



ENERGY STAR®: Overview and Strategic Brand Management

Sam Rashkin
National Director, ENERGY STAR for Homes
U.S. EPA

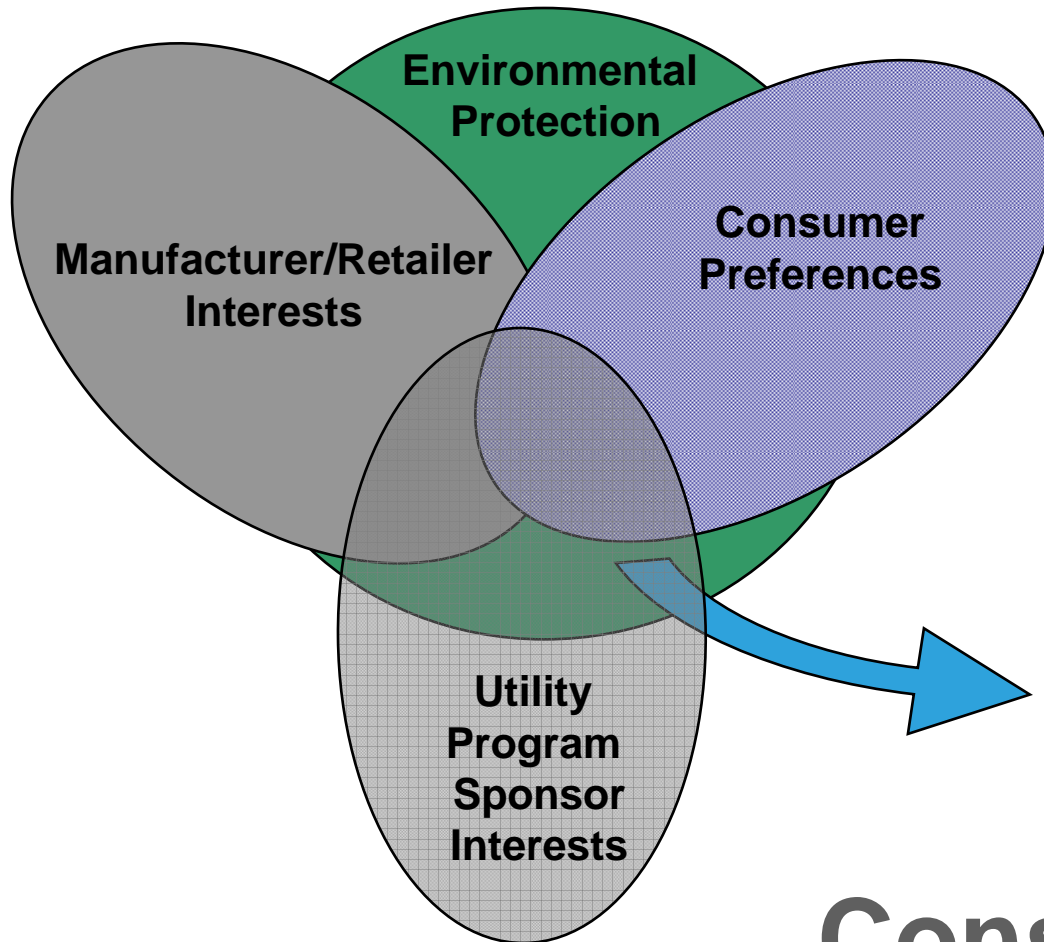
CEE WINTER PROGRAM MEETING
JANUARY 15, 2008

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***
(2nd 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

