

US EPA ARCHIVE DOCUMENT



# ENERGY STAR

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US EPA

# Today

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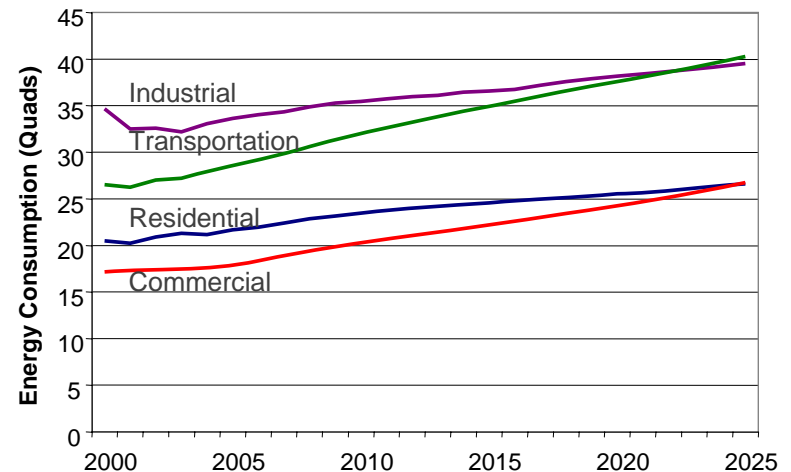
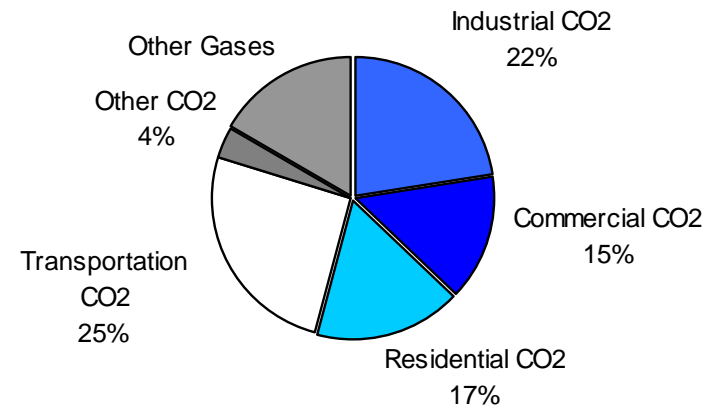
## ENERGY STAR

- Purpose
- How it works
- Driving consumer (and business) behavior
- Protecting brand integrity
- Why it works
- Lessons learned

