

How Raters will Benefit from the ENERGY STAR[®] Home Improvement Program

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Our Goal

 Make it easy for homeowners to improve the energy efficiency of their homes



Obstacles

- · It's not easy
- 73.7 million single-family homes -- each one unique
- Homeowners don't realize they have a potential to save money
- Homeowners may have misinformed ideas about how to save (money and energy)
- Homeowners don't know who can help or who to trust



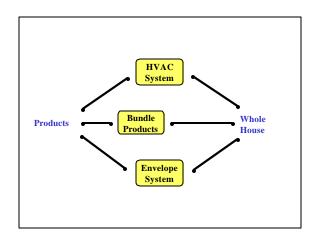
ENERGY STAR^a Label for Homes

- Energy Star label for all homes
 - Both new and existing homes
 - HERS 86
- No new label for existing homes
 - 2nd label would add confusion
 - As soon as someone moves into a new home, it becomes an existing home
- Focus will be on inserting energyefficiency into an array of transactions
 - From product replacement to system upgrades to whole house improvements



Our Strategy

- ENERGY STAR® Home Improvement Toolbox
 - Consumer information Web site
 - Home Performance Benchmark
 - Home Improvement Tool
 - Labeled Products and Marketing Bundles
 - Performance Specifications
 - Home Solutions









Advantages For Raters

- Consumer Awareness
- Marketing
- Lead Generation
- Opportunities for expanding your business



Home Benchmark

- · Consumer awareness tool
- Measures actual home energy performance and estimates potential for improvement
- Performance depends on efficiency of building envelope, HVAC, appliances, lighting and occupant behavior
- Not an audit or analysis tool
- Based on home energy bills (usage)



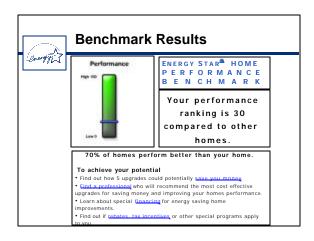
Benchmark Development

- Based on DOE/EIA 1997 RECS
 \$\text{4000 single-family homes}\$
- Regression analysis and model developed by Mike MacDonald and Sherry Livengood at ORNL
- Adjust (normalize) energy use based on home size, age, number of occupants and climate.
- Rank adjusted energy use against homes in RECS



Information Requirements

- · Annual energy use
- Floor area
- Zip code
- Number of household members
- Age of home
- Well pump?





Applications

- Consumer awareness
 - Am I using more energy than I could?
- Screening tool
 - What homes have the most potential for improvement?
- Measure improvement
 - How have upgrades improved my performance?
- Criteria for rewarding performance
 - Is home in highest percentile?



Benefits to Raters

- Easy to use web-based marketing and consumer awareness tool
- · Helps raters get more leads
- Helps raters expand their business



Home Solutions with ENERGY STAR®

- <u>Service</u> to provide whole house analysis <u>and</u> ensure recommendations are implemented
- Emphasis on comfort, durability, and professional problem-solving along with energy-efficiency
- Enormous overlap with what raters already do!
 - Increased emphasis on either providing upgrades directly, or overseeing process



Home Solutions Characteristics

- Provider does NOT have to be a third party -- can do the work too
- Essential to have oversight, most likely in the form of certification and accreditation and a QA/QC program
- Use of a valid software tool
- Targeted to states or areas with the necessary interest, support, and expertise



Home Solutions Features

- Home energy inspection with an energy specialist, e.g., a rater, including:
 - Diagnostic testing
 - Combustion safety
 - Possibly appliance metering
- Targeted solutions for the home's energy and maintenance problems
- Provider encouraged to perform recommended work



Home Solutions Timeline

- NYSERDA beginning pilot
- Searching for additional pilot(s)
- Begin full roll-out in 12-18 months