ENERGY EFFICIENCY COMBATS CLIMATE CHANGE AND SPURS ECONOMIC GROWTH

Volatile energy prices, energy security, global climate change, and the current economic downturn are critical national and global issues. Yet, we have one practical, proven solution at our fingertips—energy efficiency. Widespread improvements in the efficiency of the nation’s housing, buildings, and industries can address our energy and environmental challenges, while creating new jobs and stimulating the U.S. economy.

Today’s economic concerns and the accelerating pace of discussions on climate legislation demand an immediate, massive increase in the use of energy-efficient products and practices. Well-targeted policies and programs to help meet this demand are also necessary. Energy efficiency represents the lowest cost, fastest, and largest untapped solution for reducing greenhouse gas emissions in the near term. To maximize this potential, energy-reduction strategies must complement carbon-focused policies; together, they can overcome the persistent market barriers that limited the adoption of energy efficiency in the past. Such policies will allow us to achieve greater reductions in greenhouse gas emissions at lower cost, resulting in greater protection of our global environment.

Since its inception by the U.S. Environmental Protection Agency (EPA) in 1992, the ENERGY STAR program has overcome many market barriers and helped revolutionize the marketplace for cost-effective, energy-efficient products and services. The program is a trusted source of unbiased information that helps homeowners, businesses, and other consumers understand their opportunities for energy savings and identify the reliable, cost-effective, efficient products and services that capture these savings. The ENERGY STAR program focuses on driving greater efficiency in the following areas:

- Bringing to market new energy-efficient products that operate well beyond federal minimum efficiency requirements across more than 60 product categories for the home and office.
- Constructing efficient new homes and commercial buildings—public housing, multifamily and single family housing, schools, office buildings, hospitals, hotels, and others—that exceed code and meet rigorous benchmarks for energy efficiency.
- Improving the efficiency of existing homes, commercial buildings, and industrial facilities through standardized measurement systems, proven energy management strategies, and new energy efficiency services that overcome lingering market barriers.

Through 2008, more than 15,000 organizations have partnered with ENERGY STAR. They have achieved and helped the country achieve significant environmental and financial benefits. This document provides a brief overview of the key 2008 ENERGY STAR achievements.

RESULTS FOR 2008

Americans, with the help of ENERGY STAR, prevented 43 million metric tons of greenhouse gas emissions in 2008 alone—equivalent to the annual emissions from 29 million vehicles—and saved more than $19 billion on their utility bills (see Fig. 1). These savings are expected to grow substantially in the coming years as more households, businesses, and organizations rely on ENERGY STAR for guidance on investing in energy-efficient products, practices, and policies.

FIG. 1. Since 2000, ENERGY STAR Benefits Have More Than Doubled
ENERGY STAR PARTNERS

Across the residential, commercial, and industrial sectors, businesses and institutions are helping to fight global climate change and save money through energy efficiency. A diverse set of public and private organizations nationwide are joining forces with EPA and the U.S. Department of Energy (DOE) through ENERGY STAR to protect the environment, while bringing the value of energy efficiency to their customers, the public, and themselves. The more than 15,000 ENERGY STAR partners include:

- Over 2,400 manufacturers using the ENERGY STAR to label and differentiate more than 40,000 individual product models, many of which carry the brands that today’s consumers prefer.
- More than 1,000 retail partners bringing ENERGY STAR qualified products and educational information to their customers.
- Over 6,500 builder partners constructing new homes that qualify as ENERGY STAR in every state and the District of Columbia—saving homeowners money while maintaining high levels of comfort.
- Nearly 4,500 private businesses, public sector organizations, and industrial facilities investing in energy efficiency and reducing energy use in their buildings and facilities.
- More than 40 states, 550 utilities, and many other energy efficiency program sponsors Nationwide leveraging ENERGY STAR to improve the efficiency of commercial buildings and homes.
- Thousands of energy service providers, home energy raters, financial institutions, architects, and building engineers making energy efficiency more widely available through ENERGY STAR—providing additional value to their customers.

