



# *ENERGY STAR for Homes : Program Update*

*Richard Karney, P.E.*

*U.S. Department of Energy*

*2005 ENERGY STAR Appliance Partner Meeting*

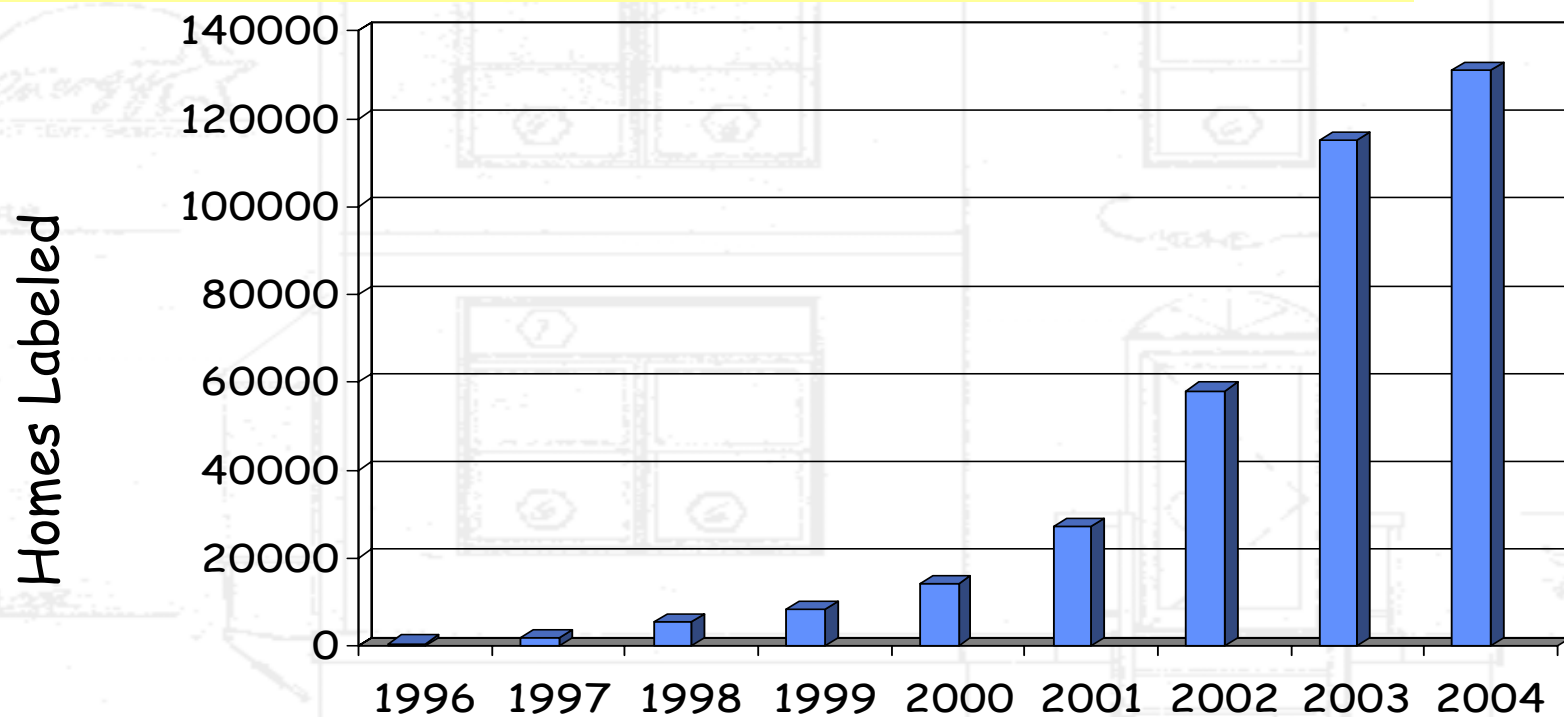
*September 30, 2005*

# ENERGY STAR Homes

## The Numbers: National



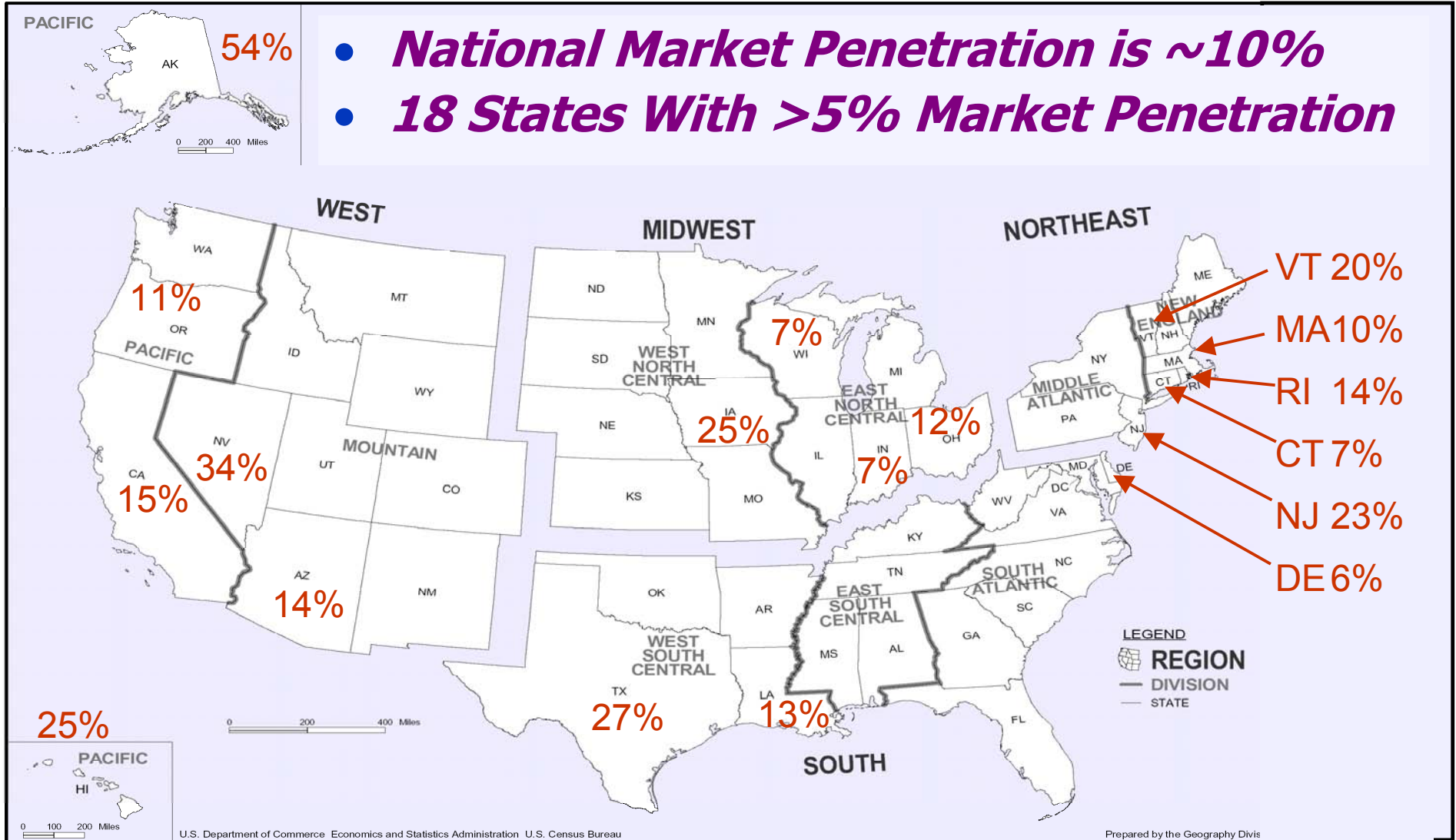
- 130,000 ENERGY STAR Qualified Homes in 2004 alone
- 400,000 Cumulative Homes at the end of 2004
- Estimate 200,000 additional homes in 2005



# ENERGY STAR Homes The Numbers in 2004



- **National Market Penetration is ~10%**
- **18 States With >5% Market Penetration**



# ENERGY STAR Homes

## Who Do We Partner With?



- **Home Builders**
  - Site built and manufacturer homes
- **Home Energy Raters**
  - Provide required third party verification
- **Sponsoring Programs and Utilities**
  - 75 active partners
- **Lenders**
  - Offer EEMS, with additional ENERGY STAR Information

