

*ACEEE Market Transformation Conference
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ENERGY STAR Labeled Homes: Market Transformation Based on Increased Profitability

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Market Transformation: Some Basics

Three Types of Market Transformation Programs



- *Codes and Standards*
- *Financial Incentives*
- *Market-Based Initiatives*

Three Types of Market Transformation Programs



Codes and Standards:

- **Examples:**
State Energy Codes, NAECA Standards
- **Process:**
Confrontational mandate to industry
- **Participant Desired Outcome:**
Market Entry

Three Types of Market Transformation Programs



Financial Incentives:

- **Examples:**
Rebate Programs, Tax Credits
- **Process:**
Cash reward for achieving target performance level
- **Participant Desired Outcome:**
Cash

Three Types of Market Transformation



Market-Based Initiatives:

- **Examples:**
Labels, Consumer Campaign, Internalizing External Costs
- **Process:**
Establish link between higher energy efficiency and increased profitability
- **Participant Desired Outcome:**
Market Advantage



*Market Transformation:
Market-Based Initiative Example
ENERGY STAR for Homes*

*ENERGY STAR Labeled Homes
What is it?*



- *Labeling Initiative*
- *Homes verified by third-party to be at least 30% better than national MEC earn the ENERGY STAR label*
- *Primary Customers are Builder, HERS Industry and Utilities*

*ENERGY STAR for Homes
Profitability Connection:*



*Energy efficiency is better for
business.*

*ENERGY STAR is a great platform
for selling energy efficiency.*

*ENERGY STAR Profitability Connection:
Comparative Business Models*



Builder Business Model:

Wait for consumers to
ask for new technology

Other Industries Business Model:

Continually ***exploit new
technology*** to improve
performance and cost advantage

ENERGY STAR Profitability Connection: Why Exploit New Technologies?



- *Renders old technology obsolete*
 - *Increases revenues*
 - *Increases consumer satisfaction*
 - *Reduces liability/complaints*
- ...in other words, more profit!*

ENERGY STAR Profitability Connection: Which New Technologies?



Criteria for Selecting New Technologies to Sell:

- *Does it **Add VALUE?***
(enhanced performance exceeds cost)
- *Am I Willing to **Sell It?***
(tell the story)

ENERGY STAR Profitability Connection: New Technology Example



Moving from Audio Cassette to CD:

- *Did it **Add VALUE?***
 - *Better Sound*
 - *Easier to Use (instant access to tracks)*
 - *Fraction of Cost to Produce*
- *Was Industry Willing to **Sell It?***
 - *YES!!! For twice the cost!*

ENERGY STAR Profitability Connection: Why Energy Efficient is Better



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

- *Lower Utility Bills*
 - *More Comfort*
 - *More Durability*
 - *Improved Indoor Air Quality*
- ...in other words, **better performance***

*ENERGY STAR Profitability Connection:
Why Energy Efficient Costs Less*



<i>Energy Eff. Home</i>	<i>Monthly</i>	<i>Annual</i>
<i>Utility Savings ¹</i>	\$35	\$420
<i>Additional Mortgage Costs ²</i>	\$15	\$180
Net Income	\$20	\$240

¹ Savings will **increase** as utility costs go up

² Mortgage costs for ~\$2,000 of improvements
remain fixed!

*ENERGY STAR Profitability Connection:
Summary*



*Energy efficient homes deliver
a **better product** for
lower cost.*

Next Question:

*Are you Willing to **sell it?***

ENERGY STAR Profitability Connection: ENERGY STAR Platform



Trusted government symbol
that makes it **easy** for consumers
to identify energy efficient products



ENERGY STAR Profitability Connection: ENERGY STAR Platform



- **Added *Credibility***
Government-backed certification
- **Easy Product *Differentiation***
Not every builder's energy efficient any more!
- **Access to *National Platform***
 - over 40 utility programs
 - military housing
 - low-income housing programs
 - ENERGY STAR Mortgages
 - potential tax credit

ENERGY STAR Profitability Connection: Typical Builder Story



- *Price*
- *Location*
- *Facade*
- *Cosmetics*
- *Floor Plan*

ENERGY STAR Profitability Connection: ENERGY STAR Builder Story



- *Price*
- *Location*
- *Facade*
- *Cosmetics*
- *Floor Plan*
- *Select Group*
- *Lower Bills*
- *More Comfort*
- *More Durability*
- *Improved IAQ*
- *Good for the Environment*

ENERGY STAR Profitability Connection: Selling with ENERGY STAR



No One But Cambridge Builds HOMES LIKE THIS!

