



# ENERGY STAR<sup>®</sup>: Overview and Strategic Brand Management

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U.S. EPA

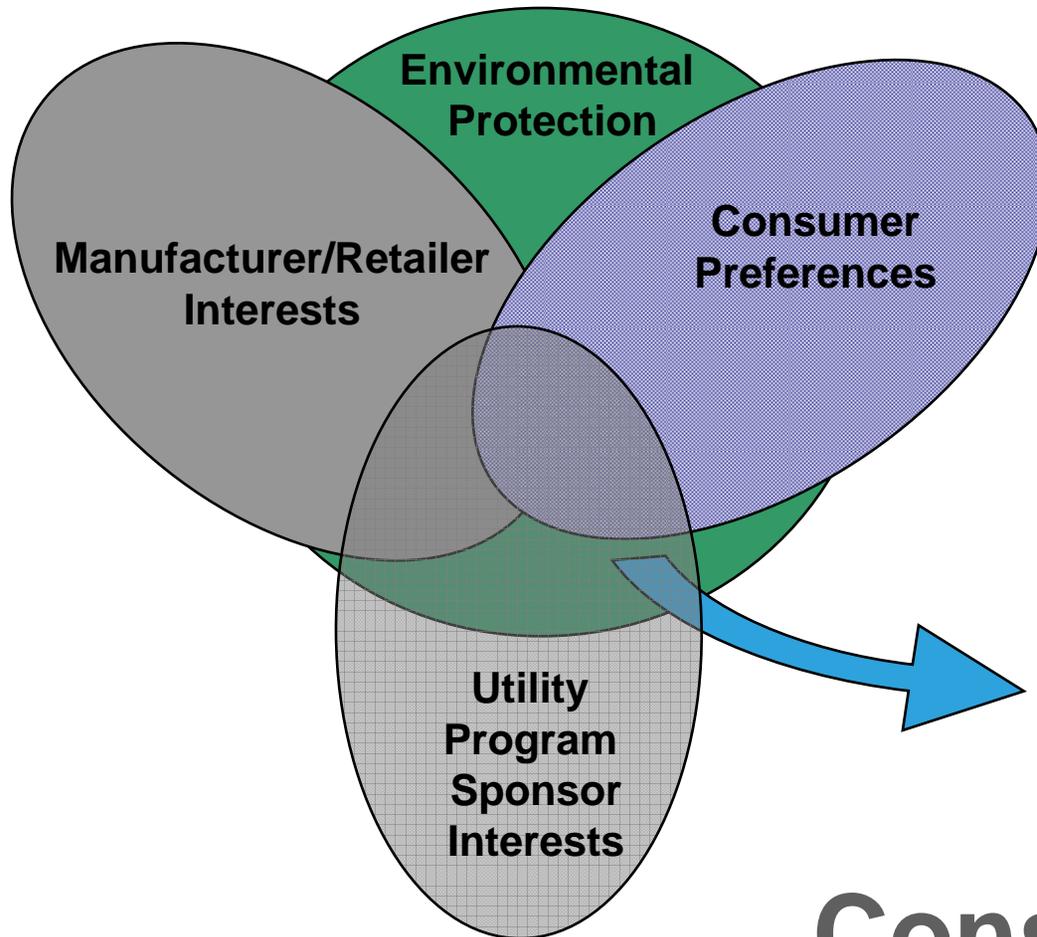
CEE WINTER PROGRAM MEETING  
JANUARY 15, 2008

# Today



- Success to date; what it means for tomorrow
- Program foundation
- Outreach: New PSA campaign, other efforts
- Products update : new specs, new initiatives
- Residential update: new and existing homes
- Commercial / Industrial update

# Environmental 'Brand' Success Builds Upon Intersection of Interests



**Cost-Effective**  
**No Sacrifice in**  
**Performance**

## Consumer is Key

# ENERGY STAR

## Brand Promise and Key Principles



- ***Protects the Environment***  
through superior energy efficiency
- ***No Tradeoffs***  
in performance or quality
- ***Cost Effective***  
(2<sup>nd</sup> price tag)
- ***Source of Authority***  
Govt. backed symbol providing valuable, unbiased information
- ***Binary***  
(Y/N)
- ***Power of the individual***  
to make a difference

# ENERGY STAR

## Across the Marketplace



### Residential:



#### Labeled Products

- 50+ products
- 2,000+ manufacturers

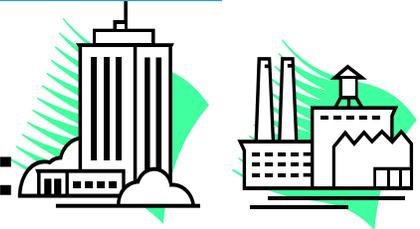
#### Labeled New Homes

- ~20-30% more efficient

#### Home Improvement

- beyond products
- ducts / home sealing
- whole home retrofits

### Comm & Ind :



#### Corporate Energy Management

- benchmarking, goals, upgrades (management, systems vs. widgets)
- whole building label for excellence
- sector focuses
- technical assistance

#### Labeled Products

- plug loads, not system components

#### Small Business

International partnerships – Canada, EU, Japan, etc

# ENERGY STAR

## Accomplishments



In 2006, Americans with the help of ENERGY STAR:

- **37 MTCe**

GHG emissions prevented = ~25 million vehicles

- **\$14 billion**

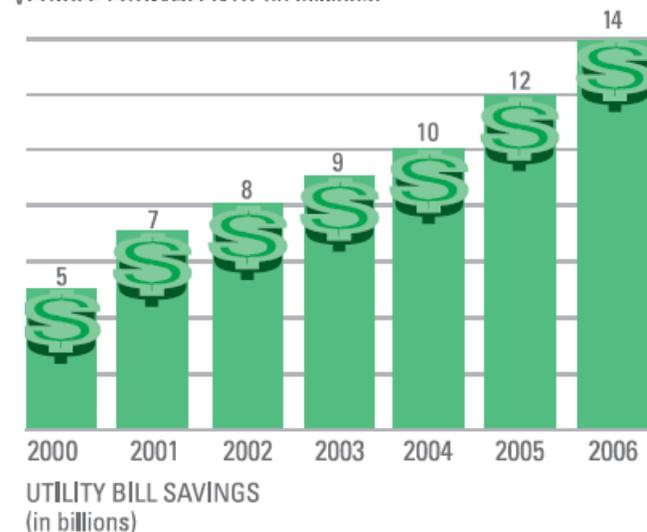
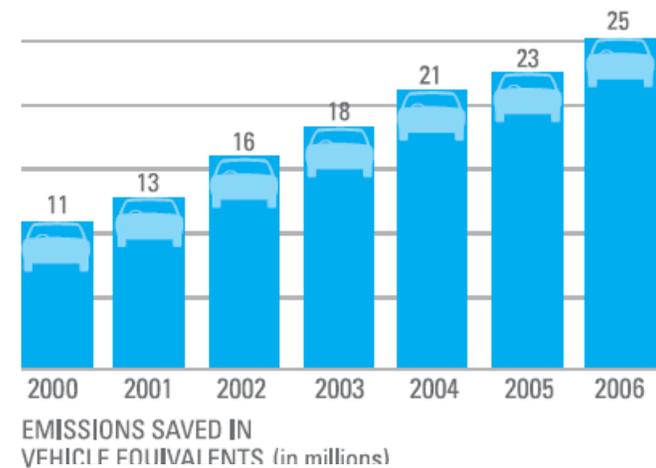
saved on energy bills

- **170 billion kWh**

lower energy use – almost 5% of US electricity sales

- **1/3 total US GHG**

emissions reduction from EPA's CCP's



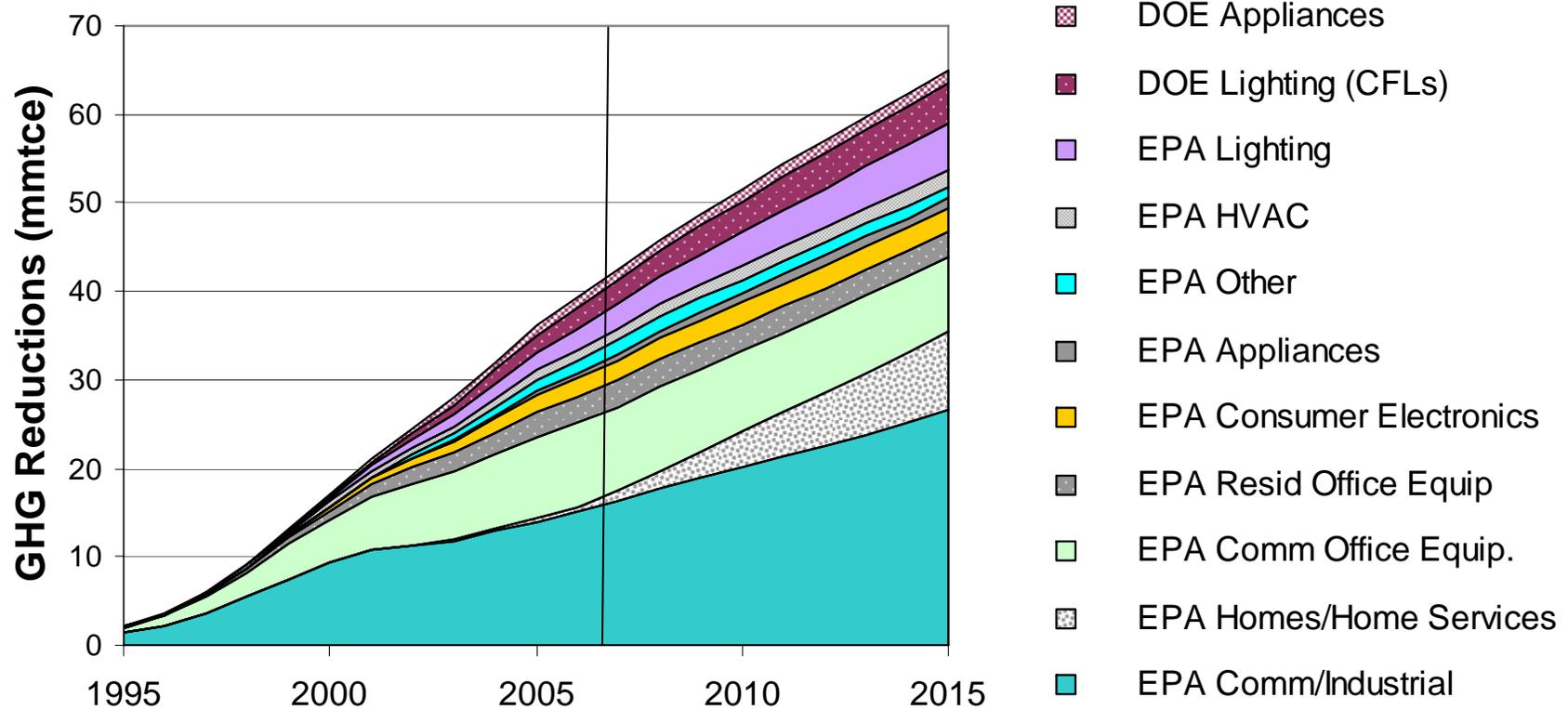
# ENERGY STAR Program Success



- **70%+** Public awareness
- **12,000** organizations engaged in manufacturing, delivery, and adoption
- **2.5 billion+** qualified products sold to date
- **~850,000** new homes
- **~12%** of new homes starts
- **60,000+** buildings benchmarked

