

Valuing Home Performance with ENERGY STAR



Capturing Results of Breakout Sessions

Caroline Hazard, SRA International

Value Map Exercise Group Exercise:

- Financial Institution
- Trade Association
- Implementation Vendor

GAINS

How do you measure success?

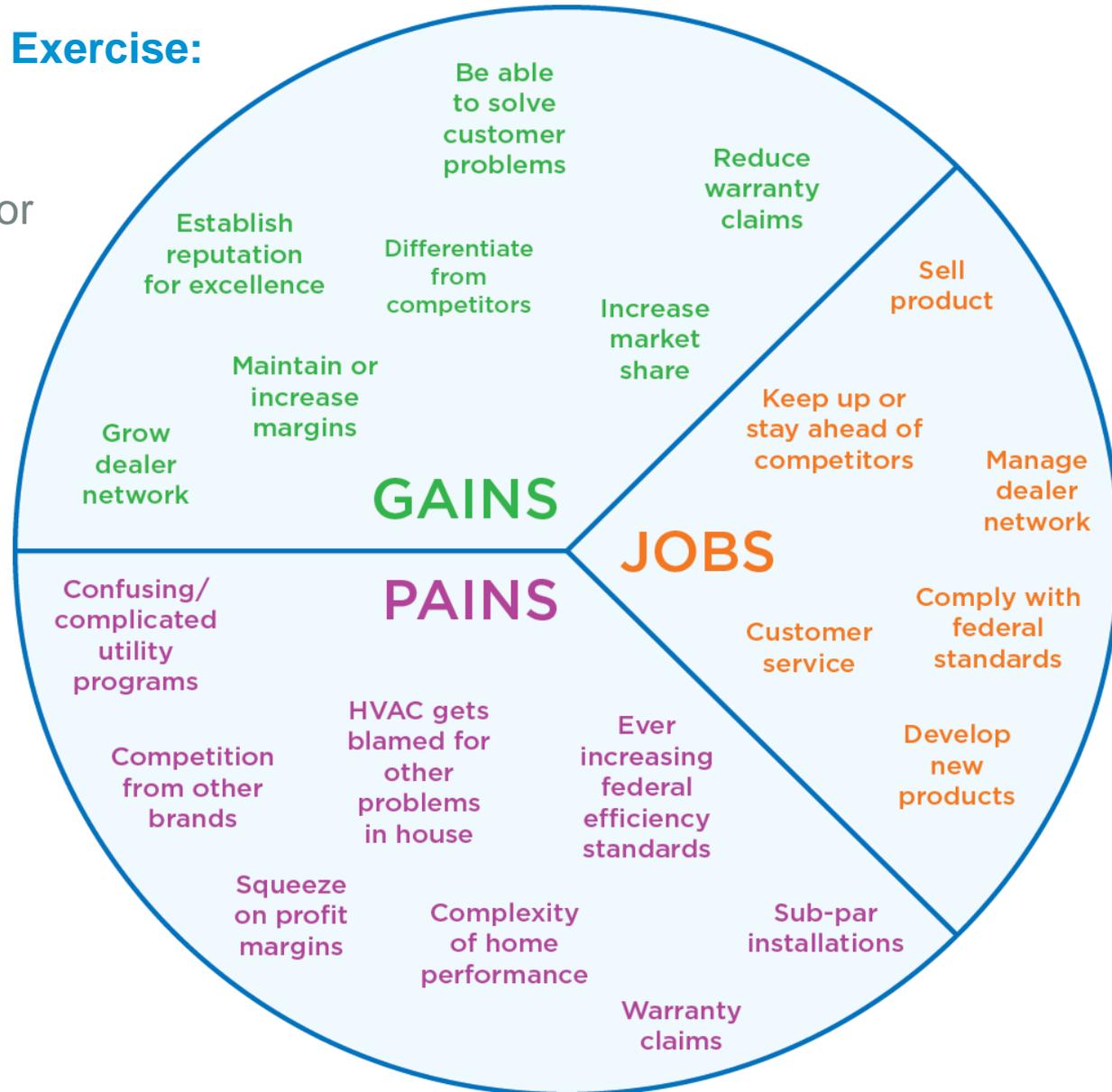
Outcomes you want to achieve and concrete benefits

PAINS

What are your pain points? Bad outcomes, risks, obstacles

JOBS

What are you trying to accomplish?