The collective efforts of these partners and EPA have resulted in steady growth of consumer awareness of the ENERGY STAR label. By the end of 2008, more than 75% of the American public could identify the ENERGY STAR label. The influence of the label is growing in tandem. In 2008, one in three households knowingly purchased an ENERGY STAR qualified product and more than 75% of those households credited the label as an important factor in their decision.

FIG. 2. More Than 2.5 Billion ENERGY STAR Qualified Products Purchased Since 2000

ENERGY STAR FOR THE HOME

The American public trusts ENERGY STAR as the national symbol for energy efficiency to guide their purchasing decisions, save them money, and protect the environment. By looking to ENERGY STAR for best practices and products, households can reduce their energy use and save about one-third, or $750 annually, on their utility bills, while reducing the greenhouse gas emissions that contribute to climate change.

HIGHLIGHTS FOR 2008

- **Change the World, Start with ENERGY STAR Campaign.** This national campaign challenged Americans to pledge to make energy-efficient choices at home that help reduce greenhouse gas emissions. The 2008 campaign—capped off by a six-city tour of an energy-efficient home exhibit—had a reach of 28 million people and generated nearly 500,000 pledges.
- **Qualified Products.** Americans purchased about 550 million ENERGY STAR qualified products in 2008 across more than 60 product categories for a cumulative total of more than 2.5 billion products since 2000 (see Fig. 2). The categories—including appliances, heating and cooling equipment, consumer electronics, office equipment, lighting, and more—offer consumer savings of as much as 75% relative to standard models.
- **New Home Construction.** Despite the continued downturn in the new housing market in 2008, more than 100,000 new homes were constructed to meet ENERGY STAR guidelines, bringing the total number of ENERGY STAR qualified homes to nearly 940,000 (see Fig. 3).
- **Home Improvement.** Over 50,000 homeowners are saving energy and enjoying greater comfort in their homes thanks to state and locally sponsored Home Performance with ENERGY STAR programs—a whole-home retrofit program with growing support across the country. Four new sponsors launched this program in 2008 for a total of 27. Further, EPA debuted the ENERGY STAR HVAC Quality Installation program to increase the number of properly installed HVAC systems. Systems that are not properly installed use 25% more energy.
- **Public Housing.** More than 6,000 ENERGY STAR qualified homes were built using public funding in 2008. Forty state housing finance agencies (HFAs) now give preference to projects that include ENERGY STAR products and practices, while seven state HFAs require all new homes funded with low-income housing tax credits to be ENERGY STAR qualified.
- **ENERGY STAR Product Specifications – New and Revised.** In 2008, new ENERGY STAR requirements for televisions went into effect, and for the first time they address the energy use of televisions when in use, not just in standby/off mode. EPA established a new specification for set-top boxes that includes requirements for active-mode energy use, and also introduced a new ENERGY STAR partnership for the service providers who bring the cable, satellite, and telecommunications boxes into people’s homes. EPA expanded the ENERGY STAR computer requirements to

1 A more detailed summary of the program’s 2008 achievements and plans for the future will be provided in an Annual Report, which will be published in the fall of 2009.

2 Average household utility bill is approximately $2,200 per year.
include thin clients and small-scale servers, made the requirements for desktops and notebooks more rigorous, and raised the efficiency bar again for qualified imaging equipment. New ENERGY STAR requirements for refrigerators also went into effect.

**ENERGY STAR FOR BUSINESS**

Through the ENERGY STAR program, EPA provides tools and resources to thousands of commercial and industrial partners to help them reduce energy use and offers recognition opportunities to showcase partners’ energy efficiency efforts. Partners’ successes grew significantly in 2008.

