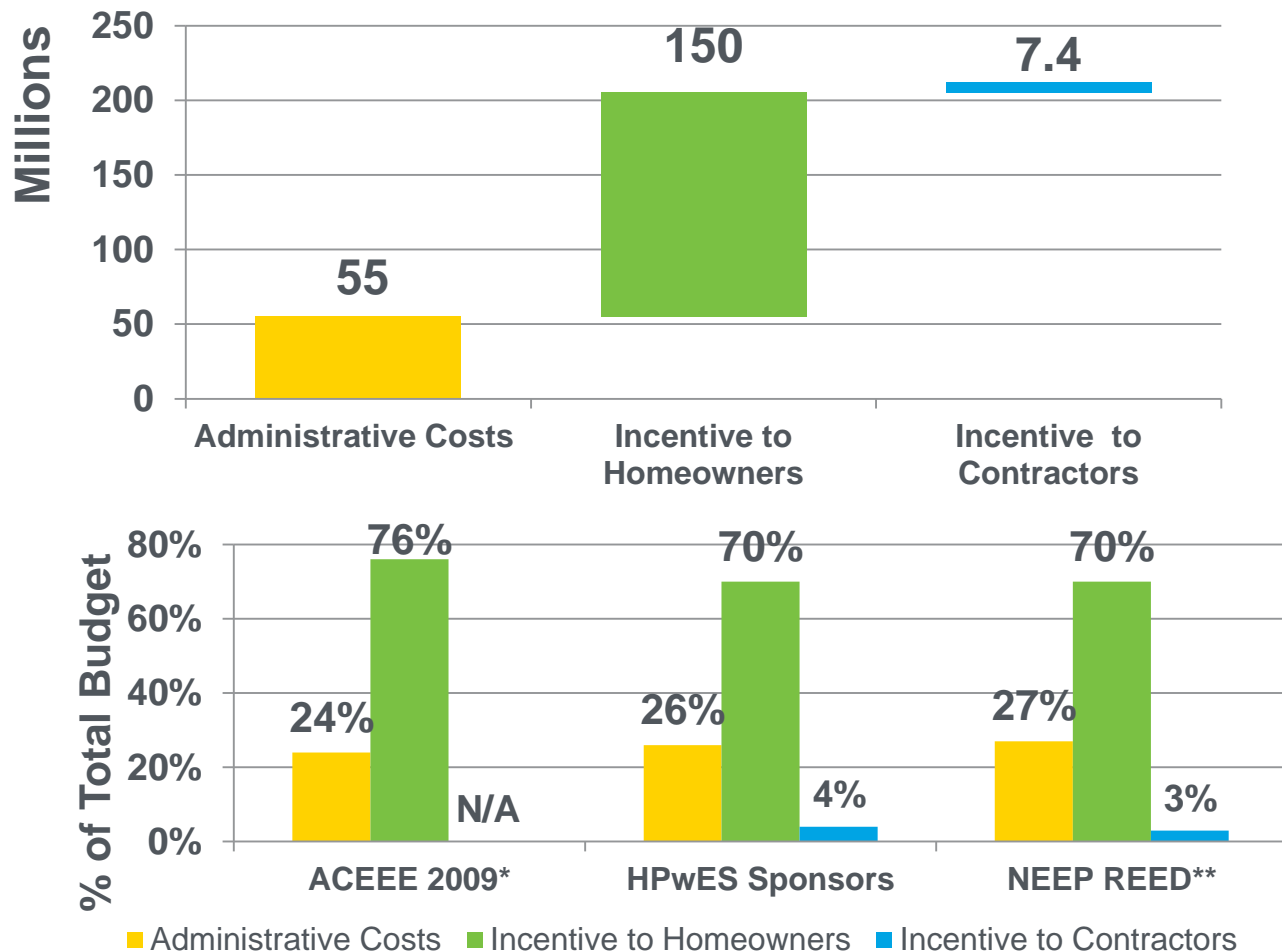


- 24 active HPwES Sponsors reported a program budget of less than \$1 Million for CY2012
- On average these Sponsors completed 170 projects, with a maximum of 530 projects per Sponsor
- On average, each of these projects realize 10 MMBtu's of site energy savings



# Cumulative Program Cost to Sponsors

Excluding Participant Cost



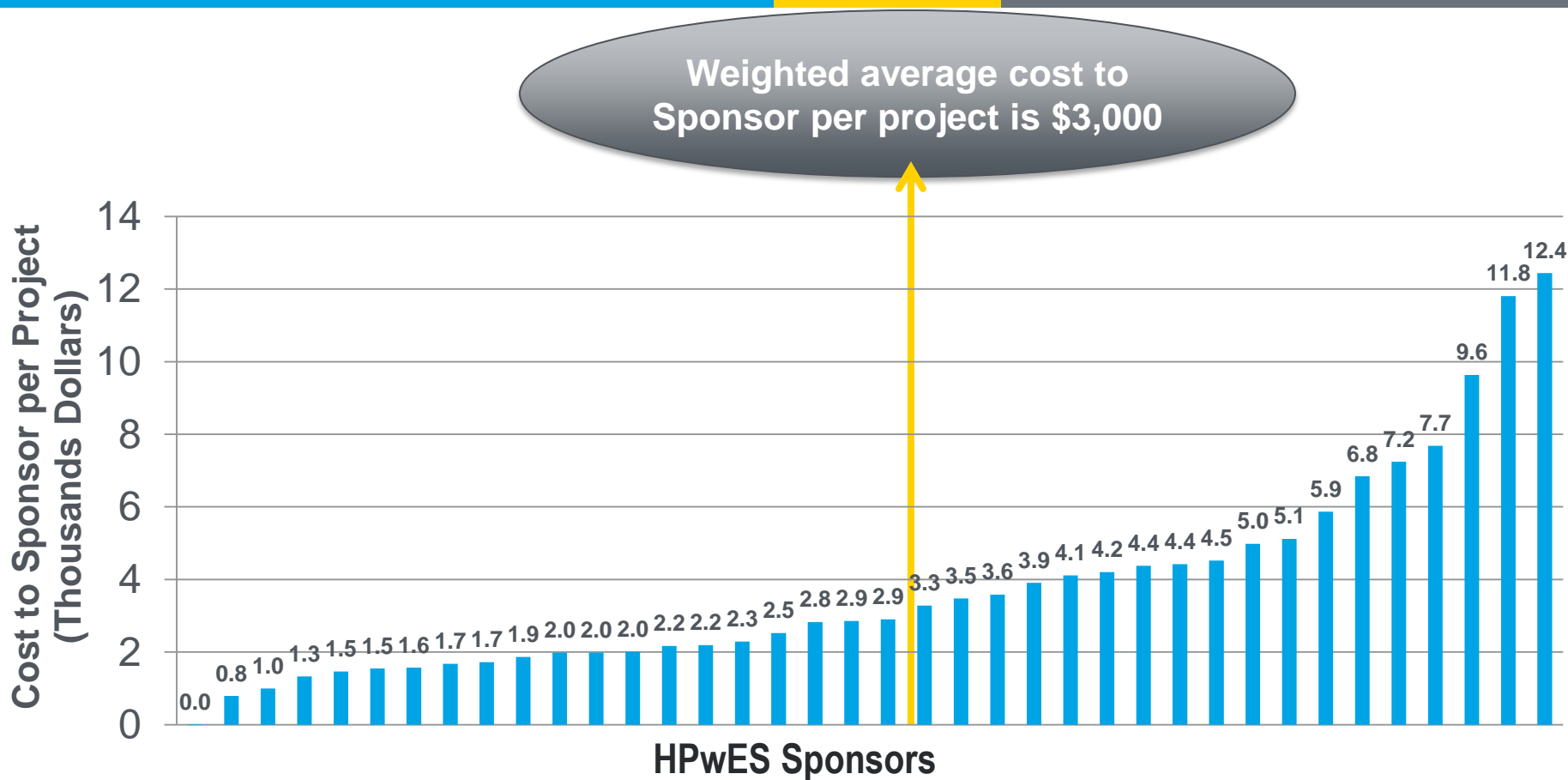
- Total reported cost to Sponsors for CY2012 = \$212.4 Million
- 70% of reported program costs went to homeowner incentives
- Administrative incentives represent 26%