Trade Associations

Jobs	Gains	Pains
Creating member value	Alignment of program standards	Not enough members
Help members understand standards and regs	Positive recognition and publicity for industry actions	Back office compliance requirements
Influence future standards	Lead generation	Access to unsecured finances
Certification of installers & products	Project data feedback	Conflicting programs
Represent an invisible industry	Ability to lobby	Finding good labor
Offer training		Funding

Implementation Vendors

Jobs	Gains	Pains
Earn savings for the utility	Reaching those in need (low income)	Insane marketplace – conflicting programs
Customer service	Access to the Home Performance with ENERGY STAR brand	Quantifying NEBS
Innovation in delivery models	More business	Bad reviews
Paying a living wage	Promote best practices (proper ventilation, etc.)	Data quality
EM&V	Customer safety	Administrative responsibility
Being a reliable source of expertise		TRCs

Financial Institutions

Jobs	Gains	Pains
Help fund projects	(virtually) guaranteed returns	Legal restrictions
Create profit	Aggregation	Financial market fluctuations
Provide differentiated products	Access to customer feedback via contractors	Finding qualified customers
Approve loans	Opportunity for deeper energy savings	Overcoming negative perceptions
Assess risk	Reduced default rate	Regulations
Validate/ inspect projects	Positive PR/ environmental image	Program cycle vs. loan time

QMS for Home Performance

Key Outcomes

Some clarity on:

- ✓ QMS for the contractor vs. QMS for a program administrator or Sponsor
- ✓ What integration between these segments and systems looks like and how it allows for continuous improvement

Areas to focus

- ✓ Understanding customer needs
- ✓ Aligning interests across teams and decision makers
- ✓ Getting financial institution involvement
- ✓ Defining quality objectives



Diversifying Project Financing Options for Home Performance

Key Findings

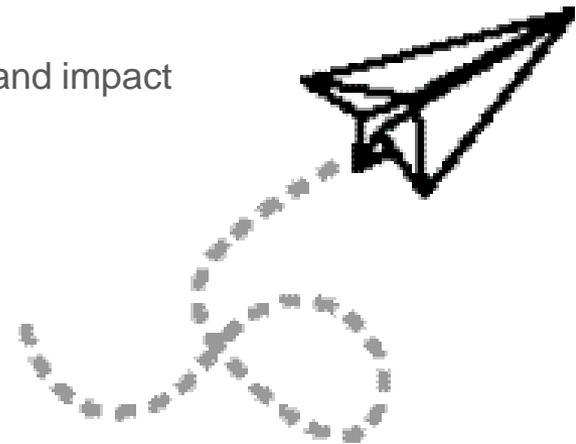
- ✓ Conducting strategic planning – set program goals and objectives
- ✓ Define your target market
- ✓ Find the right contractors
- ✓ Fully integrate financing with the HP transaction process
- ✓ Keep it simple
- ✓ Seek out unique partnerships



