



# ENERGY STAR® OVERVIEW OF 2012 ACHIEVEMENTS

## TWENTY YEARS OF SAVING MONEY AND PROTECTING OUR CLIMATE

Climate change continues to be one of the nation’s most important environmental challenges, and improving energy efficiency is one of the easiest, fastest, and most cost-effective solutions. For the past 20 years, the U.S. Environmental Protection Agency (EPA) has effectively captured and channeled the ingenuity of the marketplace through ENERGY STAR, a voluntary energy-efficiency program.

Since 1992, EPA has partnered with organizations throughout America to implement practical, proven, cost-effective solutions for reducing greenhouse gas (GHG) emissions with outstanding environmental and financial success. Through cutting-edge investments in energy-efficient technologies and practices, the ENERGY STAR program contributes to important health and environmental benefits by addressing the challenges of climate change while strengthening our economy.

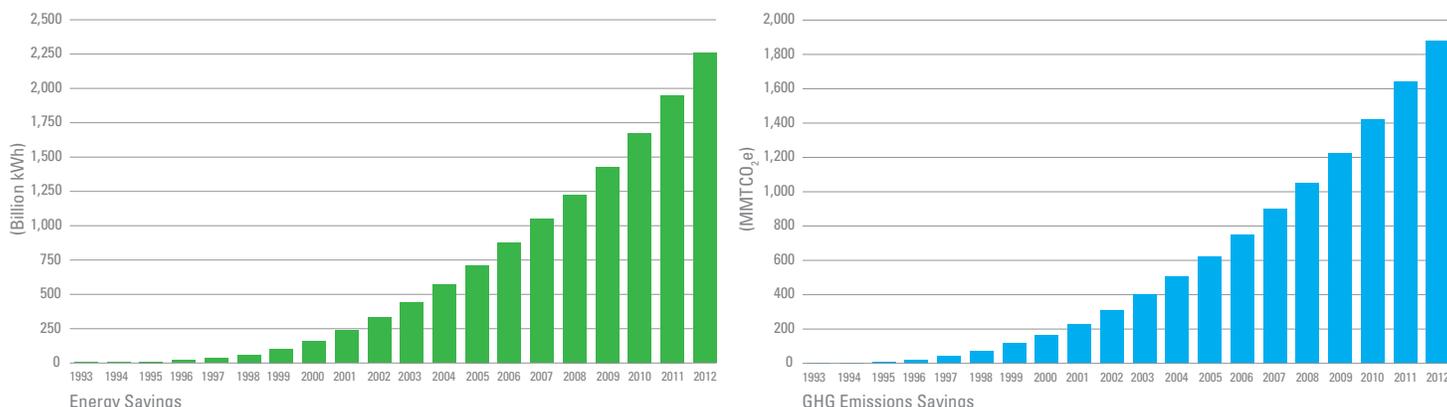
EPA will continue to dismantle barriers to widespread energy efficiency through ENERGY STAR by serving as a trusted source of unbiased information that helps consumers and businesses make choices that are good for the environment and the economy. This document provides a brief overview of key ENERGY STAR achievements in 2012.

## RESULTS FOR 2012

In 2012, 18,000 organizations partnered with EPA, improved efficiency, and realized significant environmental and financial benefits. They help protect the climate while making energy efficiency accessible to their customers, the public, and their own organizations. These committed partners and individuals across the country have tapped the value of ENERGY STAR to achieve dramatic energy savings while cumulatively preventing more than 1.8 billion metric tons of GHG emissions (see Fig 1)<sup>1</sup> and saving over \$230 billion on utility bills.