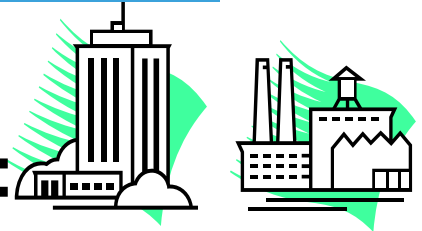
Labeled New Homes

- ~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**

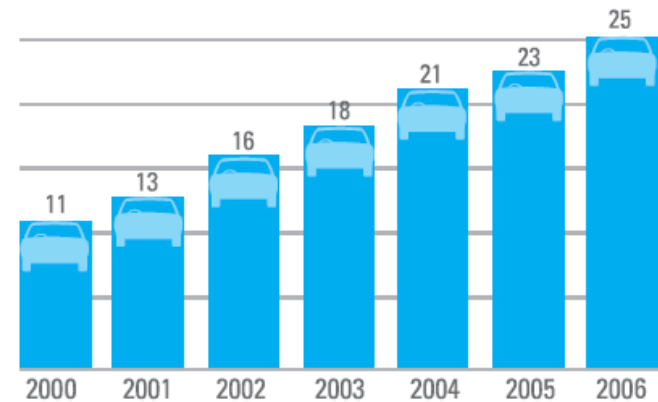
saved on energy bills

- **170 billion kWh**

lower energy use – almost 5% of US electricity sales

- **1/3 total US GHG**

emissions reduction from EPA's CCP's



EMISSIONS SAVED IN
VEHICLE EMISSIONS (in millions)



UTILITY BILL SAVINGS
(in billions)