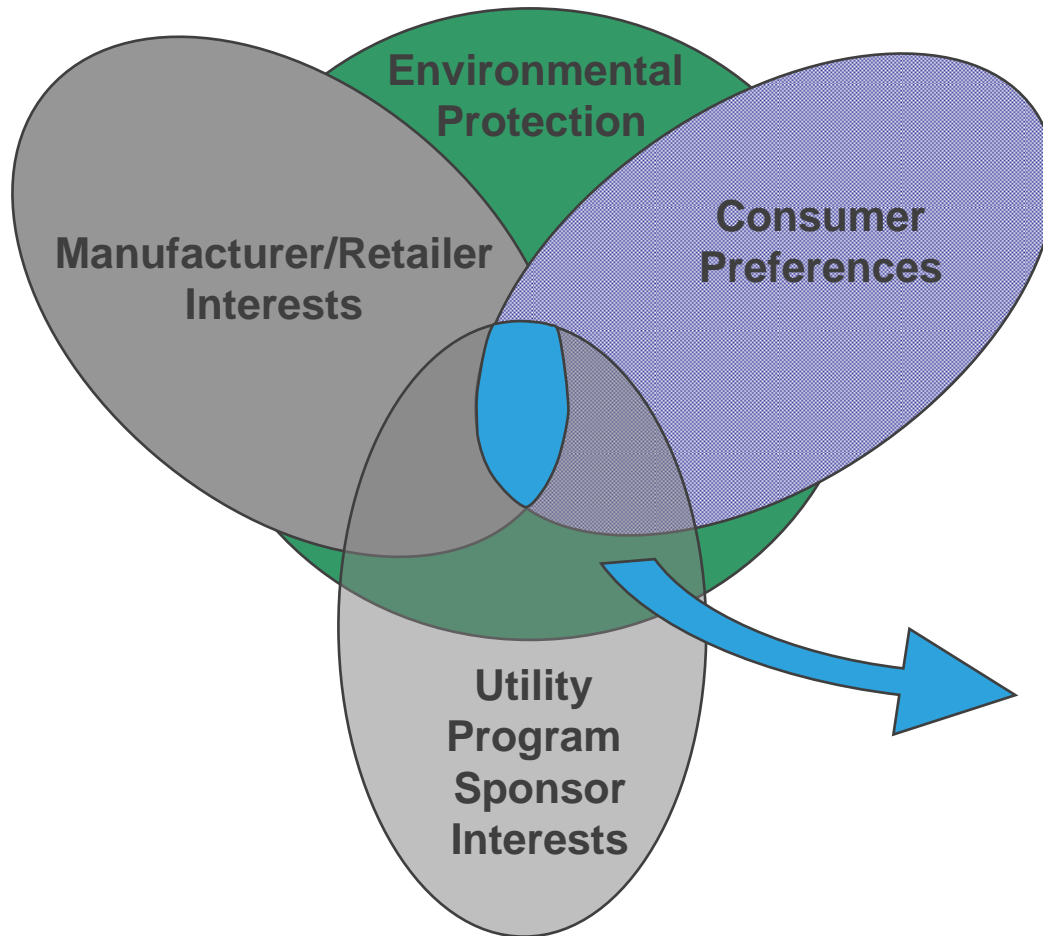
# ENERGY STAR

- Reduce greenhouse gas (GHG) emissions through large win-win-win opportunities with today's energy efficient technologies and practices
  - 30% savings in many buildings, homes, and facilities
- Provide credible information to buyers to
  - reduce transaction (research) costs
  - reduce perceptions of risk
  - enhance investment in efficient technologies and practices
- Work with the marketplace to capitalize on motivations of individual actors

**Greenhouse Gas Emissions by Sector  
2000**



# Environmental Success Requires Finding/Building Upon Intersection of Interests



Consumer is Key

# ENERGY STAR



- Protects the environment through superior energy efficiency
- No tradeoffs in performance or quality
- Cost effective (2<sup>nd</sup> price tag)
  
- ENERGY STAR is a government backed symbol providing valuable, unbiased information – source of authority
- Binary (Y/N)
- Power of the individual to make a difference

# ENERGY STAR Strategies



## Residential

### Labeled Products

- 50+ products / 1700 manufacturers
- 10-60% more efficient

### Labeled New Homes

- 30% more efficient

### Home Improvement

### Services

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

## Commercial / Industrial

### Corporate energy management

- benchmarking, goals, upgrades (mgmt & systems --not widgets)
- whole building labeling for excellence
- technical assistance

