ENERGY STAR

Presentation to the Missouri Energy Task Force

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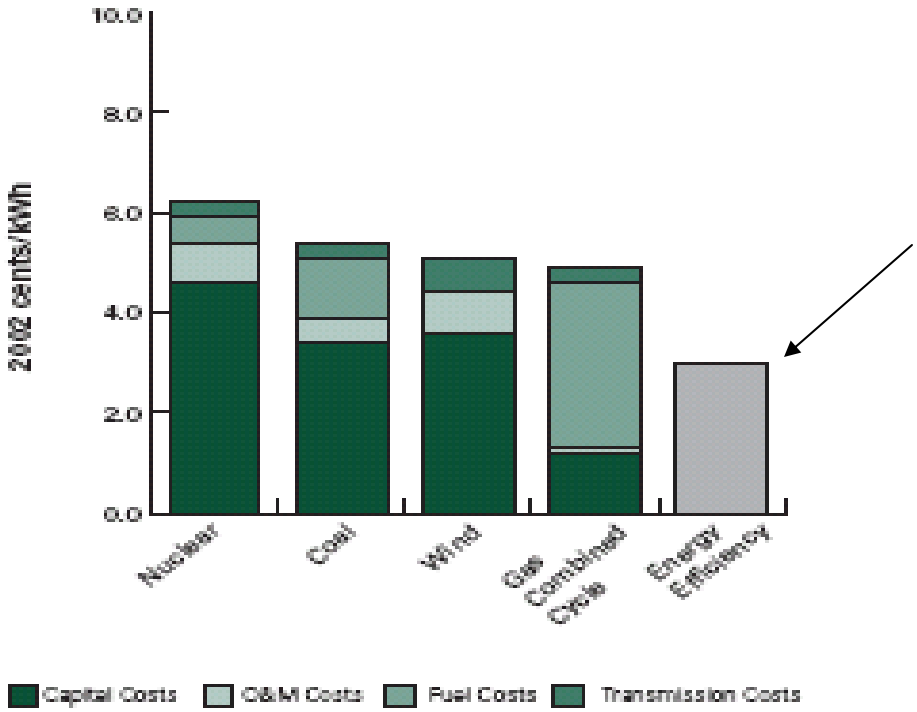
ENERGY STAR

- 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?

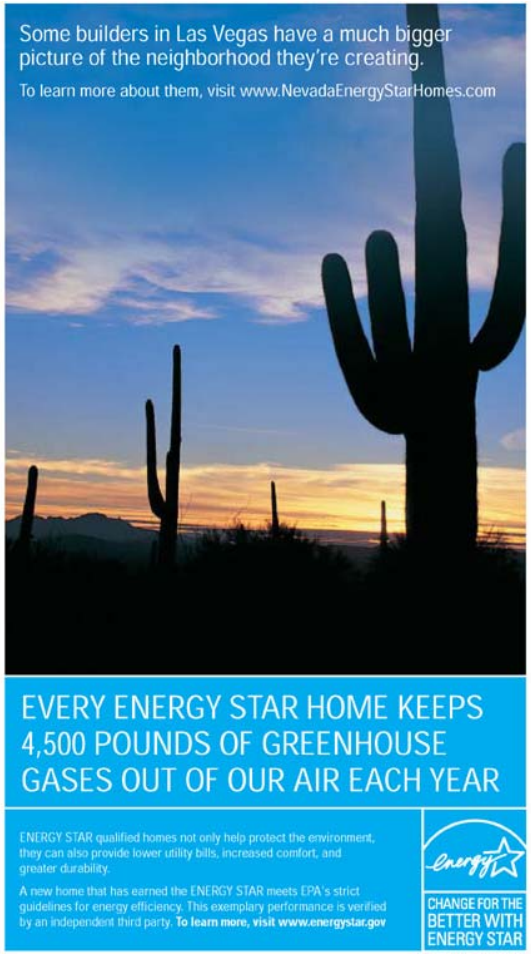


Note: The costs for nuclear, coal, wind, and gas combined cycle are projections for the cost of producing energy from new plants in 2010. The cost for energy efficiency is a median figure based on recent reports of the cost of energy saved over a portfolio of programs in leading states.

