



ENERGY STAR for New Homes Utility Stakeholder Meeting

Program Design Track
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Wisconsin ENERGY STAR Homes Program

Program Review:

- Program Description
- Program Implementation and Intent
- Initial Research
- Key Needs to Address
- Program Design Considerations
- Objectives and Lessons Learned
- What is Working What is New



Wisconsin ENERGY STAR Homes Program

*Augmenting Skills with Technical Training and Education
... Investing in Success*

Education and training = sharing information

- Reasons to invest
- Ways to invest
- Types of training
- Results
- New Opportunities



Wisconsin ENERGY STAR Homes Program

Program Description:

The Wisconsin ENERGY STAR Homes Program provides unbiased, third party building verification, consulting, and testing services to the Building Industry on the construction of safe, comfortable, and durable energy efficient new homes.

Building Performance is verified through a certification process (for fee) that includes plan review, construction site visits, and final testing that address building performance beyond energy efficiency and in the best interest of the industry, occupant, and environment



Wisconsin ENERGY STAR Homes Program

Program Implementation and Goals:

The Program is designed, developed, and administered by Wisconsin Energy Conservation Corporation and delivered by private accredited consultants (advanced raters) with the partial support of Public Benefit funds (collected through rater payers).

The intent of the program is to set participants up for success and empower them through the sharing of building performance information and the development of marketing tools to create market awareness and differentiation – *market transformation*



Program Research

Initial Program Research:

Informal research involved:

- drawing on the experiences of developing and delivering an existing home rating program
- Early experience of “rating” new homes for Parade of Homes promotion
- Review of other national new construction programs



Key Needs

Key Needs Identified:

- Establish standards valuable to the building industry (*and buying public*) beyond energy efficiency. Standards that address the builder's concerns (*and public need*) and build trust and credibility (SAFE)
- Add site visits during construction to address and document details that drive building performance and *provide an on-going platform for voluntary engagement and continuous improvement*
- Increase the credibility of the HERS infrastructure with expanded training and on-going support targeting new construction issues



Key to Address

Other Keys to Address:

- Increased costs (*upfront*) to the builder for the delivery of program services (*consultant fees*)
- Potential (*and perceived*) increases in material cost / upgrades necessary to meet (*or exceed*) energy (*and other requirements*) for certification
- Balance building consumer awareness and demand with builder participation (*capability and acceptance*) in meeting program standards



Design Considerations

Program Design Options:

- Require site visits and additional standards to address building performance – air tightness, ventilation capacity, combustion safety
- Require written site visit reports to builder. Provides added value to builder and transfers responsibility for implementing SV recommendations *in best interests of builder*
- Invest in outside “experts” for training consultants and building industry. Investment strengthens program/consultant credibility, builder buy-in, and develops (*later*) in-state resources and HBA recognition



Design Considerations

Program Design Options:

- Provide Consultant fee discounts and (*later*) Builder Certification rewards to (*initially, partially*) offset the builder's incremental cost of program services
- Include Rating (*score*) and (*later*) Technology rewards to (*partially*) offset the builder's incremental costs in meeting efficiency threshold and/or encourage upgrades for greater energy savings
- Develop marketing mechanisms to gain builder buy-in and potentially offset costs of participation, and building market awareness and differentiation – *in advance of consumer marketing*



Objectives and Lessons Learned

Program Goal:

To be viewed as credible and valuable in building industry and market

Lessons learned:

- address concerns building industry first
- standards are specific, achievable, assessable, and *proven* effective
- don't over promise what you (or the market) can deliver
- informed decisions are “better” choices



Objectives and Lessons Learned

Program Goal:

To deliver safe, comfortable, durable, and energy efficient homes

Lessons Learned:

- don't put energy efficient first
- construction details (not products) matter
- market message beyond new home "paradigm"
- provide homeowner's manual and follow-up survey



Objectives and Lessons Learned

Program Goal: *Increase electric system reliability*

Lessons Learned (in Wisconsin):

- builders don't decide / influence base and plug load decisions
- equipment run time and maintenance effect savings potential
- electric load increasingly \geq heating load = lost opportunities
- Market Channel rewards / spiffs are better positioned to influence buyer / builder decisions



Objectives and Lessons Learned:

Program Goal: *Create infrastructure of professional service providers*

Lessons Learned:

- tend towards market cost training
- market program as a business opportunity
- require tight QC & QA, and customer services standards
- offset initial barrier to program participation at your own risk
- create opportunities to diversify consultant services



Objectives and Lessons Learned:

Program Goal: *Promote installation of renewable energy technologies*

Lessons Learned:

- small but growing potential market (*and market advantage*)
- cross promote installers / assessors / suppliers to facilitate market
- address “renewable ready” time of construction details
- reduce loads (first) to match technology



Objectives and Lessons Learned:

Program Goal:

To be recognized as market leader in new construction building performance

Lessons Learned:

- build on national ENERGY STAR for Homes platform
- integrate / infiltrate local home building associations
- provide venue and mechanism for participant recognition awards
- leverage PR campaigns, local industry champions, collateral marketing and training event opportunities



Investing in Builders Skill with Technical Training and Education

Reasons To Invest:

- To gain TRUST and CREDIBILITY in the building industry
- To develop “local” training resources (*trainers*) – phase out initial reliance on outside experts.
- To provide platform for continued improvement – training new topics, technologies, advanced trainings
- To engage Home Building Associations on training agenda topics of mutual interest.