### Labeled Products

- for plug load, not system components

## Industrial

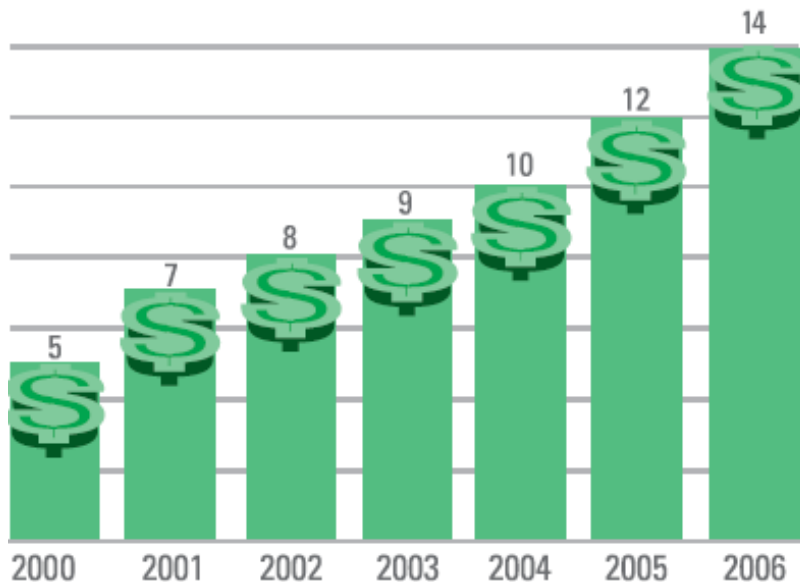
### Small business initiative

# A Successful Program

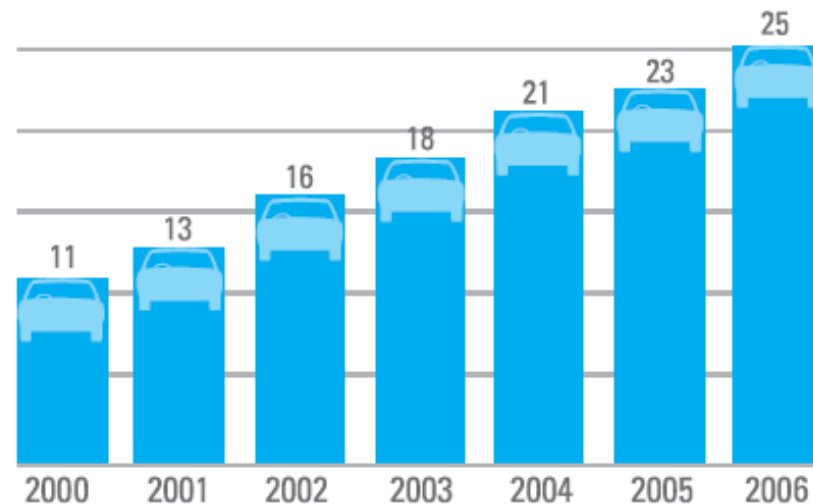
## Accomplishments - 2007

In 2007, Americans with the help of ENERGY STAR:

- Prevented 40 million metric tons of GHG emissions— equivalent to 27 million vehicles
- Saved \$16 billion on energy bills
- Delivered 1/3 of total US GHG emissions reduction from EPA's Climate Change Programs



 UTILITY BILL SAVINGS  
(in billions)



EMISSIONS SAVED IN  
VEHICLE EQUIVALENTS (in millions)



# Successful Program

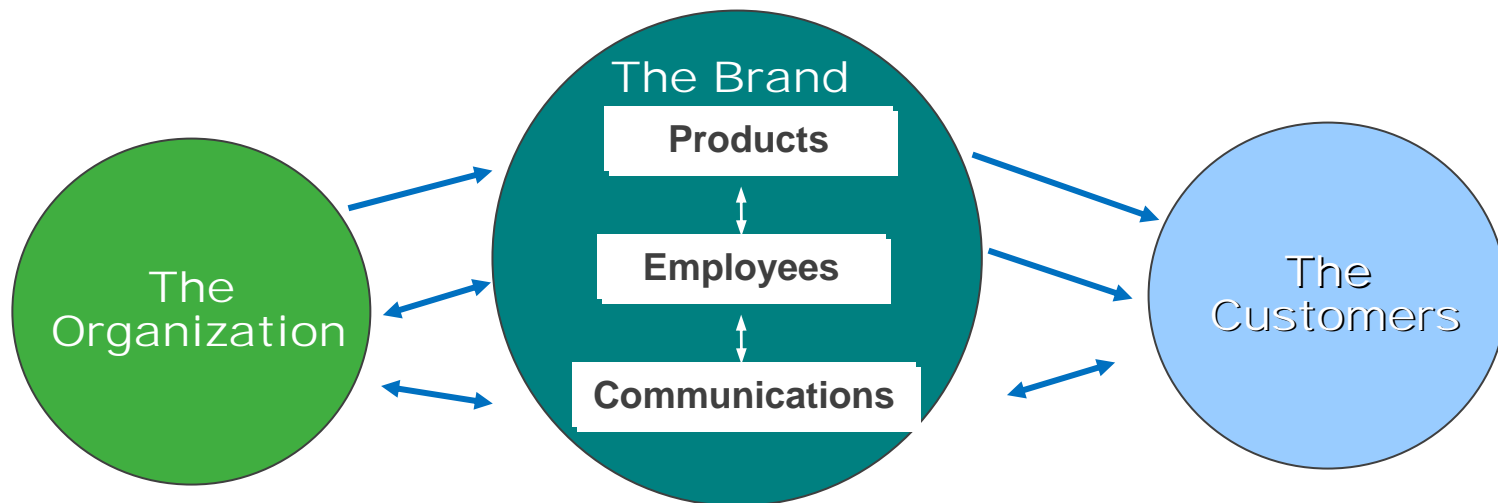


- Public awareness of ENERGY STAR over 70%
- Engaged 12,000 organizations in manufacturing, delivery, adoption of energy efficiency
- Helped consumers purchase more than 2.5 billion qualified products from more than 2,000 manufacturers across 50 product categories
- Over 840,000 new homes are ENERGY STAR; 12% of new homes starts across the country are ENERGY STAR
- Tens of thousands buildings benchmarked, thousands of buildings improved

