

NORTH CAROLINA ENERGY STAR CONFERENCE
DECEMBER 8, 2005



*Why Thousands of Builders
Voluntarily Label Their Homes*
ENERGY STAR

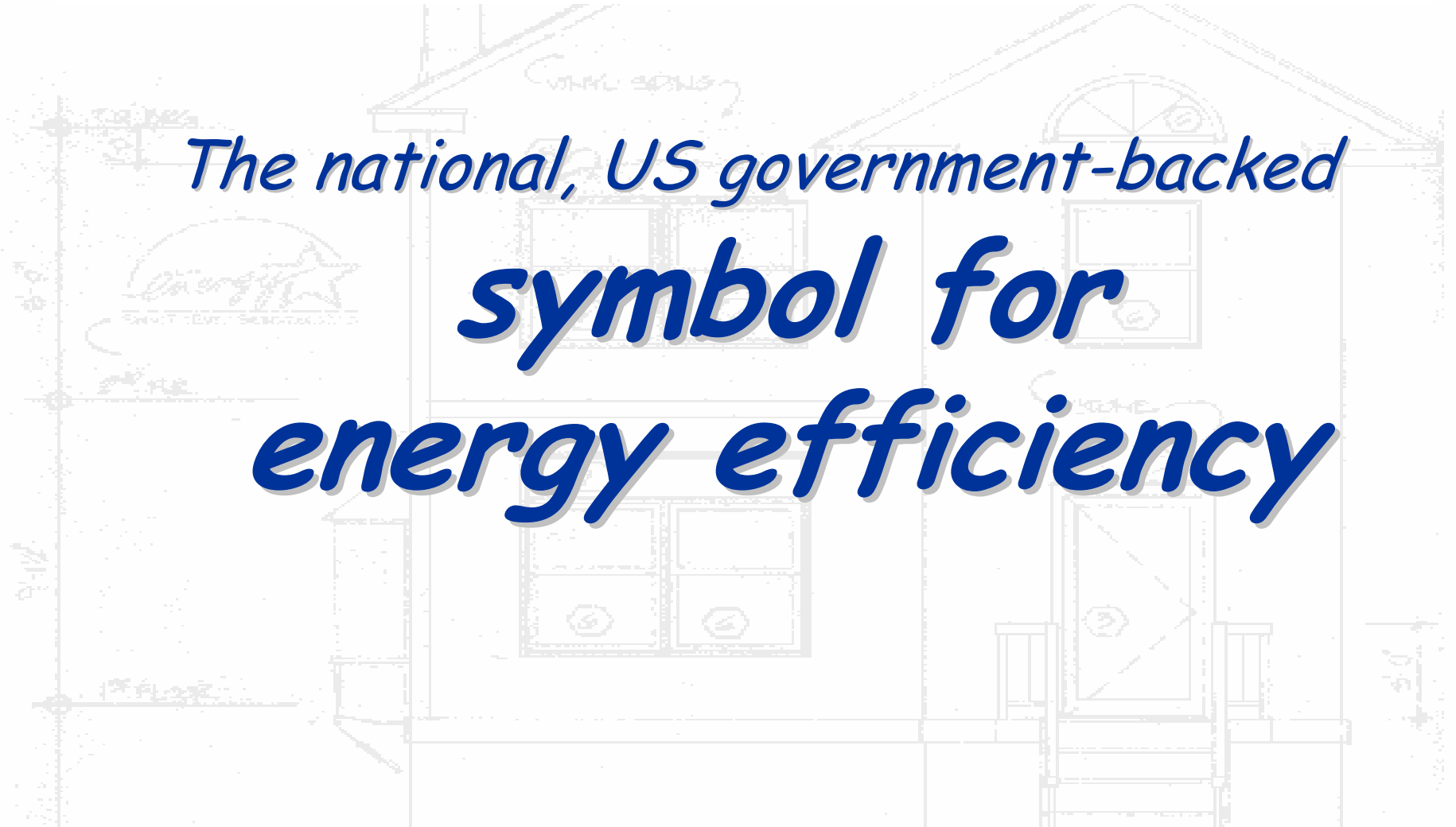
A faint, light-colored architectural drawing of a house is visible in the background. It shows a two-story structure with a gabled roof, a front door with a small porch, and several windows. Some windows have small circular icons with numbers inside them, likely representing energy efficiency ratings. The drawing is overlaid with the main text.