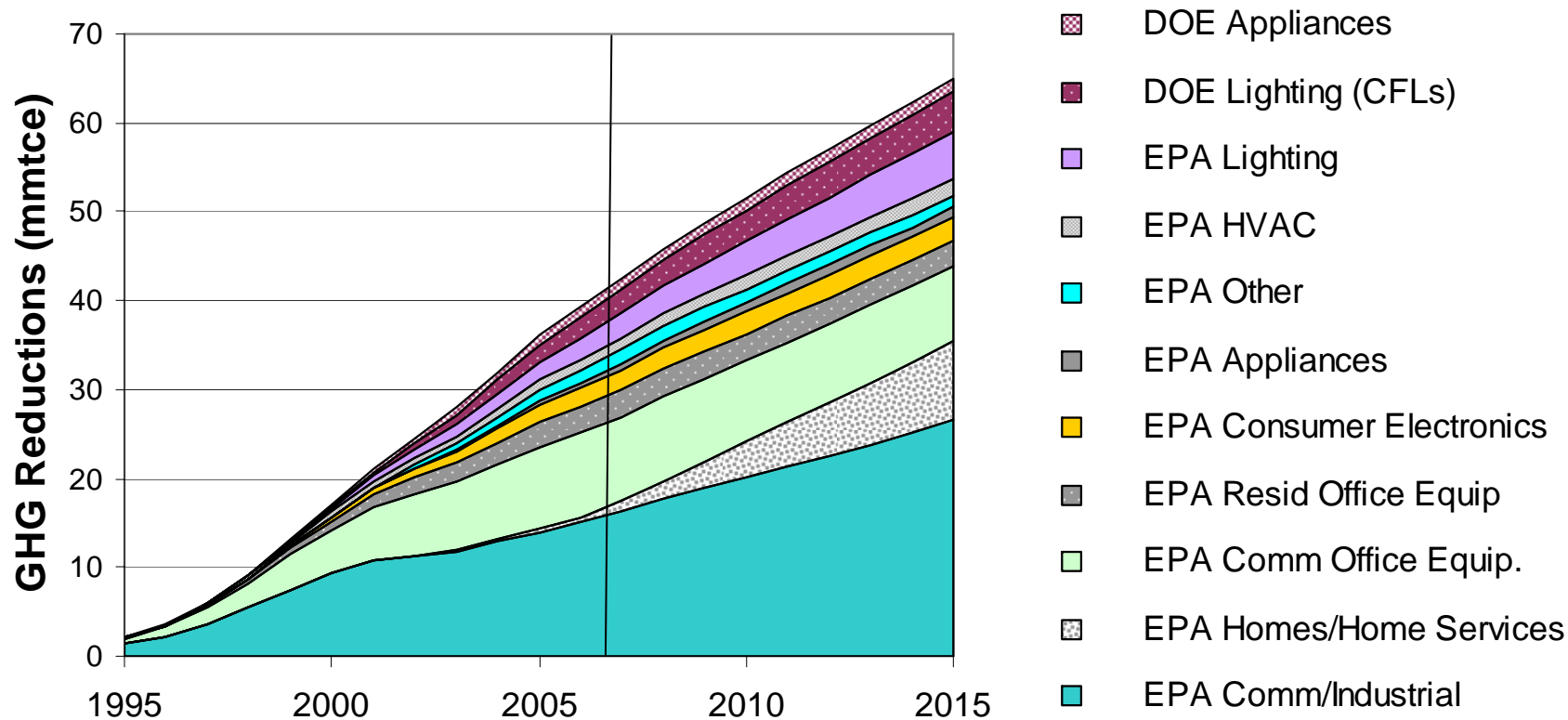
ENERGY STAR Program Success



- **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

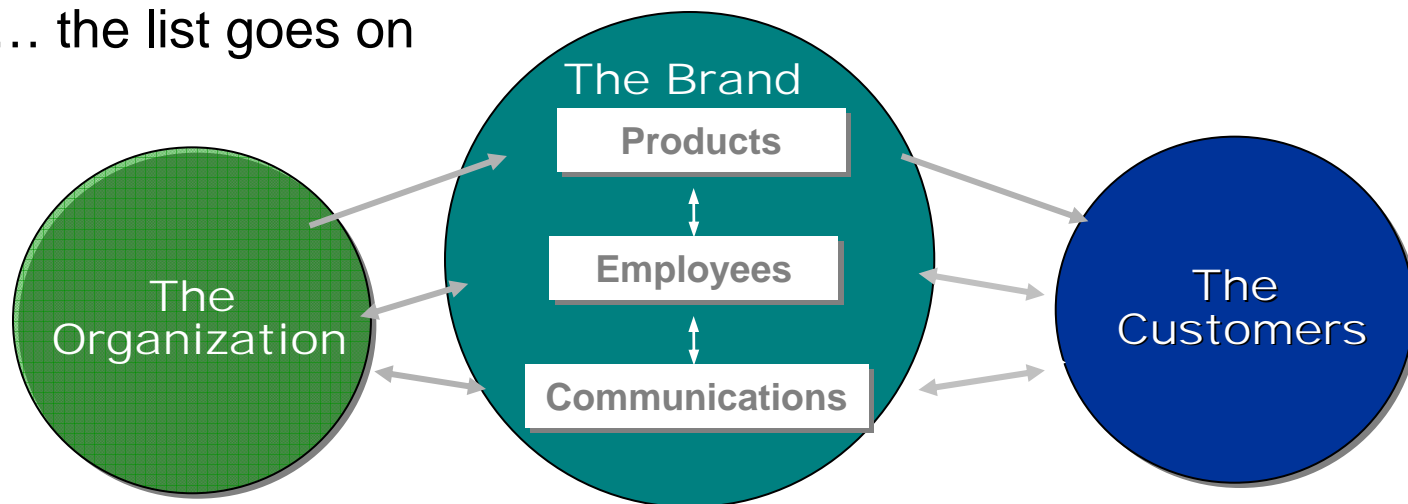
-- communications

-- services and support

-- website

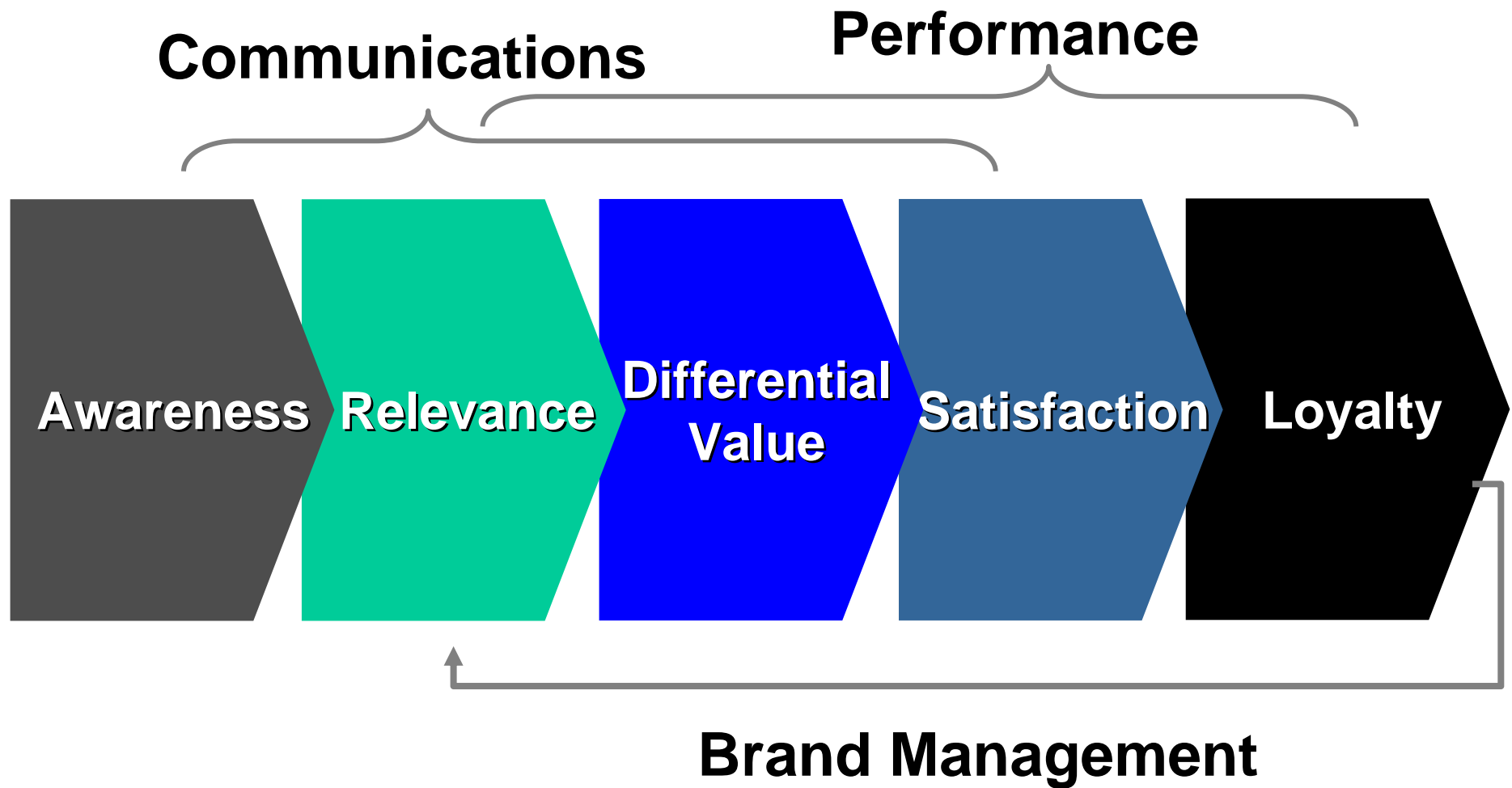
-- R&D

... the list goes on



Loyalty is the Goal

Dependent on Performance and Management