Lean Production for Home Performance

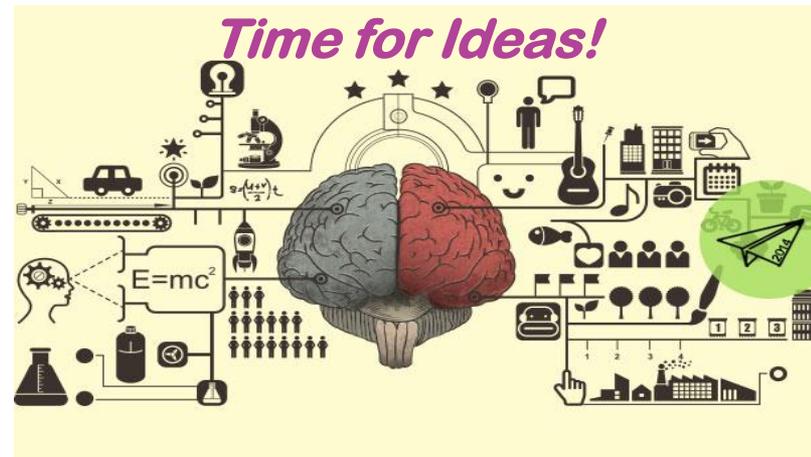
Key Findings

- ✓ Getting rid of program silos
- ✓ Improving communication within and across processes
- ✓ Building QA into process earlier would help
- ✓ Managing demand
- ✓ Continuous improvement – to review and adjust
- ✓ Testing and measuring any changes to better understand impact

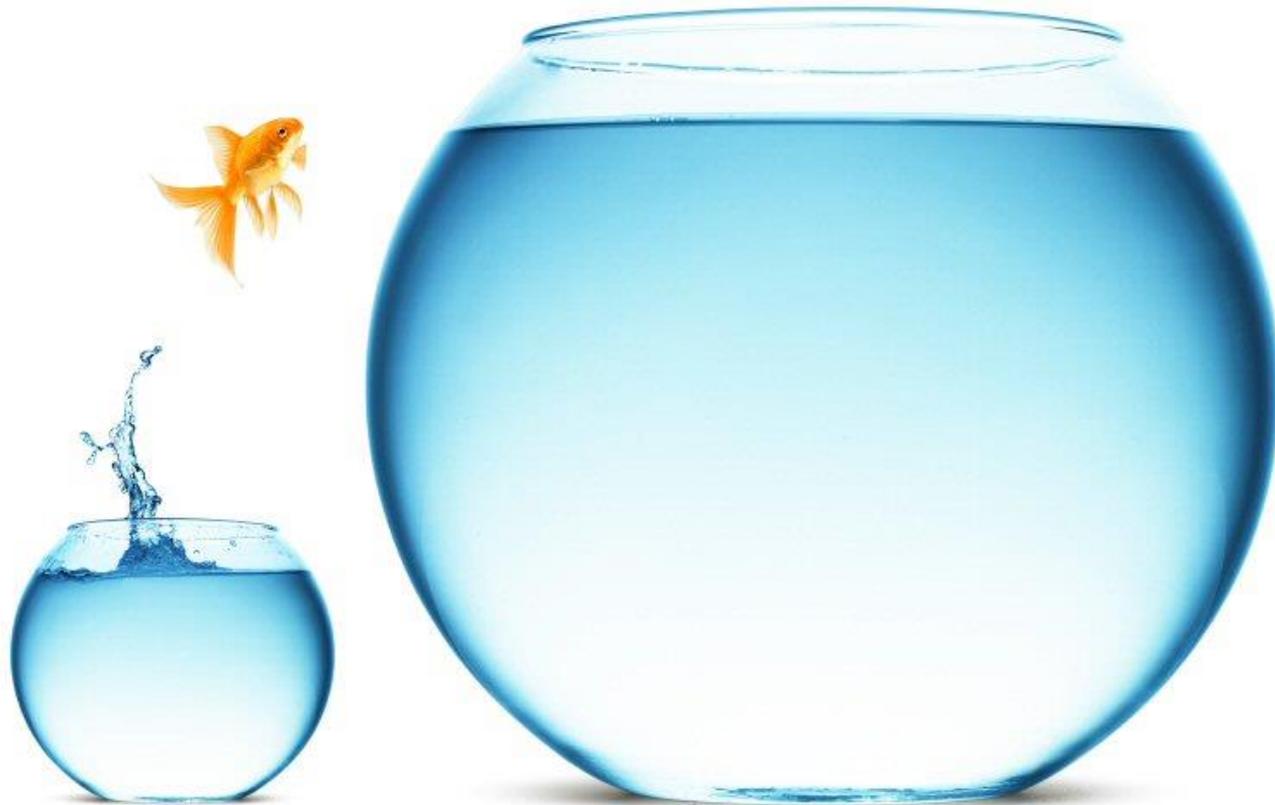


3 Questions for You to Consider throughout the Day

1. Who values home performance and why?
2. What do market actors need to know or have to invest in home performance?
3. How can market actors get more value from their investment in home performance?