**ENVIRONMENTAL RESULTS POSITIONED TO DOUBLE  
OVER NEXT 10 YEARS**

# A Brand:

- Is a complex relationship of functional benefits **and** emotional connections
- 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

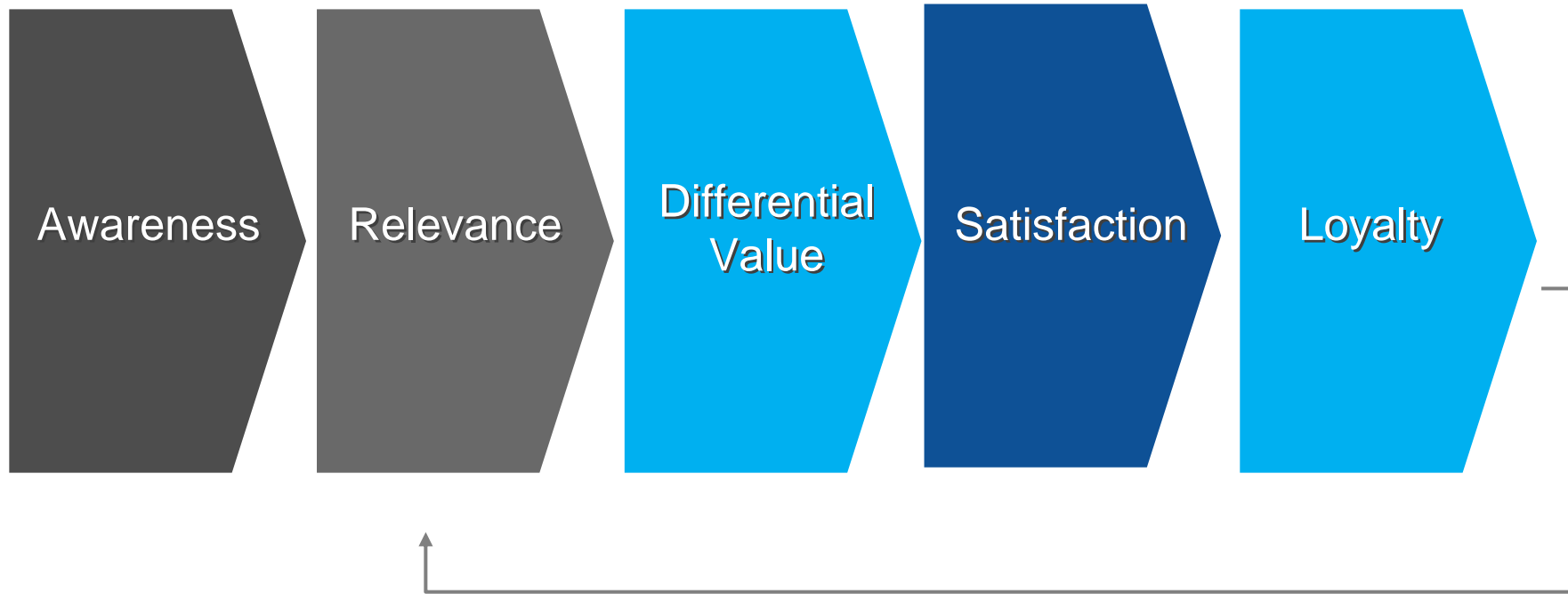


# Loyalty is the goal



Communications

Performance



# 50+ Product Categories Are Covered by ENERGY STAR in the US



## 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

## Lighting

CFLs  
Residential light fixtures  
Exit signs

## Commercial Food Service

Refrigerators  
Freezers  
Fryers  
Steamers  
Vending machines

## Home Envelope

Home sealing  
Roof products  
Windows/Doors

# ENERGY STAR label on products

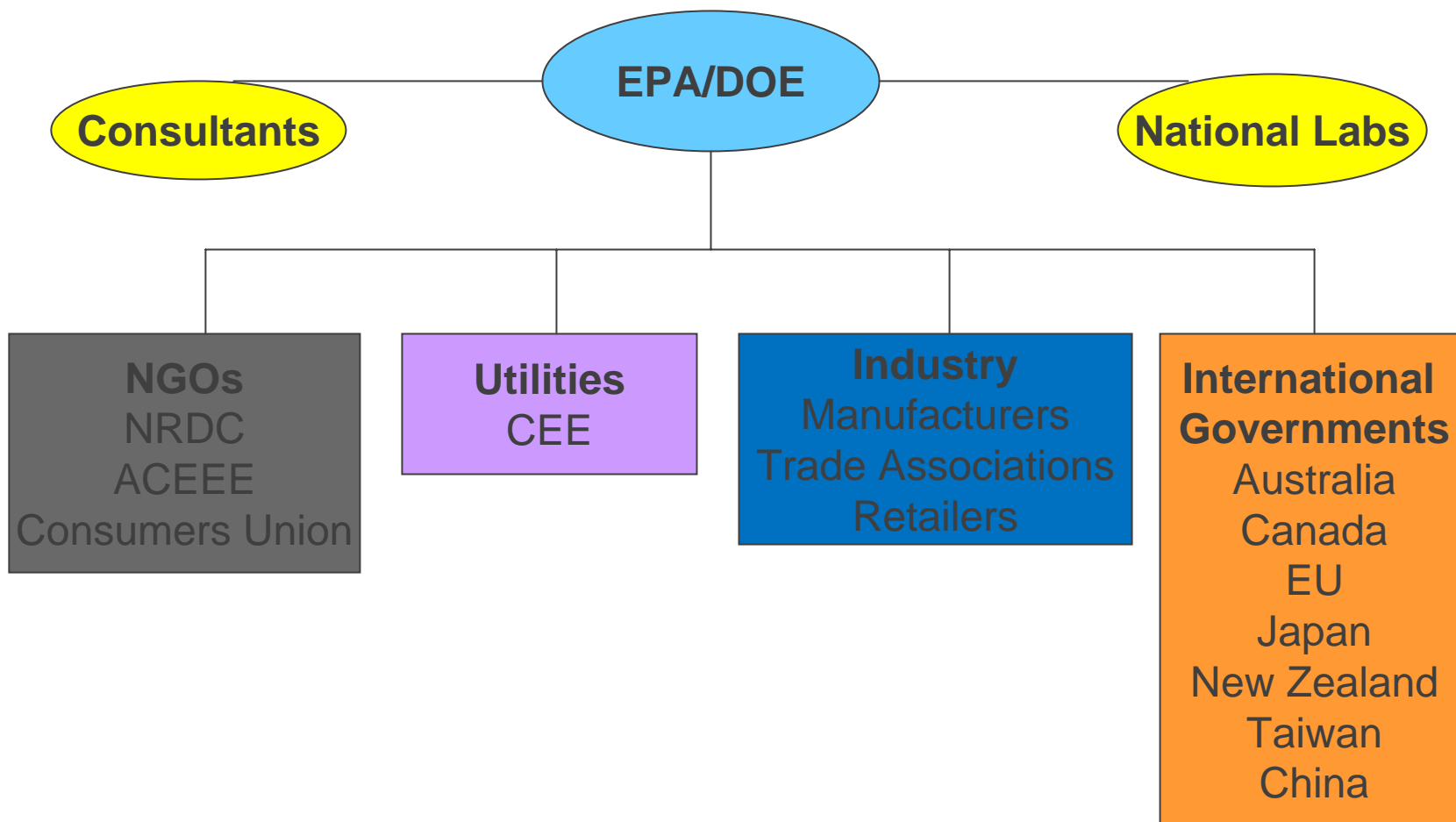


# Clear process for Setting/Revising ENERGY STAR Specifications

- Criteria weighed when developing or revising ENERGY STAR product specifications:
  - Significant energy (GHG) savings will be realized on a national basis.
  - Product energy consumption and performance can be measured and verified with testing.
  - Product performance will be maintained or enhanced.
  - Purchasers of the product will recover any cost difference within a reasonable time period.
  - Specifications do not unjustly favor any one technology.
  - Labeling will effectively differentiate products to purchasers
- Documented Agency guidance
- Strive for top 25 percent of product models (not sales) but key criteria can trump that goal
- Use a well documented process (see chart) – for transparency



# Negotiations with Stakeholders





# WIW: Important Process Elements



- **Consistency**
  - Follow steps, notify stakeholders
- **Transparency**
  - Post all documents and stakeholder comments (with permission) on web
  - Create and post a decision memo at the end of the specification development process explaining each decision point and documenting what happened and when
- **Inclusiveness**
  - Trade associations, manufacturers, laboratories, utilities, NGOs and international governments
- **Responsiveness**
  - Acknowledge receipt of all comments, and respond promptly to questions and/or requests for meetings/conference calls
- **Clarity**
  - Provide comment boxes below any proposed changes on draft specifications that outline reason for edits/changes; include line numbers on all draft specifications for easy reference