Environmental  
Results  
Positioned to  
**Double**  
over next  
10 Years

# Large Environmental Benefit



Source: LBNL Analysis, EPA Goals

# ENERGY STAR is a Brand

## What Does that Mean?



- **Complex relationship**

emotional connections and functional benefits

- **Exists in the mind of consumer**

- **Everything you do defines your brand:**

- products

- people

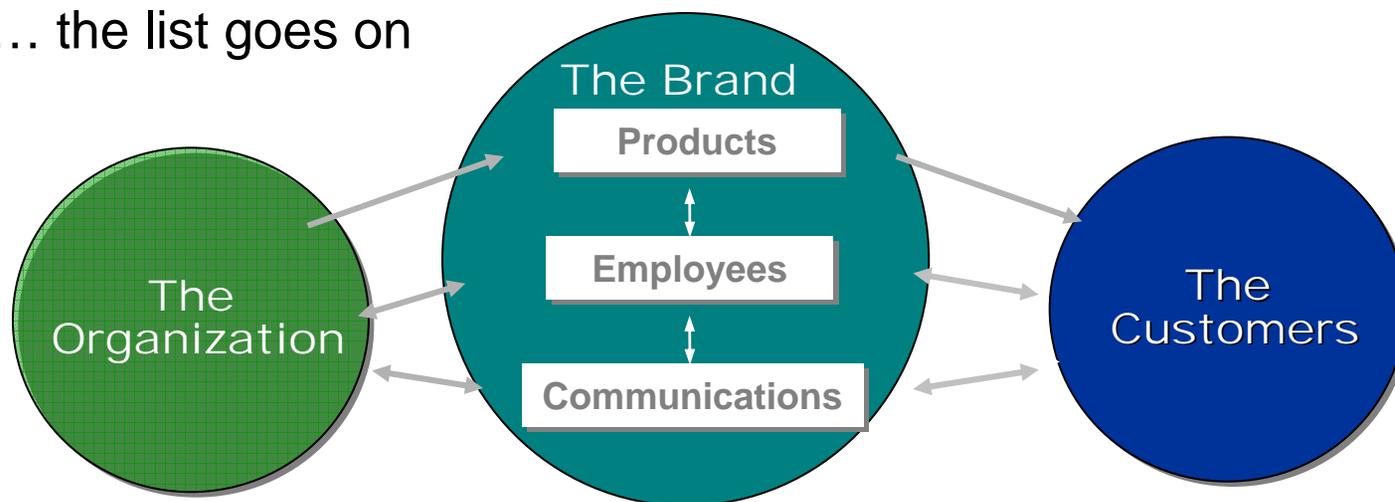
- communications

- services and support

- website

- R&D

... the list goes on



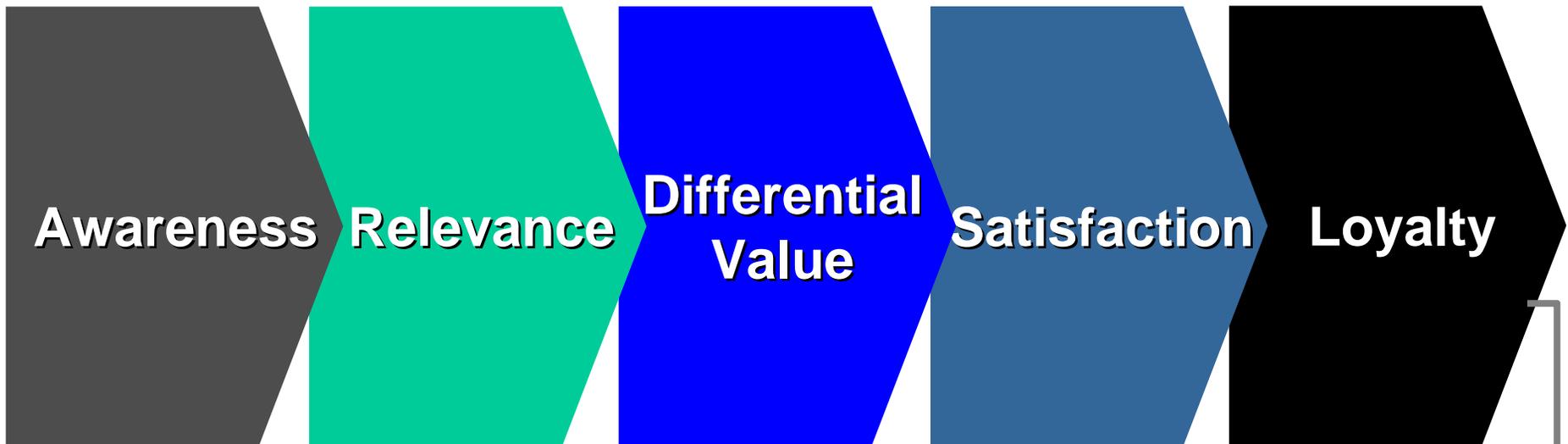
# Loyalty is the Goal

Dependent on Performance and Management



**Communications**

**Performance**



**Brand Management**

# Key Elements of ENERGY STAR Brand Management



- **Dialed up emotion with rational equity**  
speak to head AND heart
- **Brand guidelines**  
for government and partners
- **Consistent personality**
- **Consistent communications**
- **Co-branding platform**
- **Comprehensive monitoring**

# Monitoring and Protecting Integrity of ENERGY STAR



- **EPA monitors use/protects integrity of brand**

- Information on products and appropriate logo use required
- Routine checking of manufacturer submitted information
- Selective product testing
- Pulling from retail shelves – twice annually
- Customer calls
- Manufacturer information on competitors
- Designed supplemental testing program for problem areas -- lighting products
- Track all advertisements (monthly)
- All printed press coverage (daily & monthly)
- Integrity Report – annually or biannually
- Insure correct use of mark: all violations dealt with; coord. with EPA's OG

- **Self-certification works**

- competitive market place
- active consumer groups (Consumer Reports)

# Recent Report on ENERGY STAR Brand



- **Strong Brand**
- **History, Evolution, Current Status**
- **Benchmarks**  
other brands, lessons learned
- **Int'l Brand Expert**  
Interbrand

Building a Powerful and  
Enduring Brand:  
The Past, Present, and Future  
of the ENERGY STAR® Brand

