



PA Home Energy

- A Residential Energy Efficiency Program -

November 19, 2008





What is PA Home Energy?

PA Home Energy is an innovative residential program that is partnering with ENERGY STAR to improve the energy efficiency of new and existing homes.





Key Concept - House as a System





Key Concept: Market Transformation



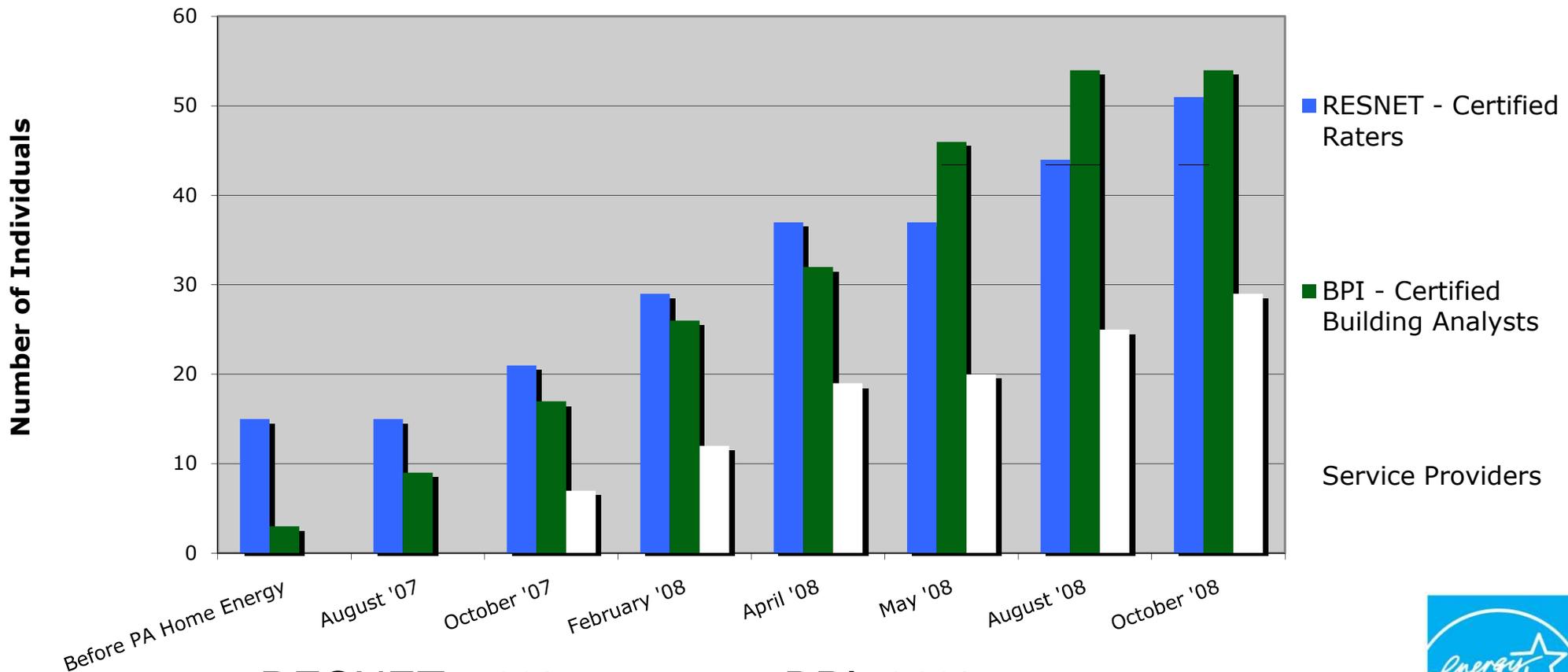
- Whole house approach
- Trained workforce, RESNET & BPI
- National standards
 - ENERGY STAR Qualified New Homes
 - Home Performance with ENERGY STAR
 - Plus combustion safety and ventilation requirements, reporting on water-saving features
- Statewide infrastructure
- Regional homeowner incentives
- Statewide financing (HELP)