What is ENERGY STAR?

WHAT IS ENERGY STAR?



*The national, US government-backed
**symbol for
energy efficiency***



ENERGY STAR BACKGROUND



- ***Launched*** in 1992 for computers
- ***Grown*** to products across 40+ categories
 - 1995 - new homes
 - 1999 - efficient buildings
 - 2003 - updated logo
- ***Sold*** 1+ billion products
- ***Prevented*** greenhouse gas emissions equivalent to those from 18 million vehicles



Before



After

WHAT IS ENERGY STAR? ENERGY STAR LABELED HOMES

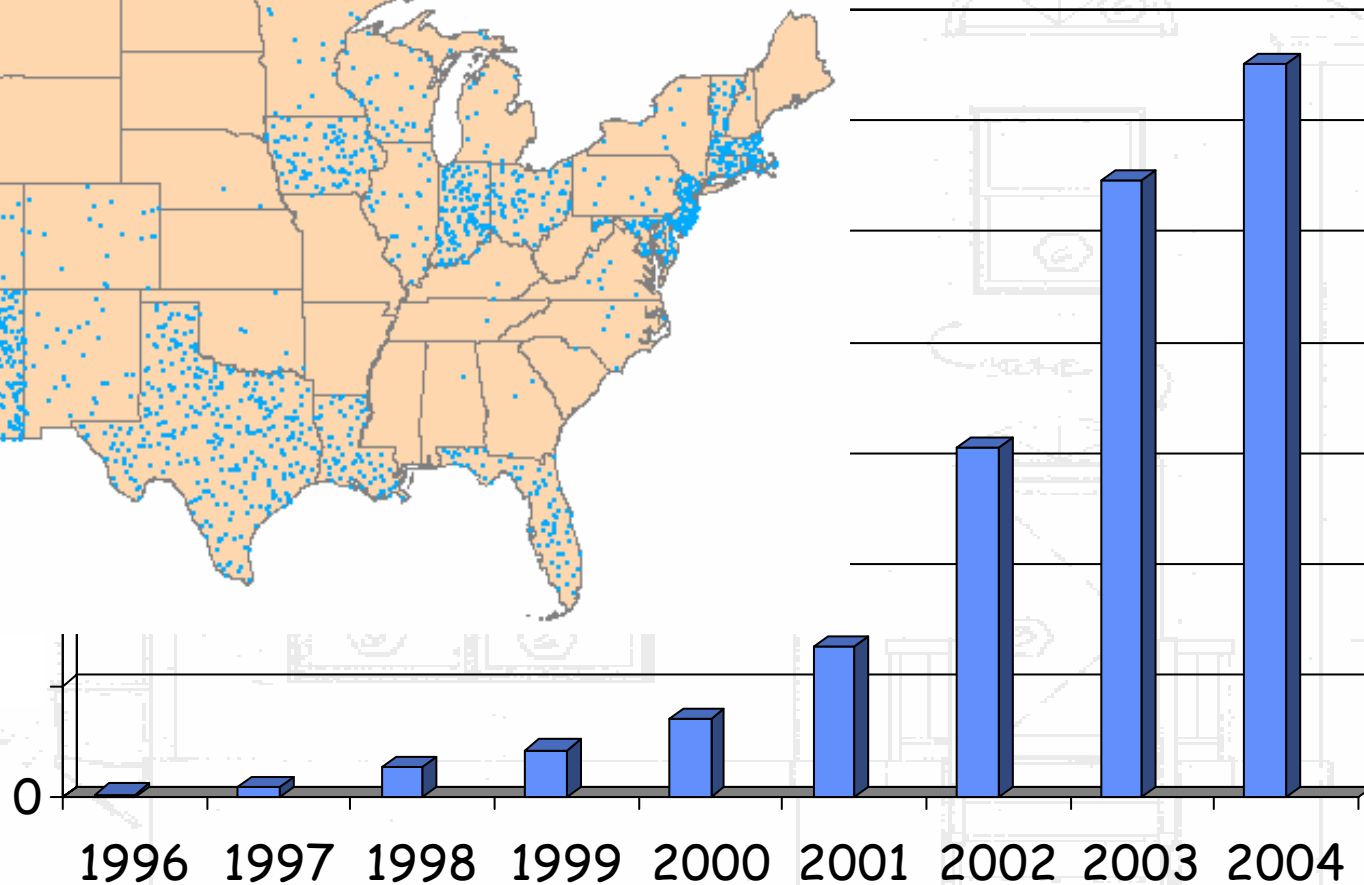
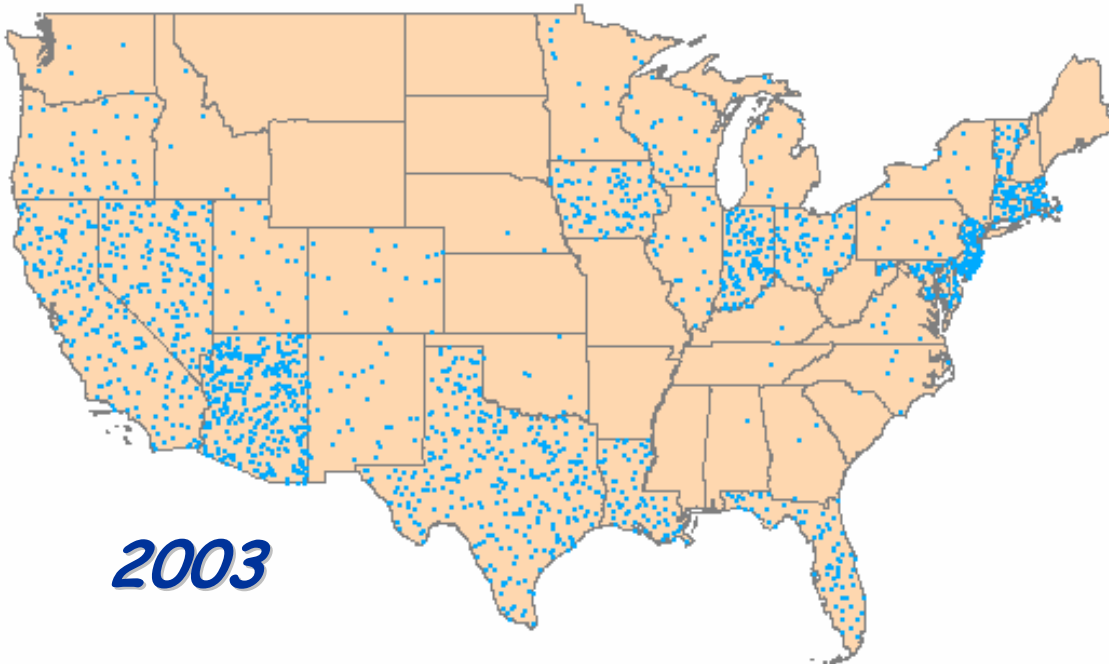