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

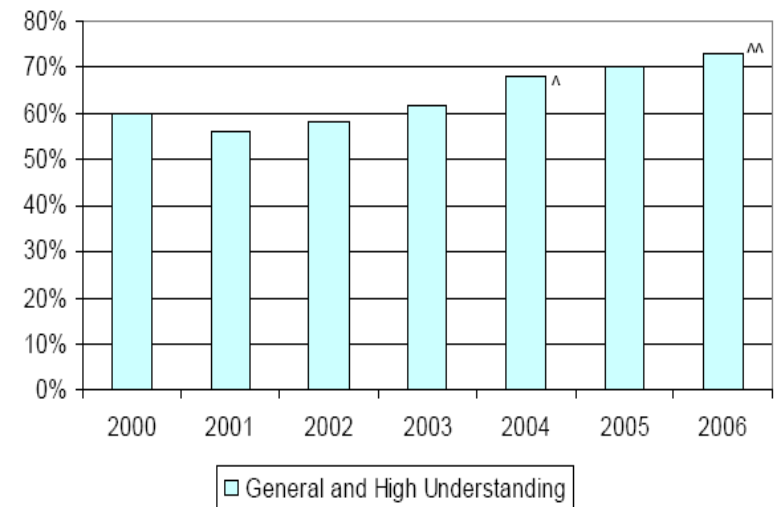
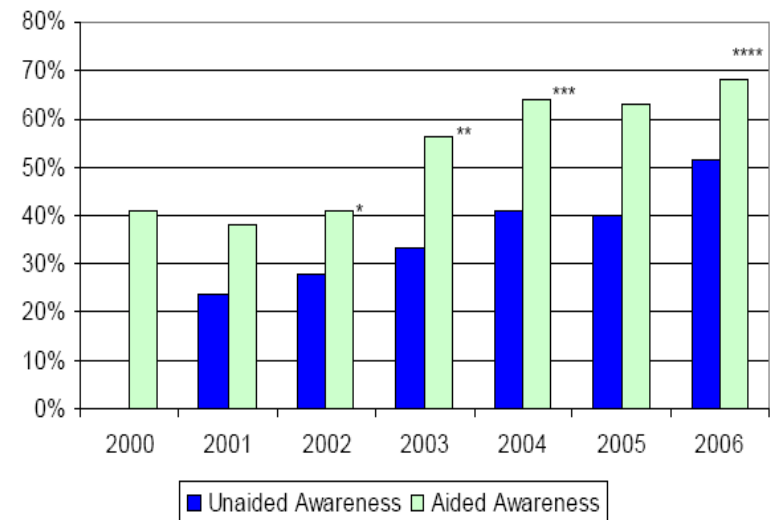


Outreach

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
 - ENERGY STAR Home Advisor: 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

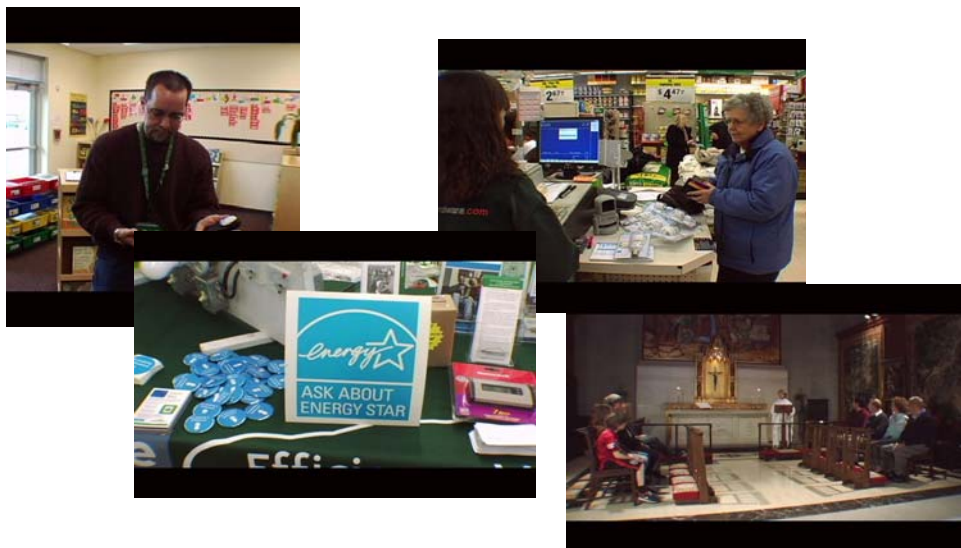
**Provide value to
program partners**

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

NAME: Martha Ware

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

SAVINGS: \$100 | 1000 kWh | 1000 lbs. CO₂

NEXT PROJECT: Learning how to ski

JOIN MARTHA IN THE FIGHT AGAINST GLOBAL WARMING.
ENERGY STAR® 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.