By partnering with ENERGY STAR, consumers and businesses also reduced their utility bills by \$24 billion, due to investments in energy-efficient technologies and practices that will continue to provide bill savings for years to come. In 2012 alone, Americans, with the help of ENERGY STAR, prevented 242 million metric tons of GHG emissions<sup>2</sup>—providing over \$5.8 billion in benefits to society due to reducing damages from climate change.<sup>3</sup>

**Fig. 1. ENERGY STAR Program Benefits Have Nearly Tripled in its Last Decade**



<sup>1</sup> ENERGY STAR program cost/benefit calculations began in 1993.

<sup>2</sup> All reductions in annual GHG emissions are reported in million metric tons of carbon dioxide equivalent (MMTCo<sub>2</sub>e).

<sup>3</sup> Societal benefits are based on the social cost of carbon which monetizes the damages associated with an incremental increase in carbon emissions in a given year, including (but is not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services. Interagency Working Group on Social Cost of Carbon. 2010. Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866. February. United States Government. <http://www.whitehouse.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf>



## ENERGY STAR FOR PRODUCTS

As the national symbol for energy efficiency, ENERGY STAR makes it easy for consumers and businesses to purchase products that save them money and protect the environment. EPA remains focused on maintaining program integrity, while expanding ENERGY STAR's role as a trusted resource for Americans in the fight against climate change.

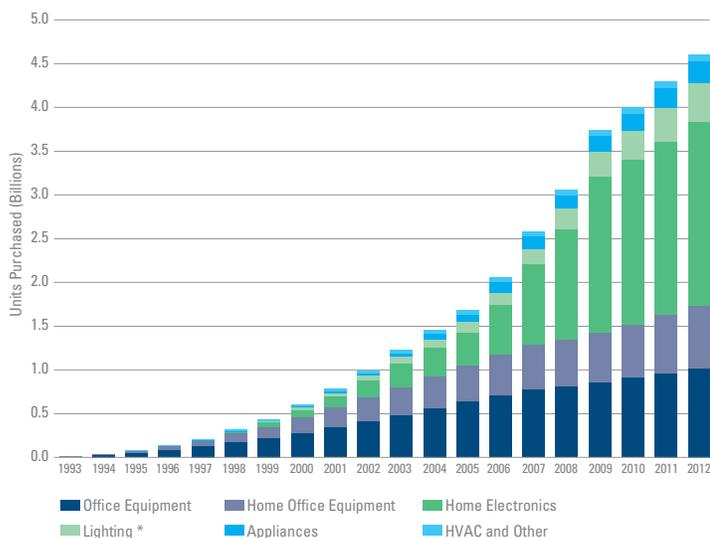
**Certified Products.** Americans purchased about 300 million ENERGY STAR certified products in 2012 across more than 65 product categories for a cumulative total of more than 4.5 billion products since 1993 (see Fig. 2). Today, 85% of the American public recognizes the ENERGY STAR label. Global support for the program remains strong, as exemplified by the signing of a 5-year renewal of the ENERGY STAR Office Equipment agreement with the European Union.

**ENERGY STAR Most Efficient 2012.** By the end of the year, as this initiative became a permanent part of the program, more than 1,400 models from over 50 manufacturers were recognized as the "best of the best" in energy efficiency. Categories included televisions, computer monitors, clothes washers, refrigerators, and heating and cooling equipment.

**ENERGY STAR Product Specifications.** EPA updated performance requirements for televisions, displays, audio/video equipment, room air conditioners, residential water heaters, and vending machines as well as commercial clothes washers, ice machines, and dishwashers. ENERGY STAR added requirements for uninterruptible power supplies.

**Third-Party Certification for ENERGY STAR Products.** All products that earn the ENERGY STAR are subject to strict testing and certification requirements before they can carry the label. By year's end, EPA certified over 40,000 products. Verification testing administered by EPA-recognized certification bodies is also in process for all product categories. In 2012, EPA disqualified 87 models based on the results of this post-market testing. The program's emphasis on testing and third-party product review ensures that consumers can trust ENERGY STAR certified products to deliver the energy savings promised by the label.