What will you do next?



Valuing Home Performance with ENERGY STAR



Ely Jacobsohn, U.S. DOE, HPwES Program Manager

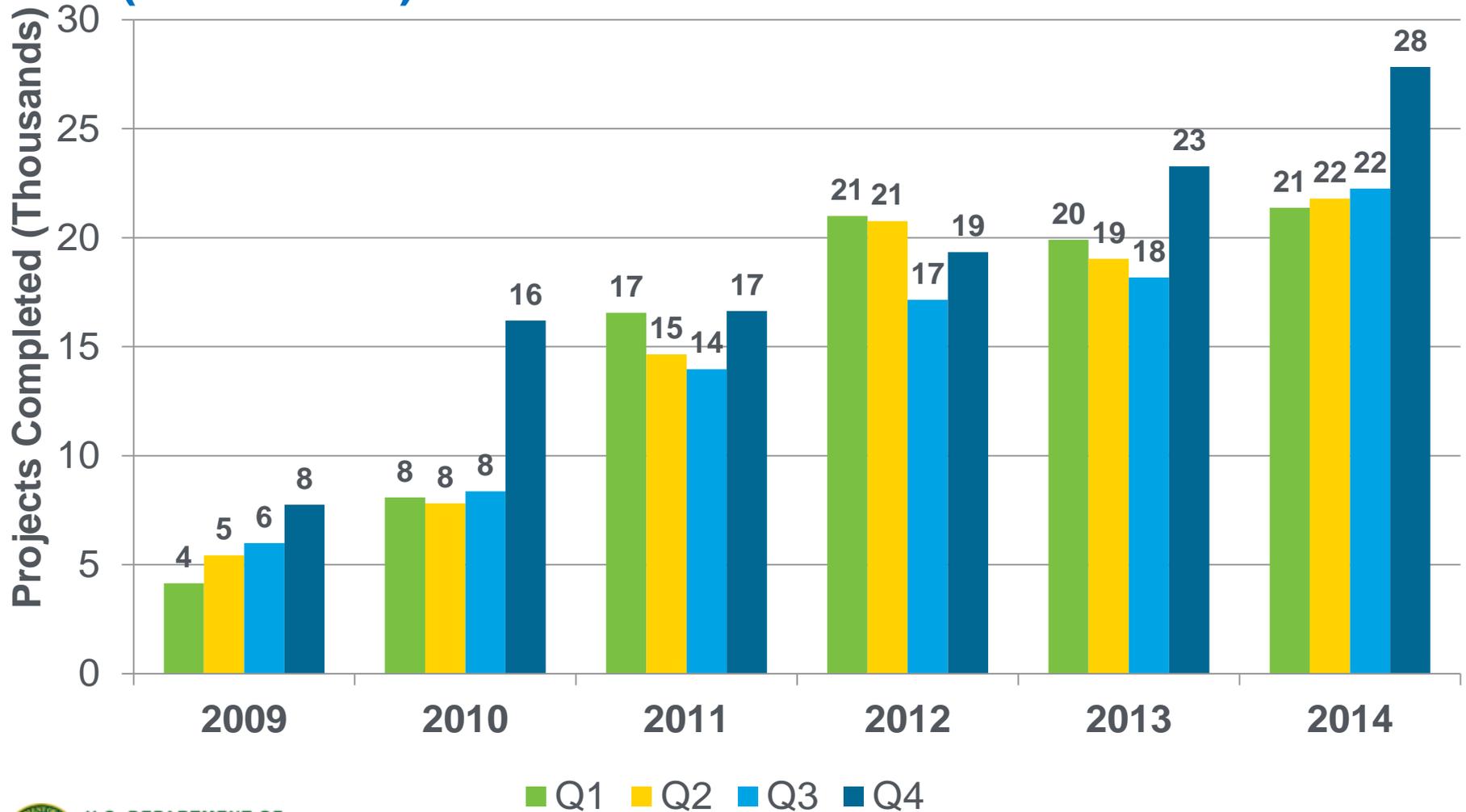
Home Performance with ENERGY STAR Vital Statistics