Sources: ACEEE 2004, EIA 2004.

Energy Efficiency is Low Cost

Why Use ENERGY STAR?

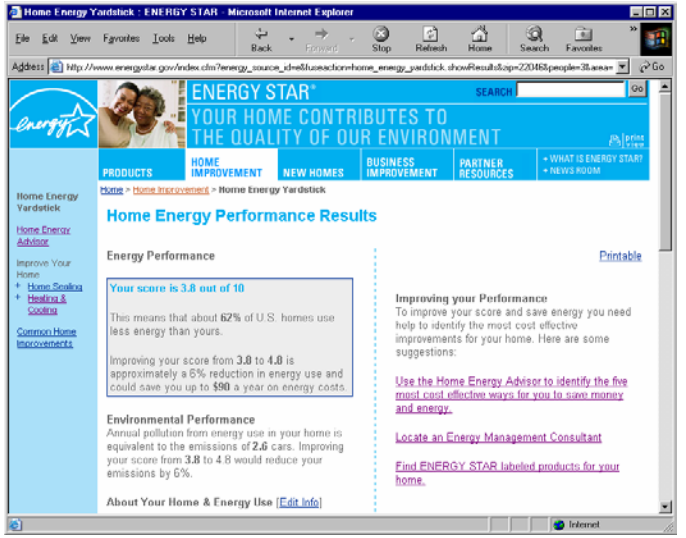


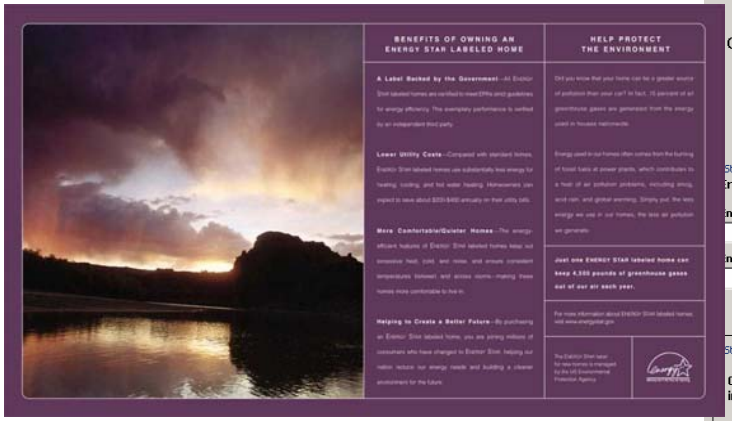
Major advertising campaigns

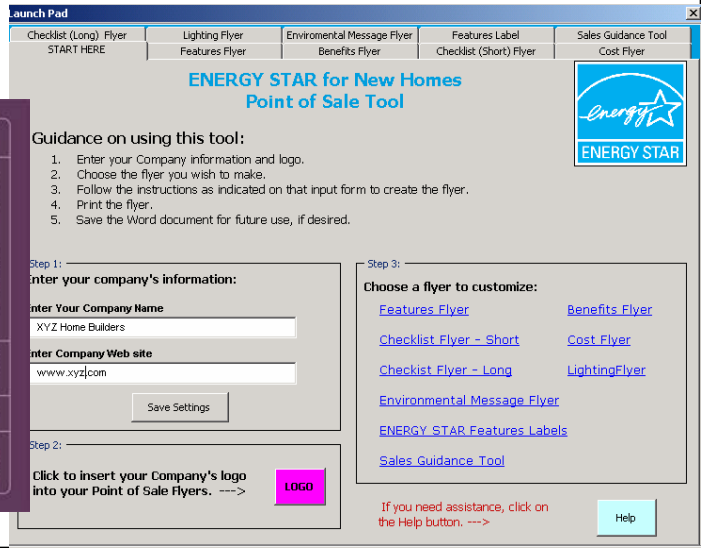
- Change a Light, Change the World Campaign (Oct–Nov)
- Appliance Program
  - Clothes Washers (April-Sept)
  - Refrigerator Retirement campaign (July-Sept)
- Cool Your World (Memorial Day to Labor Day)
- First Frost
- Builder Ad Partnership in spring
- SEARS, Home Depot, Lowe's are major partners

Why Use ENERGY STAR?