**Fig. 2. More than 4.5 Billion ENERGY STAR Certified Products Purchased Since 1993**



\*Lighting category does not include purchases of light bulbs.

**Change the World, Start with ENERGY STAR Campaign.** At the end of the 2012 campaign, more than 3.5 million people had taken the ENERGY STAR Pledge, committing to make energy-efficient changes at home. Through EPA's new youth outreach effort, Team ENERGY STAR, kids across the country helped their families save energy. This effort integrated elements from Universal's *Dr. Seuss' The Lorax* movie and asked people to share an energy-saving success story. More than 10,000 young people participated, including those from 150 Boys & Girls Clubs of America. In October, ENERGY STAR Day celebrated the collective achievements of both families and organizations in changing the world with ENERGY STAR. These initiatives, along with thousands of partner-led ENERGY STARs Across America events, represent a vital and growing national movement to protect the climate.

## ENERGY STAR FOR HOMES

Through ENERGY STAR, EPA works to increase the energy efficiency of the nation's new and existing housing stock to cost-effectively reduce GHG emissions, while lowering Americans' utility bills and improving the comfort of their homes.

**Transition to New Requirements for ENERGY STAR Certified Homes.** In 2012, EPA completed the transition to new, more rigorous requirements for homes to earn the ENERGY STAR label. Homes certified under the new requirements are at least 15% more efficient than those built to the 2009 International Energy Conservation Code (IECC), and include additional energy-saving features to deliver a performance advantage of up to 30% compared to typical new homes. More than 100,000 new homes earned the ENERGY STAR in 2012, bringing the total number of certified homes to more than 1.4 million (see Fig. 3). Since EPA began labeling new homes in 1995, American homeowners have saved more than \$4 billion on their energy bills and reduced GHG emissions by more than 39 billion pounds. In 2012 alone, families living in ENERGY STAR certified homes saved \$527 million on their utility bills.

**ENERGY STAR for New Multifamily High-Rise Buildings.** Since multifamily high-rise buildings first became eligible to earn the ENERGY STAR label, 40 buildings containing more than 3,800 individual units have been certified. These high-rise buildings must meet EPA's energy efficiency guidelines and be designed to be at least 15% more efficient than the building energy code. In 2012, 16 buildings containing over 900 multifamily high-rise units were certified.

**Home Performance with ENERGY STAR.** In 2012, an estimated 75,000 homes were improved through the whole house retrofit program, Home Performance with ENERGY STAR (HPwES). This work was performed by 50 locally sponsored programs, including 5 new programs launched in 2012, and more than 1,900 participating contractors across the nation. Since the program's inception, more than 250,000 homes have been improved through HPwES. The HPwES program is administered by the U.S. Department of Energy, with support from EPA.

**Energy Efficiency Guidance and Tools for Homeowners.** This year, 1.3 million Americans visited the ENERGY STAR website to find information about home efficiency improvements, and use the Home Energy Yardstick and Home Energy Advisor to assess their homes' energy use and get recommendations to help reduce utility bills and improve comfort. In 2012, EPA began a project to enhance the Home Energy Yardstick to incorporate "Green Button" functionality, which will enable quicker and more accurate input of a consumer's utility data into the tool, making it easier to receive a home's score.