- Completed over 430,000 projects since 2002
- 27,831 projects were completed in Q4 2014 (20% growth over Q4 2013)
- 93,220 projects were completed in 2014 (15% growth over 2013)
- On average, each project realizes 22 MMBtu of energy savings (all fuels combined)
- The reported average invoice cost of a HPwES project is \$5,600 (ranging between \$600 – \$17K)

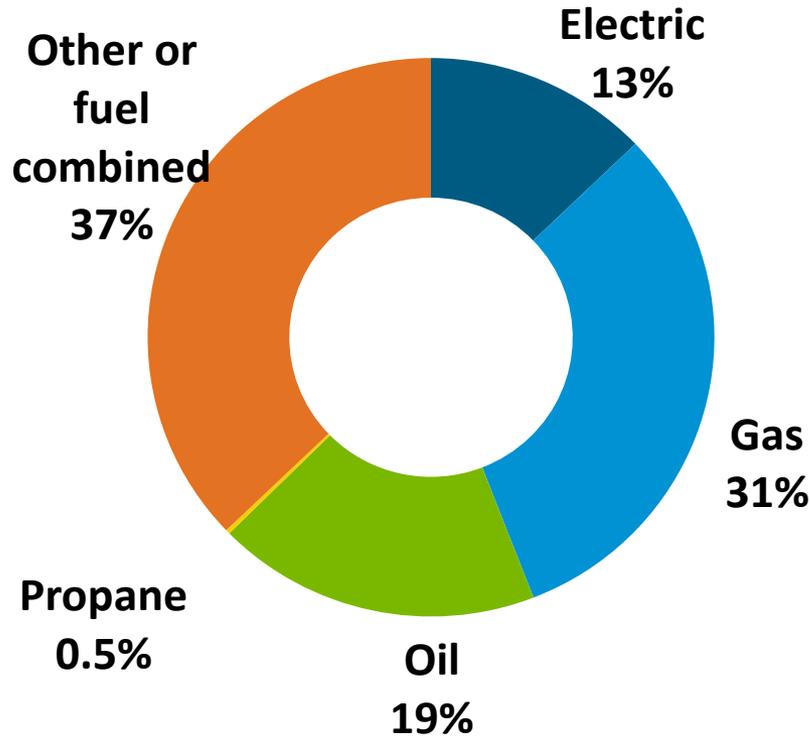
HPwES Sponsored Regions



Quarterly Projects Completed (2009- 2014)