Prepared by Interbrand for the U.S. Environmental Protection Agency  
June 2007



# ENERGY STAR is Strong Brand



## Applied lessons learned from 1,000's Brands:

- **Brand tenants are serving ENERGY STAR well and cannot be compromised**
  - Proven technology
  - Carbon reductions
  - Benefits reasonably immediate and measurable
  - Protect the brand
- **Moving forward**
  - Continue to carefully manage the brand
  - Be consistent; protect brand definition
  - Results must be tangible
  - Remain customer driven
  - Innovate to maintain momentum

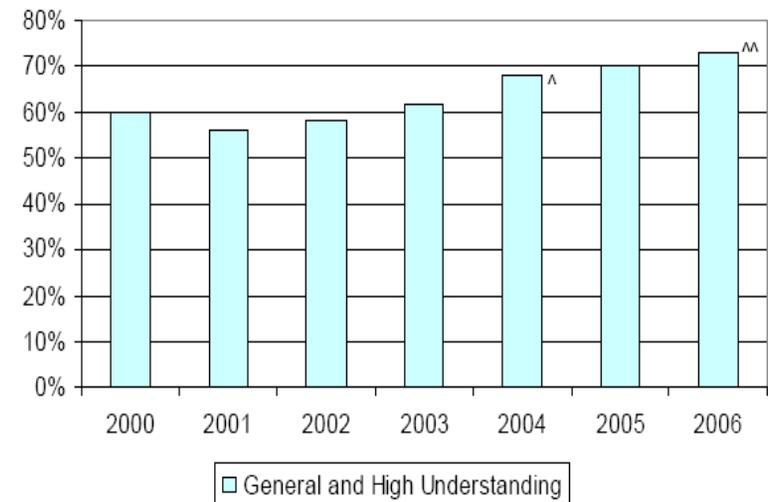
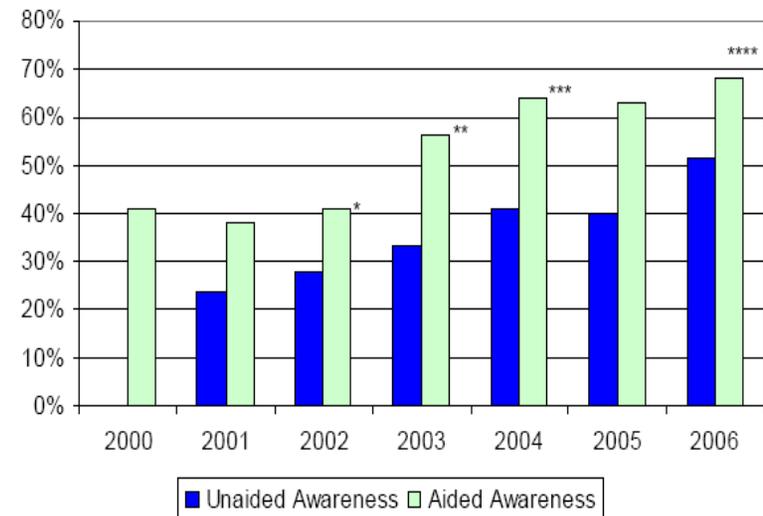


# Outreach

# Outreach is Critical to Results



- People must ACT to achieve environmental benefit
- EPA devotes substantial resources to outreach
- Recent results
  - Awareness greater than 70%
  - Strong understanding
  - Media reach of 1 billion plus per year
  - 10 million web visits per year



# Outreach Emphasizes Environment

## Why talk about the environment?



- **Americans are concerned**

- 87% strongly agree or agree with the statement “I am very concerned about the environment.”
- 93% strongly agree that “Saving energy helps the environment”
- 74% of consumers believe that a product that is better for the environment is a somewhat to a very important consideration when purchasing an appliance or an energy using product

- **Create a long term connection for action**

help to motivate change

- **Emotional**

# The Time is Right

## Energy Efficiency and Global Warming



- **82% of Americans believe in global warming,** and there is widespread belief that human behavior is contributing to the problem.

Fox News/Opinion Dynamics Poll, Spring 2007

- **Majority believe immediate action needed**

NY Times/CBS Poll, April 2007

- **86% would choose one home over another** based on its energy efficiency.

Shelton Group/Energy Pulse, 2006

- **63% say change their consumption habits** based on increase in energy prices.

Shelton Group/Energy Pulse, 2006

# EPA Coordinates Outreach



- **Broad**
  - PSA – profiles of real people
  - ENERGY STAR Advice: [energystar.gov/home](http://energystar.gov/home)
  - ENERGY STAR Home Advisor: [energystar.gov/homeadvisor](http://energystar.gov/homeadvisor)
- **Products**
  - **Lighting -- ENERGY STAR Change a Light**
  - **HVAC**
  - **Office equipment**
  - **Consumer electronics**
  - **Commercial Food Service**
- **New Homes**
- **Existing Homes**
  - **Web-based tools**
- **Commercial Buildings**
  - **Sector-based challenges**
- **Industrial**