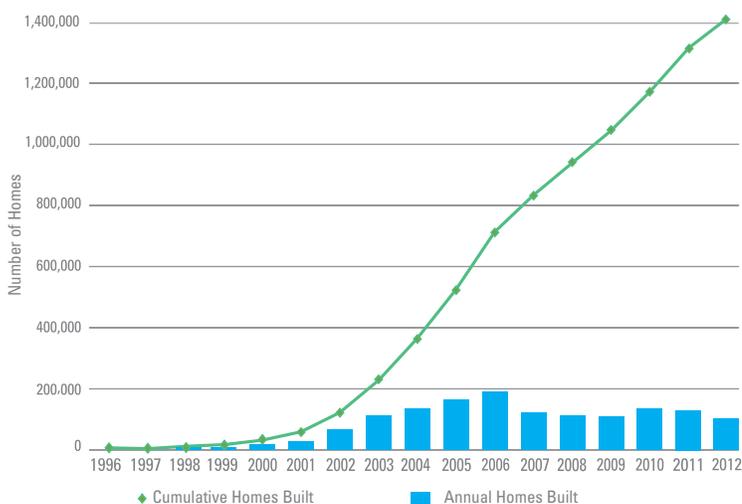
**Affordable Housing.** In fiscal year 2012, more than 8,500 ENERGY STAR certified homes were built within the affordable housing sector using funding from the U.S. Department of Housing and Urban Development. In addition, more than 320 Habitat for Humanity affiliates nationwide built more than 1,700 ENERGY STAR certified homes for low-income families.

## ENERGY STAR FOR BUSINESS

ENERGY STAR partners continue to demonstrate solutions that deliver significant GHG emissions reductions through energy efficiency. Year after year, these organizations are leading examples of how to implement successful strategies, technologies, and practices to increase the efficiency of U.S. buildings and plants based on EPA's proven ENERGY STAR framework, posting significant results for the environment and their bottom line.

**Benchmarking Shows Big Savings.** Unveiling the largest U.S. building energy benchmarking data analysis to date, EPA examined over 35,000 buildings that consistently used the ENERGY STAR Portfolio Manager measurement tool from 2008 to 2011. The buildings showed an average of 7% energy savings and 6% GHG emissions reductions over three years—with the buildings that were initially the lowest performers making the greatest improvements. In addition to this analysis, EPA released a series of ENERGY STAR Portfolio Manager Data Trends in 2012 (see Fig. 4).

**Fig. 3. More than 1.4 Million Homes Nationwide Have Earned the ENERGY STAR Label**



\*The decrease in the number of homes certified reflects the overall decrease in the total number of homes built.

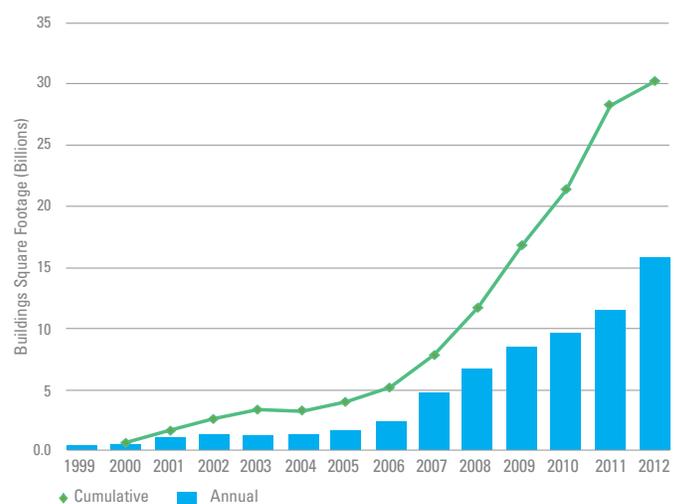
**ENERGY STAR Certification for Top Performance.** By the end of 2012, more than 8,200 buildings and plants became ENERGY STAR certified, for a total of more than 20,000 facilities. ENERGY STAR buildings emit 35% fewer GHG emissions and use 35% less energy than average buildings.

**Significant Portfolio-Wide Savings.** More than 270 leading companies and school districts have been recognized as ENERGY STAR Leaders for portfolio-wide energy savings, a 30% growth. Some organizations earned recognition for reducing energy use up to 60%. Energy management strategies—such as executive commitment; active involvement of staff, tenants, or students; and investment in new technologies—were integral to their success.

