



# ENERGY STAR® OVERVIEW OF 2005 ACHIEVEMENTS

#### **BRINGING ENERGY EFFICIENCY TO HOMES AND BUSINESS**

Since its inception in 1992, ENERGY STAR has grown steadily in terms of the energy efficiency solutions it offers businesses and households, the breadth of organizations engaged in the partnership, and the benefits it has delivered. As a result, many Americans are saving energy and spending less on utility bills, while experiencing the quality, comfort, and performance they expect from products, homes, buildings, and industrial facilities.

Businesses and organizations—such as auto manufacturers, cement producers, hotels, commercial real estate firms, governments, schools, and hospitals—are managing their energy use strategically, saving money, and differentiating themselves in the marketplace as forward-thinking stewards of our resources. Product manufacturers and home builders are providing a broad array of efficient products and new homes. Households are investing in more efficient appliances, lighting, heating and cooling systems, and other improvements. As rising fuel prices drive up utility costs nationwide, these energy efficiency solutions are becoming increasingly important to families and businesses.

The continued success of the ENERGY STAR program is a result of its focus on practical strategies to remove market barriers. These barriers can hinder investment in cost-effective, energy-efficient products and practices that help individuals and organizations realize significant savings. The program serves a vital role as a credible, objective source of information and tools upon which businesses and homeowners can rely to make well-informed energy decisions.

Better energy decisions contribute to a better environment by reducing emissions of greenhouse gases. Through ENERGY STAR, thousands of organizations are taking the opportunity to invest in energy efficiency, save money, and help protect the environment. Their efforts are adding up to significant contributions to the President's greenhouse gas intensity reduction goal for 2012.

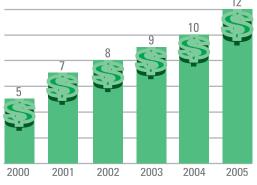
This document provides a brief overview of key ENERGY STAR achievements in 2005, based on partner actions throughout the residential, commercial, and industrial sectors. A more detailed summary of the achievements will be provided in an Annual Report in Fall 2006.

#### **RESULTS FOR 2005**

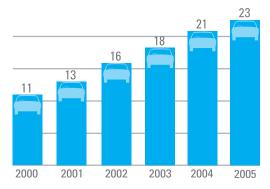
Americans, with the help of ENERGY STAR, prevented 35 million metric tons of greenhouse gas emissions in 2005 alone—equivalent to the annual emissions from 23 million vehicles—and saved about \$12 billion on their utility bills (see Fig. 1). They also saved a significant amount of energy in 2005—150 billion kilowatt hours (kWh) or 4 percent of total 2005 electricity demand. In addition, ENERGY STAR helped avoid 28,000 megawatts (MW) of peak power, equivalent to the generation capacity of more than 50 new power plants.

These benefits have grown by 15 percent from one year ago, now totaling more than twice the benefits achieved in 2000. Savings are on track to nearly double again in 10 years as more households, businesses, and organizations rely on ENERGY STAR for guidance on investing in energy-efficient products and practices. The 2005 ENERGY STAR results represent about one-third of the total greenhouse gas emissions reductions from EPA's climate change programs.

FIG. 1. Since 2000, Savings Have More Than Doubled







EMISSIONS SAVED IN VEHICLE EQUIVALENTS (in millions)

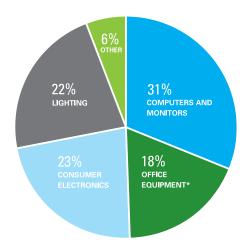


#### **ENERGY STAR PARTNERS**

A diverse set of public and private sector partners spanning the country are collaborating with the U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy (DOE) through ENERGY STAR to bring the value of energy efficiency to their customers, the public, and themselves while helping protect our environment. More than 8,000 ENERGY STAR partner organizations have committed to improving and promoting the energy efficiency of products, homes, and businesses. They include:

- About 1,500 manufacturers using the ENERGY STAR to label and differentiate more than 35,000 individual product models, many of which carry the brands that today's consumers prefer.
- More than 800 retail partners bringing ENERGY STAR qualifying products and educational information to their customers, representing more than a 45-percent increase over 2004.
- More than 2,500 builder partners constructing new homes in every state and the District of Columbia that qualify for the ENERGY STAR—saving homeowners money while maintaining high levels of comfort.
- About 2,500 private businesses, public sector organizations, and industrial facilities investing in energy efficiency and reducing energy use in their buildings.
- More than 30 states and more than 450 utilities and other energy efficiency program sponsors leveraging ENERGY STAR to improve the efficiency of government buildings and of their customers.
- Hundreds of energy service providers, energy raters, architects and building engineers, and financial lenders partnering with ENERGY STAR to make energy efficiency more widely available and to provide exceptional value to consumers and businesses.