- ***Voluntary***
- ***Defines Truly Energy Efficient***
30% > MEC, and 15% > State Code
- ***Builder Recognition***
Government-Backed Label
Third-Party Verified

WHAT IS ENERGY STAR? A GROWING LABEL FOR HOMES



Each dot = 50 labeled homes



WHAT IS ENERGY STAR?
A GROWING LABEL FOR HOMES



- ***500,000+ Labeled Homes Cum.***
- ***~15-60% Market Penetration***
- ***2,800+ Builder Partners***
- ***60%+ 100 Largest Builders***

A faint architectural drawing of a house is visible in the background. It shows a two-story structure with a gabled roof, a front door with a small porch, and several windows. Some windows have small circular icons with numbers inside them. The drawing is light gray and serves as a backdrop for the main text.

Why Build Energy Efficient?

WHY ENERGY EFFICIENT?

COMPARATIVE BUSINESS MODELS



Builder Business Model:

*Wait for consumers
to ask for new technology*

Other Industries Business Model:

*Exploit new technology
to improve performance and cost
advantage*

WHY ENERGY EFFICIENT?

EXPLOITING TECHNOLOGY EXAMPLE



Audio Cassette to CD:

- ***Easier to use***
- ***Better Sound***
- ***More Durable***
- ***Fraction of Cost to Produce***
- ***Twice the price!***

WHY ENERGY EFFICIENT?

WHY EXPLOIT NEW TECHNOLOGIES?