Infrastructure Development

RESNET/BPI Certified Individuals in PA



RESNET: 73% pass rate; BPI: 96% pass rate

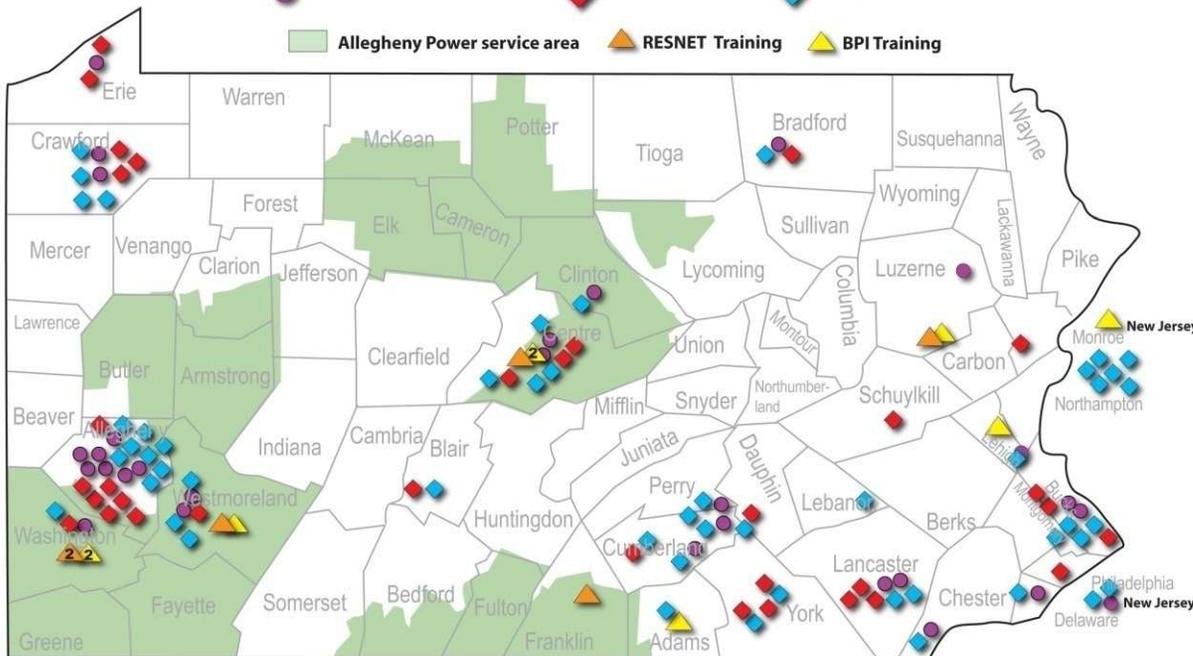




Trainings/ Service Providers

Service Providers & Training Locations

- Service Provider Locations
- ◆ RESNET Certified
- ◆ BPI Certified
- Allegheny Power service area
- ▲ RESNET Training
- ▲ BPI Training



Training Cycles

- ▲ RESNET ▲ BPI
- ▲ State College - August 27-31, 07
- ▲ Greensburg - September 24-28, 07
- ▲ Greensburg - October 8-12, 07
- ▲ Washington - January 15-19, 08
- ▲ Washington - January 28- February 1, 08
- ▲ Allentown- March 10-14, 08
- ▲ Chambersburg- April 21-25, 08
- ▲ Gettysburg- May 5-9, 08
- ▲ Wall, NJ- May 19-23, 08
- ▲ Washington - June 23-27, 08
- ▲ Washington - July 14-18, 08
- ▲ Hazleton - July 21-25, 08
- ▲ Hazleton - August 4-8, 08
- ▲ State College - October 6-10, 08
- ▲ State College - October 20-24, 08

