



ENERGY STAR FOR NEW HOMES BUILT UNDER THE HUD HOME AND CDBG PROGRAMS

Grantees participating in the HUD Home Investment Partnership Program (HOME) and the Community Development Block Grant Program (CDBG) should adopt the Energy Star standard for new construction and gut rehabilitation. Since 1995, buildings can qualify for the Energy Star standard in a manner similar to Energy Star products such as compact fluorescent bulbs, refrigerators, and computers. The standard is for residential single- and multifamily buildings with not more than three stories.

Why build to the Energy Star Standard? The benefits go well beyond just saving energy.

Benefits also include:

- Lower operating costs for tenant -also allows owner to borrow more
- Increased comfort - draft free house
- Better quality of construction resulting in more durable structure, e.g., prevention of mold
- Higher value - more and more recognized by appraisers as creating higher value
- Reduced air pollution - less need for more energy production

What qualifies a home for the ENERGY STAR label?

- The Energy Star label is awarded to buildings that are at least 20% more efficient than a reference home that meets the International Energy Conservation Code (IECC) of 2004.
- Note that fewer than half the states have adopted this code.
- Many are still on the '93 Council of American Building Officials Model Energy Code.

How to meet the standard?

- It is a performance-based system. There are many ways to meet the standard. Only those things that are necessary to achieve a score of ~0 on the Home Energy Ratings (HERS) scale need be done.
- For homes, EPA relies on the HERS scoring overseen by the Residential Energy Services Network (RESNET).
- The new HERS Index is based on a score of 100 [the reference house that meets the 2004 IECC] and each point below that approximates a one percent reduction in energy use.
- The new ENERGY STAR for Homes threshold requires a HERS Index of 80 in Northern states, or roughly 20 percent more efficient than IECC, and a HERS Index of 85 in the Southern states, or roughly 15 percent more efficient than IECC.

The heart of ENERGY STAR for homes is a certification that is based on inspections and objective testing at the completion of construction:

- ***Inspection*** - The home energy rater inspects the home, with software, measures its energy characteristics, such as insulation levels, window efficiency, wall-to-window ratios, heating and cooling system efficiency, the solar orientation of the home, and the water heating system
- ***Testing*** - Diagnostic testing, such as blower door for building air leakage and duct blaster testing for forced air systems leakage is part of the rating.

What does it cost to reach that level?

- It may cost \$1-2,000 per home. In some jurisdictions utility companies participate as EP A partners by providing the certification service without cost; some may also provide incentive
- CDBG can pay for some of the added costs in meeting ENERGY STAR standards even with HOME-financed production, if the costs are not covered by HOME.
- Appraisers are beginning to recognize the added value achieved by the ENERGY STAR certification.

How can you put ENERGY STAR construction into your program?

- By incorporating the following language in your RFP or procurement process for housing "All new and gut rehab residential buildings up to three stories shall be designed to meet the standard for Energy Star Qualified New Homes (≥ 80 [85 for South] on the HERS Rating Scale). All procedures used for this rating shall comply with National Home Energy Rating System guidelines."
- The developer takes care of all the rest working with the infrastructure, i.e. the HERS rating system and contractor. **It's as simple as that!**

What are the roles and responsibilities of all the participants in getting Energy Star Homes?

Grantee / PJ:	Adopts ES Standard
Developer/CDC:	Reviews plans with HERS contractor (certified rater)
Contractor:	Builds according to the plans
HERS Contractor:	Inspects and tests building; evaluates energy efficiency
Property owner:	Enjoys significantly reduced operating costs
Occupant:	Enjoys improved comfort and healthier environment

ENERGY STAR REFERENCES

-See the EPA web site: partnership, marketing, and technical resources -National infrastructure exists for implementation of ENERGY STAR for homes. Accrediting organizations are the Residential Energy Services Network (RESNET) and states. For a list of HERS Certified Contractors available by state, see:

http://www.natresnet.org/directory/rate_directory.asp#Search

You can find very comprehensive technical stuff in plain English at:

<http://www.buildingscience.com>

The DOE Webpage for State Energy Codes is:

http://www.energycodes.gov/implement/state_codes/state_status_full.php

EIA Webpage for Energy uses by State /Source/Sector

<http://www.eia.doe.gov/emeu/states/states.html>

THE POWERPOINT PRESENTATION, "ENERGY STAR FOR GRANTEES"

- Summarized above, it is for grantees participating in the HUD Home Investment Partnership Program (HOME) and the Community Development Block Grant Program (CDBG).
- It describes ENERGY STAR for *new* homes: how it works; why it works; and how grantees can easily adopt it for their residential new construction projects.
- Our purpose is "to leverage your role as CDBG and HOME grantees to build higher quality, more energy efficient, and thus more affordable housing."
- This PowerPoint is available from the HUD web site:
<http://www.hud.gov/offices/cpd/library/energy/energystargrantees.ppt>