## Multiple Goals

**Build Awareness**

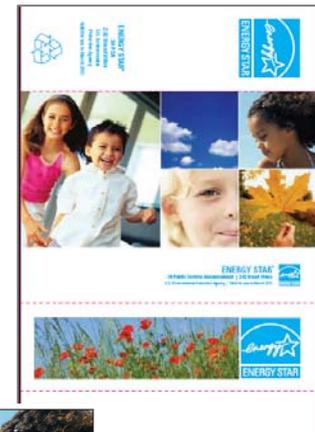
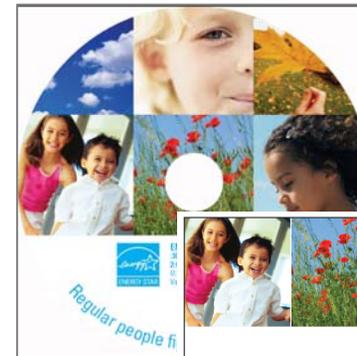
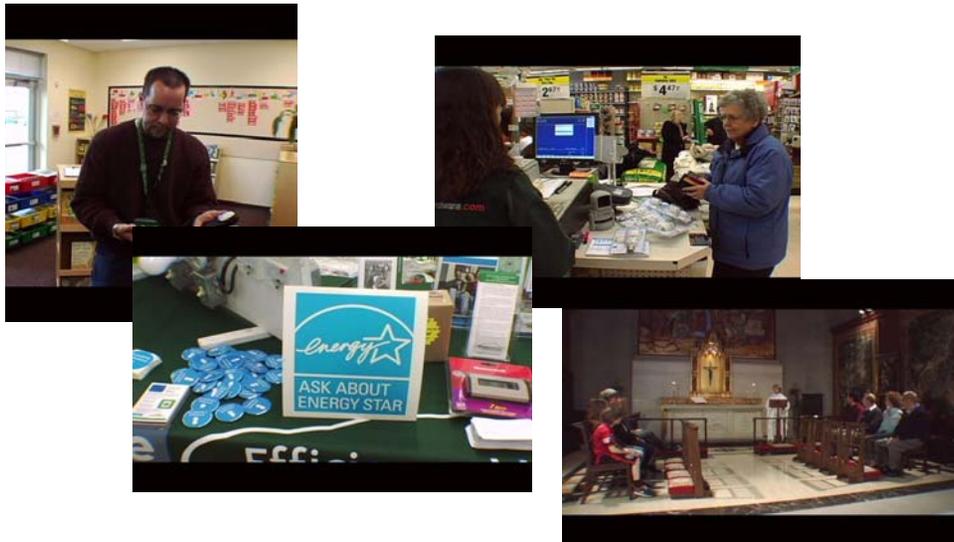
**Provide value to  
program partners**

**Promote action**

# ENERGY STAR PSA Campaign: Current Components



- :30 TV PSA
- 4 print PSAs
  - 2 C&I, 1 Residential, 1 Special
- 2 minute video



# ENERGY STAR PSA Campaign: Print campaign



- Designed to work across ENERGY STAR program
- People that act – in profile
- Join the fight against global warming
- Residential
- Commercial
- Available to Co-op

A print campaign image featuring a woman, Martha Ware, standing in a doorway. She is wearing a red button-down shirt and blue jeans, smiling. The background shows a hallway with a dog lying on the floor. Text is overlaid on the top left of the image, and a blue banner is at the bottom.

NAME: Martha Ware

FIGHTING GLOBAL WARMING BY: Installing ENERGY STAR<sup>®</sup> qualified lighting, programmable thermostat, insulation, and furnace

SAVINGS: \$xx | xxx kwh | xxx lbs. CO<sub>2</sub>

NEXT PROJECT: Learning how to ski

**JOIN MARTHA IN THE FIGHT AGAINST GLOBAL WARMING.**  
ENERGY STAR<sup>®</sup> qualified products and energy efficient behaviors can help you save energy and money at home while reducing greenhouse gas emissions. Learn more at [www.energystar.gov](http://www.energystar.gov).

The Energy Star logo, featuring a white star with a swoosh above it, set against a blue background. Below the logo, the words "ENERGY STAR" are written in white capital letters on a blue rectangular background.



NAME: Pepsi Co. Green Team

FIGHTING GLOBAL WARMING BY: Improving energy  
efficiency company-wide with ENERGY STAR's help

SAVINGS: \$0x | 00x kwh | 00x lbs. CO<sub>2</sub>

NEXT PROJECT: Winning the Cola Wars

## JOIN PEPSICO IN THE FIGHT AGAINST GLOBAL WARMING.

PepsiCo is one of thousands of organizations saving energy with help from EPA's ENERGY STAR<sup>®</sup> Program. That means lower energy bills for PepsiCo and a cleaner environment for all of us. Learn how your organization can be a part of the solution at [www.energystar.gov](http://www.energystar.gov).



NAME: The Mayor

FIGHTING GLOBAL WARMING: With my friend Horton lending a hand

We helped all the Whos across the land!

We insulated homes and changed lights.

They're now fluorescents—so very bright.

ENERGY STAR® showed us the way

To make a difference every day.

SAVINGS PER HOME: \$400 | 11,000 kWh | 5,800 lbs. CO<sub>2</sub>

NEXT PROJECT: Teaching all of Who-ville to do what's right

Turn out the lights when you're sleeping at night!



**JOIN HORTON and THE MAYOR IN THE FIGHT AGAINST GLOBAL WARMING.**

Horton and The Mayor understand how important it is for each of us to do our part. We can all fight global warming by making easy changes in our homes, at school, and at work. Learn more at [energystar.gov](http://energystar.gov).

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**ENERGY STAR**

# 2007 Campaign ENERGY STAR Change a Light



## ENERGY STAR Change a Light Day, Oct. 3, 2007

- Turnkey materials
- 20 day bus tour; 10 stops

### Recent success:

- 1.2 million+ pledges to date
- 1,000+ participating organizations
- State leadership activity in nearly every state
- 30 proclamations of ENERGY STAR Change a Light Day



Help us change the world,  
one ENERGY STAR® light at a time.

Take the ENERGY STAR Change a Light Pledge and join Americans nationwide in the fight against global warming. Go to [energystar.gov](http://energystar.gov) to learn more.