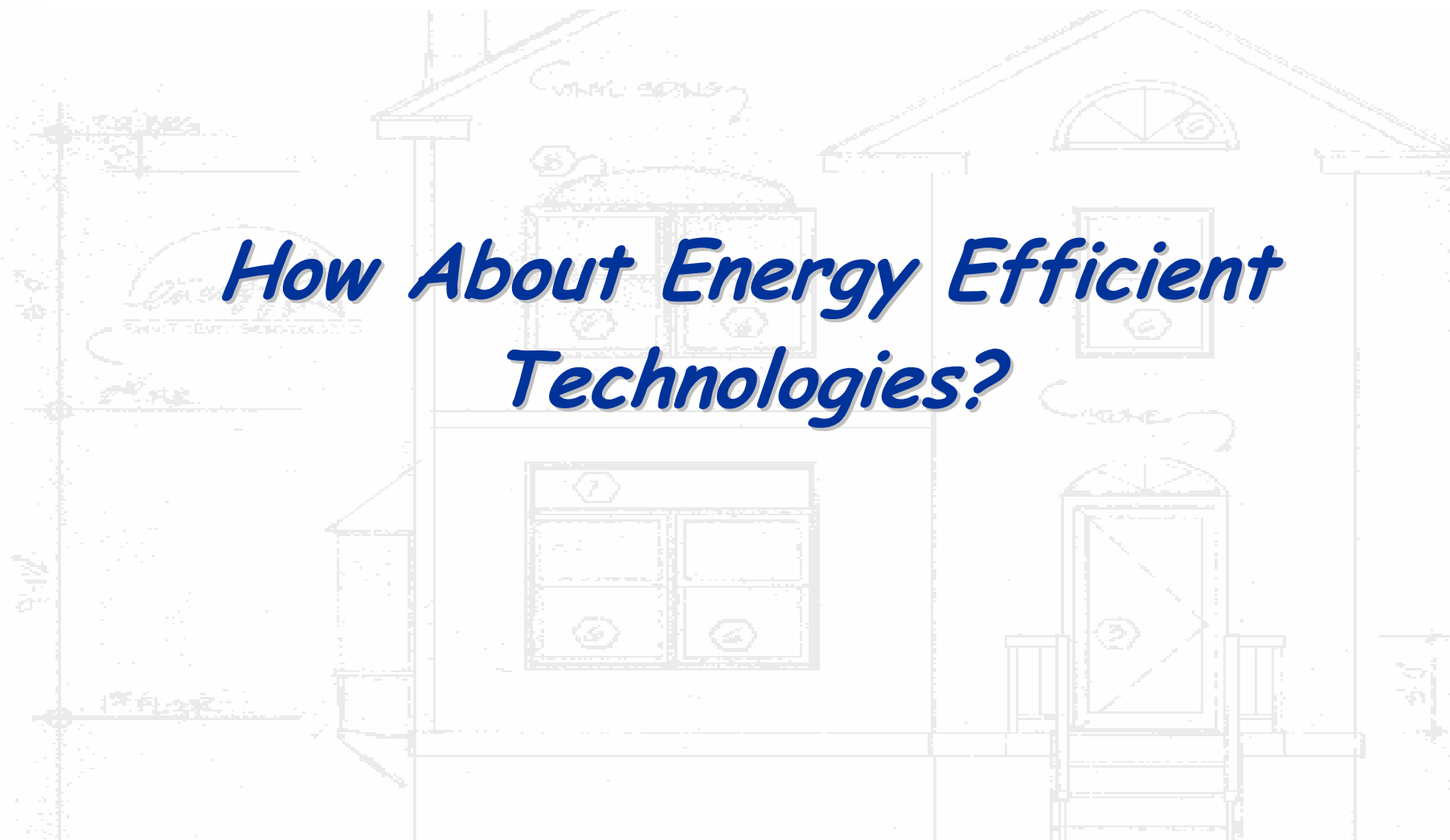
- *Renders competition obsolete*
- *Increases revenues*
- *Increases consumer satisfaction*
- *Reduces risk*

...in other words, more profit!