The Energy Star logo, featuring a stylized star with the word "Energy" in a script font and "ENERGY STAR" in a sans-serif font below it.



NAME: Pepsi Co. Green Team

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

SAVINGS: \$0x | xxx kwh | xxx lbs. CO₂

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® 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.



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. CO₂

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.

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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 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





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

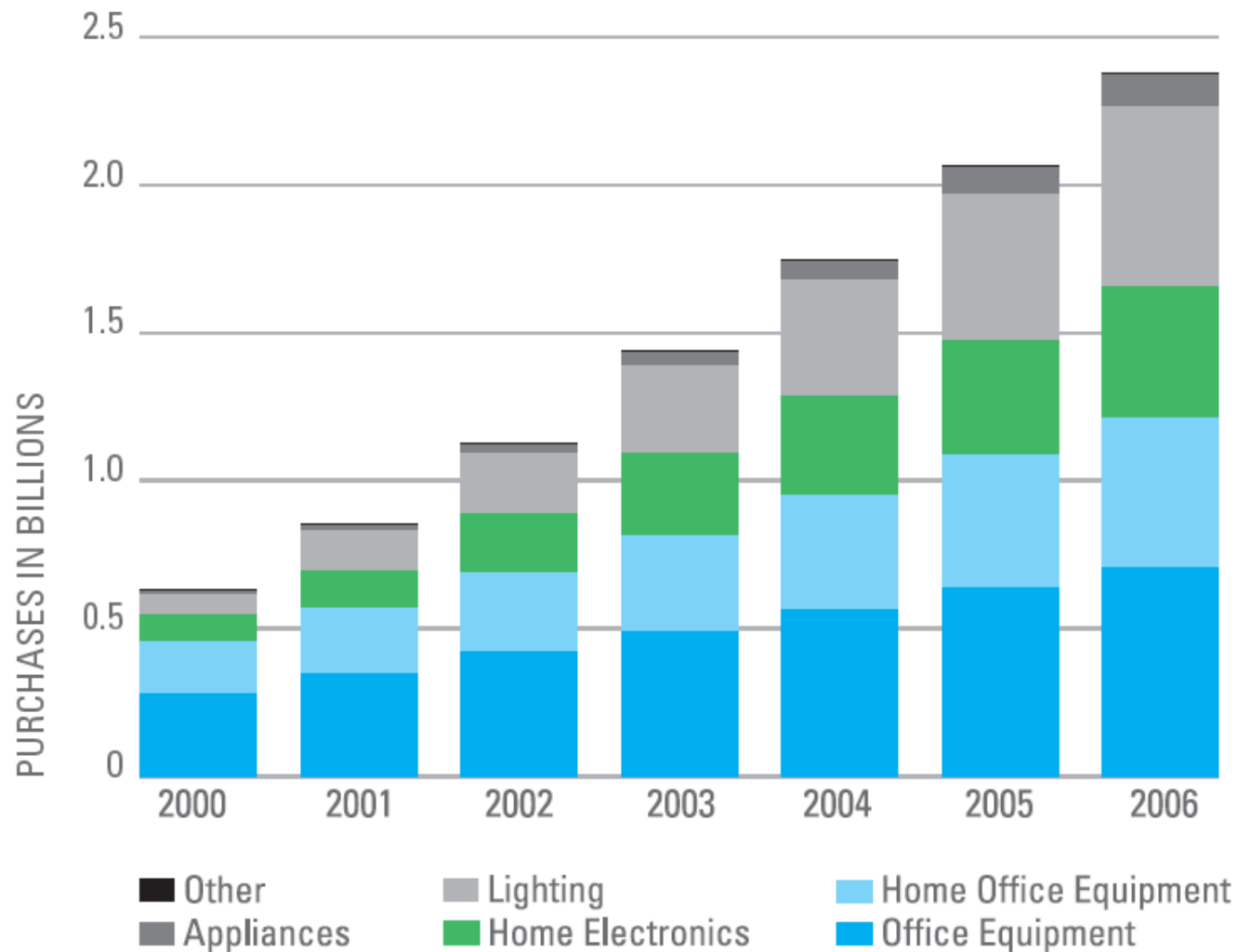
- Boilers
- Ceiling fan light kits
- Water coolers
- Audio/DVD