\*: Saving Energy Cost-Effectively: A National Review of the Cost of Energy Saved Through Utility-Sector Energy Efficiency Programs

\*\* : <http://www.neep-reed.org/Focus.aspx> . Excluding the Others Category .

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# Average Sponsor Cost per Project (Excluding Homeowner Contribution)



Cost to Sponsor  
Per Project



Total Reported Admin plus  
Homeowner and  
Contractor Incentives

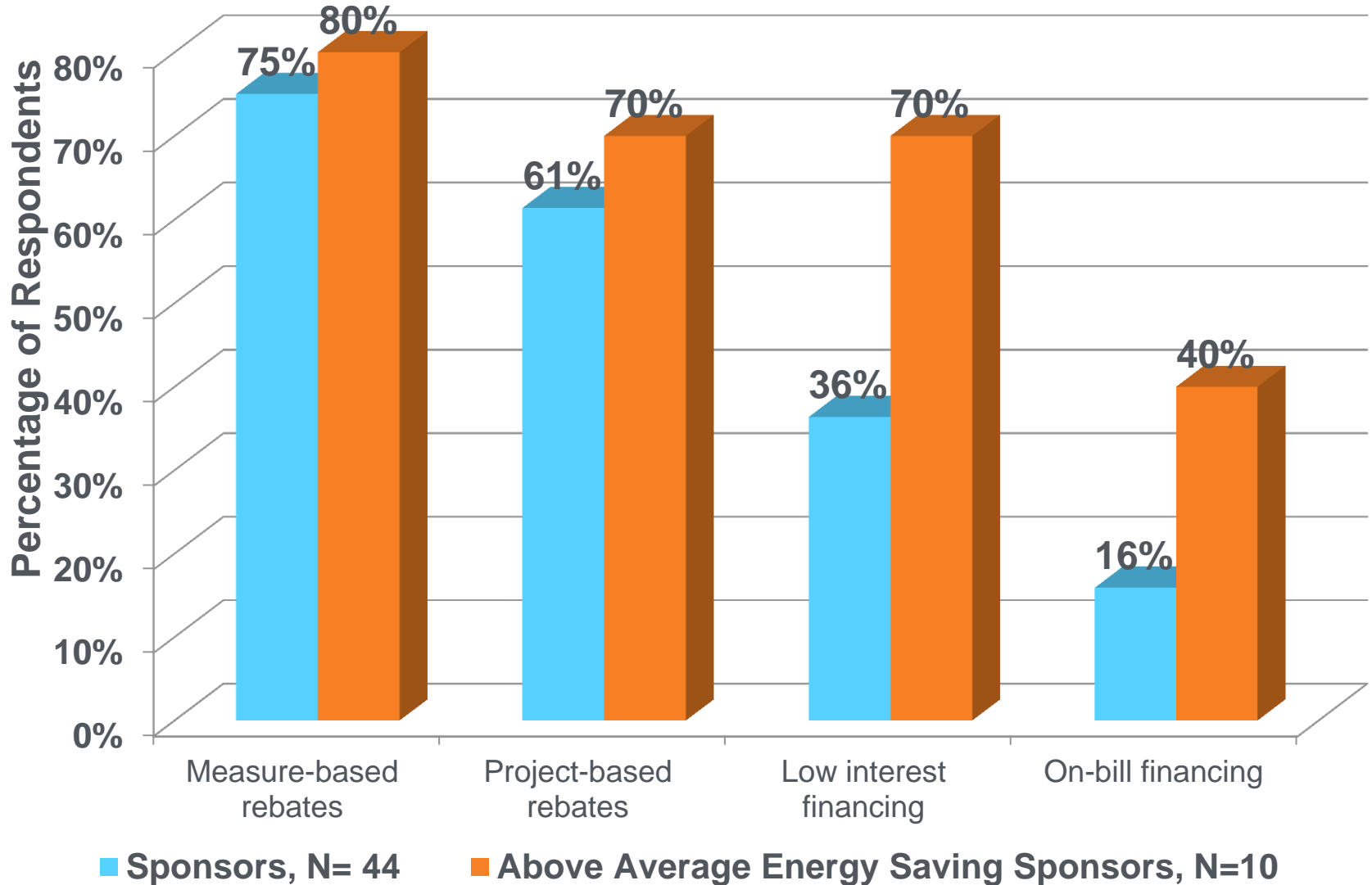


Number of HPwES  
Projects Completed  
in 2012

N=37

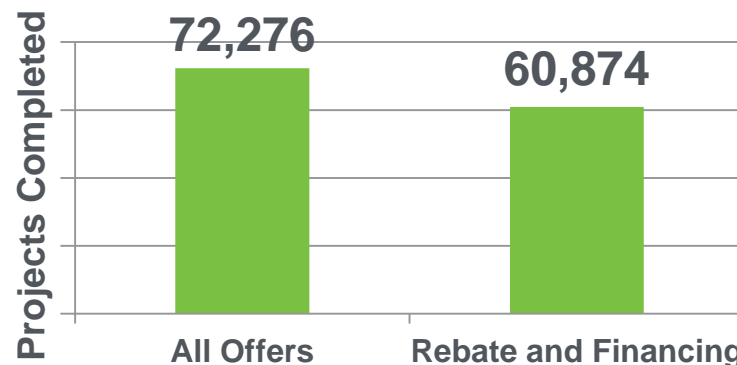
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# Types of Consumer Incentive Offers