WHY BUILD ENERGY EFFICIENT?
EXPLOITING TECHNOLOGIES: HOMES



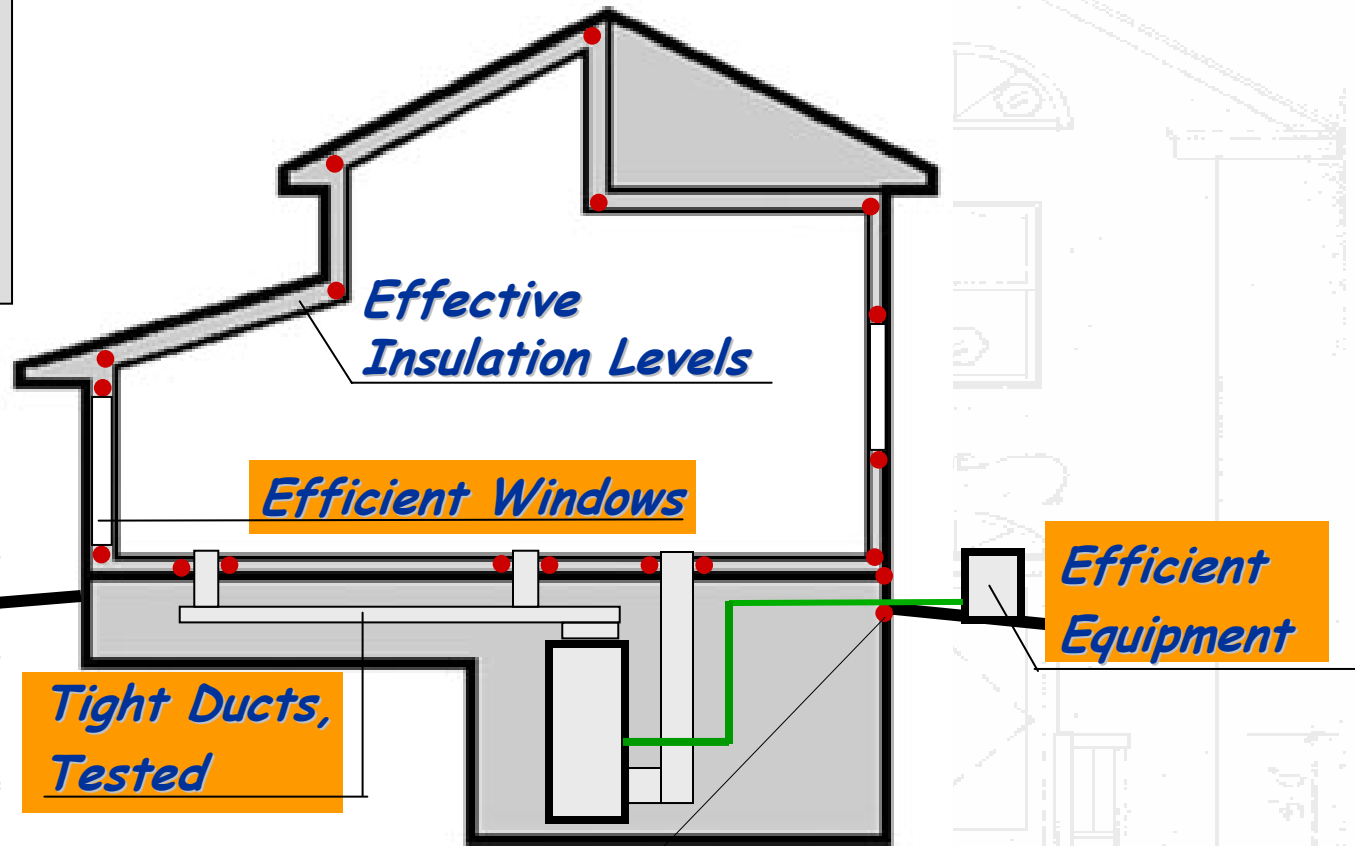
How About Energy Efficient Technologies?



