

# ENERGY STAR



## Presentation to the Missouri Energy Task Force

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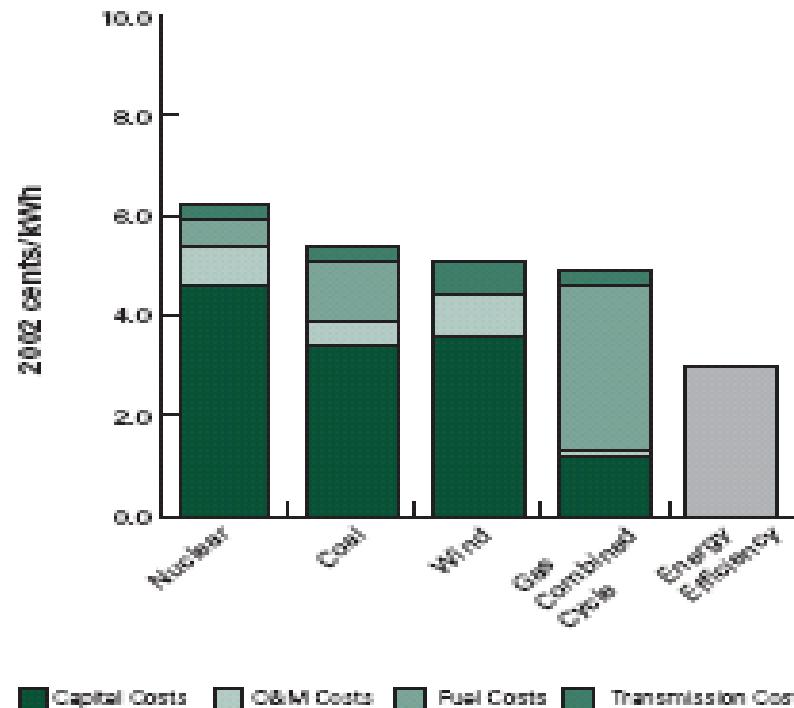
# ENERGY STAR



- A national brand representing energy, financial and environmental performance
- Over 40 product categories including appliances, lighting, consumer electronics, office equipment
- New homes and commercial buildings
- 60 percent public recognition of ENERGY STAR brand



# Why ENERGY STAR?



Energy Efficiency is Low Cost

Note: The costs for nuclear, coal, wind, and gas combined cycle are projections for the cost of producing energy from new plants in 2010. The cost for energy efficiency is a median figure based on recent reports of the cost of energy saved over a portfolio of programs in leading states.

Sources: ACEEE 2004, EIA 2004.

# Why Use ENERGY STAR?



STAY COOL THIS SUMMER  
WITH ENERGY STAR  
QUALIFIED COOLING EQUIPMENT



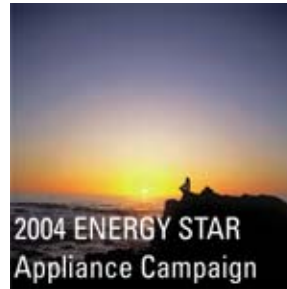
Some builders in Las Vegas have a much bigger picture of the neighborhood they're creating.  
To learn more about them, visit [www.NevadaEnergyStarHomes.com](http://www.NevadaEnergyStarHomes.com)



EVERY ENERGY STAR HOME KEEPS  
4,500 POUNDS OF GREENHOUSE  
GASES OUT OF OUR AIR EACH YEAR

ENERGY STAR qualified homes not only help protect the environment, they can also provide lower utility bills, increased comfort, and greater durability.

A new home that has earned the ENERGY STAR meets EPA's strict guidelines for energy efficiency. This exemplary performance is verified by an independent third party. To learn more, visit [www.energystar.gov](http://www.energystar.gov)



## Major advertising campaigns

- Change a Light, Change the World Campaign (Oct-Nov)
- Appliance Program
  - Clothes Washers (April-Sept)
  - Refrigerator Retirement campaign (July-Sept)
- Cool Your World (Memorial Day to Labor Day)
- First Frost
- Builder Ad Partnership in spring
- SEARS, Home Depot, Lowe's are major partners

Beautifully  
your environment

It's easy to see that ENERGY STAR qualified fixtures add style to any decor. But what you can't see is that they help to beautify our environment by using less energy and preventing air pollution. It's your job to help to brighten your home. Choose an ENERGY STAR and Change a Light, Change the World.

HELP PROTECT OUR ENVIRONMENT FOR FUTURE GENERATIONS.  
MAKE YOUR NEXT LIGHT AN ENERGY STAR.