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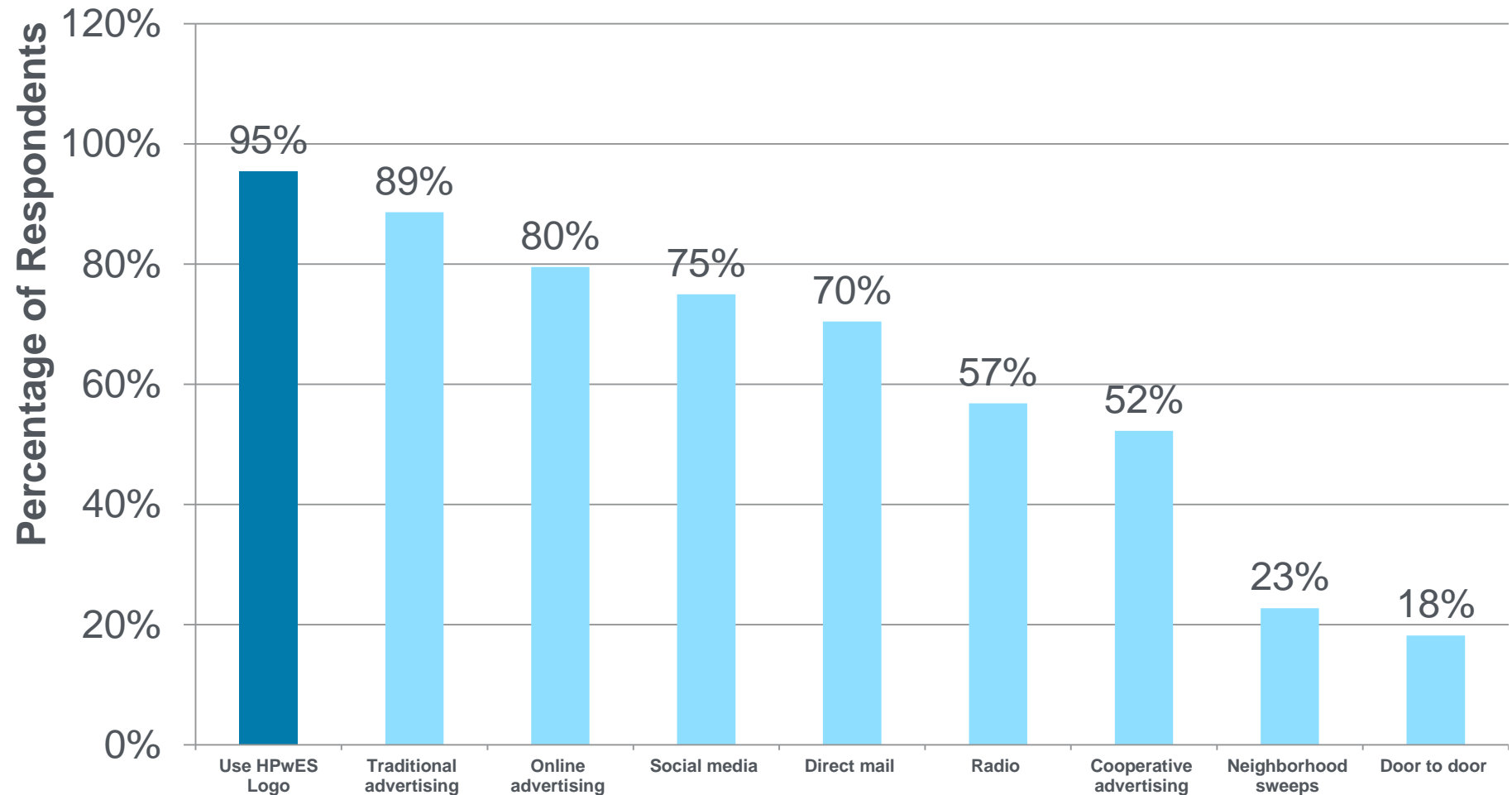
# Consumer Incentives – Combining Rebates and Financing



- 16 HPwES Sponsors reported offering financing options to Homeowners
- Financing was always coupled with project or measure based rebates
- Low interest financing is the most prevailing form

- **ALL** large volume Sponsors offer financing to homeowners
- The 16 Sponsors offering financing, completed 84% of projects

# Sponsors' Marketing Strategies and Tactics



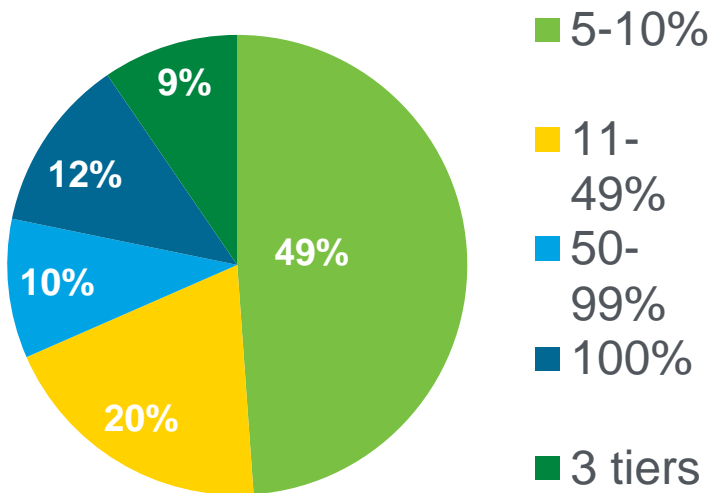
Most Sponsors reported more than one tactic.

Data indicating the effectiveness of marketing tactics used was not collected.