Award Winning: One of the most awarded home builders in the country, Cambridge Homes has received numerous awards for quality, customer service, and innovation.

Technologically Advanced: Cambridge Homes is proud to be a leader in the use of advanced technology in its homes, including energy-efficient appliances, smart home systems, and more.

Energy Efficient: Cambridge Homes is proud to be a leader in the use of energy-efficient building practices, including high-quality insulation, energy-efficient windows, and more.

Visit one of our outstanding new-home communities today and expect to be impressed!

- | | |
|--|---|
| <p>THE GALLERY COLLECTION
1000 sq. ft. - 1500 sq. ft.</p> <ul style="list-style-type: none"> 1. Cambridge Homes 2. Cambridge Homes 3. Cambridge Homes 4. Cambridge Homes 5. Cambridge Homes 6. Cambridge Homes 7. Cambridge Homes 8. Cambridge Homes 9. Cambridge Homes 10. Cambridge Homes | <p>THE MILLAN COLLECTION
1000 sq. ft. - 1500 sq. ft.</p> <ul style="list-style-type: none"> 1. Cambridge Homes 2. Cambridge Homes 3. Cambridge Homes 4. Cambridge Homes 5. Cambridge Homes 6. Cambridge Homes 7. Cambridge Homes 8. Cambridge Homes 9. Cambridge Homes 10. Cambridge Homes |
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A Higher Standard™ of Energy Efficiency

Another David Powers™ Feature

Taking the program one step further, David Powers Homes tests every home for compliance with this program and is the only Houston builder testing every home.

David Powers Homes is one of the best Houston home builders to build every one of our homes to comply with and even exceed the national Energy Star program, the most built energy efficiency program in the nation. Energy Star is a voluntary national program developed by the U.S. Department of Energy to help consumers identify a benchmark for energy efficiency residential construction. The Energy Star program uses a home-as-a-system. The components of windows, insulation, orientation, heating and air conditioning, and air tightness, are all evaluated, inspected and certified to meet stringent requirements set by the program.

What does that mean for you?
Save 30% on Utility Bills
Energy Star Homes make it possible for owners to save money each month on utility bills and maintenance costs. As an Energy Star home owner, your utility bills may be reduced by as much as 30% each month, a significant savings when you consider the true cost of home ownership. "Smile" just because it costs you to own and operate a costly home.

Solid Construction
Energy Star Homes are more tightly constructed and contain high efficiency heating and air conditioning equipment, more insulation, tighter doors, energy efficient windows, and a home that's more tightly sealed against heat transfer from hot walls, drafts, noise, dust, and pollen.

Comfort and Quiet
Tighter construction and improved insulation help keep out excess heat, cold and noise while maintaining constant temperature from room to room. Individual air returns outside you to keep bedrooms doors closed for privacy.

Healthier Indoor Air
Energy Star homes have better sealed doors which helps keep out dust, pollen, mold, radon, and carbon monoxide, so you can breathe easier.

Good for the Environment
About 20% of an homeowner's home energy goes in losses. Energy Star homes use significantly less energy, so you can feel good knowing you are doing your part for the environment.



Living Proof of the David Powers Energy Star Higher Standard™



It's usually a year, two or three before new owners realize the benefits of building an energy-efficient home. In fact, they are very proud owners of a new David Powers home and have built their own homes because they made the right choice.

ENERGY STAR Profitability Connection: Summary



First:

Build Energy Efficient

Then:

Sell Energy Efficiency with ENERGY STAR



Market Transformation: ENERGY STAR for Homes Results

ENERGY STAR Labeled Homes 2001 Progress



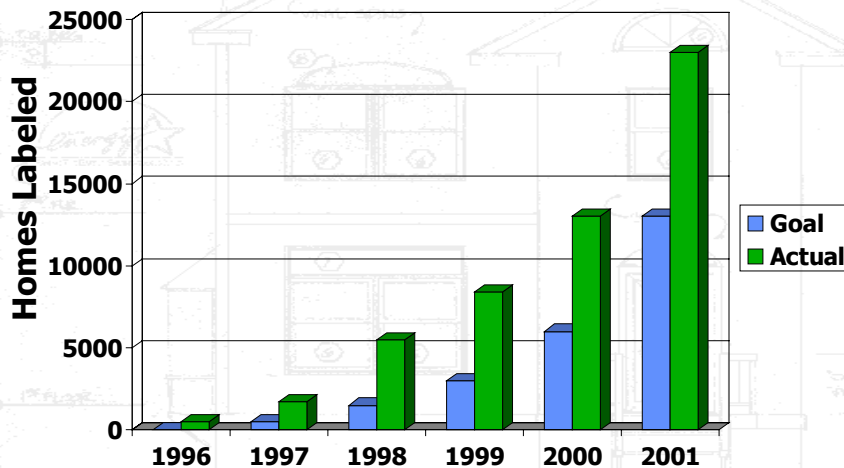
- *26,000+ Homes (45,000 cum.)*
- *10 - 25+% Penetration in Major Mkts.*
- *Large Corporate Builder Commitments*
- *~40 Utility Partners*
- *~20 Modular Housing Plants*
- *~50 Man. Housing Plants Being Certified*

ENERGY STAR for Homes Market Transformation Metrics

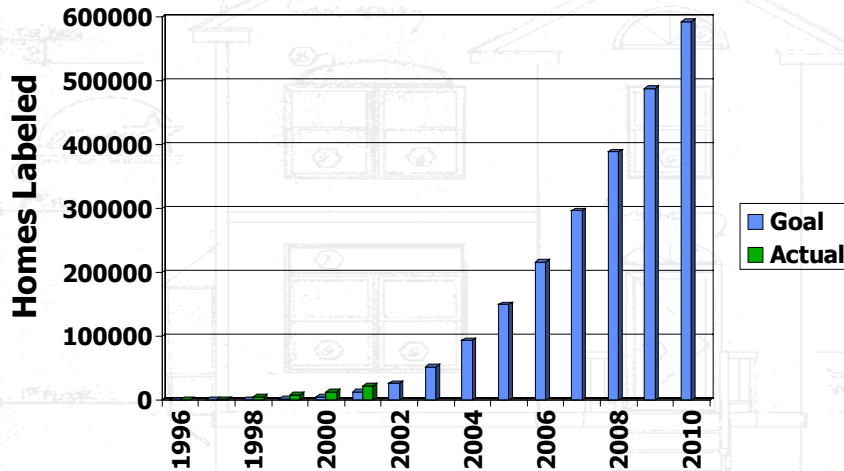


- *Over 30% of top 100 builders partnering with ENERGY STAR*
- *Large Corporate Builders Asking How They Can Do More!*
- *Average HERS Score 87.5 (not just trying to meet target)*
- *Insulation Industry Building Science Programs*

ENERGY STAR for Homes Actual Growth



ENERGY STAR for Homes Projected Growth



ENERGY STAR for Homes 10 We Got Right and Wrong:



Wrong

- **Spreading Too Thin**
- **Focus on Financing**
- **One Verification**
- **Unused Tools**
- **Sales Training**
- **Manufacturer Allies**
- **Limited Awards**
- **Certificates**
- **Over Promoting**
- **Abrupt Changes**

Right

- **Target Markets**
- **Focus on Large Builders**
- **Verification Options**
- **Message**
- **Sales Facilitating**
- **Local Champions**
- **Achievement Awards**
- **Sticker Labels**
- **Setting Expectations**
- **Making Mistakes**



*Market Transformation:
Market-Based Initiatives
Final Observation*

*ENERGY STAR for Homes
Observation*



Market-based Incentives work with:

- **cost-effective** technologies; and
- adequate supply/service **infrastructure**

*...train business partners to chase the **value** rather than the **cash!***

Cost of Lighting



Incandescent Lighting



(10 years)

Initial Investment: \$.50

10 Year Operation: \$60.00

Replacement: \$ 3.50

Total Cost:

\$64.00

CFL Lighting



(10 years)

Initial Investment: \$ 9.00

10 Year Operation: \$15.00

Replacement: \$.00

Total Cost:

\$24.00

Cost of Clean Clothes



Standard Clean Clothes

Initial Investment: \$ 500

15 Year Operation: \$1,200

15 Year Detergent: \$1,200

15 Year Water: \$ 700

Total Cost:

\$3,600

ENERGY STAR Clean Clothes

Initial Investment: \$1,000

15 Year Operation: \$ 500

15 Year Detergent: \$ 500

15 Year Water: \$ 300

Total Cost:

\$2,300