Products that earn the ENERGY STAR® green greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.  
[www.energystar.gov](http://www.energystar.gov)

# Why Use ENERGY STAR?



- Ready to use tools, brochures and calculators
- Long lead time to develop energy efficiency specifications



**DESIGNED TO EARN THE ENERGY STAR**

The estimated energy performance for this design meets US EPA criteria. The building will be eligible for ENERGY STAR after maintaining superior performance for one year.



Home Energy Yardstick - ENERGY STAR

YOUR HOME CONTRIBUTES TO THE QUALITY OF OUR ENVIRONMENT

**Home Energy Performance Results**

**Energy Performance**


Your score is 3.8 out of 10

This means that about 62% of U.S. homes use less energy than yours.

Improving your score from 3.8 to 4.8 is approximately a 6% reduction in energy use and could save you up to \$90 a year on energy costs.

**Environmental Performance**

Annual pollution from energy use in your home is equivalent to the emissions of 2.6 cars. Improving your score from 3.8 to 4.8 would reduce your emissions by 6%.



**BENEFITS OF OWNING AN ENERGY STAR LABELED HOME**

**A Label Backed by the Government** - All ENERGY STAR labeled homes are certified to meet strict guidelines for energy efficiency. This company performance is verified by an independent third party.

**Lower Utility Costs** - Compared with standard homes, ENERGY STAR labeled homes use substantially less energy for heating, cooling, and hot water heating. Homeowners can expect to save about \$200-\$400 annually on their utility bills.

**More Comfortable/Smarter Homes** - The energy efficient features of ENERGY STAR labeled homes help air circulate better, keep your home cool and energy efficient, and provide better indoor air quality.

**Helping to Create a Better Future** - By purchasing an ENERGY STAR labeled home, you are joining millions of consumers who have changed to ENERGY STAR. Helping our nation reduce our energy needs and building a cleaner environment for the future.

**HELP PROTECT THE ENVIRONMENT**

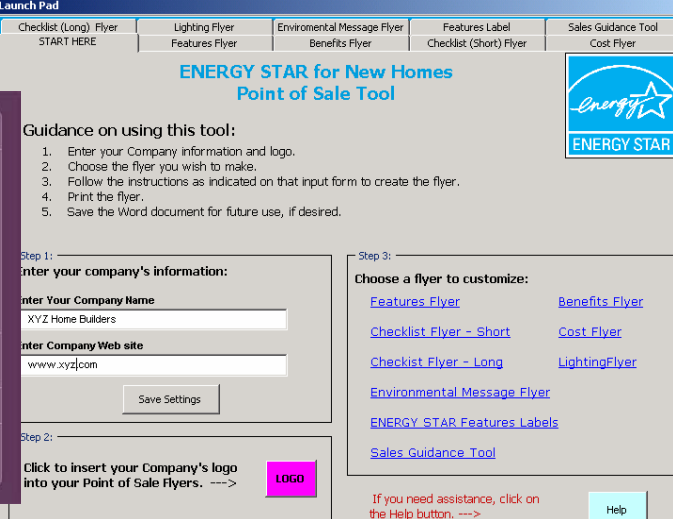
Did you know that your home can be a greater source of pollution than your car? In fact, 18 percent of all greenhouse gases you generated from the energy used in your home...

Energy used in your home often comes from the burning of fossil fuels at power plants, which contributes to a host of air pollution problems, including smog, acid rain, and global warming. Simply put, the less energy we use in our homes, the less air pollution we generate.

Just one ENERGY STAR labeled home can keep 4,300 pounds of greenhouse gases out of our air each year.

For more information about ENERGY STAR labeled homes, visit [www.energystar.gov](http://www.energystar.gov).

The ENERGY STAR seal is a mark of excellence in energy efficiency. It is a mark of environmental leadership.



ENERGY STAR for New Homes Point of Sale Tool

Guidance on using this tool:

1. Enter your Company information and logo.
2. Choose the flyer you wish to make.
3. Follow the instructions as indicated on that input form to create the flyer.
4. Print the flyer.
5. Save the Word document for future use, if desired.