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



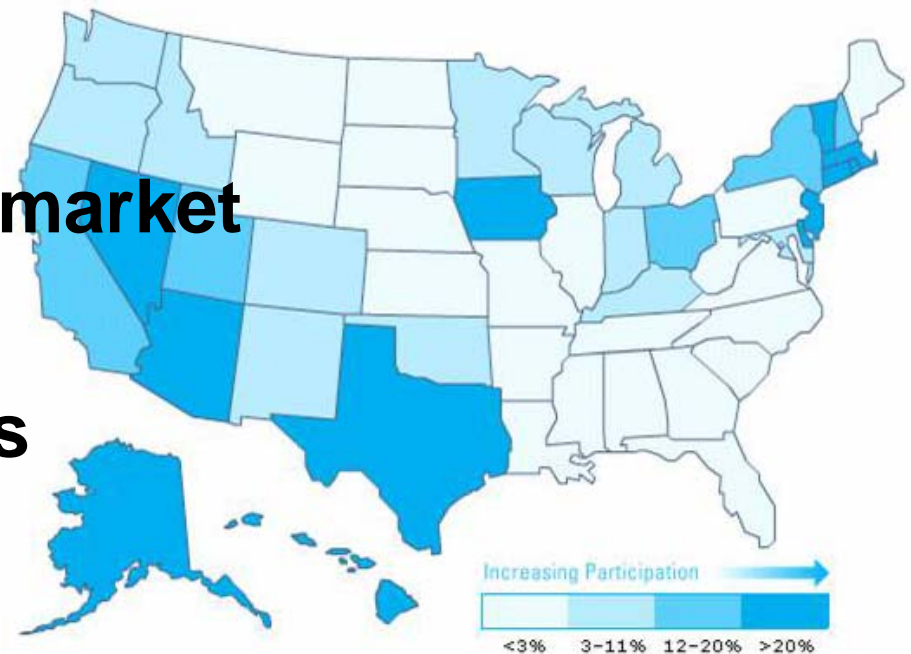


Update on ENERGY STAR New Homes and Home Improvement

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

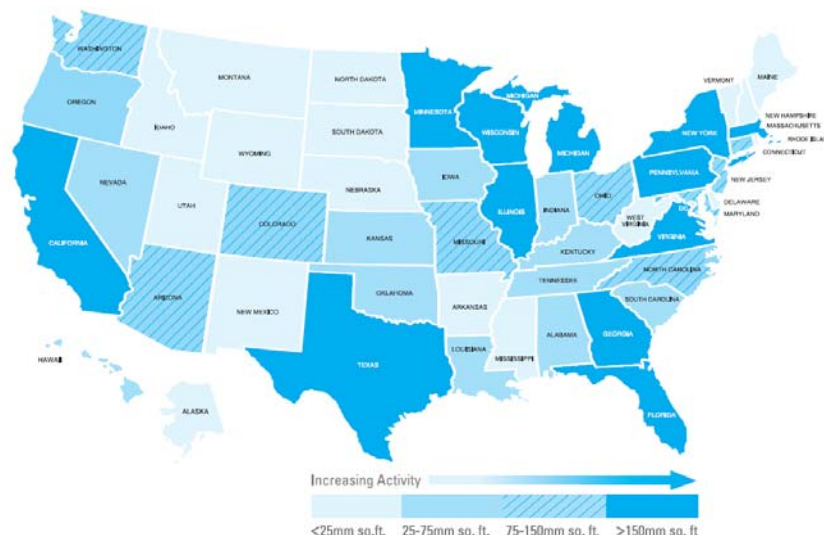


- **Leadership in the market place**
 - energy efficiency leadership
- **Whole Building Performance**
 - promote integration of systems
 - about energy savings -- not presence of new technology
 - achieve twice the savings for a given investment
- **Performance Measurement System**
 - can not manage 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!