KEEP YOUR COOL ON ENERGY COSTS THIS SEASON.  
**JUST LOOK FOR THE STAR.**



### YOUR GUIDE TO HOME ENERGY SAVINGS

- SEAL AIR LEAKS AND INSULATE: CUT UTILITY COSTS BY 10%
- INSTALL A PROGRAMMABLE THERMOSTAT: SAVE \$100 A YEAR
- REPLACE SINGLE-PANE WINDOWS: SAVE \$110-\$400 A YEAR
- CHANGE 5 LIGHTS TO ENERGY STAR: SAVE UP TO \$60 A YEAR

# Example: Web-based Tool

## ENERGY STAR @ home



- **Focal point for extending ENERGY STAR's market position**  
as a trusted source on energy savings information
- **Broad range of "tips"**  
in addition to highlighting labeled products, (e.g. wash full loads)
- **Systematic selection and documentation process**  
behind advice
- [energystar.gov/home](http://energystar.gov/home)





# Update on ENERGY STAR Products

# ENERGY STAR Uses Consistent Criteria for Product Specifications



- Significant energy (GHG) savings
- Consumption/performance can be measured and verified
- Maintain/enhanced performance
- Cost-effective, short paybacks
- No bias to one technology.
- Effective differentiation for consumers
- Strive for top 25% of product models (not sales) but key criteria can trump that goal

# Use Well-Documented, Transparent Process



## Specification Development Cycle



# ENERGY STAR in the US:

Grown to 50+ Product Categories



## Heating & Cooling

Central AC  
Heat pumps  
Boilers  
Furnaces  
Ceiling fans  
Room AC  
Ventilating fans

## Office Equipment

Computers  
Monitors  
Printers  
Copiers  
Scanners  
Fax machines  
Multi-function devices

## Home Electronics

Battery chargers  
Cordless phones  
Answering machines  
TV/VCRs  
DVD products  
Home audio  
External power adapters  
DTAs

## Appliances

Clothes washers  
Dishwashers  
Refrigerators  
Dehumidifiers  
Air cleaners  
Water coolers

## Commercial Food Service

Refrigerators  
Freezers  
Fryers  
Steamers  
Vending machines

## Lighting

CFLs  
Residential light fixtures  
Exit signs

## Home Envelope

Home sealing  
Roof products  
Windows/Doors

# Overview of New and Revised Specifications



Product Cat.	2007 New/Revisions	2008 Revisions	New in 2008
Office Equipment	Imaging equipment -- 4 / 07 Computers – Jul 07	Imaging equipment (tier II) Computers (tier II) Monitors	Servers Data storage Large scale routers
Consumer Electronics	Digital TV Adapters –1 / 07	Televisions Set-top boxes External power adapters/ battery chargers	
Lighting	Decorative Light Strings 9/ 07 RLF – Sep 07		
Commercial Food Service	Dishwashers -- 10/ 07	Fryers (new sizes) Refrigerators Freezers	Icemakers -- Jan 08 Ovens and Griddles
HVAC		Ventilation fans Furnaces Programmable thermostats	
Other	Roof Products – 12/07 Traffic signals/Transformers - - 5 / 07 (suspended) Vending machines -- 7/ 07		

# Other Possibilities

## The Candidate List



### Revisions

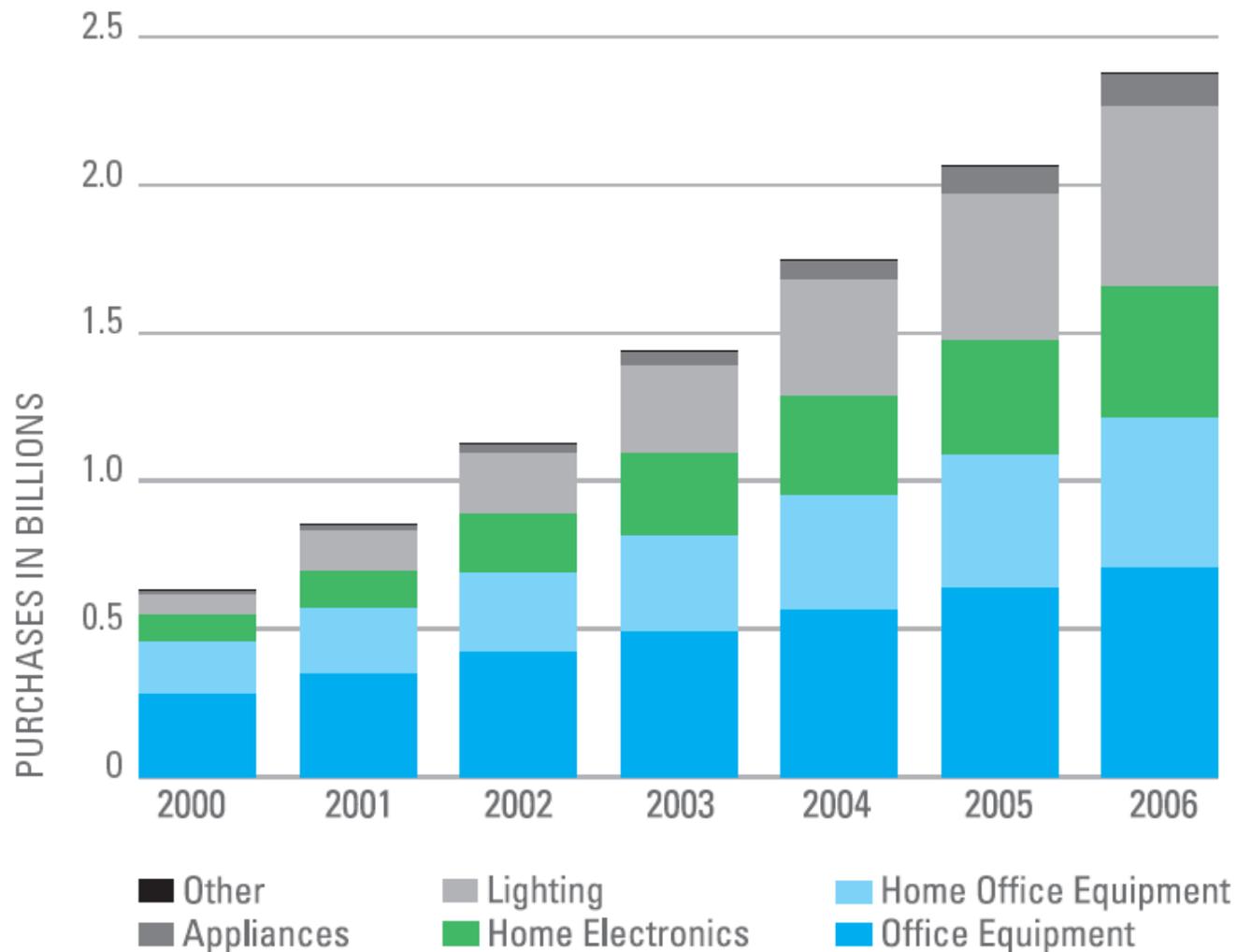
- Boilers
- Ceiling fan light kits
- Water coolers
- Audio/DVD