**HIGHLIGHTS FOR 2008**

- **ENERGY STAR Challenge.** More than 2,400 organizations and individuals—including over 300 local governments—have joined EPA’s ENERGY STAR Challenge to improve the efficiency of the nation’s buildings by 10% or more as measured by EPA’s energy performance rating system. Key Challenge organizations continued to work with their members to benchmark building energy use, set savings goals, track performance, and strive for the ENERGY STAR as the symbol for top performance.

- **Local and State Government Initiatives.** In 2008, local and state governments initiated strategic programs to promote energy efficiency and protect the environment. The City of Louisville inspired and engaged the business and broader community to benchmark and improve the city’s buildings. The Wisconsin Lieutenant Governor issued the ENERGY STAR Challenge to K-12 school districts across her state, with the goal of committing 100 districts to reduce energy use by 10% within one year. The District of Columbia enacted legislation, which requires that, beginning in 2010, eligible privately owned commercial buildings be benchmarked using EPA’s energy performance rating system on an annual basis and that the information be made publicly available through an online database.

- **New Buildings are Designed to Earn the ENERGY STAR.** A total of 130 building designs have achieved Designed to Earn the ENERGY STAR, each with the intent of earning the ENERGY STAR after occupation and when sufficient energy-use verification data are available. The number of these completed buildings that have gone on to earn the ENERGY STAR continued to increase in 2008.

- **Leading Organizations in Saving Energy.** Sixty-five partners have been recognized as ENERGY STAR Leaders for reducing the energy use in their buildings by as much as 30% or achieving top-performing portfolios, as verified through EPA’s energy performance rating system. These organizations, mostly K-12 school districts, manage nearly 325 million square feet across about 4,900 facilities.

- **Portfolio Manager Expansion.** For the first time, utilities are able to exchange and download their customers’ utility bill data directly into EPA’s Portfolio Manager where the building rating system resides.

- **ENERGY STAR for Industry.** Important progress was made across EPA’s 16 ENERGY STAR Industrial Focuses. EPA kicked off a new Steelmaking Focus with participants from over 95% of steel producers with integrated U.S. mills. EPA also finalized the plant-level energy performance indicators for the pharmaceutical industry and made great progress toward completing indicators for the glass and food processing industries. The ENERGY STAR Energy Guide for petrochemical plants was released.

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**FIG. 3. Nearly 940,000 Homes Nationwide Bear the ENERGY STAR Label**

**FIG. 4. Commercial Building Rating and Labeling Activity Gains Momentum**

- **EPA’s Energy Performance Rating System.** As a result of numerous initiatives across the country, more than 11.5 billion square feet of floor space has been rated using EPA’s energy performance rating system, representing about 16% of U.S. building space (see Fig. 4). This includes over 83,000 buildings, representing more than 60% of acute care hospitals; 40% of offices (including banks); 20% of schools, supermarkets, and retailers; and 15% of hotels and residence halls.
SUSTAINED EXCELLENCE