Program Sponsors Reported Annual Site Energy Savings for 2014



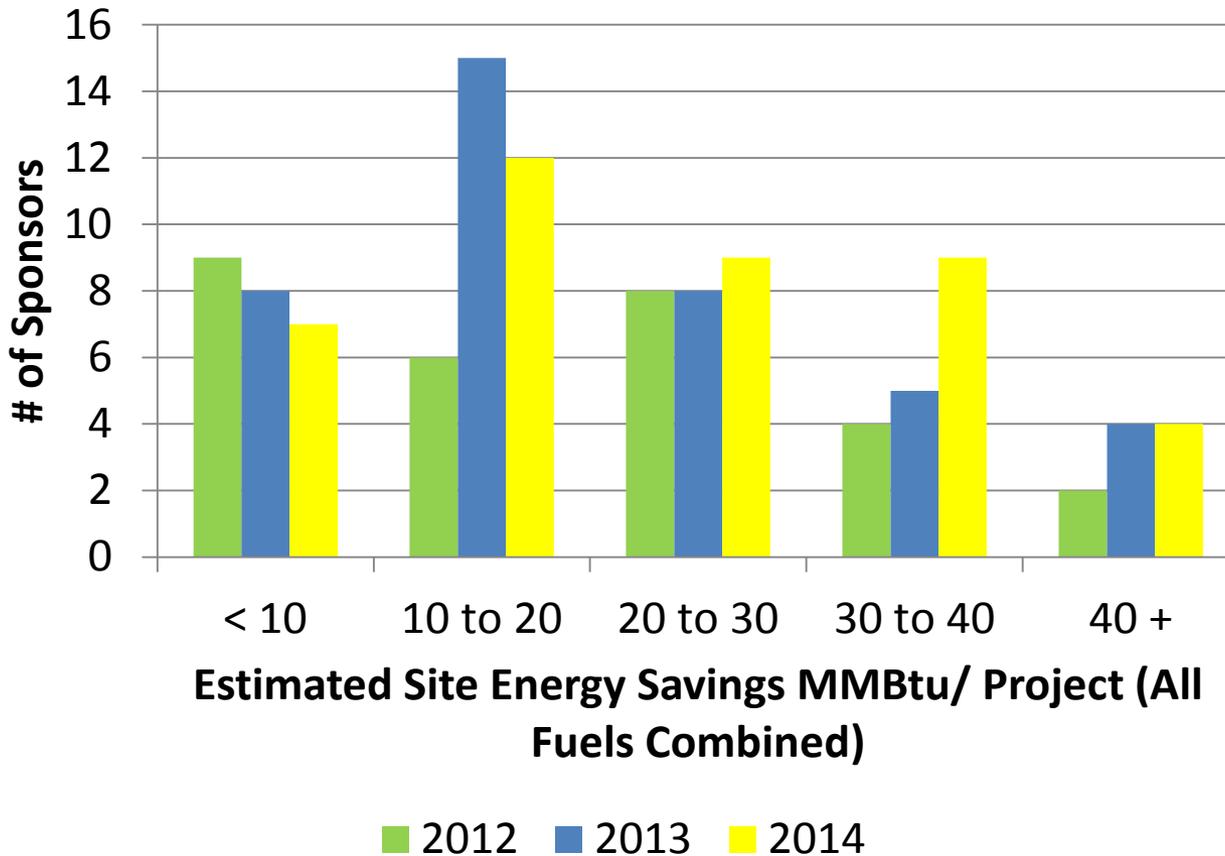
- ❖ All actively producing Sponsors reported their energy savings for 2014.
- ❖ 42 Sponsors completing about 92,000 projects reported saving **about 2.4 trillion Btu or 2,400,000 MMBtu.**
- ❖ The GHG emissions reduction because of these projects equals to taking more than **40,000** cars off the road for one year

Electric Savings (MWh)	89,579
Gas (Therms)	7,447,788
Oil (Gallons)	3,170,253
Propane (Gallons)	61,249

