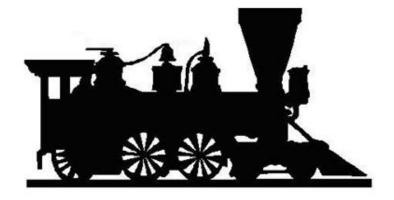


All Aboard

Is it time for you to catch the Home Performance with ENERGY STAR Train?













I. What is Home Performance with ENERGY STAR?

Home Performance with ENERGY STAR Program Update

II. Home Performance with ENERGY Sponsorship

- Benefits for Sponsors
- Importance of the ENERGY STAR Brand
- ENERGY STAR Refreshed Messaging
- Sponsor Onboarding Process/Sponsor Responsibilities
- Benefits for contractors
- Other Tools and Resources for Sponsors
 - Sponsor Guide and Reference Manual (v1.5)
 - ENERGY STAR Brand Book and Available Home Performance with ENERGY STAR Marks
 - Four Initiatives to Improve Value and Increase Participation
 - Completion Certificate Template
 - o HPXML Implementation Guide
 - Quality Assurance
 - Regional Collaboratives
 - The Better Buildings Residential Program/Home Energy Score
- Using the Home Performance with ENERGY STAR Mark (Examples)
- Sponsor/Contractor Recognition

III. Program Design Examples

- Entergy NOLA
- SWEPCO
- V. Q&A/Open Discussion





What is Home Performance?

A **science-based** approach to home improvement that:

- Treats the house as a system of interacting sub-systems and components
- Uses diagnostic testing to guide the selection and installation of improvements and measured results
- Combines energy efficiency with other key performance factors like comfort, indoor air quality, and the durability of the building and its systems







What is Home Performance with ENERGY STAR?

A public-private voluntary partnership program focused on turning building science-based recommendations into solutions for improved, energy-efficient homes

- ✓ Trust the work and the worker
- ✓ Quality third-party quality assurance
- ✓ Whole-House Approach methodical, thoughtful improvements

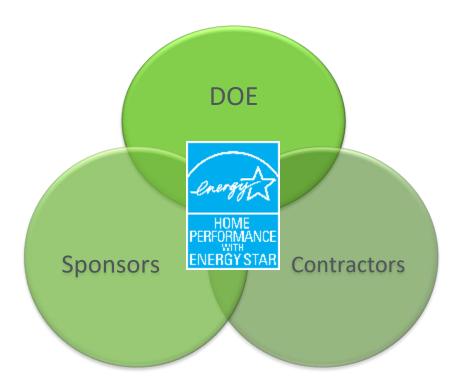






Home Performance with ENERGY STAR Approach









ENERGY STAR New and Existing Homes Programs



- New construction and substantial renovations
- Certified Rater is primary POC with builder or homeowner
- Provider network oversees
 Raters and is responsible for quality assurance
- Provides an asset rating
- Labels homes achieving threshold performance standards



- Existing home improvements
- Participating Contractor is primary POC with homeowner
- Program Sponsors oversee contractors and are responsible for local program implementation including QA
- Provides whole-house assessment, report, and estimated savings for installed improvements
- Does not label homes but provides a certificate of completion



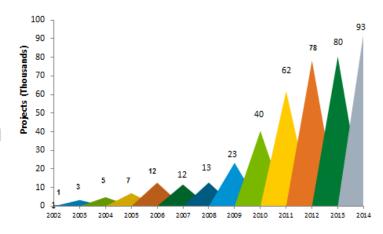




Home Performance with ENERGY STAR Update

- Completed over 430,000 projects since 2002
- 27,831 projects completed in Q4. That is about 20% growth compared to 2013Q4.
- 93,220 projects completed in 2014. This is 15% growth compared to 2013. The GHG emissions reduction because of these projects equals to taking more than 40,000 cars off the road for one year
- Added the Alaska Housing Finance Corporation as a HPwES Sponsor in April 2015
- Sponsor Guide and Reference Manual (v1.5) released in March 2014
- Sponsor Guide and Reference Manual (v1.5) FAQ released in March 2015
- HPXML Implementation Guide released in April 2015
- On average in 2014, each project realizes 22 MMBtu of energy savings (all fuels combines) (update)
- The average invoice cost of a project is \$5,600 (ranging between \$600 \$17K). On average about 65% of the invoice cost is covered by the homeowner. The rest is covered by incentives.