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



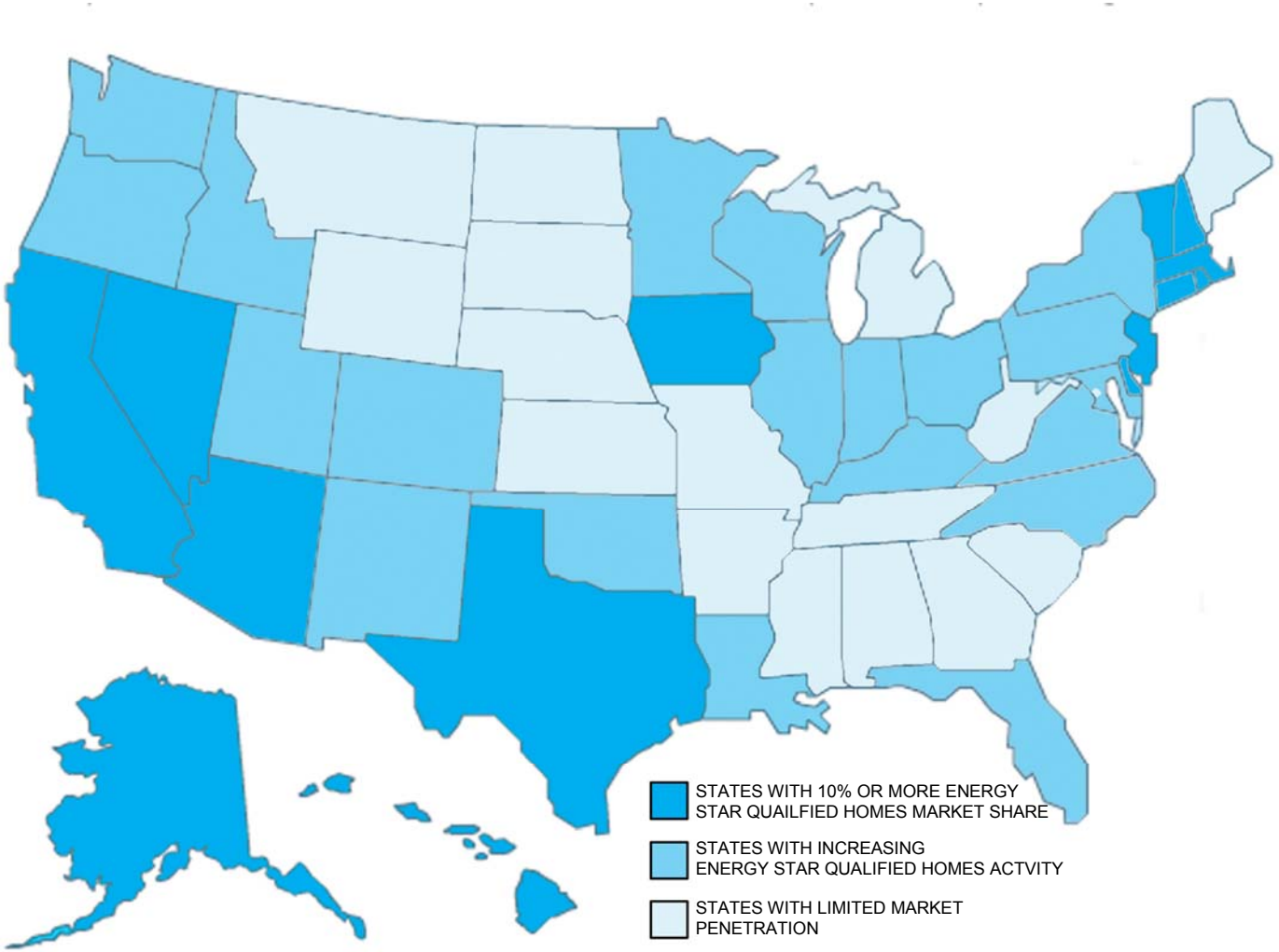




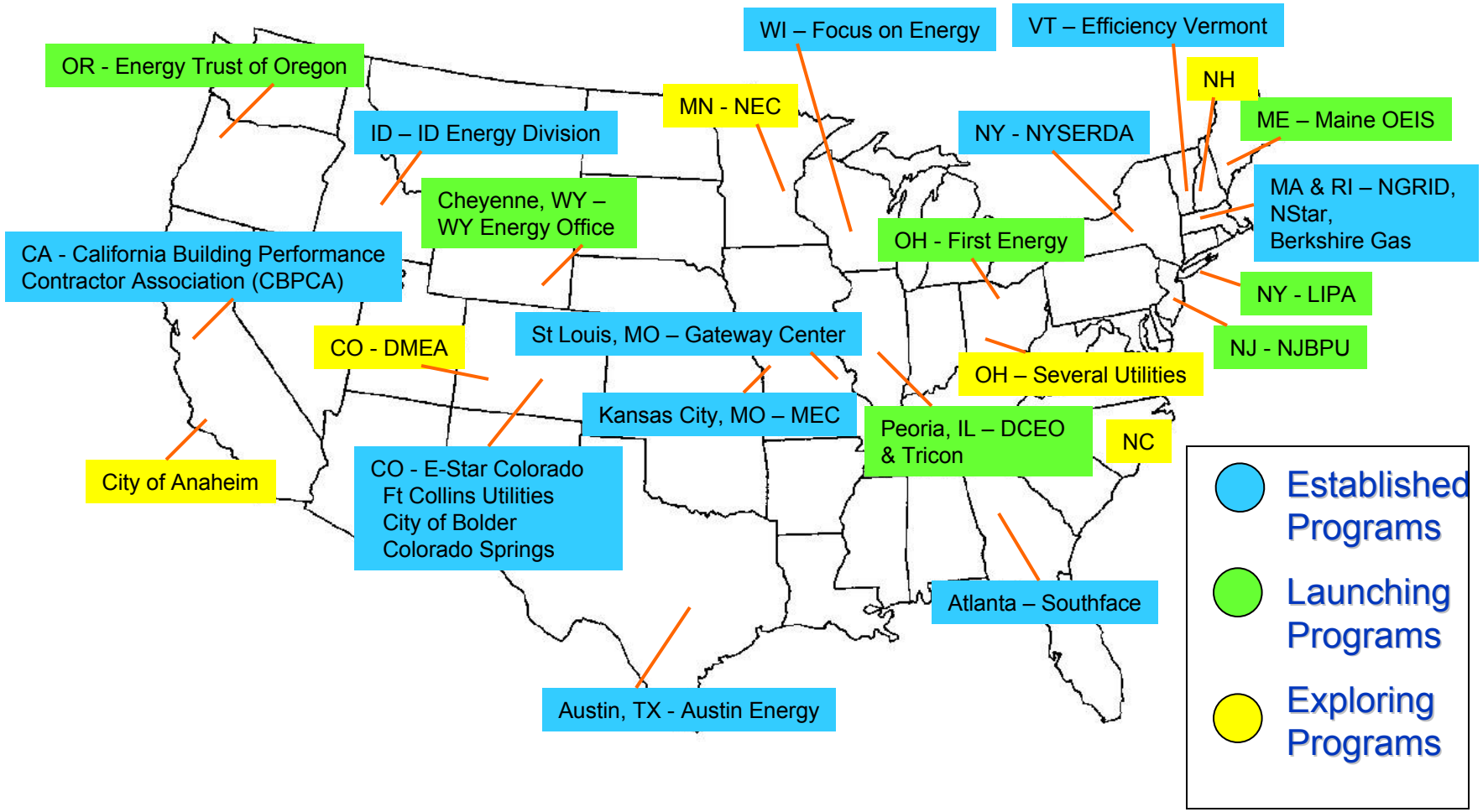
Success to Date

- 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



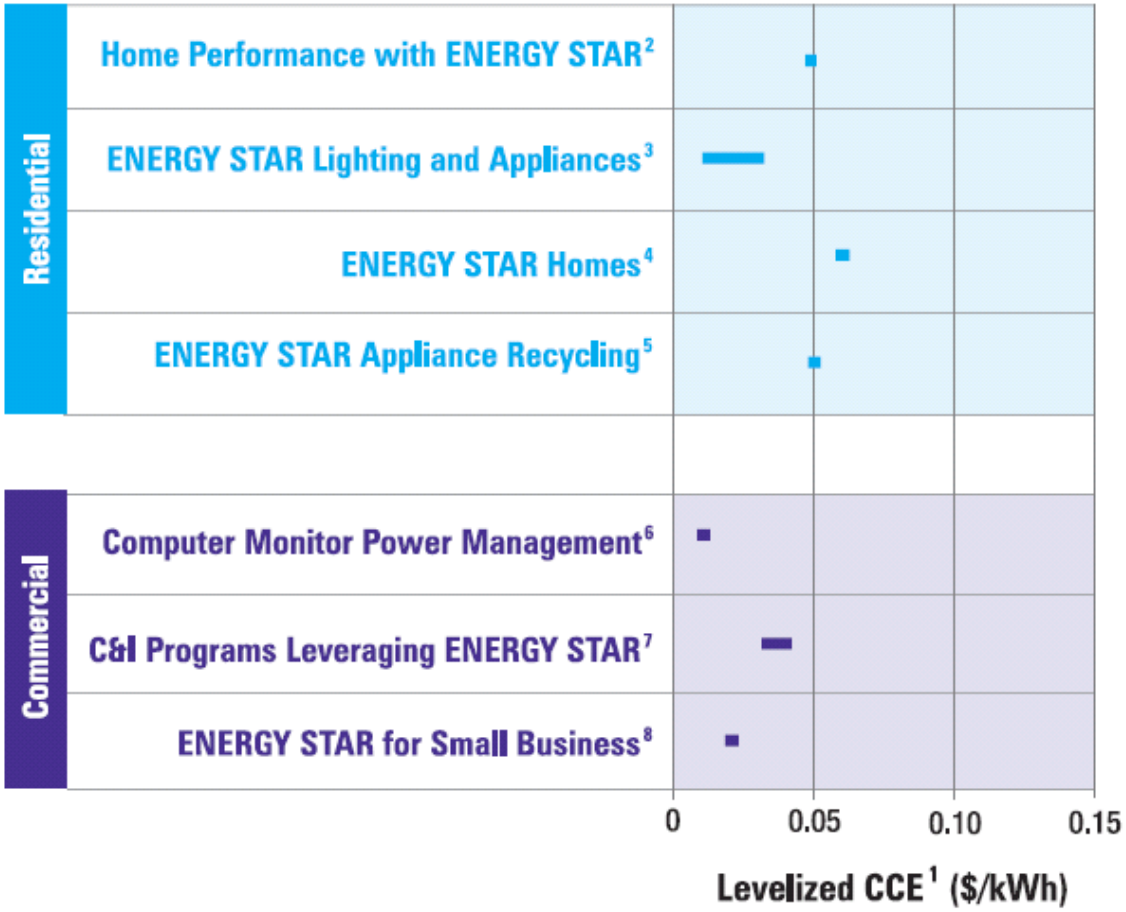
Home Performance with ENERGY STAR



Expected savings for ENERGY STAR

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

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	ENERGY STAR Recommended HVAC quality installation practices
		Rebate for qualifying ENERGY STAR HVAC	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[6]	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	Additional incentives that reward comprehensive whole-building upgrades
		Continuous tracking of energy performance	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

[6] 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 form 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 snot covered by federal standards
  - 10 states have adopted appliance standards

Additional Resources

- The Clean Energy-Environment State Partnership
  www.epa.gov/cleanenergy/stateandlocal/
- National Action Plan for Energy Efficiency
  www.epa.gov/cleanenergy/eeactionplan.htm