

# ENERGY STAR<sup>®</sup> OVERVIEW OF 2010 ACHIEVEMENTS

# **ENERGY EFFICIENCY GROWS OUR ECONOMY AND ADDRESSES CLIMATE CHANGE**

Climate change is one of the global community's most pressing environmental issues. Due to tough economic times, coupled with volatile energy prices and energy security concerns, cost-effective solutions to reduce greenhouse gas (GHG) emissions are more important than ever for businesses, consumers, and organizations. Despite being a proven strategy that can protect the environment while stimulating the economy and creating new jobs, many energy efficiency opportunities remain. However, a growing number of Americans across the country are taking bold steps to seize this opportunity to fight climate change and reduce their utility bills by investing in energy-efficient technologies and practices.

In 1992, the U.S. Environmental Protection Agency (EPA) launched the ENERGY STAR program. Since that time the program has overcome market barriers and advanced the adoption of energy-efficient products, practices, and services across the residential, commercial, and industrial sectors. ENERGY STAR continues to be regarded as the trusted source of unbiased information that helps Americans identify reliable, cost-effective, energy-saving solutions that protect the environment by reducing GHG emissions.

Through 2010, more than 20,000 organizations have partnered with EPA, achieving significant environmental and financial benefits. This document provides a brief overview of key ENERGY STAR achievements in 2010. A more comprehensive summary of the program's accomplishments will be available later in 2011.

# **RESULTS FOR 2010**

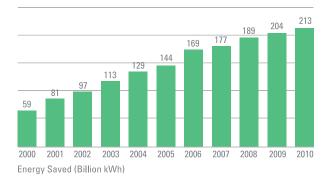
2010 proved to be another year of remarkable growth and sustained success for the ENERGY STAR program. Americans, with the help of ENERGY STAR, prevented 170 million metric tons of GHG emissions<sup>1</sup> in 2010 alone equivalent to the annual emissions from 33 million vehicles (see Fig. 1)—and saved about \$18 billion on their utility bills. EPA predicts that these benefits will continue to increase in the years ahead as more and more households, businesses, and organizations look to ENERGY STAR for guidance and make energy efficiency changes in the way they live and work.

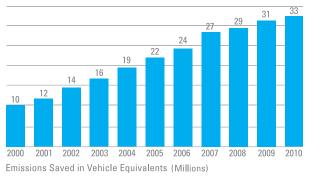
# **ENERGY STAR PARTNERS**

A diverse set of public and private organizations nationwide are joining forces with the federal government through ENERGY STAR to protect the environment, while bringing the value of energy efficiency to their customers, the public, and themselves. ENERGY STAR partners include:

- More than 1,600 manufacturers using the ENERGY STAR to label and differentiate more than 40,000 individual product models.
- More than 1,400 retail partners bringing ENERGY STAR qualified products and educational information to their customers.
- More than 8,400 builder partners constructing new homes that qualify as ENERGY STAR in every state and the District of Columbia—saving homeowners money while improving their comfort.
- More than 5,800 private businesses, public sector organizations, and industrial facilities investing in energy efficiency and reducing energy use in their buildings and facilities.

Fig. 1. Since 2000, ENERGY STAR Benefits Have More Than Tripled





**S**EPA

All reductions in annual greenhouse gas emissions are reported in million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e).

- More than 700 utilities, states, and 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.

# **ENERGY STAR QUALIFIED PRODUCTS**

The American public trusts ENERGY STAR as the national symbol for energy efficiency to inform their purchasing decisions, save them money, and protect the environment. By relying on ENERGY STAR for products, Americans know they can save on utility bills, while reducing the emissions that contribute to climate change.

### **Highlights for 2010**

**Qualified Products.** Americans purchased about 200 million ENERGY STAR qualified products in 2010 across more than 60 product categories for a cumulative total of almost 3.5 billion products since 2000 (see Fig. 2). Qualified products—including appliances, heating and cooling equipment, consumer electronics, office equipment, lighting fixtures, and more offer consumer savings of as much as 65% relative to standard models. Today, more than 80% of the American public recognizes the ENERGY STAR label. Of the households that knowingly purchased an ENERGY STAR qualified product, about 75% credited the label as an important factor in their decision.

**ENERGY STAR Product Specifications.** EPA updated performance requirements for light commercial heating and cooling equipment, water coolers, and hot food holding cabinets. Having successfully transformed the market toward greater energy efficiency, EPA sunset the ENERGY STAR specifications for digital-to-analog converter boxes and external power adapters.