WHY BUILD ENERGY EFFICIENT? OLD SPEC



*HERS Score
of 86 and
15% > code,
or equivalent
package...*



Build it Tight, Tested

WHY BUILD ENERGY EFFICIENT? NEW SPEC



*Expanded
HERS Score
of 83/84, or
equivalent
package...*

*ENERGY STAR Qualified
Lighting, Fans, or
Appliances*

*IECC Insulation
Properly Installed*

Continuous Air Barrier

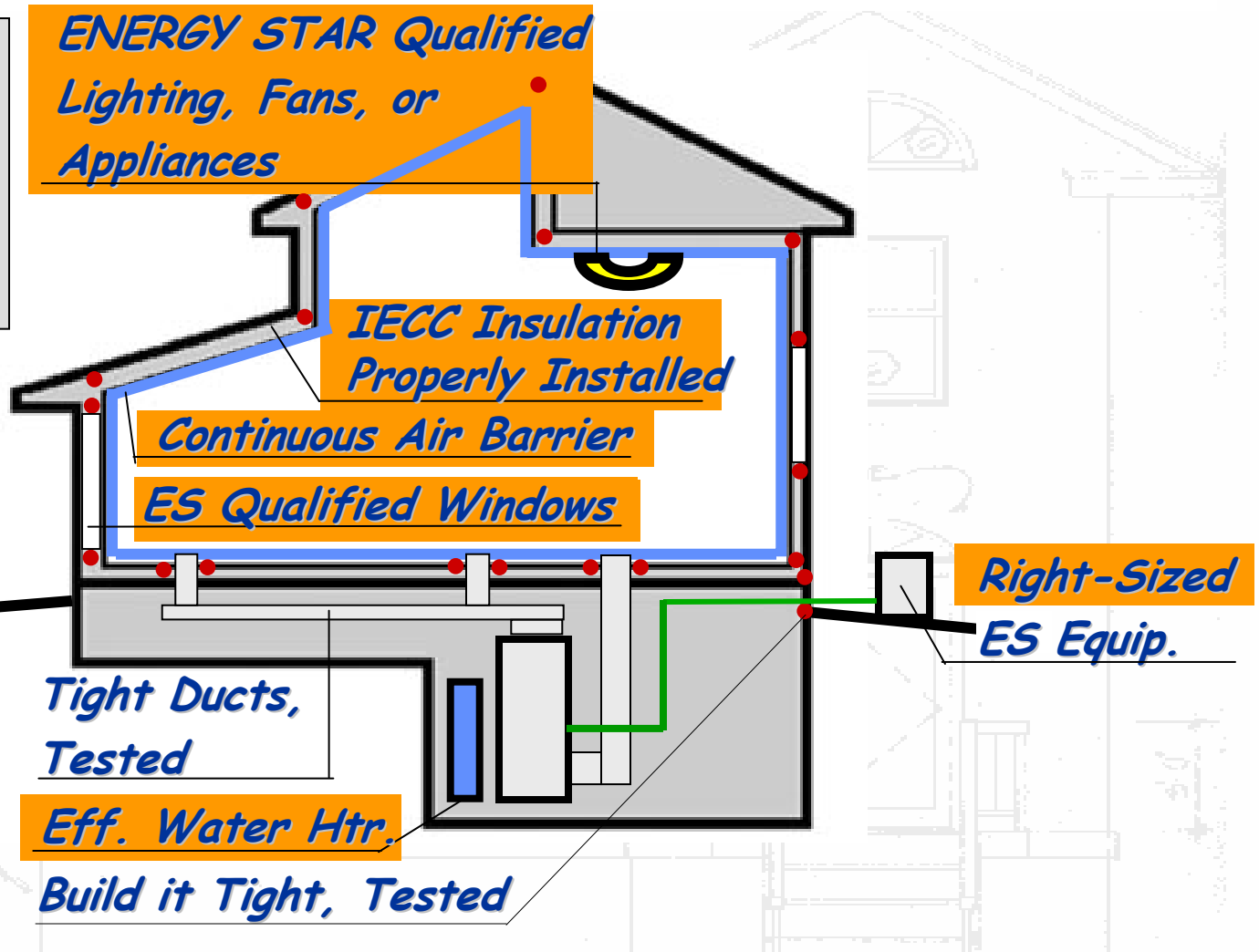
ES Qualified Windows

*Right-Sized
ES Equip.*

*Tight Ducts,
Tested*

Eff. Water Htr.

Build it Tight, Tested



WHY BUILD ENERGY EFFICIENT?
TECHNOLOGY MAKES A DIFFERENCE



Complete Air Barrier: Attic Knee Wall



WHY ENERGY EFFICIENT?

PERFORMANCE ADVANTAGE



Unless you're prepared to break the laws of physics, energy efficiency delivers:

- *Lower Utility Bills;*
- *More Comfort;*
- *More Durability;*
- *Improved Indoor Air Quality; and*
- *Environmental Protection*

WHY ENERGY EFFICIENT? HOW MUCH DOES IT COST?