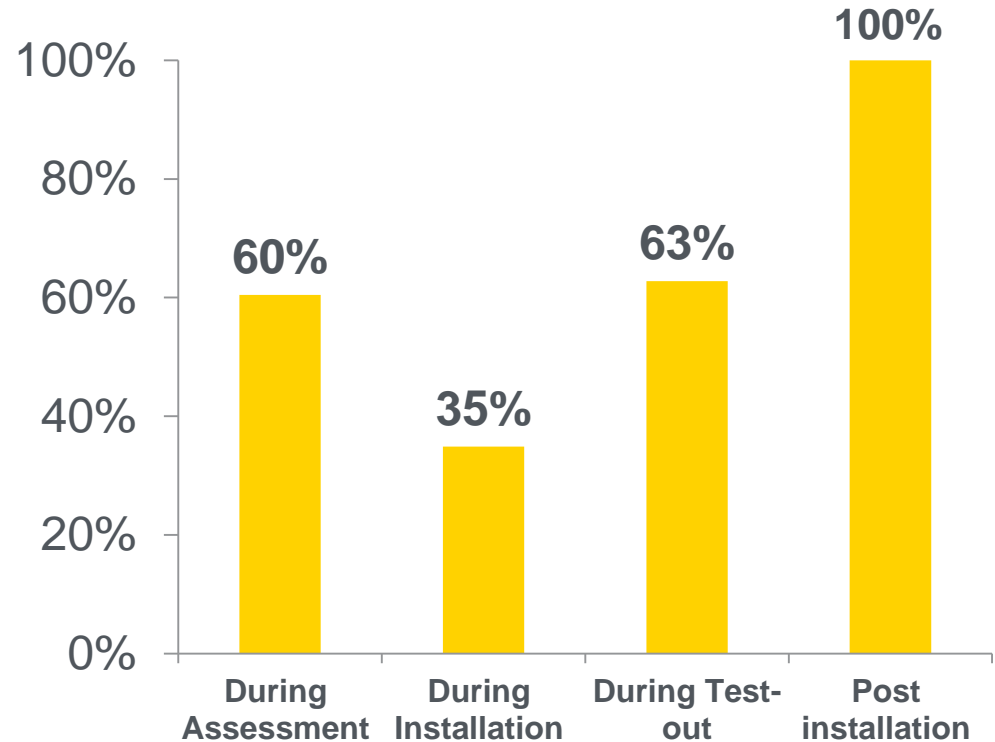
**N=44**

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## Field Inspection Sampling Ratio



## Field Inspection Schedule

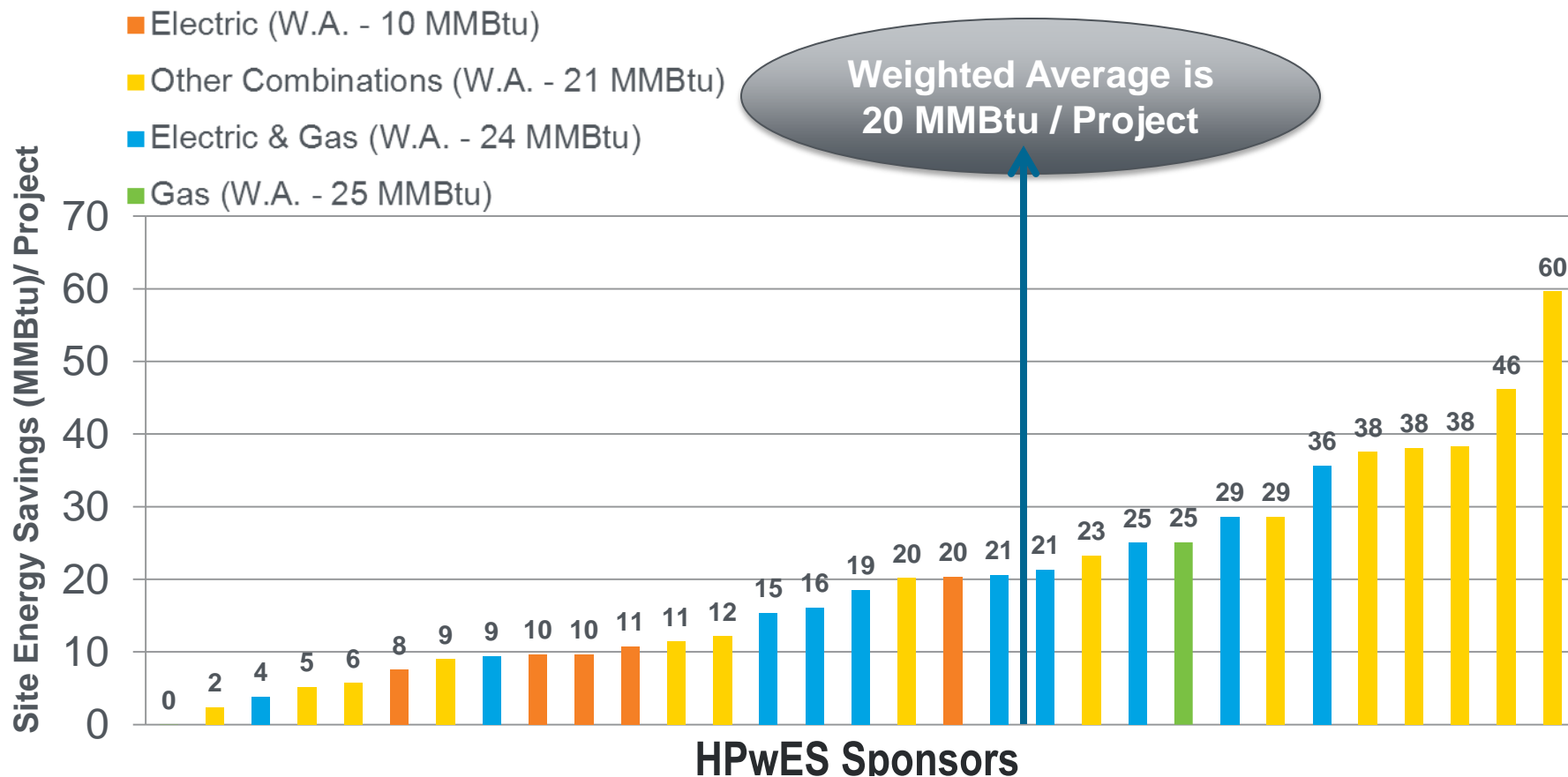


- 56% of Sponsors have in-house staff to conduct inspections
- 96% complete post-installation inspections within 3 months of project completion

N=43

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# Weighted Average (WA) Annual Site Energy Savings per Project ( All fuels included)