# ENERGY STAR Homes Builder Partner Profile



- Builders of all sizes participate
  - Production builders dominate numbers
  - Top 20% of partners contribute 80% of homes
- 2,500 active builders nationwide
  - 100% of top 10 builders
  - 96% of top 25 builders
  - 50% of top 100 builders
- Use ENERGY STAR Web site for a list of all Builder Partners



## ENERGY STAR Goals for New Guideline:

- Use tried-and-true energy efficiency improvements
- Balance energy efficiency with cost - effectiveness
- Simplify the definition of ENERGY STAR qualified homes
- Integrate ENERGY STAR qualified products

# Proposed ENERGY STAR Guideline Home for 2006



## Performance Path




- Must meet minimum HERS scores for Climate Zone
  - HERS 83 (expanded zones 1-5)
  - HERS 84 (expanded zones 6-8)
  - Additional requirements (refer to posted specification)
- Builder must choose at least one ENERGY STAR product category (appliances/lighting, HVAC or windows)



# Proposed ENERGY STAR Guideline Home for 2006



## Prescriptive Path

<b><u>Tight Envelope</u></b> <ul style="list-style-type: none"><li>– 2004 IECC-compliant insulation</li><li>– Thermal Bypass Checklist</li></ul>	 <b><u>HVAC</u></b> <ul style="list-style-type: none"><li>– North: E.S. Heating (AFUE 90)</li><li>– South: E.S. Cooling (SEER 14)</li><li>– Right-sized, w/E.S. Thermostat</li></ul>
<b><u>Tight Ducts</u></b> <ul style="list-style-type: none"><li>– 4 cfm/ 100 sq. ft.</li></ul>	 <b><u>Windows</u></b> <ul style="list-style-type: none"><li>– Climate-zone specific</li></ul>
<b><u>Efficient Water Heater</u></b> <ul style="list-style-type: none"><li>– Varies with tank size and fuel type, slightly higher than NAECA minimums</li></ul>	 <b><u>Lights &amp; Appliances</u></b> <ul style="list-style-type: none"><li>– Min. 5 E.S. fixtures, fans, and/or appliances</li></ul>



# Opportunities for ENERGY STAR Appliances



- Both paths provide opportunity to increase ENERGY STAR appliance market share in residential new construction by:
  - Manufacturers offering “ENERGY STAR appliance packages” to builders
  - EEPS partnering with builders and manufacturers to encourage increased regional integration of ENERGY STAR appliances

# New Opportunities



- Develop new builder business
  - Co-Sponsor Building Science and Energy Efficiency Seminars (e.g., Houses That Work)
- Join local ENERGY STAR 'Affinity Groups'
  - Participate in ENERGY STAR-sponsored Outreach Partnership (i.e., Co-op Advertising)

# ENERGY STAR Outreach Partnership



- Requires participation from at least 3 partners (min. two must be builders)
  - Product manufacturers can and do participate!
- ENERGY STAR provides customized ad templates
  - Partner names, logos, local web site
- Partners fund an 8-13 week placement
  - ENERGY STAR funds a complementary ad

# ENERGY STAR Outreach Partnership



ENERGY STAR qualified homes provide greater comfort and durability while lowering utility costs. Energy efficiency also protects the environment by significantly reducing the greenhouse gas emissions that contribute to global warming. Learn more. Visit [www.energystar.gov](http://www.energystar.gov)

ENERGY STAR Qualified Homes  
Full Page 2005 Partner Template Option



THESE BUILDERS PROVIDE  
COMFORT, DURABILITY AND  
A CLEANER ENVIRONMENT

Find these ENERGY STAR qualified builder partners near you at [www.localsite.com](http://www.localsite.com) or [www.energystar.gov](http://www.energystar.gov)

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WITH EACH ENERGY STAR QUALIFIED HOME,  
THE FUTURE LOOKS A LITTLE BRIGHTER.

Find builder partners near you at [www.localsite.com](http://www.localsite.com)

ENERGY STAR qualified homes meet EPA's strict guidelines for energy efficiency. These homes provide greater comfort and durability while lowering utility costs. Energy efficiency also protects the environment by significantly reducing the greenhouse gas emissions that contribute to global warming. Learn more. Visit [www.energystar.gov](http://www.energystar.gov)

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For More Information about  
**ENERGY STAR**



*On the Web at:*

*[www.energystar.gov/homes](http://www.energystar.gov/homes)*

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