Benefits for Sponsors

- Get to use the widely-recognized Home Performance with ENERGY STAR marks and ENERGY STAR Partner mark
- Become part of a growing Home Performance with ENERGY STAR family of Sponsors
- Sponsor recognition through the ENERGY STAR Partner of the Year Awards
- Access to Account Managers
 - Supporting access to the national Program and to technical assistance
 - Fostering regional coordination among Sponsors
 - Regional collaboratives established in SW, SE, and MW; pursuing for NE and NW
- Access to other DOE's Residential Program resources including:
 - Better Buildings Residential Program
 - Better Buildings Residential Program Solution Center
 - The Better Buildings Residential Network
 - Workforce Guidelines
 - Building America
 - Home Energy Score
- Coordinate and collaborate with sister agencies
- Help evolve HPwES (We value transparency)
 - We encourage stakeholder involvement through webinars, meetings, regional collaboratives and comment periods on new program policies and guidelines
 - Sponsor Guide and Reference Manual (v1.5) was released in March of 2014









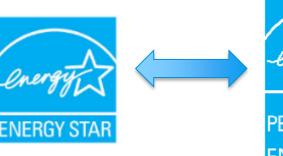






Importance of the ENERGY STAR Brand



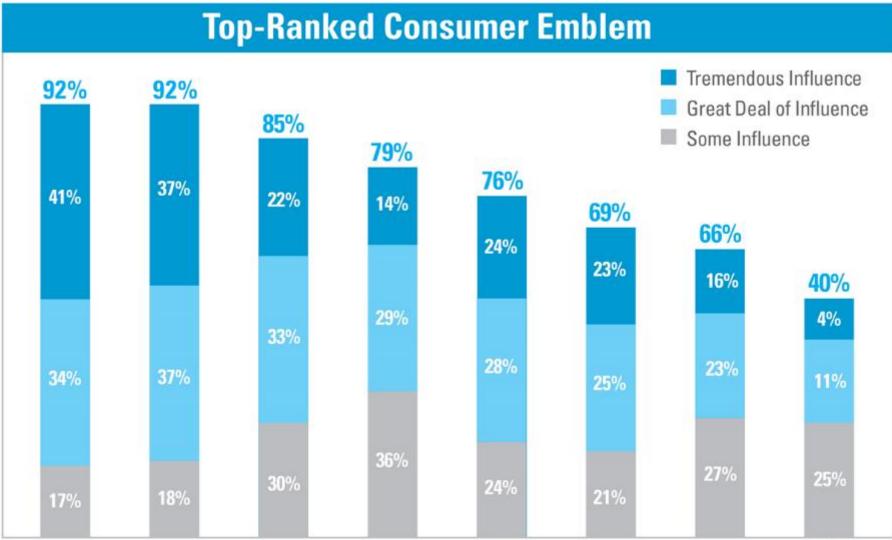




- 87% of households recognized the ENERGY STAR® label when shown the label
- 85% of households had a high or general understanding of the label's purpose
- 64% of households associated the ENERGY STAR® label with "efficiency or energy savings"
- 73% said the label influenced at least one of their purchase decisions very much or somewhat
- 75% were likely to recommend ENERGY STAR-labeled products to a friend



























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.









Sponsor Onboarding Process

How to catch the Home Performance with ENERGY STAR Train?