Site Energy Saving  
(MMBtu)/ Project



Reported Annual Site  
Energy Saving  
(MMBtu)

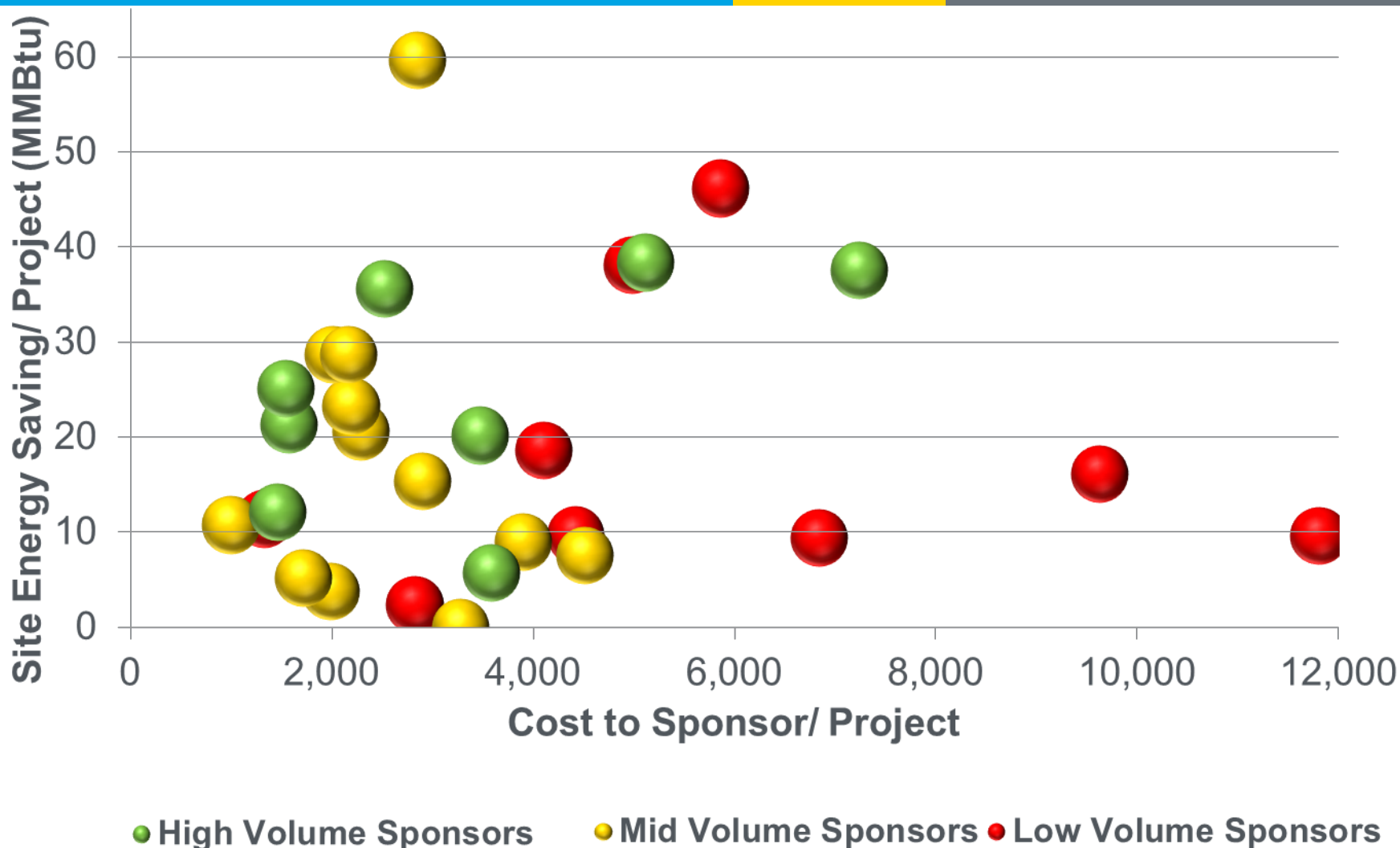


Number of HPwES  
Projects Completed  
in 2012

**N=31**

Confidence in data content is limited due to variance in respondents interpretation of questions posed in the 2012 annual data call. Additionally, error may be compounded by limited dataset.

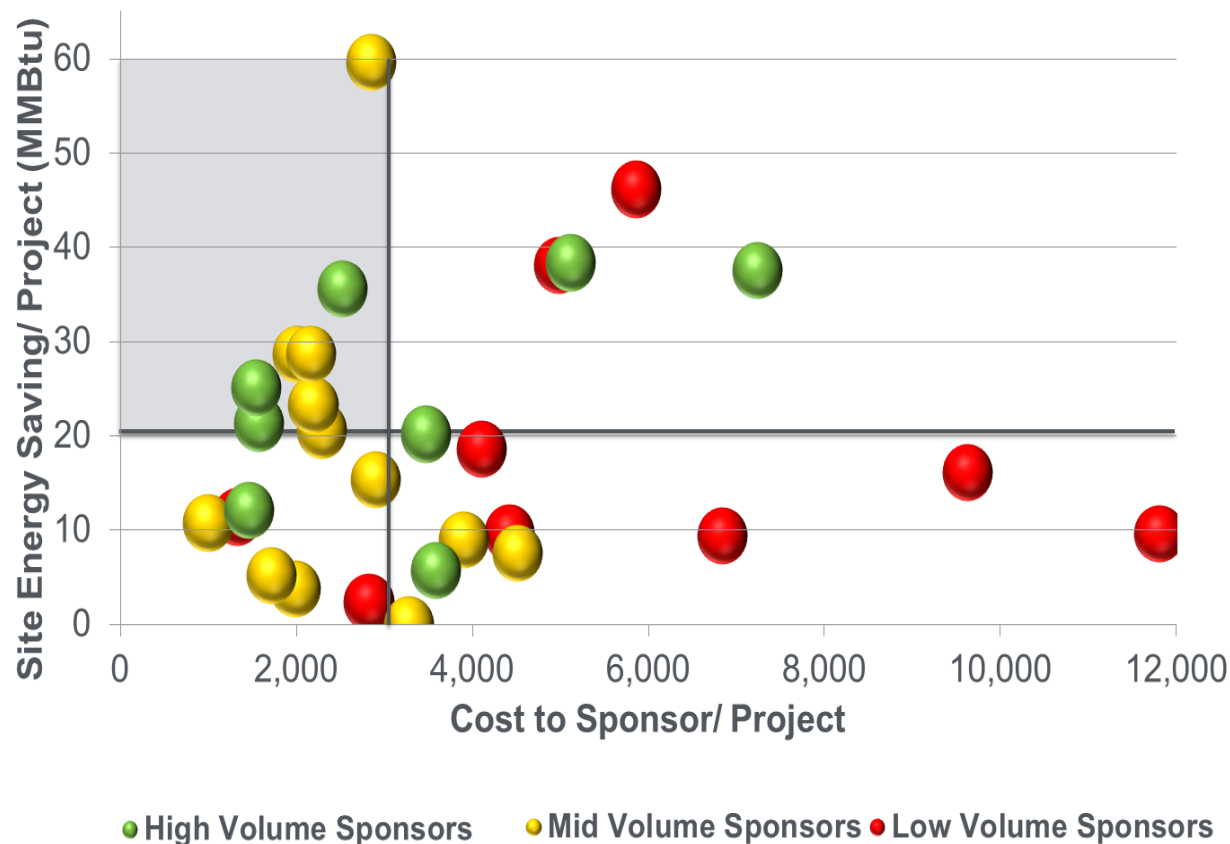
# Reported Site Energy Savings and Cost to Sponsor (for all fuels reported)