Service Provider Locations

- ABC Green Properties & Energy Options Inc. - McMurray
- AJ Stones Design Contractor- Level Green
- Bauer Specialty Insulation- Erie
- Building Performance Architecture- Pittsburgh
- Comfy House- Pittsburgh
- Conservation Consultants Incorporated- Pittsburgh
- Domain Building Performance LLC- Doylestown
- EAM Associates Inc. - White Haven
- EIC Inc./Comfort Home- Lancaster
- Enefex - Doylestown
- Energy and Environmental Solutions- Wildwood
- Energy Auditors - Marysville
- Energy Eagles, LLC - Pittsburgh
- Energy Professionals Insulation- Lock Haven
- Energy Smart Home Improvement - Boiling Springs
- Envinity- State College
- Green Savers LLC- Avondale
- Home Energy Solutions- Mechanicsburg
- HomeTown Green - Media
- HomeWorks Energy Solutions- Meadville
- MHP's PA Energy Audits- Bellefonte
- MaGrann Associates- Moorestown, NJ
- Master Remodelers, Inc.- Pittsburgh
- PA Energy Savers - Coopersburg
- Pure Energy- Lancaster
- Quad K Energy Conservation - Towanda
- Schlosser Construction- Saegertown
- The Energy Doctor- Irwin
- West Penn Energy Audits- Pittsburgh





Key Concept: Broad or Deep

- Broad and Shallow

- Many homes
- Faster deployment
- Little investment in training
- Low level of savings per home
- Transaction costs high relative to return
- Dependent on program support, results only for the life of the program



Replace Light bulbs, Thermostats, Appliances

More Houses, or

More Savings per House

ENERGY STAR
Whole House Programs:

Home Performance

New Homes

- Deep and Narrow

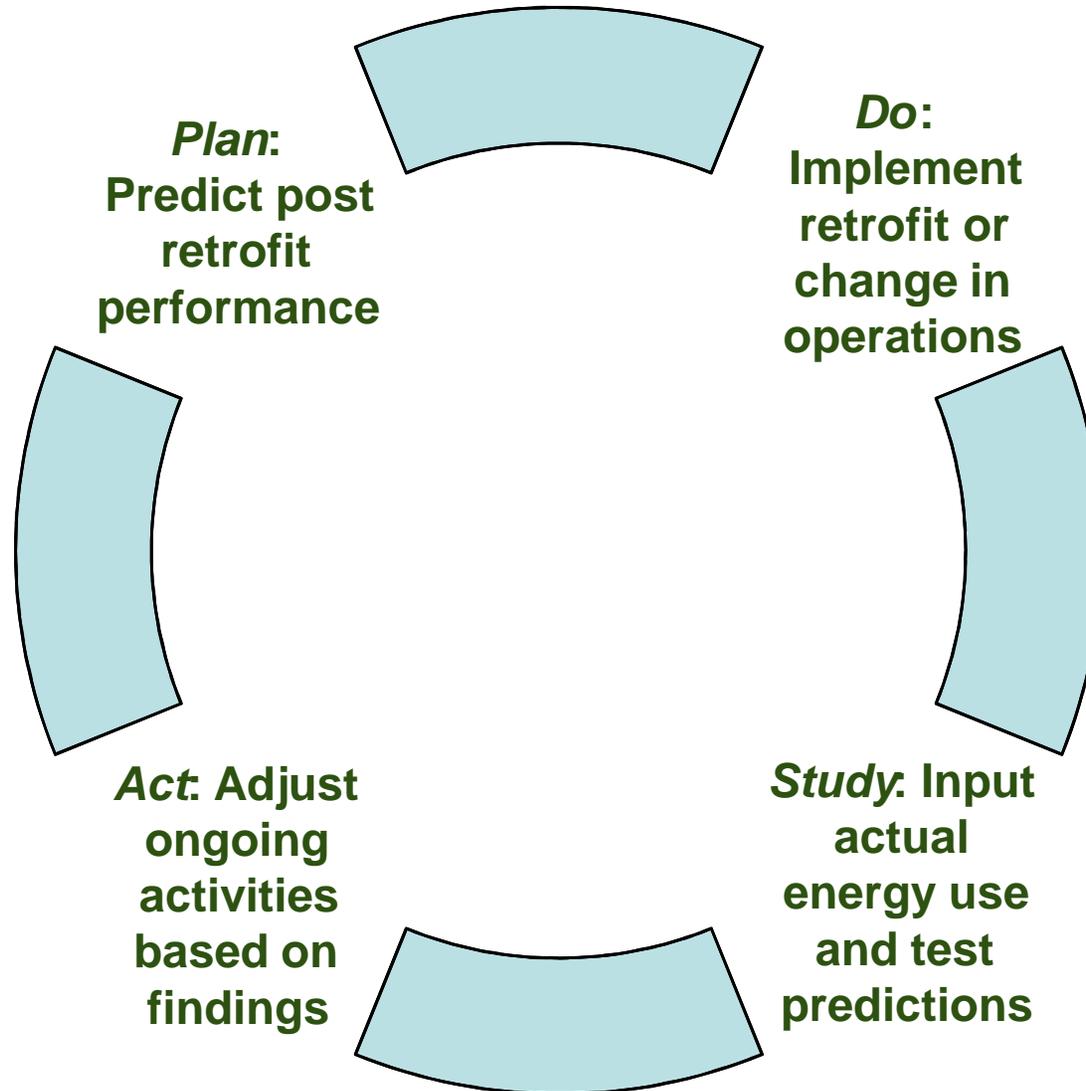
- Fewer homes to start, slower deployment
- Much greater savings per home
- Requires greater training and equipment investment
- Viable business model independent of programs, transforms market and businesses
- Drives greater consumer and contractor investment