FIG. 2. More Than 2 Billion ENERGY STAR Qualified Products Purchased Since 1992



<sup>\*</sup>Excluding computers and monitors.

#### **ENERGY STAR FOR THE HOME**

By looking to ENERGY STAR, households can reduce their energy use and save up to 30 percent, or \$450 annually on average, on their utility bills (currently averaging around \$1,500 per year). Recognized by more than 60 percent of the American public, the ENERGY STAR label has become the trusted national symbol for energy efficiency. Whether replacing an old appliance, making home improvements, or buying a new home, consumers can use ENERGY STAR to help guide their purchasing decisions, save them money, and prevent greenhouse gas emissions.

#### **Highlights for 2005**

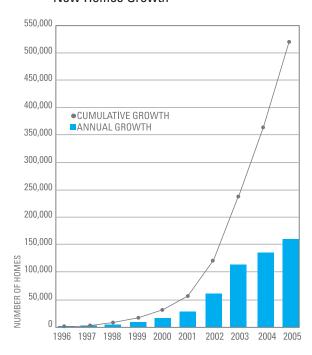
- Americans purchased about 175 million ENERGY STAR qualified products spanning more than 40 product categories in 2005, bringing the total number of ENERGY STAR products purchased since 1992 to more than 2 billion. These products, which include appliances, heating and cooling equipment, home electronics, office equipment, and lighting, offer consumers savings of between 10 and 90 percent relative to standard models (see Fig. 2).
- EPA added new products to the ENERGY STAR suite by developing energy efficiency specifications for power supplies and a specification for battery charging systems, which are used to recharge a wide variety of cordless products such as power tools and small household appliances. EPA also established more rigorous ENERGY STAR specifications for lighting, dehumidifiers, central air conditioners/air-source heat pumps, cordless phones, and new homes. DOE established a more rigorous specification for residential clothes washers, which for the first time includes a factor for water efficiency.
- EPA and DOE, together with more than half of the state governors, declared October 5, 2005, ENERGY STAR Change a Light Day to kick off a 2-month Fall outreach campaign to encourage the public to change one light in their homes to an energy-efficient model. More than 250 participating organizations promoted lighting products that use one-third the energy of traditional lighting and last up to 10 times longer. This single change can make a sizeable difference for our nation's energy resources and environment.
- EPA, DOE, and the U.S. Department of Housing and Urban Development (HUD) announced a new residential initiative, Partnerships for Home Energy Efficiency, to improve the energy efficiency of the nation's homes by 10 percent or more over the next decade. A 10-percent savings would total almost \$20 billion a year, help increase the affordability and comfort of homes, and reduce demand for natural gas by more than 1 Quad, among other benefits.
- More than 17,000 homes have been improved through state and locally sponsored Home Performance with ENERGY STAR programs. This whole-house retrofit initiative backed by EPA and DOE in a growing number of markets is bringing additional opportunities to achieve energy savings and reduce peak loads to new parts of the country.

#### **PROGRAM EFFECTIVENESS**

ENERGY STAR is a major component of EPA's climate protection programs. Every federal dollar spent on these partnership programs means:

- Reductions in greenhouse gas emissions of 1.0 metric ton of carbon equivalent (3.7 tons of CO<sub>2</sub>).
- Savings for partners and consumers of more than \$75 on their energy bills.
- The creation of more than \$15 in private sector investment.
- Net savings of over \$60.

### FIG. 3. A Decade of ENERGY STAR Qualified New Homes Growth



More than half a million families, 40-percent more than last year, now live in ENERGY STAR qualified new homes and are saving about \$110 million annually (see Fig. 3). Further, builders in more than 40 metropolitan areas now construct 10 percent or more of their new homes as ENERGY STAR, making it easier for prospective homebuyers to find a qualified home; and almost 10 percent of new homes constructed in 2005 earned the ENERGY STAR. These homes can be found in every state and the District of Columbia.