Step 1: Enter your company's information:

Enter Your Company Name  
XYZ Home Builders

Enter Your Company Web site  
[www.xyz.com](http://www.xyz.com)

Save Settings

Step 2: Click to insert your Company's logo into your Point of Sale Flyers. ---> **LOGO**

Step 3: Choose a flyer to customize:

- Features Flyer
- Benefits Flyer
- Checklist Flyer - Short
- Cost Flyer
- Checklist Flyer - Long
- Lighting Flyer
- Environmental Message Flyer
- ENERGY STAR Features Labels
- Sales Guidance Tool

If you need assistance, click on the Help button. ---> **Help**

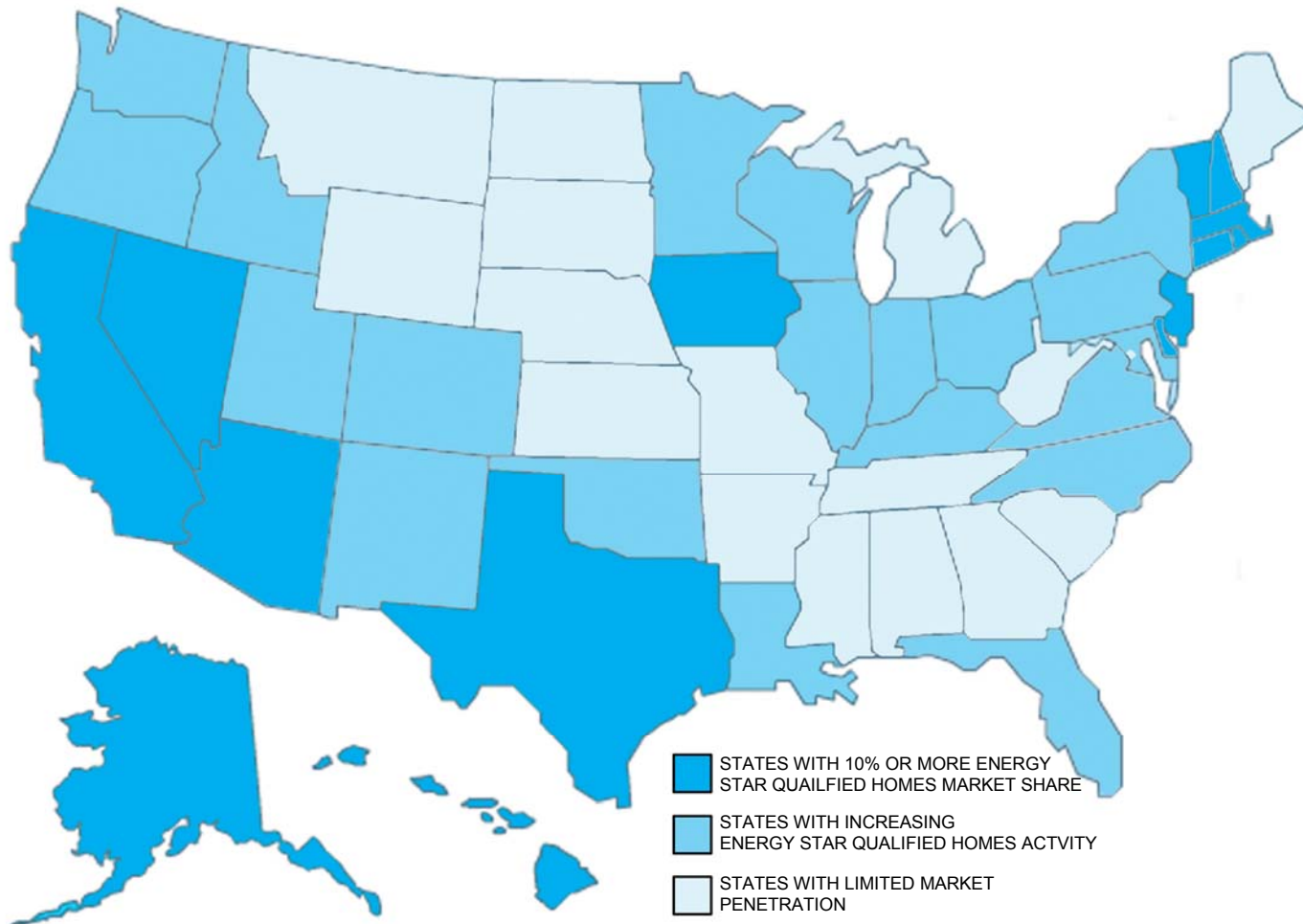
# Success to Date



- In 2005, Americans, with help of ENERGY STAR:
  - saved \$12 billion on energy bills
  - prevented greenhouse gas emissions equal to 23 million cars
  - met 4% of total 2005 electricity demand
- More than **2 billion** ENERGY STAR products have been sold to date.
- EPA's Energy Performance Rating System has been used to evaluate more than 26,000 buildings.
- More than **2,500** buildings have earned the ENERGY STAR