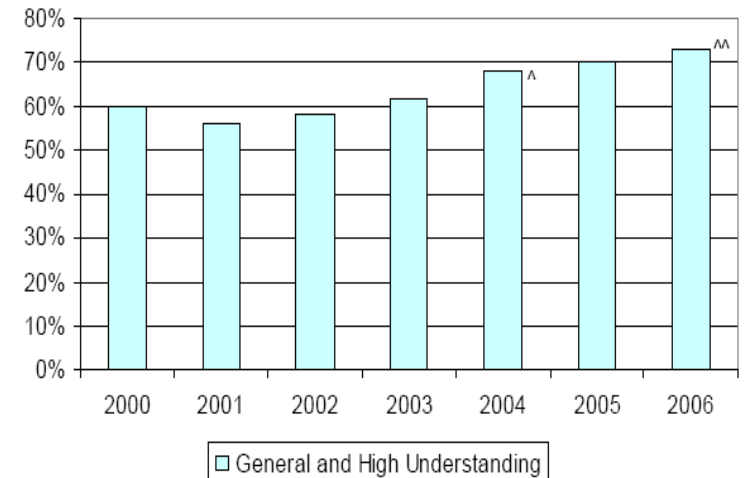
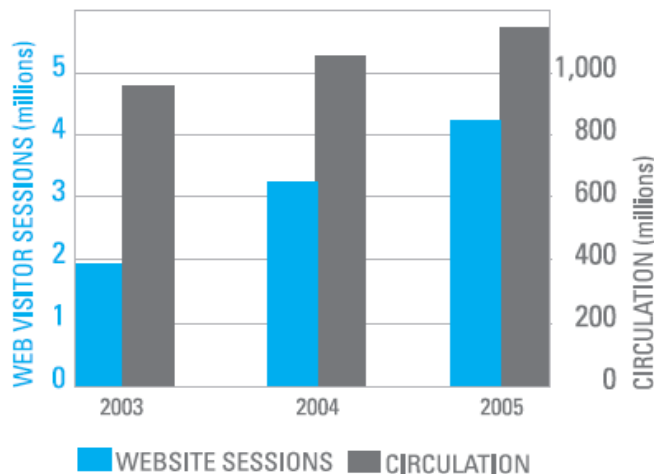
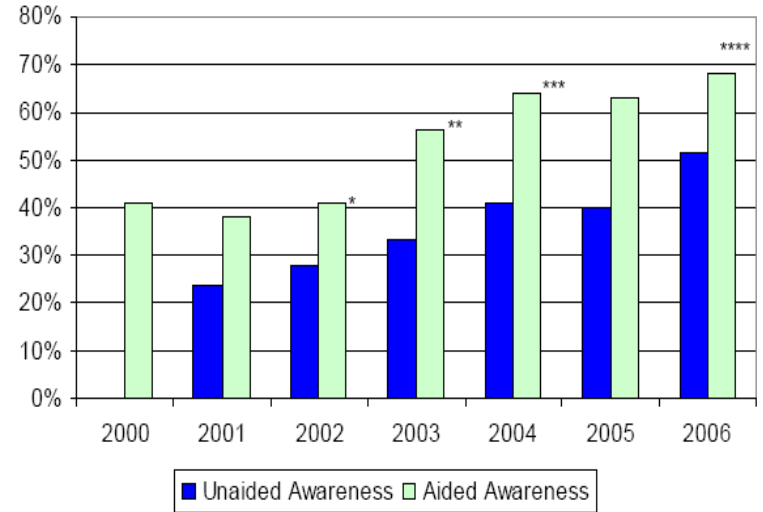
# Changing Consumer Behavior



- Educate Consumer
  - Second price tag (life cycle costs)
  - Environmental choice
  - Credible source
- Partner with Retailers
  - 1,000 partners representing 23,000 storefronts
  - Bring information to the consumer at point of purchase
- Partner with utility/efficiency program sponsors
  - More than 500 utility partners (represent 60% of US customers)
  - 30 state partners
  - Leverage ENERGY STAR platform to extend energy efficiency programs
- Partner with new home builders
  - Regional markets
  - More than 50% market share in some areas
  - 3,500 active builders around the country