Additional Debit

<i>High-Perf. Windows</i>	<i>\$500</i>
<i>Air Sealing</i>	<i>\$200</i>
<i>Tight Ducts</i>	<i>\$200</i>
<i>Effective Insulation</i>	<i>\$400</i>
<i>Air Barrier Details</i>	<i>\$500</i>
<i>Lighting/Appliances</i>	<i>\$200</i>
<i>High-Eff. Equip.</i>	<i><u>\$500</u></i>

Additional Credit

<i>Right-Sized AC</i>	<i>(\$500 - \$800)</i>
<i>Reduced # AC</i>	<i>(\$500 - \$1,000)</i>
<i>Compact Ducts</i>	<i>(\$200 - \$400)</i>
<i>Reduced Framing</i>	<i>(\$200 - \$400)</i>
<i>Eliminate Furnace</i>	<i><u>(\$ 0 - \$500)</u></i>

~\$2,500 vs. (\$1,500-\$2,000)

WHY ENERGY EFFICIENT? COST ADVANTAGE



	<i>Monthly</i>	<i>Annual</i>
<i>Utility Savings</i>	\$35	\$420
<i>Added Mortgage</i>	\$15	\$180
<i>Cost Savings</i>	\$20	\$240

= \$1,000's for typical ownership period

WHY 1'000 BUILDERS ENERGY EFFICIENT?
ANSWER:



- *Renders competition obsolete*
- *Increases revenues*
- *Increases consumer satisfaction*
- *Reduces risk*

*...in other words,
more profit!*

- **72% drop** in quality-related callbacks at after joining ENERGY STAR
Gunstra Homes in Indiana
- **70%+ drop** in service center costs
David Weekly Chicago
- **50-80% drop** (\$80 million) in service center costs since joining Building America/ENERGY STAR
Pulte West

A faint, light-colored architectural drawing of a house is visible in the background. It shows a front elevation with a gabled roof, a central door with a transom window, and a large window with a decorative arch above it. The drawing includes various lines, dimensions, and annotations, such as "VINYL SIDING" and "ENERGY STAR".

Why Label Homes ENERGY STAR?