**Biggest National Building Competition Yet.** At the midpoint weigh-in of EPA's 2012 ENERGY STAR Battle of the Buildings, an elementary school in New Jersey was the leading competitor with a 47% reduction in energy use intensity. In the first six months of the competition alone, teams representing more than 3,200 buildings around the country had saved more than \$37 million on utility bills and reduced GHG emissions equal to those emitted by the annual electricity use of more than 16,000 homes. Final results will be released in April 2013.

**New Levels of Industrial Efficiency.** Nearly a decade of energy efficiency work with the wet corn milling industry enabled EPA to re-benchmark the industry's energy performance, revealing improvements in energy efficiency across the sector, including an annual energy use reduction of 6.7 trillion British thermal units (Btu), representing a 4.3% improvement. In 2012, EPA expanded the use of ENERGY STAR tools in the integrated paper, metalcasting, printing, and dairy industries. A record number of industrial sites committed to the ENERGY STAR Challenge for Industry, and 75 met or exceeded their targets in 2012 by achieving a 10% reduction in energy intensity, saving 14.7 trillion Btu in energy.

**Fig. 4. Steady Growth in Building Space Benchmarked**



Cumulative square footage represents the unique building floor space benchmarked in Portfolio Manager. Building space benchmarked over multiple years is only counted once in the cumulative total.



# ENERGY STAR® Award Winners

## PARTNER OF THE YEAR - SUSTAINED EXCELLENCE

3M Company  
St. Paul, MN

AEP Texas Central  
Corpus Christi, TX

Andersen Corporation  
Bayport, MN

APS (Arizona Public Service)  
Phoenix, AZ

ArcelorMittal USA  
Chicago, IL

Austin Energy  
Austin, TX

Bentall Kennedy  
Toronto, ON

Bosch Home Appliances  
Corporation  
Irvine, CA

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

CalPortland Company  
Glendora, CA

CBRE, Inc.  
Los Angeles, CA

Cenergistic  
Dallas, TX

CenterPoint Energy  
Houston, TX

Cleveland Clinic  
Cleveland, OH

Colgate-Palmolive Company  
New York, NY

ComEd  
Chicago, IL

Constellation Energy/Baltimore  
Gas and Electric Company  
(BGE)  
Baltimore, MD