* Not taking into account Sponsors that reported a combined fuel mix

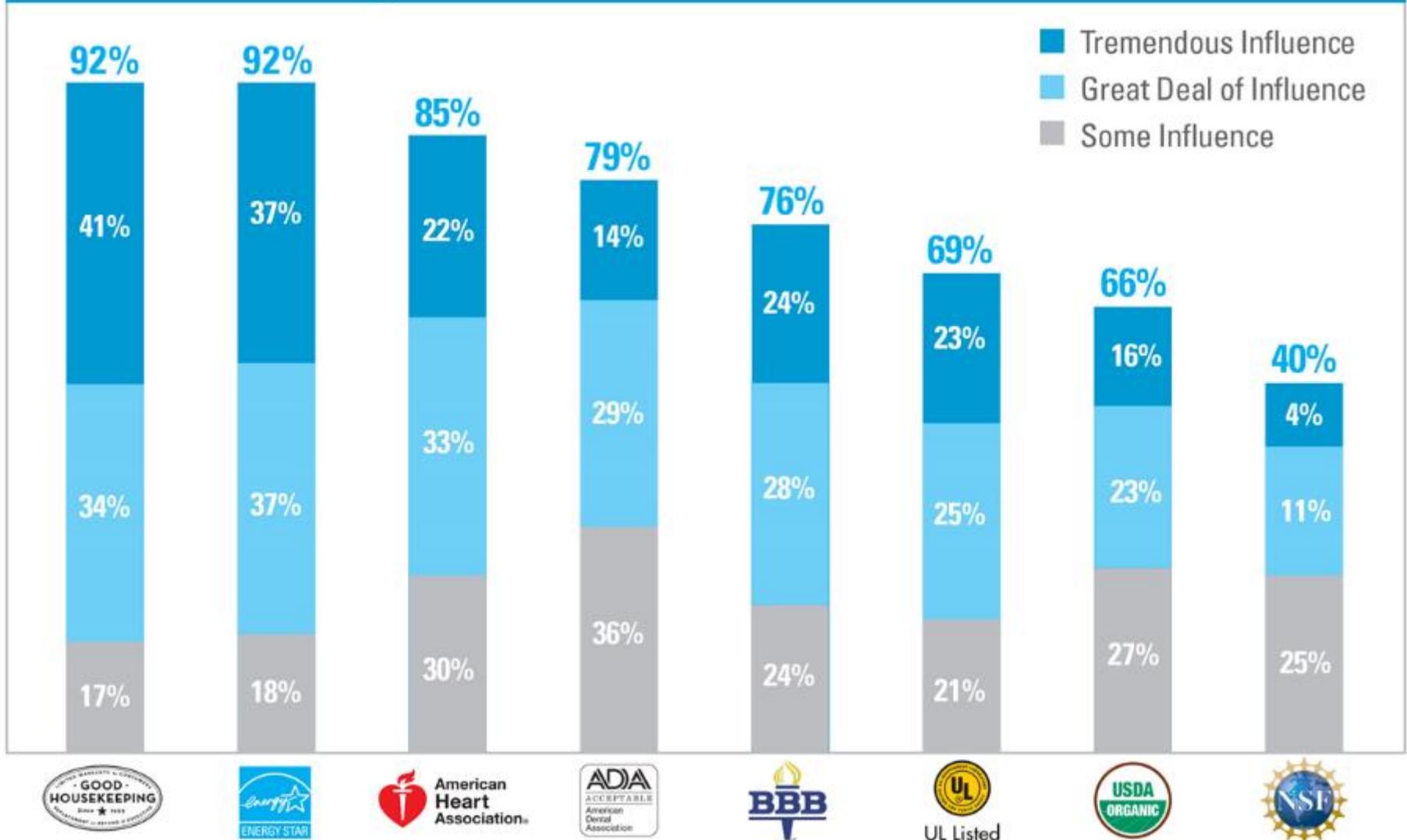
N = 42

Energy Saving Per Project



❖ On average a HPwES project saves about **22** MMBtu/ project, a weighted average of **26** MMBtu per project was also calculated

Top-Ranked Consumer Emblem





ENERGY STAR Refreshed Messaging

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, people across America have looked to the ENERGY STAR program for guidance on saving energy, saving money, and protecting the environment. Home Performance with ENERGY STAR is a systematic approach to improving energy efficiency and comfort in homes, while reducing the greenhouse gas emissions that contribute to climate change. Join the millions already making a difference at energystar.gov.