3M
St. Paul, MN

Advantage IQ, Inc.
Spokane, WA

Anderson/Vanguard Homes, Inc.
Cary, NC

Austin Energy
Austin, TX

Building Owners & Managers Association (BOMA) International
Washington, DC

CalPortland Company
Glendora, CA

CenterPoint Energy
Houston, TX

Food Lion, LLC
Salisbury, NC

Ford Motor Company
Dearborn, MI

GE Consumer & Industrial
Louisville, KY

Giant Eagle Incorporated
Pittsburgh, PA

Gorell Enterprises, Inc.
Indiana, PA

Gresham-Barlow School District
Gresham, OR

Hines
Houston, TX

J. C. Penney Company, Inc.
Plano, TX

Marriott International, Inc.
Washington, DC

Merck & Co., Inc.
Whitehouse Station, NJ

National Grid
Waltham, MA

Nevada ENERGY STAR Partners
Las Vegas, NV

New York State Energy Research and Development Authority (NYSERDA)
Albany, NY

Northeast ENERGY STAR Products Initiative
Lexington, MA

Oncor
Dallas, TX

OSRAM SYLVANIA
Danvers, MA

Pacific Gas and Electric Company
San Francisco, CA

Pella Corporation
Pella, IA

PepsiCo, Inc.
Purchase, NY

ProVia Door
Sugar Creek, OH

Providence Health & Services
Renton, WA

Raytheon Company
Waltham, MA

Sea Gull Lighting Products LLC
Riverside, NJ

Southern California Edison Company
Rosemead, CA

Toyota Motor Engineering & Manufacturing North America, Inc.
Elanger, KY

TRANSWESTERN
Houston, TX

USAA Real Estate Company
San Antonio, TX

Whirlpool Corporation
Benton Harbor, MI

Winton/Flair Custom Homes
El Paso, TX

Wisconsin Focus on Energy
Madison, WI

PARTNER OF THE YEAR

Akrige
Washington, DC

APS (Arizona Public Service)
Phoenix, AZ

ArcelorMittal USA
Chicago, IL

Bosch Home Appliances
Huntington Beach, CA

CB Richard Ellis, Inc.
Los Angeles, CA

CEMEX USA
Houston, TX

Colorado Governor’s Energy Office
Denver, CO

Council Rock School District
Newtown, PA

Energy Education
Dallas, TX

Energy Inspectors Corporation
Las Vegas, NV

EnergyLogic
Berthoud, CO

Energy Trust of Oregon, Inc.
Portland, OR

Fox Energy Specialists
Fort Worth, TX

ITW Food Equipment Group - North America
Troy, OH

The Joint Management Committee representing Massachusetts New Homes with ENERGY STAR
Massachusetts

Kennedy Associates Real Estate Investment Advisors
Seattle, WA

Kimberly-Clark Corporation
Irving, TX

Lowe’s Companies, Inc.
Mooresville, NC

MaxLite
Fairfield, NJ

Nash-Rocky Mount Public Schools
Nashville, NC

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

Northwest Energy Efficiency Alliance
Portland, OR

Puget Sound Energy
Bellevue, WA

Rocky Mountain Power, a Division of PacifiCorp
Salt Lake City, UT

Saint-Gobain
Valley Forge, PA

Satco Products, Inc.
featuring Nuvo Lighting
Brentwood, NY

Schering-Plough Corporation
Kenilworth, NJ

SENERCON
El Paso, TX

Servidyne
Atlanta, GA

Southern Energy Management
Morrisville, NC

Sunoco, Inc.
Philadelphia, PA

Technical Consumer Products, Inc.
Norcross, GA

TIAA-CREF
New York, NY

Whitefish Bay School District
Whitefish Bay, WI

Xcel Energy
Minneapolis, MN

AWARDS FOR EXCELLENCE

Actus Lend Lease
Nashville, TN

Best Buy Co., Inc.
Richfield, MN

Blue Hills Community Services
Kansas City, MO

City of Topeka, Housing & Neighborhood Development
Topeka, KS

CoStar Group, Inc.
Bethesda, MD

Energy Kinetics, Inc.
Lebanon, NJ

Georgia Power
Atlanta, GA

Ithaca Housing Authority
Ithaca, NY

Ivey Residential, LLC
Augusta, GA

KB Home
Los Angeles, CA

Maryland Energy Administration
Annapolis, MD

Menards
Eau Claire, WI

Nashville Area Habitat for Humanity
Nashville, TN

Nationwide Marketing Group
Winston-Salem, NC

Samsung Electronics Co., Ltd.
Suwon, Korea

Seattle Lighting and Destination Lighting.com
Seattle, WA

Vietnamese American Initiative for Development, Inc.
Dorchester, MA

For more information, visit www.energystar.gov

All values and figures for 2008 are preliminary as of March 1, 2009. Source for all figures: EPA Climate Protection Partnerships Division