#### **Program Enhancements for ENERGY STAR Qualified Products.**

In 2010, EPA instituted third-party certification across the entire suite of ENERGY STAR product categories. Under the new requirements, a product's performance must be certified by an EPA-recognized third-party based on testing in an EPA-

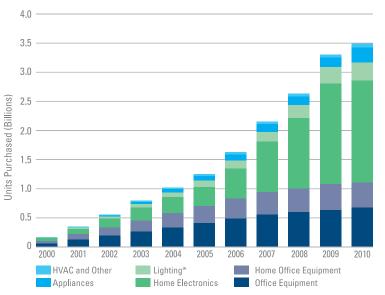


Fig. 2. Almost 3.5 Billion ENERGY STAR Qualified Products Purchased Since 2000

recognized lab before it can be labeled with the ENERGY STAR. In addition, all ENERGY STAR manufacturing partners must participate in verification testing programs run by recognized certification bodies. In consultation with certification testing experts and other stakeholders, EPA developed formal criteria for recognizing accreditation bodies, certification bodies, and laboratories that leverage international standards. The new requirements went into effect January 1, 2011, reinforcing consumer confidence in ENERGY STAR as the trusted symbol for energy efficiency and environmental protection.

#### Change the World, Start with ENERGY STAR Campaign. In

its third year, Americans across the country are making a difference for the environment as part of EPA's Change the World, Start with ENERGY STAR national campaign. People are taking small, energy-saving steps at home and in their communities that make a big difference in the fight against climate change. Through 2010, more than 2.7 million people have pledged to take action. Additionally, EPA activated more than 500,000 American youth and their families in energy efficiency projects in their communities, schools, and homes through campaign partnerships with Boys & Girls Clubs of America, DoSomething.org, and Parent-Teacher Organizations (PTO) Today.

# **ENERGY STAR FOR THE HOME**

Whether making energy-saving improvements to their existing home or looking for an energy-efficient new home, Americans rely on ENERGY STAR. Through ENERGY STAR, EPA offers best practices and products that consumers can use to reduce household energy use, save on their utility bills, and improve comfort.

#### **Highlights for 2010**

#### Nearly 1.2 Million New Homes Have Earned the ENERGY STAR.

More than 126,000 new homes were constructed to meet ENERGY STAR guidelines in 2010 (see Fig. 3), bringing the total number of ENERGY STAR qualified homes to nearly 1.2 million to date. In 2011, EPA will begin phasing in new and more rigorous guidelines for homes to earn the ENERGY STAR. Once fully implemented in 2012, homes built to the new ENERGY STAR for Homes Version 3 guidelines will be at least 15% more energy efficient than those built to the 2009 International Energy Conservation Code (IECC).

Home Improvement. Home Performance with ENERGY STAR (HPwES), EPA's flagship whole-house retrofit program, continued to expand in 2010 with over 35,000 homes improved through locally sponsored programs across the country. Such growth brings the total number of homes improved through HPwES to more than 110,000. Eight new sponsors started HPwES programs—bringing the total number to more than 35 programs across more than 30 states.

Home Energy Performance Tools. More than 95,000 consumers used EPA's online Home Energy Yardstick to compare their homes' energy use to others across the country. Over 55,000 homeowners used the interactive ENERGY STAR Home Advisor to find customized recommendations for improving the energy efficiency of their homes.

Affordable Housing. More than 5,200 ENERGY STAR qualified homes were built in 2010 using funding from the U.S. Department of Housing and Urban Development's (HUD) HOME program. In addition, 49 of 50 state housing finance agencies promoted ENERGY STAR qualified products and/or homes in their federal Low-Income Housing Tax Credit Program's Qualified Allocation

\*Lighting category does not include purchases of compact fluorescent bulbs.

Plans in 2010. Further, more than 300 Habitat for Humanity affiliates nationwide built over 1,200 ENERGY STAR qualified homes for low-income families.

# **ENERGY STAR FOR BUSINESS**

A growing number of organizations turned to EPA for ENERGY STAR tools and resources that support their energy-saving efforts. These organizations are leading by example as they implement strategic energy management programs across entire portfolios of buildings and plants, resulting in continuous energy efficiency improvements.

#### **Highlights for 2010**

**Sustaining Top Performance Through ENERGY STAR**. More than 6,200 buildings earned the ENERGY STAR in 2010 alone, nearly a 60% increase from the previous year. Of these buildings, about 40% had previously earned the ENERGY STAR, showing consistent energy savings among these top performers. About 10% of all ENERGY STAR certified buildings use 50% less energy than typical buildings. Overall, more than 12,600 buildings, representing more than 2 billion square feet of space, and nearly 50 plants, have earned the ENERGY STAR (see Fig. 4).

#### **Buildings Owners Demonstrate Significant Improvement.**

One hundred fifty organizations have been recognized as ENERGY STAR Leaders for making portfolio-wide improvements and in some cases achieving top performance across their portfolio. For the first time, an organization achieved a 50% portfolio-wide improvement milestone. Demonstrating sustained reductions, 60% of the organizations have reached multiple improvement milestones. Additionally, ENERGY STAR Service and Product Provider partners have helped more than 8,300 client buildings improve their energy use by 10 points or more.