Sponsor Responsibilities

- Sign partnership agreement with DOE and EPA
- Feature the Home Performance with ENERGY STAR name and mark on the Sponsor's website and in other promotional materials
- Adhere to program guidelines including rules on use of the Home Performance with ENERGY STAR mark
- Ensure consistent process
 - Home Performance Assessment or "Test-In"
 - Provide inspection results and recommended improvements
 - Post-Installation Test or "Test-Out"
 - Perform quality assurance
 - Report quarterly and annually to DOE







Other Sponsor Responsibilities

- Manage contractors participating in their local program
- Designate a primary point of contact for participating contractors
- Track contractors participation and performance in the program
- Develop Quality Assurance (QA) Requirements or Quality Management Systems (QMS)
 - (QA) The minimum inspection rate is set at 5% or 1 in every 20 jobs
 - Must record and track inspections
 - (QMS) Assesses the procedures, people, and materials used during the production process rather than just the final product.
- Provide a customer feedback mechanism
- Promote the Home Performance with ENERGY STAR Program
 - Market the benefits of the program
 - Conduct marketing training with contractors
 - Incorporate federal or local tips and recommendations for improvements









Benefits for Contractors

- Use the widely-recognized Home Performance with ENERGY STAR marks
- Separate your company from your competition
- Become part of a growing Home Performance with ENERGY STAR family
- U.S. Department of Energy Housing Innovation Awards for Home Performance with ENERGY STAR participating contractors
- Access to marketing toolkit on password protected ENERGY STAR website
- Access to other resources such as standardized forms, templates, "pitch book" and lead forms







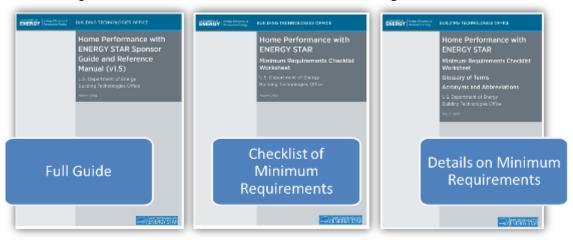


2014 Housing Innovation Award Winner
Keith Williams/Quality Insulation Installers

- Support for development of internal quality management system
- Contractor recognition (Century Club)
- Access to classroom, field training and mentoring support
- Access to sales and marketing training workshops



Updated Sponsor Guide: Clarity and Consistency



Purpose:

- Help current and prospective Sponsors plan, develop and implement Home Performance with ENERGY STAR programs
- Outlines what is required as well as recommended methods to meet those requirements
- Provide relevant, easily accessible guidance for new and current Sponsors

Includes 7 Sections and Appendices

Section 1: Use and Management of the HPwES Mark **Section 5:** The Project Installation

Section 2: Program Design and Development Section 6: Quality Assurance

Section 3: Workforce Development and Support **Section 7:** Tracking and Reporting

Section 4: The Assessment

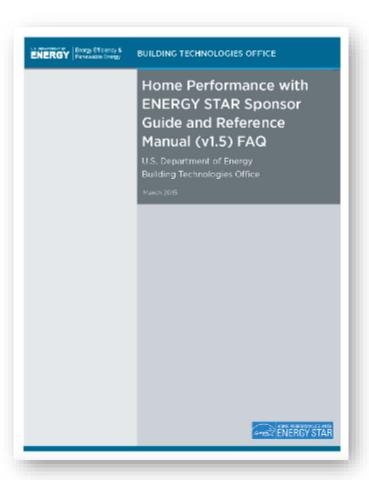


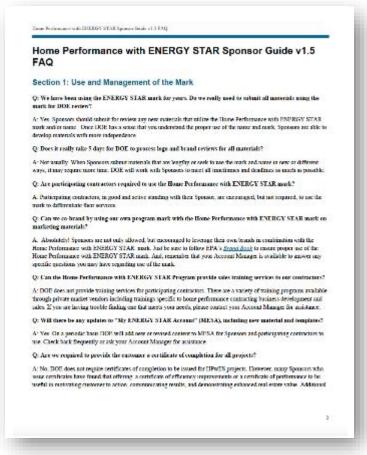


Sponsor Guide and Reference Manual (v1.5) FAQ



Just released in March!