#### **ENERGY STAR FOR BUSINESS**

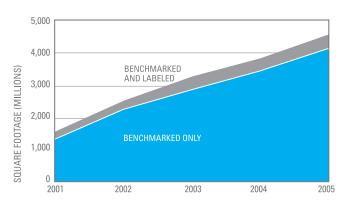
Through their ENERGY STAR partnership, businesses and organizations of all sizes can benefit from energy efficiency tools and guidance provided by EPA, including standardized measurement tools and proven business and energy management strategies. Many U.S. buildings and industrial facilities can use up to 30-percent less energy through cost-effective investments in energy efficiency. ENERGY STAR helps organizations capture a significant portion of these savings and realize the economic and environmental benefits that come with superior energy management and a sustained commitment to saving energy.

#### **Highlights for 2005**

- EPA launched the ENERGY STAR Challenge early in 2005, calling on U.S. businesses and institutions to reduce energy use by 10 percent or more in coordination with key associations and states. More than half of the states and the District of Columbia, along with over 20 major associations whose members manage many of the nation's office buildings, schools, hospitals, and other commercial buildings, are participating in the Challenge. A first step for organizations is to assess the energy use of their facilities and to set an energy savings target of 10 percent or more.
- EPA recognized almost 20 organizations for achieving significant energy savings and leading their industries in responding to the ENERGY STAR Challenge. Those achieving at least 10-percent energy savings included school districts, hospitals and supermarkets, and hotel, banking, and commercial real estate companies.

- More than 2,500 buildings have earned the ENERGY STAR label for superior energy and environmental performance, representing 480 million square feet (see Fig. 4). These buildings consume about 40-percent less energy than typical buildings, while providing the required comfort and services. Their owners are saving an estimated \$350 million annually on their energy bills relative to typical buildings.
- The number of buildings whose energy use has been assessed using EPA's energy performance rating system continued to grow, increasing by about 20 percent over 2004. The rating system has been used to evaluate about 26,000 buildings, including 38% of hospital space across the country, 25% of office building space, 24% of supermarket, 15% of school, and 14% of hotel space.
- EPA launched ENERGY STAR Exchange Services to facilitate the hosting of its rating system by third parties, making it easier to benchmark customers' facilities using their own energy tracking software. More than 3,000 benchmarked buildings were associated with the nine companies that hosted the system.
- EPA also offered training, including benchmarking sessions, to several hundred Service and Product Provider partners. They assisted with rating more than 5,000 of the buildings benchmarked and helped label 45 percent of the buildings qualifying for the ENERGY STAR during the year.
- The number of participating architecture and engineering (A&E) firms rose to 70—a fourfold increase in 3 years. Partners now use the "Designed to Earn the ENERGY STAR" graphic on their project drawings to show the projects meet EPA energy performance criteria.
- In the industrial sector, ENERGY STAR partnered with three new focus industries—food processing, glass manufacturing, and water/wastewater treatment—to develop standardized measurement tools and industry-specific best practices. EPA also advanced its energy efficiency efforts within its existing industry partnerships—automobile manufacturing, cement, pharmaceuticals, and corn and petroleum refining. Achievements in 2005 included (1) completing the first industrial plant energy performance indicator (EPI) which measures the energy efficiency of automobile assembly plants located in the United States, (2) bringing two additional EPIs for cement plants and corn refineries close to completion, and (3) developing guidelines for how these industries can earn the first ENERGY STAR industrial plant labels for demonstrating superior energy and environmental performance.