- Challenge: Can Both Approaches Coexist?
Portfolio Approaches





Key Concept: The Total Quality Management Feedback Cycle for Efficiency Programs





Other Key Concepts

- Choices that impact whole house programs:
 - Deemed Savings
 - Supporting Stages of Service Provider Business Development
 - Portfolio Programs – using deep programs to build future infrastructure
 - TRC and Measure Life





Conclusions

- Carefully crafted, coordinated program and incentive design is necessary to support whole house programs and simpler rebate programs in the same environment
- A portfolio approach is in the utility's and ratepayers best interest
 - Quick response
 - Long term infrastructure and market transformation





PA Home Energy



- Workforce Development
 - More auditors/raters
 - Dual RESNET/BPI certification
 - Mentoring & QA
- Financing & Incentives
 - Keystone HELP as stepping stone
 - Performance-based (WPP)
- Consumer Marketing
 - Benefits of whole-house approach
 - Contractor differentiation
 - ENERGY STAR link





How the Program Developed

- West Penn Power Sustainable Energy Fund (WPPSEF) developed PA Home Energy
 - WPPSEF is a 501 (c) 3 non-profit organization
 - 2001, 7-member board, investments/ grants
 - Clean power, energy efficiency, jobs
 - Developed like Keystone HELP (regional to statewide)
 - Committed \$1.14M to develop PA Home Energy for 2007-2008 timeframe, more pending in 2009-2010
 - Launched August 3, 2007
 - Performance Systems Development retained
 - EPA endorsed/ Allegheny Power supports





Homes on the Ground

PA Home Energy New & Existing Homes, September 2008

| | In Pipeline | In Process | Completed | Total | |
|--|-------------|------------|-----------|-------|-----|
| ENERGY STAR Qualified New Homes | | | | | |
| In WPPSEF territory | 12 | 56 | 8 | 76 | 95 |
| Outside WPPSEF territory | 2 | 6 | 11 | 19 | |
| Home Performance with ENERGY STAR | | | | | |
| In WPPSEF territory | 15 | 62 | 1 | 78 | 136 |
| Outside WPPSEF territory | 11 | 44 | 3 | 58 | |