#### National Competition to Work Off the Waste with ENERGY STAR.

In 2010, EPA launched its first ever National Building Competition. Teams from 14 buildings across the country, of all shapes and sizes, went head-to-head to see who could reduce their energy use the most. The greatest successes occurred in buildings that raised awareness and engaged occupants in energy saving efforts. The winning building, Morrison Residence Hall at the

1,200,000 1,000,000 Number of Homes to Earn the ENERGY STAR 800,000 600,000 400,000 200,000 2001 2002 2003 2004 2005 2006 2007 2008 2009\* 2010

\*The decrease in the number of homes qualified reflects the overall decrease in the total

Annual Homes Built

Cumulative Homes Built

number of homes built.

Fig. 3. Nearly 1.2 Million Homes Nationwide Have Earned the ENERGY STAR Label

University of North Carolina, Chapel Hill, won with an almost 36% energy use reduction in just one year.

Widespread Energy Management Tracking. The energy performance of more than 200,000 buildings—representing over 20 billion square feet, or more than 25% of the total market—has been assessed using EPA's ENERGY STAR Portfolio Manager.

**Portfolio Manager Expansion.** EPA's benchmarking tool, Portfolio Manager, was expanded to add data centers, a unique building type now eligible to receive an ENERGY STAR score and certification. EPA also added additional reporting features, including a custom reporting template that allows users to send data directly from Portfolio Manager to outside stakeholders.

**Governments Nationwide Rely on ENERGY STAR.** EPA helped other federal agencies and state and local governments leverage ENERGY STAR to implement innovative programs across the country. Projects funded through the American Recovery and Reinvestment Act, energy mandates for energy disclosure, and awareness-raising efforts about energy use and reductions in commercial buildings through innovative campaigns and competitions all relied on the ENERGY STAR platform.

**Building Performance with ENERGY STAR.** In partnership with several states and utilities, EPA announced a pilot program designed to further improve commercial building energy efficiency. Building Performance with ENERGY STAR is helping utilities and state energy efficiency programs achieve increased savings by strategically pursuing whole-building energy improvements with their business customers.

Industry Challenged to Save Energy. Nearly 200 industrial sites have responded to the ENERGY STAR Challenge for Industry. Launched in May 2010, 27 industrial sites have already stepped up to the challenge by achieving a verified 10% reduction in energy intensity in 5 years or less. Together, these sites will save over 1.7 trillion Btus and 98,000 metric tons of GHG emissions annually. EPA initiated ENERGY STAR Industrial Focuses with the concrete and dairy industries—adding to its growing list of industryspecific energy management tools and resources. A new guide on energy efficiency in steel manufacturing was issued, and EPA released an energy performance indicator (EPI) for evaluating the energy efficiency of U.S. cookie and cracker baking plants.

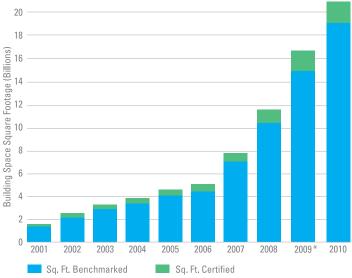


Fig. 4. Steady Growth in Building Space Benchmarked and Certified

\*2001-2008 includes only buildings eligible to receive an ENERGY STAR energy performance score. 2009 and beyond includes those buildings as well as buildings eligible to receive an EUI (Energy Use Intensity).



# ENERGY STAR<sup>®</sup> AWARD WINNERS

#### SUSTAINED EXCELLENCE

3M St. Paul, MN

Advantage IQ, Inc. Spokane, WA APS (Arizona Public Service)

Phoenix, AZ ArcelorMittal Chicago, IL

Austin Energy Austin, TX

Bentall Kennedy Seattle, WA

**Bosch Home Appliances** Huntington Beach, CA

CalPortland Company Glendora, CA

**CB** Richard Ellis Los Angeles, CA

CenterPoint Energy Houston, TX

**Community Housing Partners** Christiansburg, VA

Energy Education, Inc. Dallas, TX

Energy Inspectors Las Vegas, NV

Energy Trust of Oregon Portland, OR

EnergyLogic Berthoud, CO

Food Lion Family, Bloom and Bottom Dollar Food Salisbury, NC

Ford Motor Company Dearborn, MI

**GE Appliances & Lighting** Louisville, KY

Gresham-Barlow School District Gresham, OR

Hines Houston, TX

ITW Food Equipment Group -North America Troy, OH

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

Joint Management Committee Lexington, MA

KB Home Los Angeles, CA

Lowe's Companies, Inc. Mooresville, NC

Merck Whitehouse Station, NJ

Nashville Area Habitat for Humanity Nashville, TN

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

New York-Presbyterian Hospital New York, NY

Dallas, TX

**OSBAM SYLVANIA** Danvers, MA

Pacific Gas and Electric Company (PG&E) San Francisco, CA

Pella Corporation Pella, IA

PepsiCo, Inc. Purchase, NY

Waltham, MA

Saint-Gohain Valley Forge, PA

Servidyne

Morrisville, NČ

Sponsors of Northeast Energy Efficiency Partnerships, Inc. (NEEP) Lexington, MA

Sunoco, Inc.