FIG. 4. Steady Growth in Building Space Benchmarked and Labeled







## ENERGY STAR® AWARD WINNERS

#### SUSTAINED EXCELLENCE

3M

St. Paul, MN

ASTORIA HOMES Las Vegas, NV

CenterPoint Energy Houston, TX

David Powers Homes Houston, TX

Ence Homes St. George, UT

Food Lion, LLC

Salisbury, NC

GE Consumer and Industrial Louisville, KY

Giant Eagle, Inc. *Pittsburgh, PA* 

Gorell Enterprises, Inc. *Indiana, PA* 

Nevada ENERGY STAR Partners Las Vegas, NV

New York State Energy Research and Development Authority Albany, NY

Northeast ENERGY STAR Lighting and Appliance Initiative Lexington, MA

OSRAM SYLVANIA Danvers, MA

Pacific Gas and Electric Company San Francisco, CA

Pardee Homes Los Angeles, CA

San Diego Gas & Electric San Diego, CA

Servidyne Systems, LLC *Atlanta, GA* 

Southern California Edison Rosemead, CA

Southern California Gas Company Los Angeles, CA

Toyota Motor Manufacturing North America, Inc. Erlanger, KY

Transwestern Commercial Services Houston, TX

TXU Electric Delivery ENERGY STAR® Homes Program Dallas, TX

USAA Real Estate Company San Antonio, TX

Veridian Homes Madison, WI

Whirlpool Corporation Benton Harbor, MI

Wisconsin Focus on Energy Madison, WI

#### PARTNER OF THE YEAR-RETAILER

The Home Depot Atlanta, GA

#### PARTNER OF THE YEAR— PRODUCT MANUFACTURER

Good Earth Lighting Wheeling, IL

Lithonia Lighting Conyers, GA

Precision Entry, Inc. Sugarcreek, OH

Victory Refrigeration Cherry Hill, NJ

### EXCELLENCE IN ENERGY STAR OUTREACH

ACME Markets, Inc. *Malvern, PA* 

Alliant Energy/MidAmerican Energy Company Cedar Rapids, IA

Delta-Montrose Electric Association (DMEA)

Montrose, CO

Energy Trust of Oregon, Inc. *Portland, OR* 

Governor Robert L. Ehrlich Jr. and the Maryland Energy Administration Annapolis, MD

Kentucky Office of Energy Policy Frankfort, KY

Lowe's Mooresville, NC

Maytag Corporation Newton, IA

National Grid Westborough, MA

Nevada Power Company—Sierra Pacific Power Company Las Vegas, NV

Sears, Roebuck and Co. *Hoffman Estates, IL* 

#### PARTNER OF THE YEAR— ENERGY MANAGEMENT

California Portland Cement Company Glendora, CA

Ford Motor Company Dearborn, MI

Frito-Lay Plano, TX

Gresham-Barlow School District 10Jt Gresham, OR

Marriott International, Inc. *Washington, DC* 

Merck & Co., Inc. Whitehouse Station, NJ

New York-Presbyterian Hospital New York, NY

#### PARTNER OF THE YEAR— SERVICE AND PRODUCT PROVIDER

Avista Advantage Spokane, WA

next>edge Los Angeles, CA

Save More Resources, Inc. *Grand Junction, CO* 

#### PARTNER OF THE YEAR— ENERGY EFFICIENCY PROGRAM DELIVERY

Austin Energy Austin, TX

New Jersey's Clean Energy Program, NJBPU Newark, NJ

Puget Sound Energy Bellevue, WA

## EXCELLENCE IN ENERGY-EFFICIENT AFFORDABLE HOUSING

New Jersey Green Homes Office-NJ Department of Community Affairs Trenton, NJ

#### PARTNER OF THE YEAR— NEW HOMES

Anderson Homes, Inc. Cary, NC

Aspen Homes of Colorado Loveland, CO

Bosgraaf Homes Holland, MI

Bureau Veritas *Plano, TX* 

D. R. Horton, Inc.-Sacramento Gold River, CA

Energy Sense Houston, TX

Guaranteed Watt Saver Systems, Inc. Oklahoma City, OK

Haven Properties, Inc. *Alpharetta, GA* 

Segal & Morel Bridgewater, NJ

Southwest Home Energy Raters *El Paso, TX* 

TexEnergy Solutions, Inc. *Irving, TX* 

Winton/Flair Custom Homes El Paso, TX

#### SPECIAL RECOGNITION— EXCELLENCE IN EFFICIENCY

Cathedral Square Corporation *Burlington, VT* 

Curtis Lumber Company, Inc. Ballston Spa, NY

Fort Collins Utilities Fort Collins, CO

Innovative Design, Inc. Raleigh, NC

McCreary County Community Housing Development Corporation Whitley City, KY

Piedmont Housing Alliance Charlottesville, VA

Pinellas County Community Development Department Clearwater, FL

Power Integrations, Inc. San Jose, CA

#### For more information, visit www.energystar.gov

All values and figures for 2005 are preliminary as of March 4, 2006. Source for all figures: EPA Climate Protection Partnerships Division