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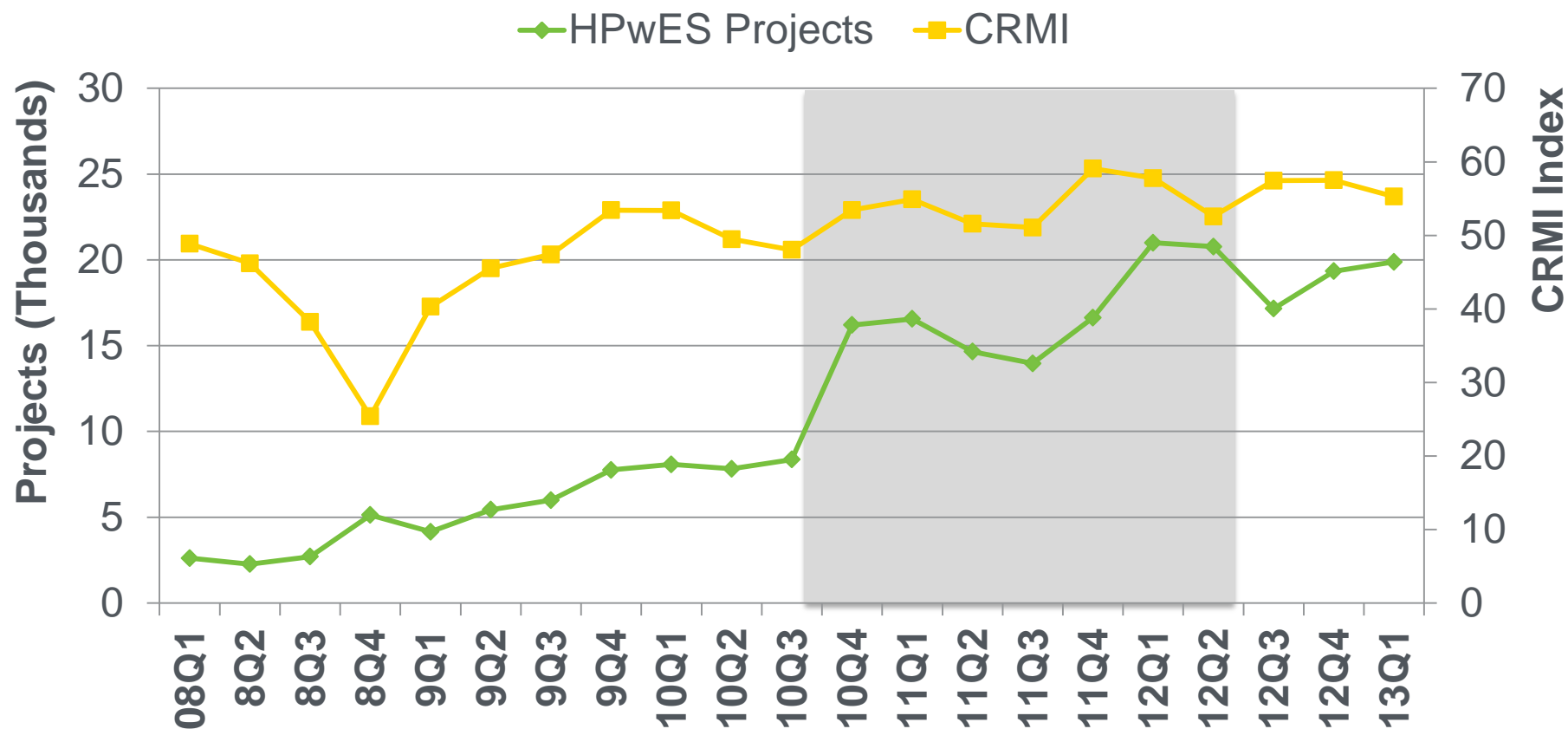
# Low Cost – High Energy Saving Sponsors