# Building Demand: Outreach critical to environmental results

- Specifications are a foundation
- People must ACT to achieve environmental benefit
- EPA devotes substantial resources to outreach with strong results
  - Annual outreach strategy
  - Media reach of 1 billion plus per year
  - 6 million web visits per year



# Retail partners



## SAVE MONEY ALL YEAR WITH THESE ENERGY SAVING IDEAS

AUTOMATED MOTION SENSORS, TIMERS, DIMMERS AND ENERGY SAVING LIGHTBULBS CAN HELP YOU SAVE ON YOUR UTILITY BILLS



Just look for ENERGY STAR and other ways to save energy



ASK ABOUT ENERGY STAR

ENERGY STAR® is sponsored by the U.S. Environmental Protection Agency and the U.S. Department of Energy.



**LOWE'S**  
Home Improvement Warehouse

Improving Home Improvement™

Look for the **Energy Star®** label when you make your next purchase.

Energy Star® helps you make energy-efficient choices that save money on your utility bills by using less energy, while still providing you with all the features you want.

Save money, save energy and help protect the environment by purchasing Energy Star® labeled products at Lowe's.

**Air conditioning purchase and installation tips to save you energy**

- Buy the right size equipment
  - Hire a professional for installation
- Lowe's installs window air conditioning units!**

For more tips and tools to help you create a cool and comfortable home, visit [Energy Star](http://EnergyStar.com) online at



**Grab the remote and chill out!**



**6000 Btu Electronic Air Conditioner \$209 SHARP.**

- 11.0 energy efficiency rating - Energy Star® qualified • 3 fan/3 cooling speeds • Rest easy remote control • Comfort touch control
- 12 hour on/off timer • Library Quiet - ultra quiet operation #183179

and purchase portable fans and air conditioners online!

We also have a wide selection



**10,000 Btu Air Conditioner \$269**

- Available exclusively at Lowe's • Energy Star saves 10% energy • 10.8 energy efficiency ratio #188246

**EVERYDAY LOW PRICES GUARANTEED!**

If you happen to find a lower price, we'll match it PLUS take off an additional 10%!



**Whirlpool 40 Pint Dehumidifier \$174**

- 40 pints per day • 7.5 amps • AccuDry® system • Automatic deicer • 2 speed fan • Bucket full indicator light (AD400SL) #196859



**Whirlpool 25 Pint Dehumidifier \$139**

- 25 pints per day • 4.9 amps • AccuDry® system • 1 speed fan • EZ-Empty® front-removable bucket • Bucket full indicator light (AD258L) #196862



**\$988**

**Window A/C Vinyl Side Panel Kit**

- Replaces old, cracked or torn side panels • 2 flexible panels each expand to fit openings to 21"H x 12"W #110445