Investing in Success

Ways to invest in Training:

- Direct training - Program resource
- Partnerships in Industry (*window manufacturer, product supplier*) with common goals (*cost sharing expense- greater market reach*)
- Sponsorships for local events (HBA conferences, trade shows, home shows). Provides value to HBA.
- Participant Scholarships for regional / national events (A.C, EEBA, RESNET)



Investing in Success

Types of training:

- Training series: In-class formal training (*informational, interactive*)
- In field small group training (*skill based, specific topic, short delivery, consultant led workshop*)
- Technical Exchange meetings: Voluntary participant driven quarterly meetings for consultants and builders (*talk shop*)
- Trainer the Trainer: Training for trainers on curriculum development and delivery (*teach not to lecture*)



Investing in Success

Training Series Results:

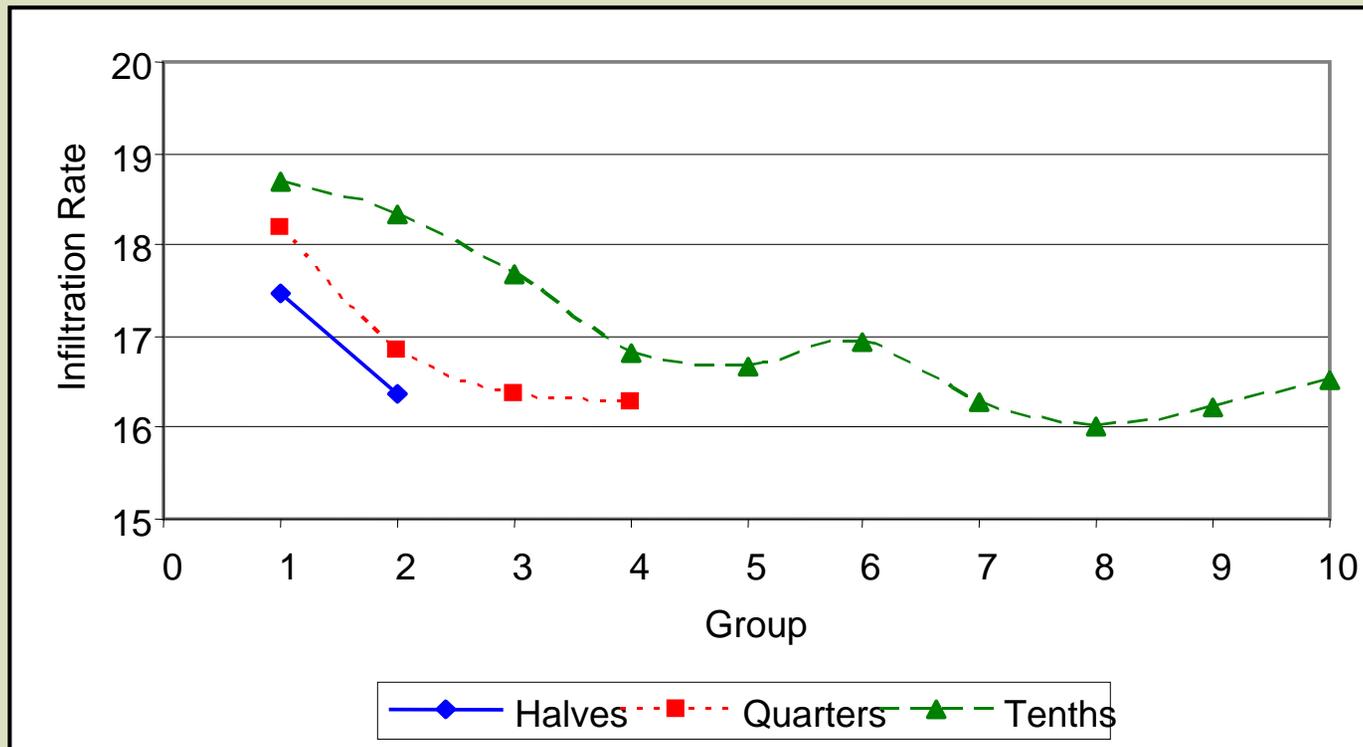
- Energy Center of Wisconsin Residential training series
- 2005-2006 Series: 8 topics, 26 events, 1,385 building professionals, average score A-, delivered (*mostly*) by local consultants
- 2000 to date: 178 events with over 8,000 building professionals (*residential and multi-family*) attending



Investing in Success

In-field Results: Builder performance trends over time

Build tight = energy efficient = building quality*





Investing in Success

New Opportunities :



ENERGY STAR for New Homes

Utility Stakeholder Meeting

Program Design Track

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