ENERGY STAR Brand Book









ENERGY STAR Brand Book (HPwES Section)

The ENERGY STAR Brand Book

USING THE HOME PERFORMANCE WITH ENERGY STAR PROGRAM MARK



This mark may be used by active Home Performance with ENERGY STAR program sponsors and their program participants.

Program Sponsors

The Home Performance with ENERGY STAR sponsor is responsible for ensuring that their program participants' use of the mark is consistent with the terms of these guidelines. Additionally, program sponsors should approve program participants' use of the Home Performance with ENERGY STAR Mark in promotional materials that feature the ENERGY STAR name prior to final production. EPA, however, is ultimately responsible for ensuring the proper usage of the mark.

CORRECT USE

EPA developed the Home Performance with ENERGY STAR Mark to be used in promotional materials to educate consumers about the program or to show that an organization participates in a locally sponsored program.

Examples of common uses of the Home Performance with ENERGY STAR Mark, available in both horizontal and vertical versions, are listed below, It is recommended, but not required, that the following language appear next to the Home Performance with ENERGY STAR Mark, where applicable, for educational purposes: "Working to deliver whole-house energy savings to improve comfort and help protect the environment."

Uses of the Home Performance with ENERGY STAR Mark include:

- · Advertising and promotional or educational materials 11 that do not identify a specific product, home, or building as ENERGY STAR:
- . Pins, hats, and other promotional items
- . Web pages that promote the Home Performance with ENERGY STAR program.

INCORRECT USE

In addition to the ENERGY STAR General Guidelines found on page 3.1, please observe the following incorrect use guidelines when using the Home Performance with ENERGY STAR Mark

- . Do not use to denote EPA or ENERGY STAR partnership or endorsement.
- Do not display with other ENERGY STAR marks (e.g., if an organization participating in Home Performance with ENERGY STAR also sells ENERGY STAR qualified windows, the organization should display either the Certification Mark next to a qualified window or the Home Performance with ENERGY STAR Mark but not both)
- . Do not use to imply that any product, service, or organization has met ENERGY STAR performance criteria.

5.0 ENERGY STAR PROMOTIONAL MARKS: 5.8

- . Do not use on a product or product packaging (the Certification Mark should be used to identify a qualified product).
- . Do not use in association with any product, home, or building to signify qualification with ENERGY STAR (the Certification Mark should be used to identify qualified products, homes, or buildings).

. Do not use on promotional materials featuring services that are not directly related to participation in a program using Home Performance with ENERGY







Available Marks for Home Performance with ENERGY STAR

For Home Performance with ENERGY STAR Program Sponsors:









For Participating Contractors:





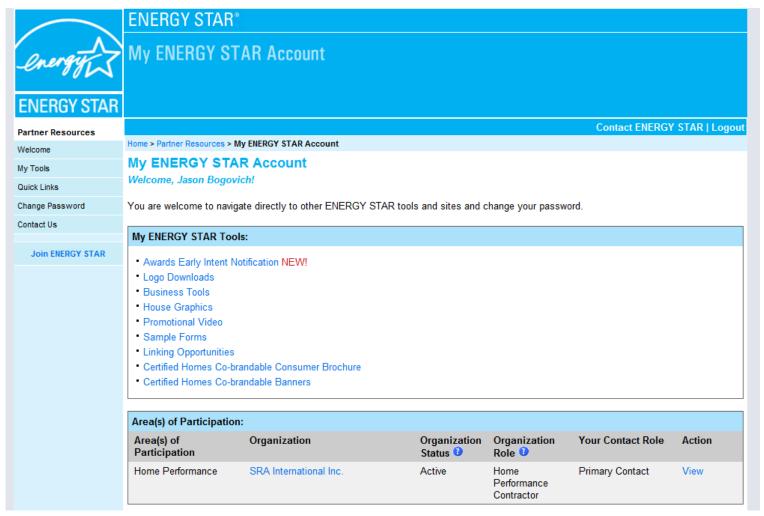








My ENERGY STAR Account (MESA)