# ENERGY STAR for Homes 2005 Market Penetration





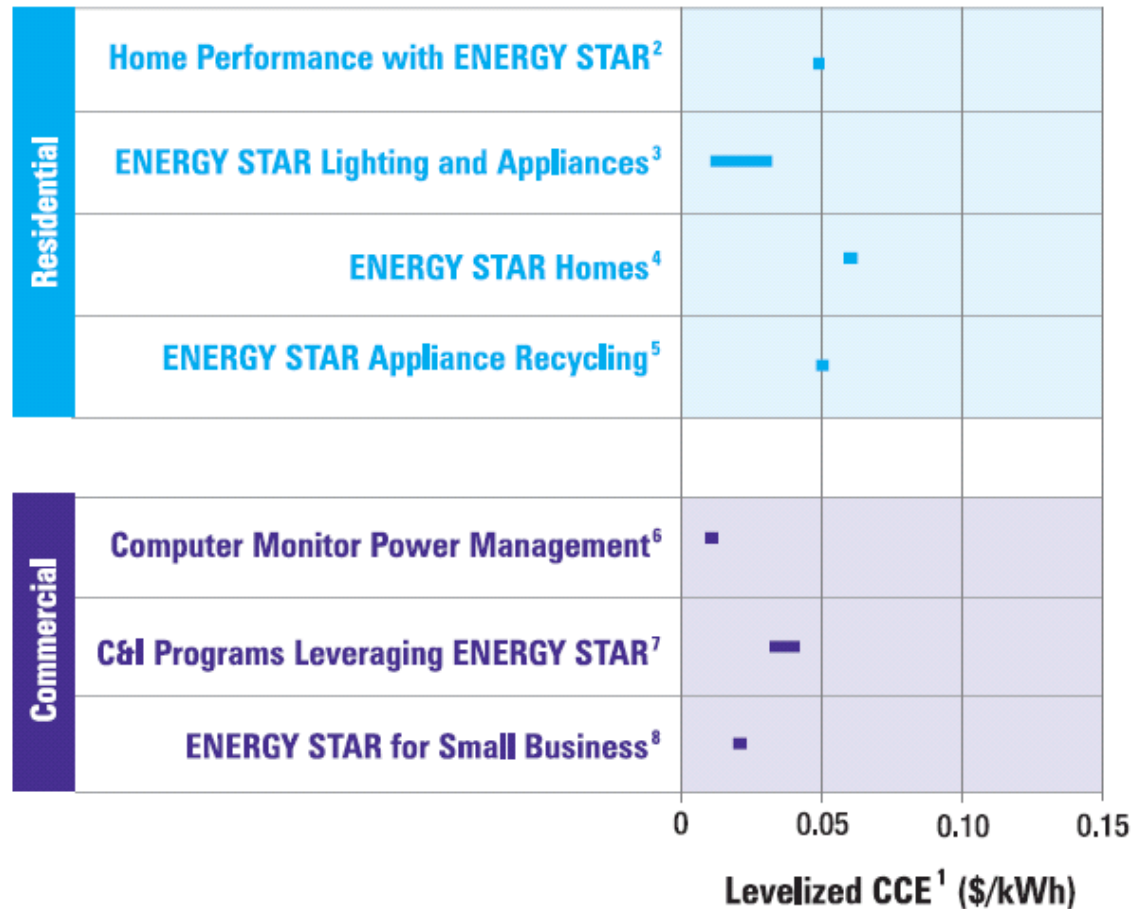


# Expected savings for ENERGY STAR



ENERGY STAR Products and Appliances	10% to 66% more efficient than standard equipment	<i>A house complete with ENERGY STAR products and appliances can save 30% on total energy bills</i>
ENERGY STAR New Homes	15% to 20% more efficient than homes built to model energy code	<i>Home owners are also more comfortable</i>
Home Performance with ENERGY STAR	On average, an existing home can save 22% to 30% on total energy	<i>Some homes are seeing a 60% improvement in the field</i>
ENERGY STAR for Commercial Buildings	ENERGY STAR buildings rank in the top quartile in terms of energy efficiency	<i>When compared to an average building, uses 35% less energy and costs \$.50 square foot less</i>