WHY LABEL HOMES ENERGY STAR?
ENERGY STAR GROWING BRAND

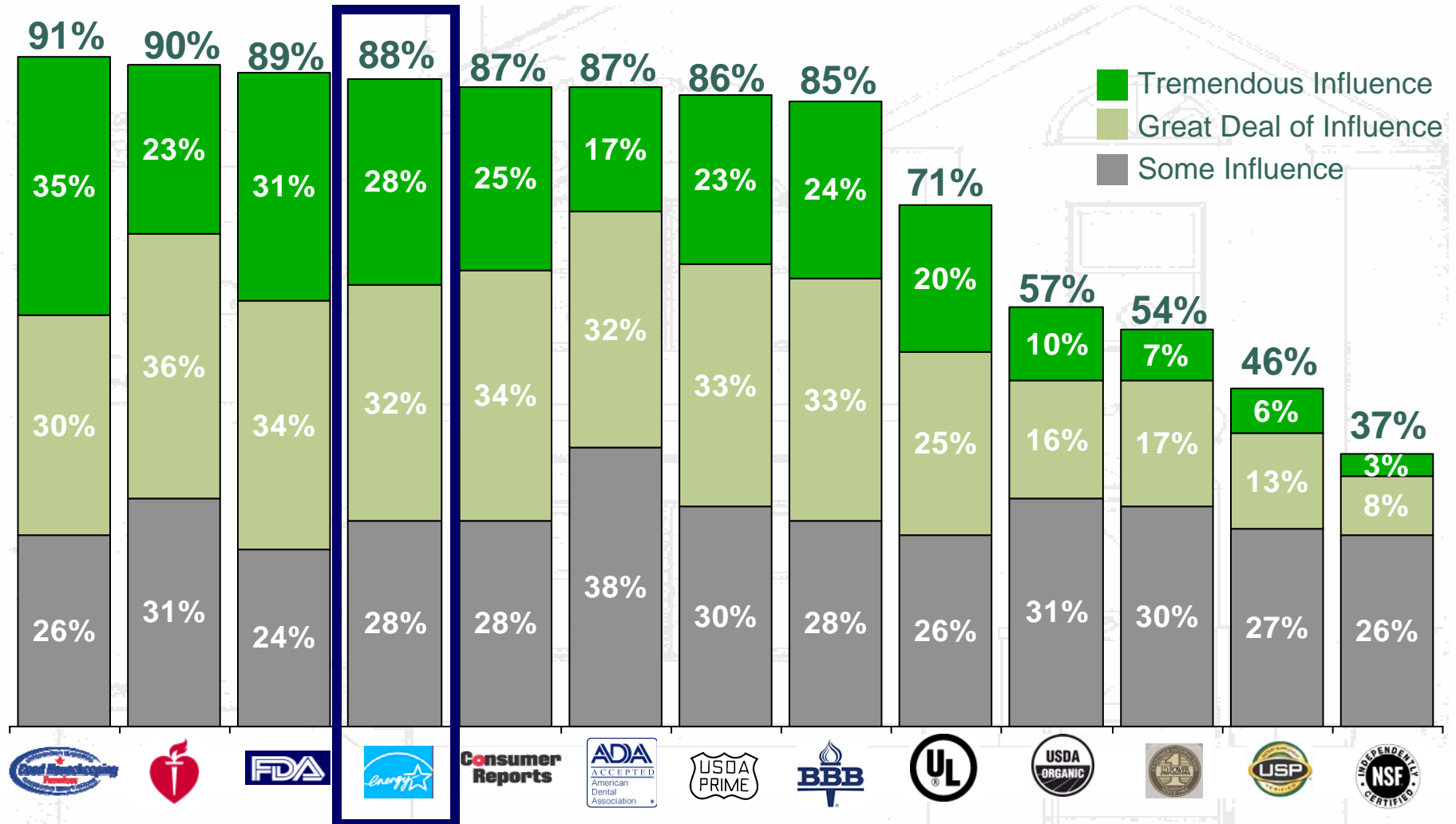


60%+ *awareness in 2004*

70%+ *households would recommend*

95% *likely to buy again in future*

WHY LABEL HOMES ENERGY STAR? ENERGY STAR 'BRAND' AWARENESS



Source: Fairfield Research, May 2003

WHY LABEL HOMES ENERGY STAR?
QUALITY ADVANTAGE
























"Our subcontractors send their best crews because they know their work will be inspected."

ENERGY STAR Partner Astoria Homes, Nevada

WHY LABEL HOMES ENERGY STAR? QUALITY ADVANTAGE



JD Powers and Associates 2005 Builder Quality Rankings

Major Market Total	112	Raleigh/Durham	113
 Austin	122	 Seattle/Tacoma	113
 Orange County (CA)**	122	 Denver/Colorado Springs	111
 Sacramento	120	 San Diego	111
 Houston	118	 San Francisco Bay Area	111
 Tucson	118	 Portland*	109
 Dallas/Ft. Worth	117	Atlanta	108
 Los Angeles/Ventura Counties**	116	 Detroit	108
 Minneapolis	116	Ft. Myers/Naples	108
Charlotte	115	Palm Beach	107
Chicago	115	 Baltimore*	106
Tampa	115	Albuquerque*	104
 Phoenix	114	 Orlando	104
 Inland Empire (CA)**	113	 Washington, D.C.	104
 Las Vegas	113	 Philadelphia	101
		Jacksonville	98

WHY LABEL HOMES ENERGY STAR?
MARKETING ADVANTAGE



"80% of single-family home builders think ENERGY STAR has had a positive impact on the marketability of their homes."

RLW 2002 Study of California ENERGY STAR for Homes Program for California Investor Owned Utilities

WHY LABEL HOMES ENERGY STAR? A WORD OF CAUTION...



Good News:

- ***Better Product***
- ***Lower Cost***

Bad News:

- ***People can't see it***
- ***People won't know to ask for it***

...Commitment to Sell is Critical!

WHY 1,000'S BUILDERS LABEL WITH ENERGY STAR SUMMARY



- *Energy efficient homes is better business.*
- *Get credit for building truly energy efficient homes with ENERGY STAR.*
- *But, you must commit to selling benefits.*

ONE MORE THING
ENERGY STAR INDOOR AIR PKG. SPEC



HOW TO REACH ENERGY STAR



On the Web at:

<http://www.energystar.gov/homes>