Four Initiatives to Improve Value and Increase Participation

HPwES Delivery Models

✓ Expand how the whole —house approach is delivered by enabling participation of multiple market actors supporting a variety of pathways for improved home performance

Recognition & Labeling

✓ Take advantage of ENERGY STAR marketing platform to encourage adoption of HPwES

Demonstrating Value through Data

✓ Promote the business case for adoption of the whole-house approach and investment in HPwES

Quality Assurance

✓ Streamline quality assurance procedures and requirements to reduce administrative burden on Sponsors and contractors while improving results



Common Themes for Growth

Grow a skilled and professional workforce

If you don't have contractors that know
 HP, then you won't have contractors that can sell HP



- Monetize more of the value of home performance
- Developing a Value Proposition for New Delivery Models

Change the common vernacular

 Do things to get more customers recognizing and talking about home performance







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

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 <u>action items</u> to be pursued

Key Activities Include:

- piloting new QA models,
- developing qualifying criteria for new partners, and
- validating the value proposition...









Completion Certificate Template

Home Performance with ENERGY STAR® Certificate of Energy Improvements	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.
Home Address:	Home Performance Improvements:
Work Performed By:	
Work Verified By:	
Work Completed On:	
	Additional Information:
Signature:	
ENERGY STAR* is the sample choice for energy efficiency. Hom is a systematic approach to improving energy efficiency and or greenhouse gas emissions that contribute to climate change. J making a difference at energyster.gov.	omfort in homes, while reducing the

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

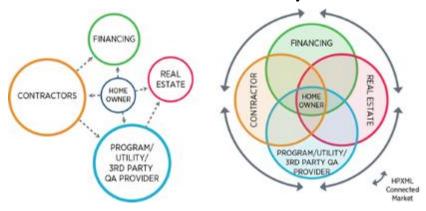






HPXML Implementation Guide

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





Sponsor Guide Section 6: Quality Assurance



Option 1: Quality Control (QC)

Relies primarily on inspections to detect defects

- Inspections used to verify compliance with standards
- Deficiencies addressed through feedback and enforcement
- Sponsors using this option may also choose to employ some QMSbased system strategies (Option 2) to enhance their QA/QC program.



Option 2: Quality Management System (QMS)

Systems-based approach to eliminate defects at the source

- Relies on a culture of quality where each individual is responsible for delivering quality products and services
- Quality is defined by a customer-focused set of criteria
- QC activities in Option 1 may be a part of a QMS program, but serve a secondary purpose



References that may be useful for planning and implementing a quality assurance program are provided in **Appendix F.**



Regional Collaboratives

The Home Performance with ENERGY STAR Program helped create 3 regional collaboratives with three REEO's. The collaboratives allow utilities, governments, program implementers, nonprofits and other stakeholders to have an opportunity to discuss major challenges and successes for implementing Home Performance with ENERGY STAR Programs.

Midwest Regional Collaborative



Southwest Regional Collaborative





Southeast Regional Collaborative



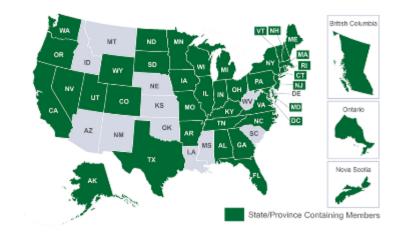




The Better Buildings Residential Program







Better Buildings Residential Program Solution Center, a robust collection of nearly 1,000 examples, strategies, and resources for program administrators and home energy upgrade professionals.

The Better Buildings Residential Network connects energy efficiency programs and partners to share best practices and learn from one another to increase the number of homes that are energy efficient.