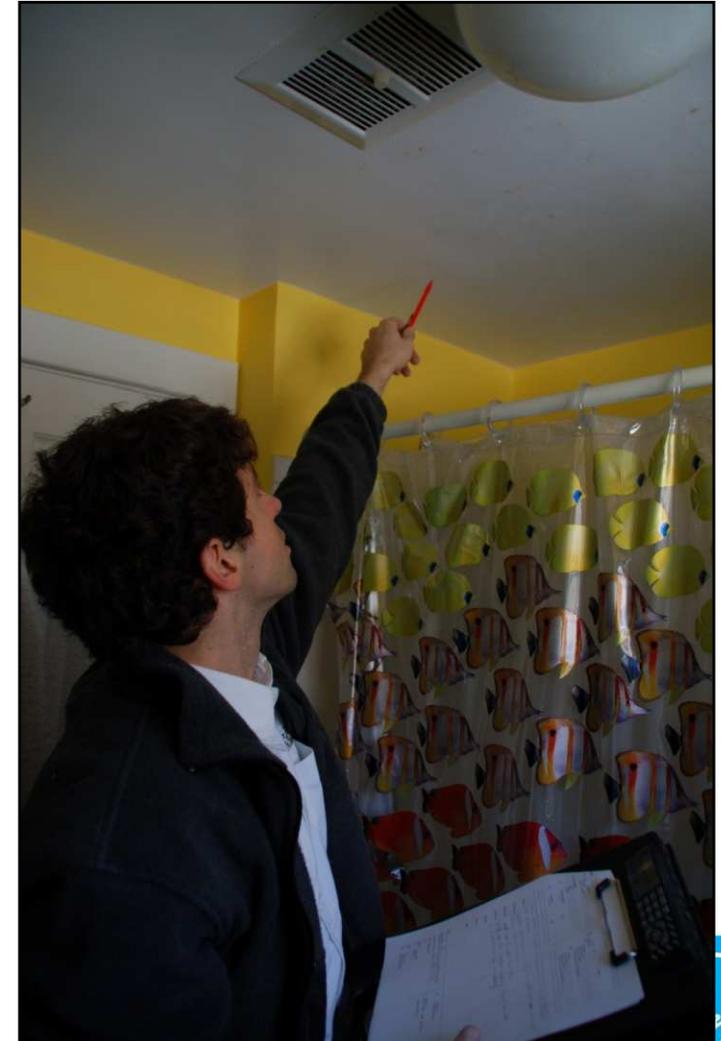
Service Providers





Quality Assurance

- Maintains a level playing field – no undercutting in quality
- Site inspections
- PA Home Energy standards
- Must submit jobs for customer to get incentives, maintain Service Provider listing



ASK ABOUT
ENERGY STAR



Marketing & Consumer Outreach

- Key messages
 - Benefits of whole-house approach and ENERGY STAR
 - Differentiation of PA Home Energy service providers

Saving money on your utility bills
never felt so good.

With today's energy prices, lowering utility bills is a top priority. Home Performance with ENERGY STAR®, sponsored by PA Home Energy, delivers cost-effective home improvements that will make your home more comfortable and energy-efficient. You'll also be helping to protect the environment. And that's a savings we can all enjoy.

To find a participating contractor, visit
pahomeenergy.com



ENERGY STAR® sponsored by the U.S. Environmental Protection Agency and the U.S. Department of Energy, helps us all save money and protect our environment through energy-efficient products and practices.



- Co-marketing of ESQNH & HPwES messages
 - With consumers
 - With service providers
 - With builders, contractors, trade allies





Consumer Inquiries

- Fifty to eighty consumer inquiries per week

| | |
|--|-------------------------------------|
| First Name: | Kathy |
| Last Name: | Greely |
| Email: | kgreely@psdconsulting.com |
| City: | Meadville |
| County: | Crawford |
| Zip Code: | 16335 |
| Phone (xxx) xxx-xxxx: | (814)558-8082 |
| Best time to call? | 8-5 |
| House Type: | High energy bills Cold or hot rooms |
| Your Home Performance Issues (Please check all that apply): | New Home |
| Learned about us by: | Word of mouth |
| Contact method: | SP Listing Request |





Allegheny Power Bill Stuffer

(710,000 residential customers)

Saving money on your utility bills
never felt so good.



PA Home Energy understands that with today's high energy prices, saving on utility bills is a top priority. Working with Home Performance with ENERGY STAR® and Allegheny Power, we can help! Our service providers use state-of-the-art tools to do a comprehensive evaluation and identify home improvements that will work together to improve energy efficiency and make your home more comfortable. At the same time, you'll be helping to protect the environment. And that's a savings we can all enjoy.

To learn more, call 800-832-3327 or visit www.pahomeenergy.org.



Allegheny Power

an Allegheny Energy company



HOME PERFORMANCE WITH
ENERGY STAR

Home Performance with ENERGY STAR® offers a comprehensive, whole-house approach to home improvement that results in better energy efficiency, great comfort, and lower energy bills.

ENERGY STAR is a voluntary partnership sponsored by the U.S. EPA and U.S. DOE to protect the environment through superior energy efficiency.