## Common Features of Higher Performing Programs:

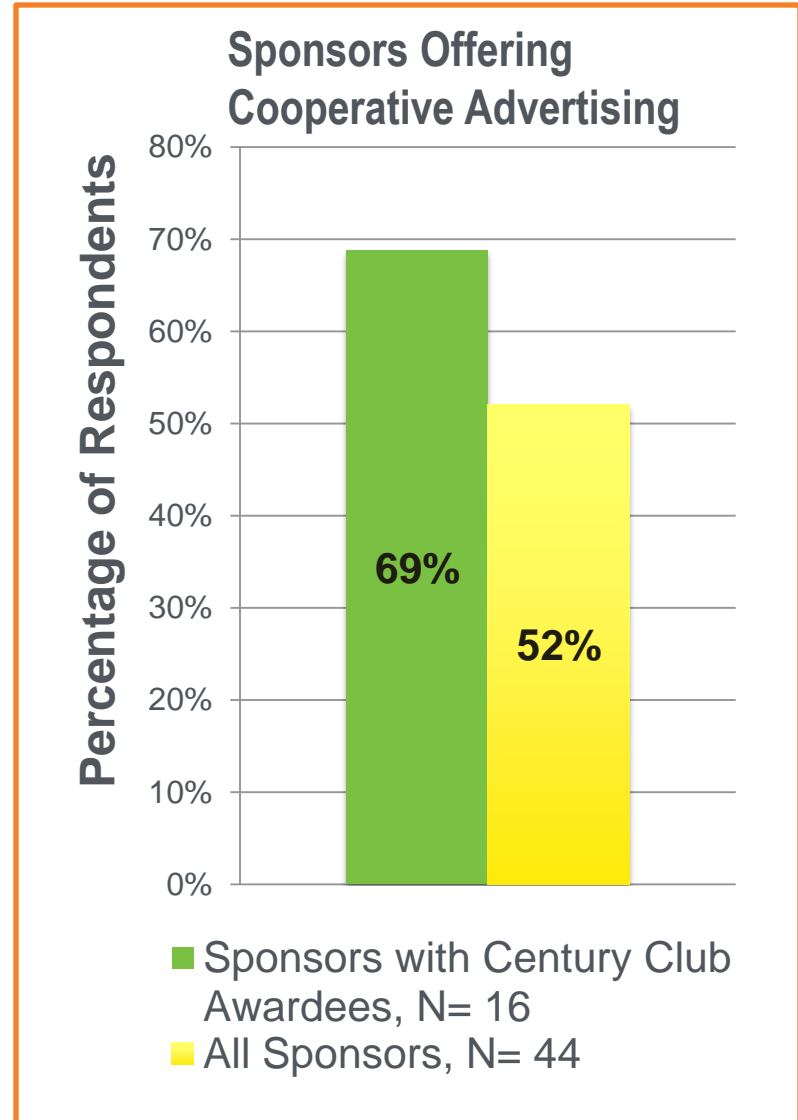
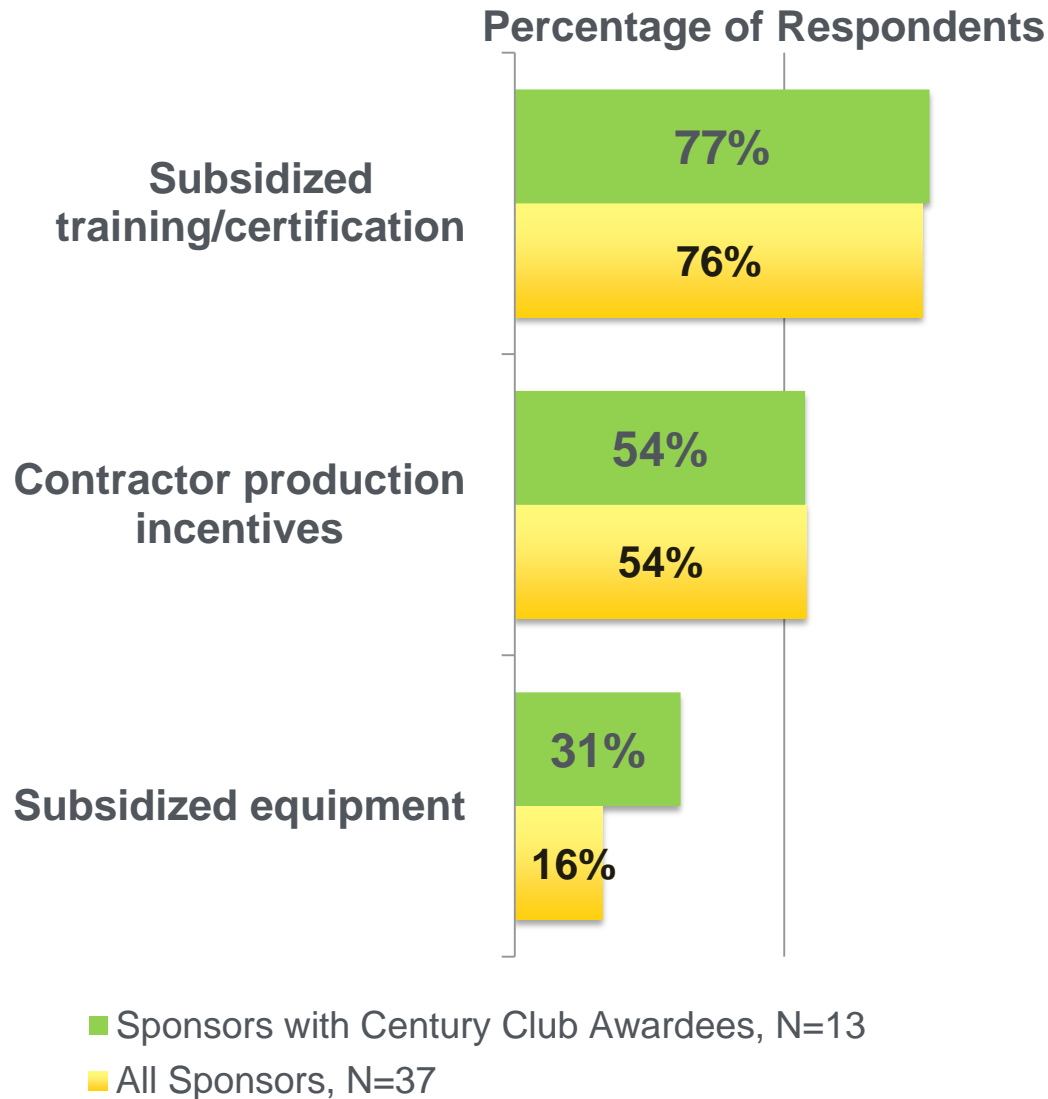
- Contractor incentives for some measures and/or bonuses for pursuing deeper energy savings.
- Multi-fuel programs, able to account for higher savings.
- Lower fixed (admin) cost
- Economies of scale: Minimum of 800 projects in 2012.