Get Involved with the Better Buildings Residential Network!

Connects energy efficiency programs and partners to share best practices to increase the number of homes that are energy efficient.

<u>Membership</u>: Open to organizations committed to accelerating the pace of existing residential upgrades. Over 165 members & counting

Benefits:

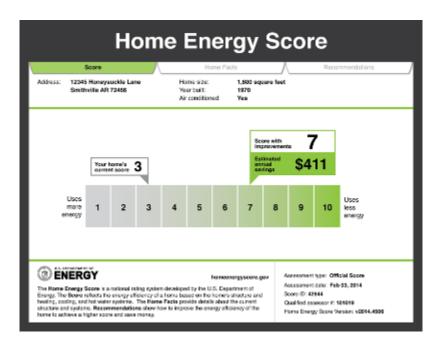
- Peer Exchange Calls:
 - Shark Tank: Residential Energy Efficiency Edition
 - Leveraging Seasonal Opportunities for Marketing Energy Efficiency
 - Real Estate & Energy Efficiency
 - Using Mobile Applications to Generate Customer Demand

- Tools, templates, & resources
- Recognition: Media, materials
- Leadership initiatives
- Member generated Initiatives
- Programming for new staff
- Newsletter updates on trends





Home Energy Score



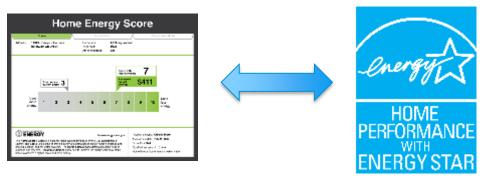
The U.S. Department of Energy's residential energy rating

- U.S. Department of Energy created nationally standardized "miles-per-gallon" home score
 - Offers homeowners affordable, reliable, easy way to understand homes' energy performance
 - Available at **no-cost** to program providers
 - ✓ Intended to motivate homeowners to invest in residential energy efficiency
 - Simple and action-oriented
 - Ability to document investment in energy efficiency using the postimprovement score





Energy Efficiency Programs Across the U.S. Are Successfully Linking the Home Energy Score with Home Performance with ENERGY STAR



- Columbia Water and Light offers the Score before and after Home Performance with ENERGY STAR projects to document the process with a simple energy efficiency message.
- Focus on Energy offers the Score as a part of their direct install program one path to participating in their Home Performance with ENERGY STAR program
- New Jersey Natural Gas uses Home Energy Score to encourage participation in New Jersey Board of Public Utilities' Home Performance with ENERGY STAR program.
- In Connecticut, Eversource and the United Illuminating Company offer the Score with on-the-spot Home Performance with ENERGY STAR projects to encourage homeowner engagement and deeper savings in future projects.

More energy efficiency programs are joining DOE to offer both Home Performance with ENERGY STAR and the Home Energy Score: coming soon -- Colorado, Vermont, among others.





Using the Home Performance with ENERGY STAR Mark for Sponsors



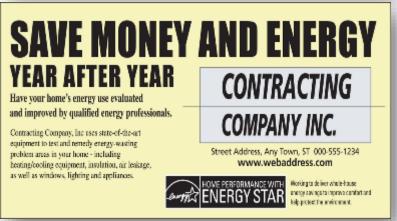






Using the Home Performance with ENERGY STAR Mark for Contractors













Contractor Marketing with Home Performance with ENERGY STAR Mark (Website)







Contractor Marketing HPwES (Print)









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.