# Program Cost-Effectiveness of ENERGY STAR



SECTOR	PROGRAM RAMP UP		
	EARLY (6 MONTHS -2 YRS)	MIDTERM (2-3 YRS)	LONGER TERM (3 TO 7 YRS)
Residential-existing homes	ENERGY STAR lighting & appliance program	ENERGY STAR lighting & appliance program (cont)	ENERGY STAR lighting & appliance program (cont). Ramp up efficiency levels as needed
	Home Performance with ENERGY STAR pilot	Expand Home Performance with ENERGY STAR pilot	Full-scale Home Performance with ENERGY STAR program
	Pilot ENERGY STAR Recommended HVAC quality installation practices	Expand ENERGY STAR Recommended HVAC quality installation practices  Rebate for qualifying ENERGY STAR HVAC	ENERGY STAR Recommended HVAC quality installation practices  Rebate for qualifying ENERGY STAR HVAC
Residential-new construction	ENERGY STAR Homes pilot (in areas w/out existing infrastructure)	Full-scale ENERGY STAR Homes program	Add incentives for ENERGY STAR Advanced Lighting Package
Affordable housing	Bulk purchasing of ENERGY STAR qualifying products and appliances for affordable housing	Bulk purchasing of ENERGY STAR qualifying products and appliances for affordable housing	
	Promotion of incentives for ENERGY STAR qualifying products to weatherization agencies	Promotion of incentives for ENERGY STAR qualifying products to weatherization agencies	
	Pilot Home Performance with ENERGY STAR in coordination with weatherization programs	Expand Home Performance with ENERGY STAR pilot	Full-scale Home Performance with ENERGY STAR program
	Pilot ENERGY STAR Homes for affordable housing <sup>9</sup>	Expand pilot of ENERGY STAR Homes for affordable housing	Full-scale ENERGY STAR Homes for affordable housing
Small business	Education about ENERGY STAR resources for small businesses	Add pilot for on-bill financing targeting specific business types and needs	Expand to additional business types and full-scale implementation of on-bill financing
	Prescriptive rebates for relevant ENERGY STAR qualifying products	Prescriptive rebates for relevant ENERGY STAR qualifying products (cont.)	Prescriptive rebates for relevant ENERGY STAR qualifying products (cont.)
Commercial-existing buildings	Sector-based education on ENERGY STAR benchmarking and whole buildings management approach	Sector-based education on ENERGY STAR benchmarking and whole buildings management approach	
	Prescriptive rebates for relevant ENERGY STAR qualifying products	Custom rebates based on whole building assessment or portfolio of buildings  Continuous tracking of energy performance	Additional incentives that reward comprehensive whole-building upgrades  Continuous tracking of energy performance
Commercial-new construction	Education and Training on ENERGY STAR Design Guidance and High Performance Buildings	Integrate Guidance w/utility incentives and design assistance	Continuous tracking of energy performance

<sup>9</sup> For non-Department of Housing and Urban Development (HUD) low income housing. HUD already requires ENERGY STAR performance levels for new construction.

# How Are States Promoting Energy Efficiency?



- Energy Efficiency Portfolio Standards
  - Providers meet percentage of their electricity demand through energy efficiency
  - 7 states with targets ranging from 10% to 50% in energy demand growth
    - Specific amount of energy saved (Ca)
    - Meet of percentage of total energy sales or growth (Conn., Texas, Illinois)
  - California has set a target of 50% of the IOUs' electricity and natural sales growth from 2004 to 2013 through Energy Efficiency Portfolio Standards
  - Texas, the first state to implement an Energy Efficiency Portfolio Standard, has calculated that it has exceed its target of a 10 percent reduction in load growth by 2004

# How Are States Promoting Energy Efficiency?



- Public Benefit Funds for Energy Efficiency
  - Created by levying a small charge on every customer's electricity bill to provide an annual revenue stream to fund efficiency programs
  - 17 states plus DC have Public Benefit Funds
  - For more comprehensive programs,
    - funding levels range from 1% to 3% of total utility revenues
    - equivalent to \$.27 to \$2.50 on a residential bill
    - efficiency programs funded through these funds have cost \$.03/KWh saved
  - New York, California and Wisconsin are leading states

# How Are States Promoting Energy Efficiency?



- Building codes for energy efficiency
  - A well designed, implemented and enforced code can eliminate inefficient building construction with little or no additional cost in total project costs
  - California, Oregon and Washington
- State Appliance Efficiency Standards
  - Minimum efficiency standards for appliance not covered by federal standards
  - 10 states have adopted appliance standards



# Additional Resources



- The Clean Energy-Environment State Partnership

[www.epa.gov/cleanenergy/stateandlocal/](http://www.epa.gov/cleanenergy/stateandlocal/)

- National Action Plan for Energy Efficiency

[www.epa.gov/cleanenergy/eeactionplan.htm](http://www.epa.gov/cleanenergy/eeactionplan.htm)