DOE's HPwES "Delivery Models" Project Update: Aggregator Roadmap

**Under-
way**

The Roadmap Provides:

- broad context for understanding the market opportunity for HPwES
- a snapshot of the relationships among the segments, players, and activities that comprise our existing and potential market, and
- A short list of action items to be pursued

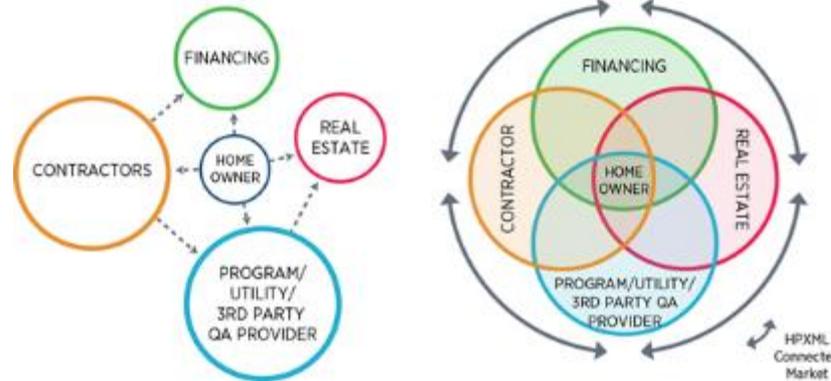
Key Activities Include:

- Develop market-based QA oversight model
- developing qualifying criteria for new partners, and
- **validating the value proposition...**



HPXML Implementation Guide

Just released in April



HPXML (Based on BPI 2100 & 2200) is a set of common definitions for the attributes of the systems in a home and the computing language that facilitates the quick and easy transfer of home-related data between different market actors.

It is the expectation of the U.S. Department of Energy that expanded use of HPXML will achieve the following:

- Reduce time and cost of collecting and transferring home and energy-related data;
- Foster new and strengthen existing organizational relationships within the residential supply chain;
- Increase the transparency of energy efficiency work to facilitate deeper market penetration of energy efficiency products and services;
- Enhance ability to quantify energy savings through standardized, data-rich EM&V methods;
- Improve the quality assurance systems and practices needed to efficiently support, measure and verify energy performance

Completion Certificate Template



Home Performance with ENERGY STAR®
Certificate of Energy Improvements

Home Address:

Work Performed By:

Work Verified By:

Work Completed On:

Signature:

Home Performance Improvements:

Additional Information:

X, Insert Logo Here.
First, right click the 'X' and select delete to remove this red box. Then, to upload a logo, click in the white space and choose a file to upload.

X, Insert Logo Here.
First, right click the 'X' and select delete to remove this red box. Then, to upload a logo, click in the white space and choose a file to upload.

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Home Performance with ENERGY STAR Certificate of Completion Template

- Customizable, co-brandable template
- Data field compliant with BPI 2101
- Implementation guidance (forthcoming)
 - HPXML compatibility
- Online: [My Energy Star Account](#)

Sponsor/Contractor Recognition

2015 ENERGY STAR Awards



- **7** Home Performance with ENERGY STAR Sponsors and Partners were recognized for their outstanding contributions to the national program
 - **Columbia Association (MD):** *Excellence in Promotion*
 - **AEP Southwestern Electric Power Company (AR):** *Partner of the Year*
 - **Efficiency Vermont (VT):** *Partner of the Year*
 - **Illinois Energy and Recycling Office at the Department of Commerce and Economic Opportunity (IL):** *Partner of the Year*
 - **Arizona Public Service (AZ):** Partner of the Year – Sustained Excellence
 - **Focus on Energy (WI):** Partner of the Year – Sustained Excellence
 - **NYSERDA (NY):** Partner of the Year – Sustained Excellence

U.S. Department of Energy's Housing Innovation Award

- **4** participating contractors were awarded the **U.S. Department of Energy's Housing Innovation Award** in 2014
 - Green Energy Improvement (IL)
 - Isaac Home Energy Performance (NY)
 - Neil Kelly Home Performance (OR)
 - Quality Insulation Installers (WI)

Home Performance with ENERGY STAR Century Club Award

- **137** participating contractors working under **19** programs were recognized for their work in 2014.



Enjoy the Reception!