CLEAResult

AEP SWEPCO

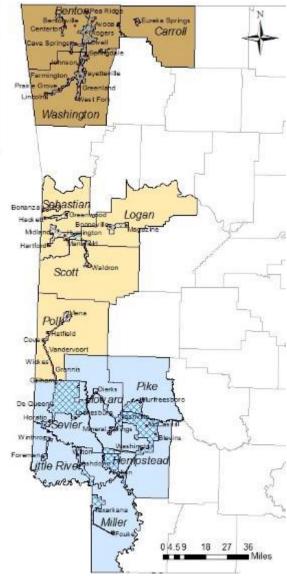
HPwES Model, Successes, and Lessons Learned

2015 ACI National Home Performance Conference & Tradeshow May 6, 2015

AEP SWEPCO

- Southwestern Electric Power Company (SWEPCO)
 - Serves 114,000 customers in AR
- ENERGY STAR Partner since 2011
- 2015 ES Partner of the Year for Program Delivery







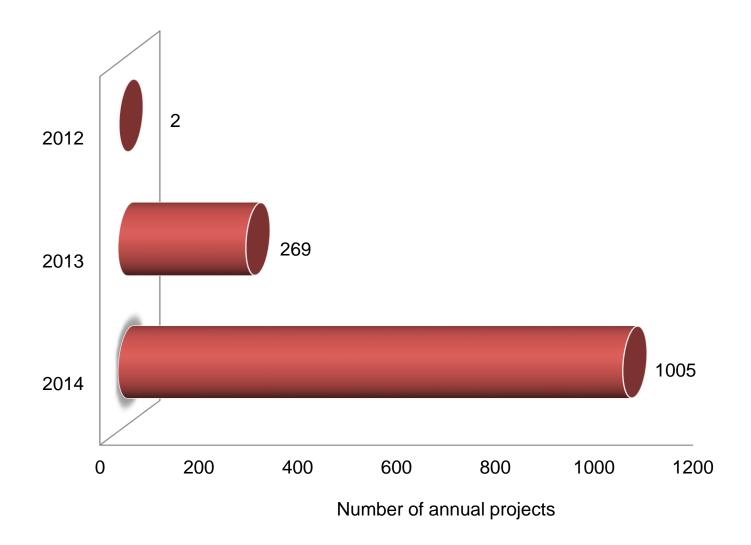
Legend

SWEPCO_Cities
 SWEPCO Territory

HPwES Model

- Contractor driven and supported by program marketing and outreach
 - Rebate based
 - Tiered rebates based on savings level achieved
 - "No Cost" to Customer = Rebates cover measure costs
 - Comprehensive assessment
 - Direct installs (low flow showerheads & aerators, CFL's and advanced power strips)
 - Duct sealing
 - Air infiltration
 - Contractor bonus performance based
 - Other Measures HVAC replacement, Windows, Attic
 & Wall Insulation

Program Growth Since 2012



Successes/Methods

- Rapid growth over two years
 - From 2 projects to over 1000 projects
- Used methods that worked for our local market
 - Typical HPwES models weren't working
 - HVAC contractors were not ready to lead
 - Identified other contractors with the skills to lead
- Training/Shaping
 - In field training and coaching
 - Classroom trainings
 - Mentoring by experienced HPwES contractor

Lessons Learned

- Patience is key build a solid foundation
- Light a fire for contractors
 - But, be prepared to contain that fire
 - Focus their efforts towards immediate success
- Listen to their concerns
 - Paperwork, procedures etc.
- Keep constant contact
 - Track progress and evaluate trends
 - Develop a solid relationship

Benefits of Sponsorship

- Universal acceptance and understanding by most people of what "ENERGY STAR" is and means, making it easy to translate that to how it can help their house.
- More than just another EE program
- There is value for programs in support and in established protocols and standards