**Will monitor market penetration, update or develop new scoping papers to assess feasibility, potential energy savings, etc**

### New Specs

- Non-Ducted AC (aka mini-splits)
- Heat Recovery ventilators
- Microwaves
- Hand dryers
- Comm Clothes Washers
- Soft Serve Machines
- Autoclaves/Sterilizers

# Result: Product Sales Growing



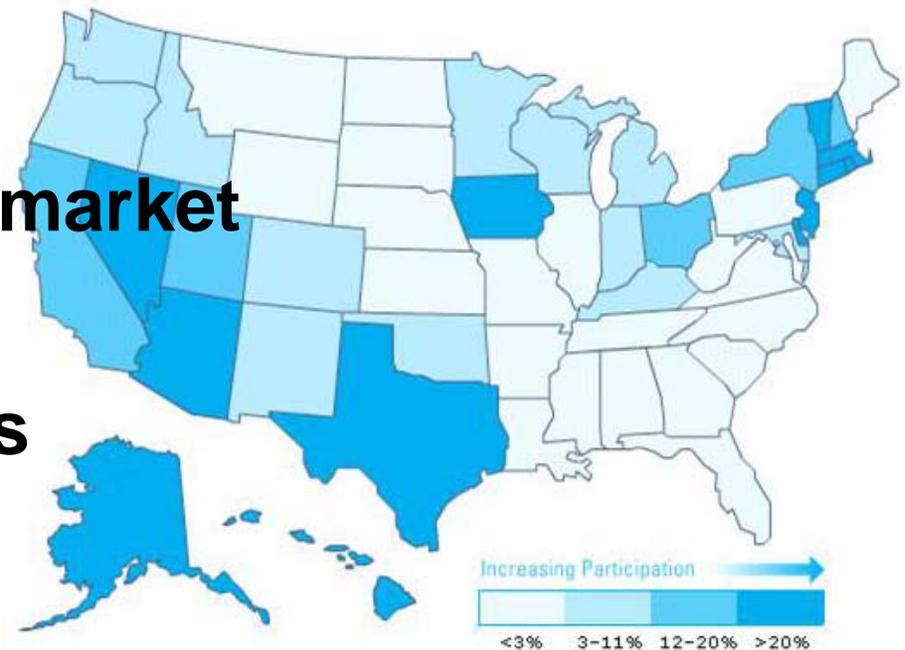


# Update on ENERGY STAR New Homes and Home Improvement

# ENERGY STAR New Homes



- **About 850,000 homes**  
~12 % market share
- **25 cities/states > 20% market pen.**
- **5,000+ builder partners**
- **New spec in 2007**
- **More High growth markets:**  
Salt Lake City, North Carolina, Denver, Atlanta, and Pacific Northwest



# ENERGY STAR New Homes

## 2007/08 Activities



- **Expand Multi-Family High Rise Pilot**  
20% > ASHRAE 90.1
- **Annual sponsor meeting**  
Develop national strategy for M&E
- **Promote carbon neutral home**  
Link with Climate Technology Initiative
- **Expand efforts in affordable housing**  
BOPs and Outreach to State Housing Agencies
- **Launch “Designed to be ENERGY STAR”**

# Existing Homes

## Home Performance with ENERGY STAR



- Expands ENERGY STAR to a service
  - Beyond products to home envelope and HVAC systems
  - Trained contractors and QA/QC
- Home Performance with ENERGY STAR
  - 36,000+ Retrofits to Date
  - Average savings of 20 % per household
- More than 20 Regional Sponsors overseeing programs
- Continued Support for BPI (EPA, DOE, HUD)
  - More than 700 participating contractors and growing

# Existing Homes

## Other Efforts



- **ES HVAC Quality Installation**

- Completing pilots with SCE and Oncor to collect cost data and test verification procedures
- Proposed proper HVAC installation program Fall 07 with CEE/ACCA
- Launch in Spring 08
- Provide program best practices and contractor training
- HVAC maintenance campaign in 2008

- **Seal & Insulate w/ENERGY STAR**

- New graphic for insulation man./retailers
- Spanish language Do-It-Yourself Guide





# Update on ENERGY STAR in the Commercial and Industrial Sector

# Commercial Sector Approach

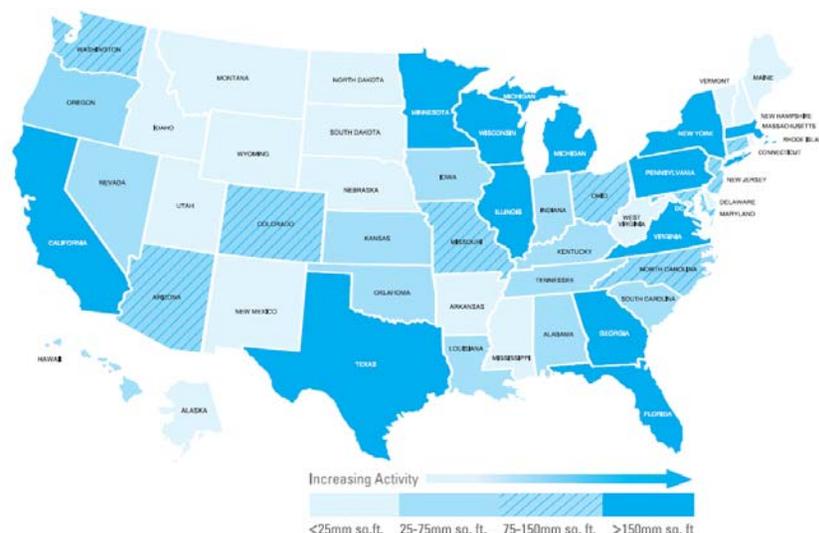


- **Leadership in the market place**
  - energy efficiency leadership
- **Whole Building Performance**
  - promote integration of systems
  - about energy savings -- not presence of new technology
  - achieve twice the savings for a given investment
- **Performance Measurement System**
  - can not manage what you can not measure
  - fix missing market information
    - how to measure efficiency / performance
    - when is a building efficient
  - provide information linked to real market transactions (like energy bills)