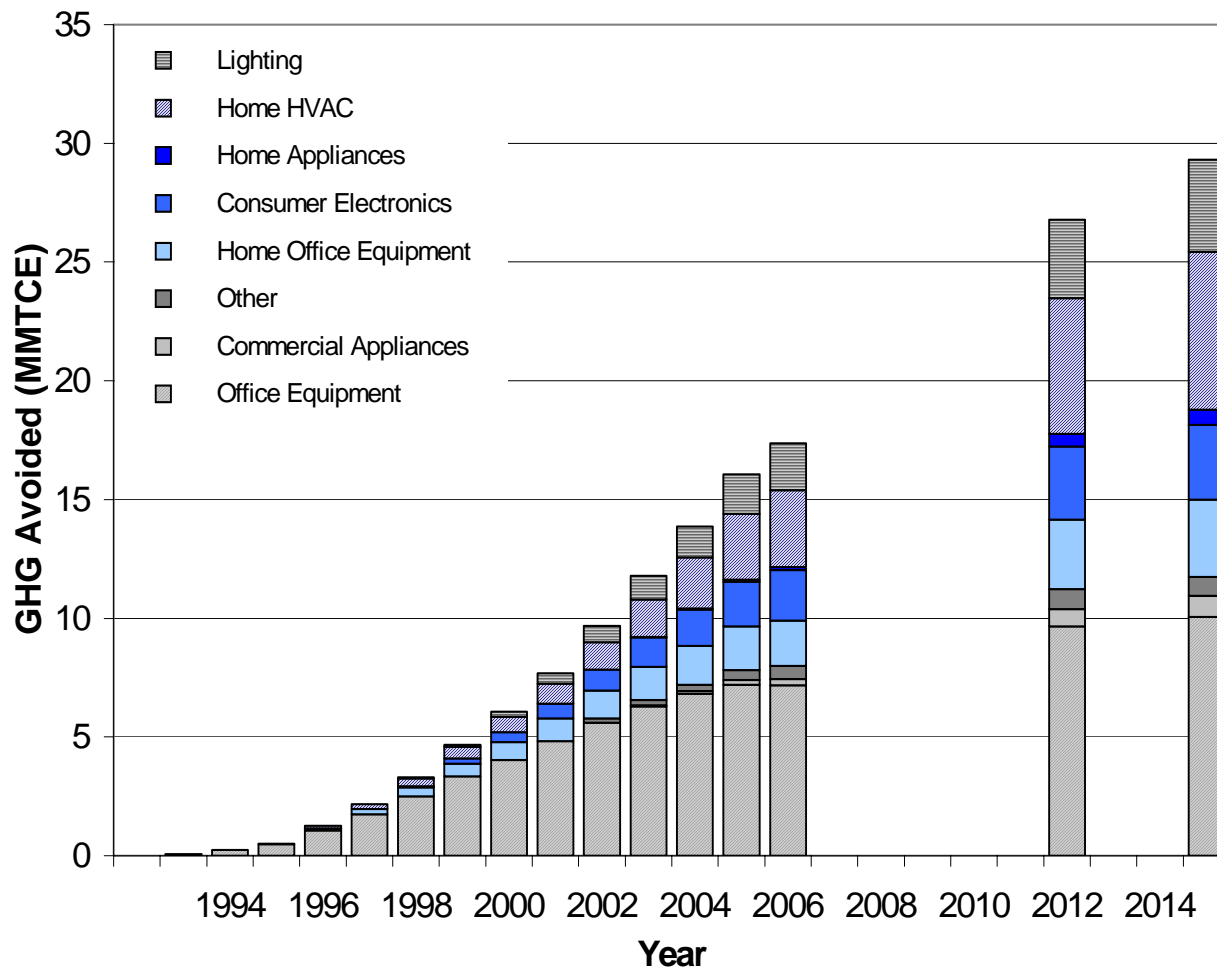
**\$2696**

**Light Duty Window A/C Support**

- Load rated to 80 lbs. • Typical range 5,000 - 10,000 Btu #54549

STAR

# On Track to Meet Future GHG Reduction Goals



## Priority Areas:

- lighting
- HVAC
- Consumer electronics (and power supplies)
- Office equipment
- Commercial food service

# Protecting Integrity of ENERGY STAR Label



- Self-certification program
- Similar to other U.S. self-certification programs
  - National appliance standards program
  - FTC EnergyGuide label
- Self-certification programs relied on to work under certain circumstances
  - Competitive market place
  - Active consumer groups (Consumer Reports)
- EPA monitors use/protects integrity of brand
  - Information on products and appropriate logo use required as condition of partnership
  - Routine checking of manufacturer submitted information
  - Selective product testing
  - Pulling from retail shelves – twice annually
  - Receiving customer calls
  - Manufacturer information on competitors
  - Designed supplemental testing program for problem areas -- lighting products
  - Track all advertisements (reports monthly)
  - All printed press coverage– daily, monthly
  - Web report –qtly
  - Insure correct use of mark: all violations dealt with; coordinate with EPA's Office of General Counsel



# Goals for the future

- Triple carbon savings by 2012 (from 2000).
  - From 16 MMTCE to over 50
- Build consumer awareness of, and loyalty to, the brand
- Motivate consumers and build demand
- Maintain meaning/integrity of label on full suite of products
  - Quality, cost-effective, relevance
- Enhance partnership with utilities and energy efficiency program sponsors
- Reduce costs of assisting partners to expand program
  - Need to manage more products
  - Need to manage more builders / new homes
  - Need to manage more commercial and 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, also Industrial

# Challenges

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- Working with stakeholders
- Market data
- Outreach through public service announcements
- Constant innovation
- Invention of EPA but property of others
- Self certification
- Limited resources



# Lessons learned



- Analytical underpinnings are key
- Do research; understand the market and issues
- Strong value proposition is key
- Use competition and the market to your favor
- Acknowledge mistakes and learn from them
- Try it
- Partnerships can deliver great results
- Rome (and ENERGY STAR) was not built in a day



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THANK YOU!