Contact Info

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 479-439-8627







Energy Smart New Orleans Home Performance with Energy Star Program

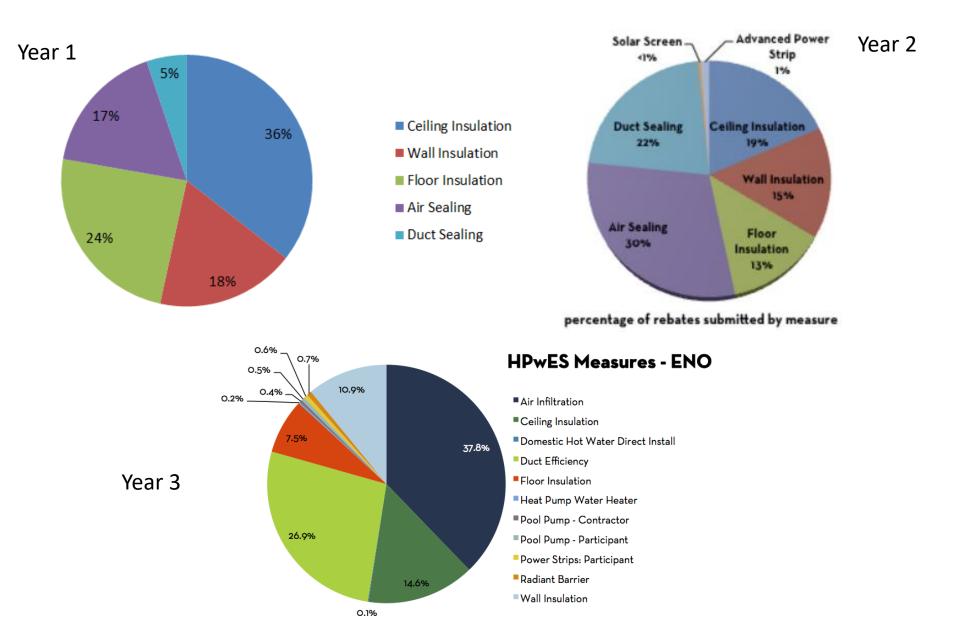
Alexander Scott,
Senior Program Manager
CLEAResult

Background

- Launched in New Orleans in 2011 by direction of the New Orleans City Council
- Originally launch as a single measure program
- Became a Home Performance Program in Summer of 2012

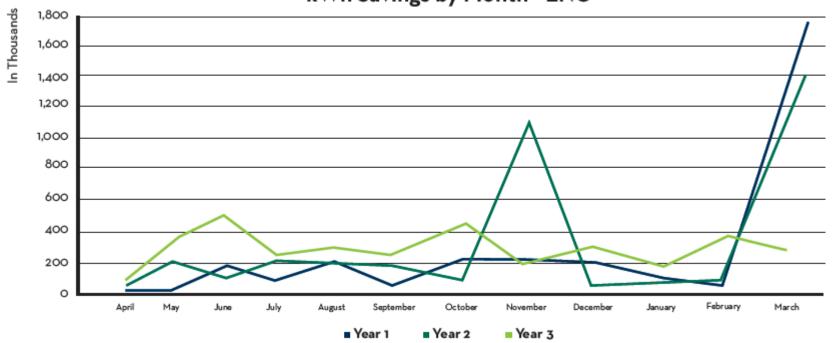


Measure Mix, First 3 years



Savings Trends, First 3 years





Contractor Benefit

- Added training, focus on multiple measures
- MESA access and logo association
- Differentiator in the marketplace, BPI requirement & program association

Partner of the Year Award 2014



Entergy's Derek Mills, former Councilwoman Cynthia Hedge-Morrell, Entergy's Gary Huntley and CLEAResult's Alex Scott accept the ENERGY STAR Partner of the Year Award.

Future Potential

- BPI Infiltration and Duct Leakage Certification
- Multiple Measures for future program, proof of concept



Q&A and Open Discussion







So are you ready to catch the Home Performance with ENERGY STAR Train?





For more information



- Ely Jacobsohn, DOE, HPwES Program Manager Ely Jacobsohn@ee.doe.gov
- Jason Bogovich, Redhorse Corporation, Account Manager <u>Jason.bogovich@redhorsecorp.com</u>
- Madeline Koewler, SRA, Program Analyst— Madeline Koewler@sra.com

Do you want HPwES News? Join our Stakeholder Email List! Email us at HomePerformance@EnergyStar.gov to join

http://www.energystar.gov/homeperformance