# Comparing HPwES Project Completed and Current Remodeling Market Index (NAHB) Trends



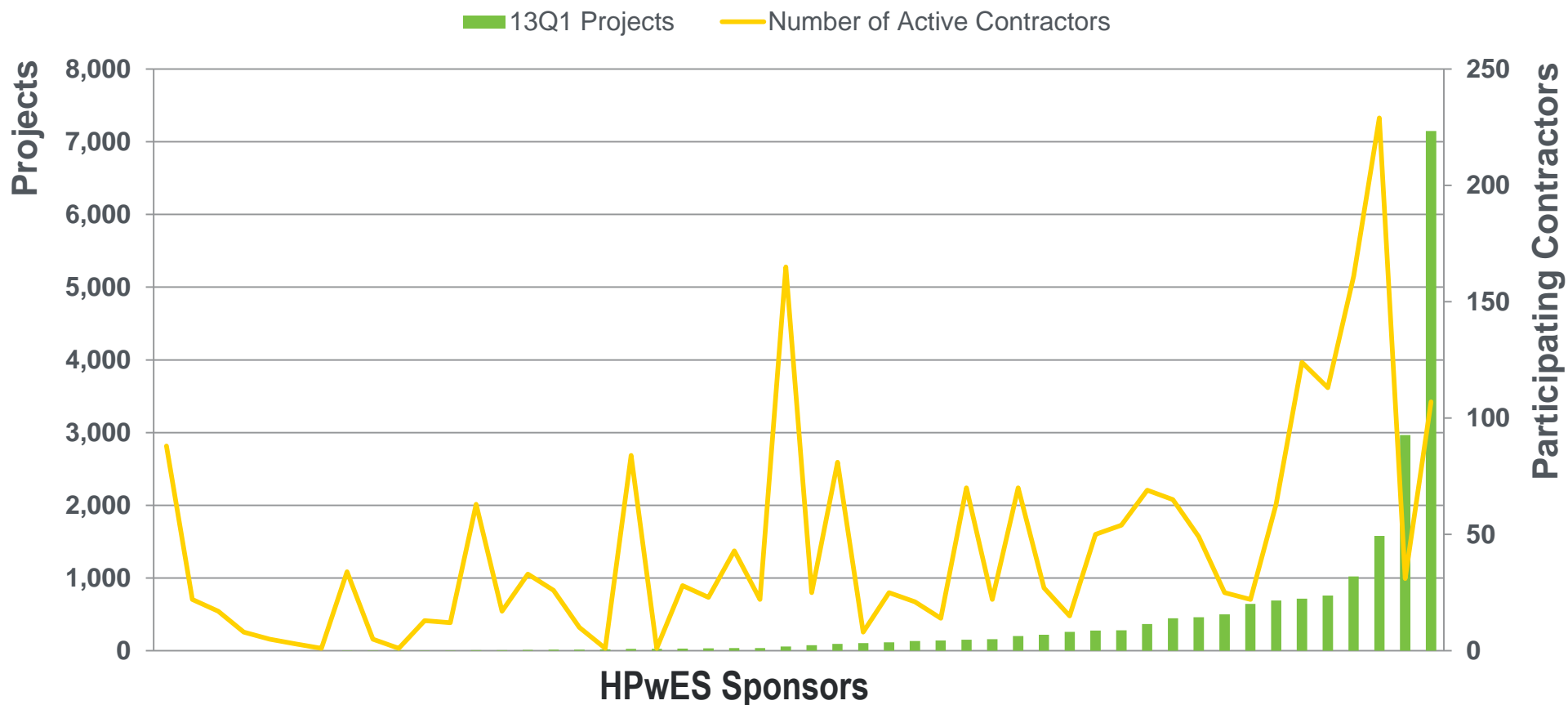
The CRMI is based on a quarterly survey of about 2,000 residential remodelers nationwide. The survey investigates the market demand for remodeling at the present time compared to three months earlier. Data shown here is for owner occupied minor alterations (less than \$25,000)

# Mid-stream Incentives





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# Projects Completed and Participating Contractors per Sponsor 2013-Q1



- The HPwES program currently has more than 2,000 participating contractors listed as active by their sponsors
- Only 530 contractors reported project activity in the last year

# HPwES Sponsor Profile

<b>Sponsor Name</b>					<b>Sponsor ID</b>							
<b>Home Performance with Energy Star Sponsor</b>					AS-MD-009							
Account Manager	Year Joining The Program	Number of Active Contractors	12Q1_P	12Q2_P	12Q3_P	12Q4_P	13Q1_P	Trend	2012_P	2012_FI	Volume	Rank (1 is Largest)
Jason Bogovich	2011	125	78	205	105	200	120		588	46	Medium	#N/A
<b>Sponsor Organization Information</b>												
Official Sponsor's Organization Name												
Program Name												
Mailing Address for Sponsor												
Mailing Address for Implementation Contractor												
<b>Contact Information</b>												
1st Administrative POC		Kevin		Powell								
2nd Administrative POC		Adam		Smith								
Implementation POC												
Reporting/Data POC		Anna		Writz								
Marketing POC		Andrew		Dickey								
Of the POCs listed above, please indicate the primary.		Marketing POC										
<b>CY 2012 HPwES Program Results</b>												<b>Number of Respondents</b>
	<b>Home Performance with Energy Star Sponsor</b>		<b>Min. Reported Value</b>		<b>Weig. Avg. All Values</b>		<b>Max. Reported Value</b>		<b>Per Project - Trend</b>		45	
	<b>Total</b>	<b>Per Project</b>	<b>Per Project</b>		<b>Per Project</b>		<b>Per Project</b>		<b>Per Project</b>			
1. Program administrative cost for CY2012	551,507	1,012	133		754		8,749				39	

Account Manager will send it out by August 2<sup>nd</sup>

- Collecting annual report data is important to evaluate Sponsor and Program performance. But, stronger conclusions can be drawn using improved data
- Existing HPwES Sponsors target 9% growth in 2013
- Majority of HPwES Sponsors project steady budgets through 2013
- Sponsor programs with  $\leq$  \$1M budgets, represent more than 50% of HPwES Sponsorship base and only 5% of completed projects in 2012.
- Cost and energy savings range significantly across Sponsors.
- About 75% of HPwES participating contractors listed as active, have not produced projects in the last year.
- Initial trend identified across high energy saving, lower cost Sponsors: target maximizing energy savings by offering more than project based incentives

## Hypothesis

Enhanced data collection and analytical models can help demonstrate the value of HPwES and promote broader participation and investment in the HP industry

## Goals



Validate average total savings and retrofit cost per HPwES project  
Validate average energy use and savings per HPwES project

Facilitate the development of uniform data definitions and standardized performance metrics among stakeholder groups (HPXML, BPD,BAFDR)

Identify HPwES market penetration and investment in the home performance industry

- 2013 Annual Data Call
  - Clarify questions asked
  - Seeking increased precision for most important data points (energy saved, costs)
  - Continue to streamline the process
- 2013 Q2 Data Call
  - Due July the 31<sup>st</sup>
- Launch Collaborative Research effort
- Looking forward to your feedback!

*Thank You!*



# For more information



- **Ely Jacobsohn**, DOE, HPwES Program Manager – Ely.Jacobsohn@ee.doe.gov
- **Courtney Moriarta**, SRA, Technical Lead – Courtney\_Moriarta@sra.com
- **Gannate Khowailed**, SRA, Data Lead – Gannate\_Khowailed@sra.com

<http://www.energystar.gov/homeperformance>