Ecova  
Spokane, WA

Energy Inspectors Corporation  
Las Vegas, NV

EnergyCAP, Inc.  
State College, PA

EnergyLogic  
Berthoud, CO

Evergreen Public Schools  
Vancouver, WA

Focus on Energy  
Madison, WI

Food Lion, Bottom Dollar Food,  
Harveys and Reid's  
Salisbury, NC

GE Lighting  
Fairfield, CT

General Motors  
Detroit, MI

Gresham-Barlow School District  
Gresham, OR

Habitat for Humanity of Greater  
Nashville  
Nashville, TN

Habitat for Humanity of Metro  
Denver  
Denver, CO

Hanesbrands Inc.  
Winston Salem, NC

HEI Hotels & Resorts  
Norwalk, CT

Hines  
Houston, TX

ITW Food Equipment Group  
Troy, OH

Ivey Residential, LLC  
Evans, GA

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

Jones Lang LaSalle  
Chicago, IL

KB Home  
Los Angeles, CA

Kohls Department Stores, Inc.  
Menomonee Falls, WI

KPPC - Kentucky Pollution  
Prevention Center  
Louisville, KY

LG&E and KU  
Louisville, KY

Long Island Power Authority  
(LIIPA)  
Uniondale, NY

Loudoun County Public Schools  
Ashburn, VA

Lowe's Companies, Inc.  
Mooresville, NC

Manitowoc Foodservice  
New Port Richey, FL

Merck  
Whitehouse Station, NJ

Meritage Homes  
Scottsdale, AZ

New Jersey Board of Public  
Utilities  
Trenton, NJ

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

New York-Presbyterian Hospital  
New York, NY

Nissan North America, Inc.  
Franklin, TN

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

Northwest Energy Efficiency  
Alliance (NEEA)  
Portland, OR

Pacific Gas and Electric  
Company  
San Francisco, CA

Panasonic Eco Solutions North  
America  
Secaucus, NJ

PepsiCo, Inc.  
Purchase, NY

Public Service Company of  
Oklahoma (PSO)  
Tulsa, OK

Raytheon Company  
Waltham, MA

Saint-Gobain  
Valley Forge, PA

Samsung Electronics Co., Ltd.  
Suwon, South Korea

Sears Holdings Corporation  
Hoffman Estates, IL

Servidyne  
Atlanta, GA

Southern California Edison  
Rosemead, CA

Southern Energy Management  
Morrisville, NC

Staples, Inc.  
Framingham, MA

The Boeing Company  
Chicago, IL

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

TIAA-CREF  
New York, NY

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

TRANSWESTERN  
Houston, TX

USAA Real Estate Company  
San Antonio, TX

**PARTNER OF THE YEAR**

AEP Ohio  
Columbus, OH

Air Force Medical Support  
Agency - Health Facilities  
Division  
San Antonio, TX

Air King, Ltd.  
West Chester, PA

Allergan, Inc.  
Irvine, CA

AVR Homebuilders  
Yonkers, NY

Beacon Capital Partners, LLC  
Boston, MA

Brandywine Realty Trust  
Radnor, PA

Burton Energy Group  
Alpharetta, GA

Cassidy Turley  
Washington, DC

Columbia Gas of Ohio  
Columbus, OH

Des Moines Public Schools  
Des Moines, IA

DIRECTV  
El Segundo, CA

Dominion East Ohio  
Richmond, VA

Eastman Chemical Company  
Kingsport, TN

El Paso Electric  
El Paso, TX

Energy Services Group  
New Castle, DE

Entergy Texas  
Beaumont, TX

Fanning/Howey Associates,  
Inc.  
Celina, OH

Grayhawk Homes, Inc.  
Columbus, GA

Hoshizaki America, Inc.  
Peachtree City, GA

Kenton County School District  
Ft. Wright, KY

LG Electronics, Inc.  
Englewood Cliffs, NJ

Liberty Property Trust  
Malvern, PA

Memorial Hermann Healthcare  
System  
Houston, TX

Nationwide Marketing Group  
Winston Salem, NC

New Hampshire CORE Utilities  
Manchester, NH

North Penn School District  
Lansdale, PA

PECO Energy Company  
Philadelphia, PA

Pella Corporation  
Pella, IA

Philips Lighting Company  
Somerset, NJ

ProVia  
Sugar Creek, OH

Scotsman Ice Systems  
Vernon Hills, IL

Scott County Schools  
Georgetown, KY

Sharp Electronics Corporation  
Mahwah, NJ

Southern Maryland Electric  
Cooperative (SMECO)  
Hughesville, MD

Technical Consumer Products,  
Inc. (TCP)  
Aurora, OH

The Connecticut Energy  
Efficiency Fund with UI and  
CL&P  
Orange, CT

The Home Depot  
Atlanta, GA

Verizon Wireless  
Basking Ridge, NJ

Vornado Realty Trust  
New York, NY

Wells Real Estate Funds  
Norcross, GA

## AWARDS FOR EXCELLENCE

### ENERGY STAR Promotion

Amerlux  
Fairfield, NJ

FSL Home Energy Solutions  
Phoenix, AZ

National Grid  
Waltham, MA

South Carolina Electric & Gas  
Company  
Cayce, SC

### Affordable Housing

Milford Housing Development  
Corporation  
Milford, DE

### Energy-Efficient Product Design

Cree, Inc.  
Durham, NC

### Retailing

Metro Lighting  
Brentwood, MO

For more information, visit [www.energystar.gov](http://www.energystar.gov)

All values and figures for 2012 are preliminary as of March 1, 2013. Source for all figures: EPA Climate Protection Partnerships Division.