# Commercial Buildings Outreach: ENERGY STAR 10% Challenge



- Improve buildings by 10% or more
- Has grown to more than 500 participants
- Key first step – assess building efficiency **using standardized measurement system**
- Cannot manage what you can not measure
- Galvanizing many end users, states, associations



# Commercial Buildings: Program Growth



- **Building benchmarking being used as energy management/ investment tool**
  - About 8 billion sf of commercial space rated
  - 10,000+ schools
  - Rated buildings doubled in 2007 to 60,000
- **4,000+ buildings earn ENERGY STAR**

# Commercial Buildings: 2007 Update



- **Energy Performance Ratings**

- Expand ratings to new markets:

- Big Box Retail - Oct 2007
- Wastewater Treatment Plants - Oct 2007

- Update existing ratings with new data:

- office building rating released Oct. 1

- Capturing environmental benefits/profile of buildings:

- Portfolio Manager incorporates emissions from EGRID

- **California Benchmarking Initiative**

- PG&E automated utility bill transfer successful, expanded

- Model for national implementation



# Commercial Buildings Partner Initiatives



## BOMA



- BEEP first year launch trained 5,000 building owners/managers
- Challenges members to 30% reductions measured w/EPA rating.
- BOMA Locals launching ES initiatives (Portland, Seattle, Austin)

## CoStar

- Comm. real estate listing service
- Highlights buildings earning ES
- Next step: All CoStar listings to provide ES performance rating



## Local Governments

- U.S. Conf. of Mayors (USCM) and National Assoc. of Counties (NACo)
- Unanimous Support for ES Challenge

# Commercial Buildings Energy and Water Update

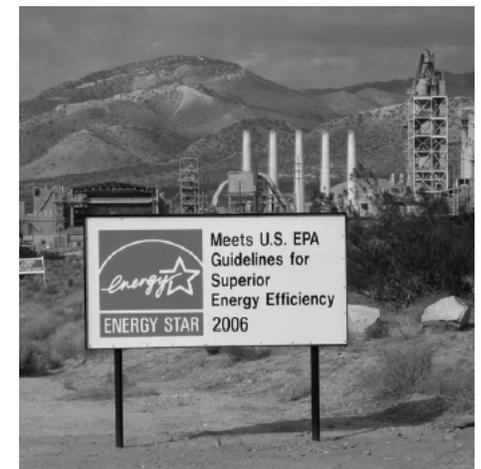


- **ENERGY STAR Water and Wastewater Focus**
  - Benchmarking tools and energy efficiency best practice guides completed by October 1, 2007
- **Water tracking in Portfolio Manager (PM)**
  - Added in June 2006
  - More than 1,500 PM users tracking water use
  - More than 10,000 water meters
- **New ES specs for products using energy and water**
  - Commercial dishwashers
  - Ice Makers

# Industrial Program



- Grown to include focus on 11 industrial sectors
  - Peer exchange
  - Sector-specific barriers and opportunities
- ENERGY STAR label available in four sectors
  - auto assembly,
  - cement, and
  - wet corn milling plants
  - petroleum refining
- Will add two new industries each year
  - fiberglass and cereal production in 2007
- Will continue to develop/promote key enabling tools
  - Assessment matrix
  - Teaming Guide
  - Energy Strategy report: “Energy Strategy for the Road Ahead” to prepare business executives for energy future:



# C&I Focus for 2008



- **Broaden the ENERGY STAR Challenge**
  - Reach new associations
  - Target 10-15 priority cities to serve as model cities to implement Challenge
- **Revise/Expand EPA's energy performance ratings**
  - Update existing ratings (schools, supermarkets, hotels)
  - Address data centers
- **Build the market for energy efficiency services**
  - Continue to engage energy service providers, utilities, state energy programs
  - Challenge architects to design buildings that will earn the ENERGY STAR.
- **Cont. easy link carbon emissions/reductions w/ES**
- **Make it easy to assess energy use on a cont. basis**
- **Leverage 70%+ brand awareness in C&I market**  
ENERGY STAR becomes the brand to look for at home and work

# ENERGY STAR

## Goals for the future



- Triple carbon savings by 2012 (from 2000).
  - From 16 MMTCE to over 50
- Build consumer ‘brand’ awareness and loyalty
- Motivate consumers and build demand
- Maintain meaning/integrity on full suite of products
  - Quality, cost-effective, relevance
- Enhance partnership with utilities and EEPS
- Reduce costs of assisting partners to expand
  - Need to manage more products; builders/new homes; commercial/industrial partners
- Build home improvement – beyond products
  - Duct sealing, home sealing, whole home performance are big opportunities
- Transform C&I approaches
  - Whole building approach, many building types, industrial

# Using the ENERGY STAR Platform



- ENERGY STAR label for products/homes
  - Broadly relevant, well-proven technologies
  - Meet brand principles
- ENERGY STAR Save More
  - Broadly available and well-proven
  - But high first costs
- Energy and Water Linkages
  - Joint energy and water utilities meeting - March 2008
  - Pursuing jointly promoting energy and water efficiency in
    - Residential appliances
    - New homes
    - Home retrofit/ audit programs
    - Commercial Kitchens
- Advanced Technologies
  - Exploring how to leverage ENERGY STAR infrastructure to help address market barriers
  - Inappropriate to use ENERGY STAR 'Brand'

# Let's Work Together



- ENERGY STAR is powerful and successful platform
- Government credibility
- Many opportunities for greater energy and greenhouse gas savings

THANK YOU!