TIAA-CREF New York, NY

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

TRANSWESTERN Houston, TX

For more information, visit www.energystar.gov

San Antonio, TX

Whirlpool Corporation Benton Harbor, MI Wisconsin Focus on Energy

Madison, WI

Oncor

**Raytheon Company** 

Atlanta, GA Southern Energy Management

Philadelphia, PA

USAA Real Estate Company

All values and figures for 2010 are preliminary as of March 1, 2011. Source for all figures: EPA Climate Protection Partnerships Division.

State College, PA **Evergreen Public Schools** Vancouver, WA

FSL Home Improvements dba FSL Home Energy Solutions Phoenix, AZ

**Electrolux Major Appliances** 

**PARTNER OF THE YEAR** 

Above and Beyond Energy

Wilmington, NC

Corpus Christi, TX

Andersen Corporation

**Colgate-Palmolive Company** 

Constellation Energy/Baltimore

Gas and Electric Company

**Continental Refrigerator** 

**AEP** Texas

Bayport, MN

New York, NY

**Cleveland Clinic** 

Cleveland, OH

New York, NY

Chicago, IL

ComEd

(BGE)

Baltimore, MD

Bensalem, PA

Burlington, VT

Charlotte, NC

EnergyCAP, Inc.

Spring, TX

**Design Tech Homes** 

Efficiency Vermont

Citi

Gainesville Regional Utilities (GRU) Gainesville, FL

Hanesbrands Inc. Winston-Salem, NC

**HEI Hotels & Resorts** Norwalk, CT

**Home Creations** Moore, OK

John B. Sanfilippo & Son, Inc. Elgin, IL

Jones Lang LaSalle Chicago, IĽ

Kohl's Department Stores, Inc. Menomonee Falls, WI

Prevention Center Louisville, KY

LG&E and KU Louisville, KY

Loudoun County Public Schools Broadlands, VA

Manitowoc Foodservice New Port Richey, FL

Meritage Homes Scottsdale, AZ

Momentum, LLC Boise, ID

New Jersey Board of Public Utilities Trenton, NJ

New Mexico Gas Company Albuquerque, NM

Nissan North America, Inc. Franklin, TN

NVR, Inc. Reston, VA

Panasonic Home & Environment Company Secaucus, NJ

PNM Albuquerque, NM

Public Service Company of Oklahoma (PSO) Tulsa, OK

Questar Gas Company Salt Lake City, UT

Samsung Electronics Co., Ltd. Suwon. South Korea

Sears Holdings Corporation Hoffman Estates, IL

Staples, Inc. Framingham, MA

TexEnergy Irving, TX

The Boeing Company Chicago, IL

The E Group, a Division of FirstEnergy Solutions Corp. Akron, OH

Wells Real Estate Funds Norcross, GA

**Xcel Energy** Minneapolis, MN

KPPC – Kentucky Pollution

#### **AWARDS FOR EXCELLENCE**

(LIPA)

Uniondale, NY

National Grid

Waltham, MA

Orlando, FL

Company

Rosemead, CA

Strategies

Coalition

Indio, CA

County

Denver

Denver, CO

Agency

Raleigh, NC

Washington, DC

San Antonio, TX

Taipei, Taiwan

DIRECTV

Canon U.S.A., Inc.

Lake Success, NY

El Segundo, CA

Richardson, TX

Vernon Hills, IL

Mahwah, NJ

Eau Claire, WI

Metro Lighting

Brentwood, MO

Retailing

Menards

Lennox Industries Inc.

Scotsman Ice Systems

Sharp Electronics Corporation

Nationwide Marketing Group Winston-Salem, NC

Goshen, IN

Salt Lake City, UT

**Affordable Housing** 

Coachella Valley Housing

Habitat for Humanity of Elkhart

Habitat for Humanity of Metro

North Carolina Housing Finance

San Antonio Housing Authority

**Energy Efficient Product Design** 

ASUSTeK Computer Inc.

National Housing Trust

Manchester, NH

Protection Division

**ENERGY STAR Promotion** 

Long Island Power Authority

New Hampshire CORE Utilities

Orange County Environmental

Southern California Edison

Utah Building Energy Efficiency