

# ENERGY STAR® OVERVIEW OF 2014 ACHIEVEMENTS



### ENERGY STAR AND ITS PARTNERS MAKE GREAT STRIDES IN ENERGY EFFICIENCY

Advancements in energy-efficient products, practices, and services help individuals and organizations protect the climate and public health while strengthening the economy. The U.S. Environmental Protection Agency (EPA) supports innovative environmental solutions through public-private partnerships such as ENERGY STAR. Since 1992, the ENERGY STAR program has reduced GHG emissions with real-world, cost-effective approaches. Together with its partners, ENERGY STAR continues to drive energy waste reductions and advance markets for widespread energy efficiency throughout the residential, commercial, and industrial sectors.

ENERGY STAR is a key part of EPA's ongoing efforts to develop national programs, policies, and regulations for reducing air pollution. ENERGY STAR is the simple choice for energy efficiency. Behind each blue label is a product, building, or home that is independently certified to use less energy and cause fewer of the emissions that contribute to climate change. Today, with awareness at more than 85%, ENERGY STAR is a widely recognized symbol for energy efficiency, helping families and businesses save \$360 billion on utility bills, while reducing greenhouse gas emissions by 2.5 billion metric tons since 1992.

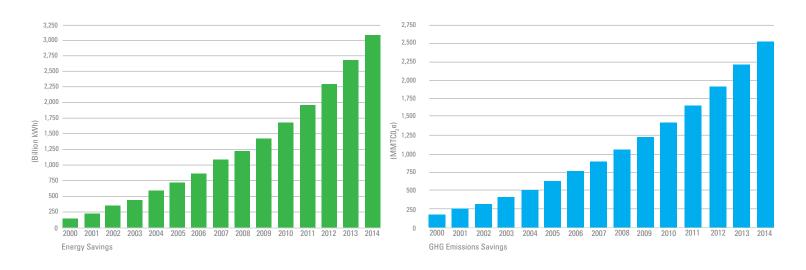
This document provides a brief overview of key ENERGY STAR achievements in 2014.

### **RESULTS FOR 2014**

In 2014, millions of consumers and 16,000 partners tapped the value of ENERGY STAR and achieved impressive financial and environmental results. Their investments in energy-efficient technologies and practices reduced utility bills by \$34 billion and will continue to provide cost savings for years to come.

Americans, with the help of ENERGY STAR, prevented more than 300 million metric tons of GHG emissions<sup>1</sup> (see Fig. 1) in 2014 alone—providing over \$12 billion in benefits to society due to reducing damages from climate change.<sup>2</sup>

Fig. 1. ENERGY STAR Program Benefits Have Doubled in the Last Five Years<sup>3</sup>



<sup>&</sup>lt;sup>1</sup> All reductions in annual GHG emissions are reported in million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e).

<sup>&</sup>lt;sup>3</sup> Graphs reflect cumulative program benefits since the program began in 1992.



<sup>&</sup>lt;sup>2</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 not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services. Source: Interagency Working Group on Social Cost of Carbon, United States Government. 2013. Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866. November. United States Government. Available online at http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/technical-update-social-cost-of-carbon-for-regulator-impact-analysis.pdf.

### **ENERGY STAR FOR PRODUCTS**

As the simple choice 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 in the fight against climate change.

Certified Products. Americans purchased more than 320 million ENERGY STAR certified products in 2014 across more than 70 product categories for a cumulative total exceeding 5.2 billion products since 1992 (see Fig. 2). Today, more than 85% of the American public recognizes the ENERGY STAR label.

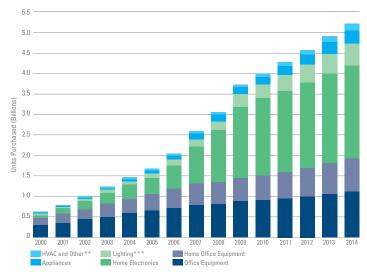
**ENERGY STAR Most Efficient 2014.** By the end of 2014, more than 1,800 models from 164 manufacturers were recognized as the best of ENERGY STAR for energy efficiency and innovation. Categories included televisions, computer monitors, clothes washers, refrigerators, dishwashers, heating and cooling equipment, ventilation and ceiling fans, and windows.

**ENERGY STAR Product Specifications.** EPA updated performance requirements for clothes washers, set-top boxes, windows/doors/skylights, residential water heaters, central air conditioners, air source heat pumps, ventilating fans, and televisions. The ENERGY STAR specification for battery charging systems was sunset. Clothes dryers were added to the program.

### **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. As of the end of 2014, there were more than 50,000 certified product models. A subset of products is also subject to verification testing administered by EPA-recognized certification bodies. In 2014, EPA disqualified 57 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 5.2 Billion ENERGY STAR Certified Products Purchased Since the Program Began\*



<sup>\*</sup> Program began in 1992.

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

The 2014 ENERGY STAR Change the World Tour brought public and private organizations together for a series of community-based service projects to make a difference in people's lives and the environment through energy efficiency. With the help of ENERGY STAR, these projects lowered utility bills, upgraded low-income housing and community buildings, and educated communities about the importance of energy efficiency, demonstrating how energy efficiency can be a pathway to positive change.

Through 2014, more than 3.2 million individuals took the ENERGY STAR pledge to make energy-efficient changes at home, representing more than 15 billion pounds in GHG emission reductions. In addition, retailers, manufacturers, and efficiency program sponsors worked together to exceed EPA's challenge to sell 20 million ENERGY STAR certified LED bulbs. Continuing into 2014, Team ENERGY STAR featured themes from the Sony Pictures film, *The Amazing Spider-Man 2*. Thousands of kids from Boys & Girls Clubs of America, representing the Torch Clubs, participated in projects to save energy at their clubs and throughout the community as part of their quest to "Be Your Own Amazing with ENERGY STAR."

### **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.

### **ENERGY STAR Certified Homes Help Reduce GHG Emissions.**

More than 86,000 new homes earned the ENERGY STAR in 2014, bringing the total number of certified homes to nearly 1.6 million (see Fig. 3). Since EPA began labeling new homes in 1995, American homeowners have saved over \$4.7 billion on their energy bills and reduced GHG emissions by more than 24 million metric tons. In 2014 alone, families living in ENERGY STAR certified homes saved in excess of \$600 million on their utility bills and prevented three million metric tons of GHG emissions. Homes certified under these requirements are at least 15% more efficient than those built to code<sup>4</sup> and include additional energy-saving features to deliver a performance advantage of up to 30% compared to typical new homes.

### **ENERGY STAR Certified Units in New Multifamily**

High-Rise Buildings. Since units in multifamily high-rise buildings first became eligible to earn the ENERGY STAR label in 2011, over 8,500 individual units have been certified in 93 buildings. These projects must meet EPA's energy efficiency requirements and be designed to be at least 15% more efficient than the building energy code. In 2014, 2,000 multifamily high-rise units in 23 buildings were certified. When combined with multifamily low-rise homes, more than 122,000 multifamily housing units have been certified to date.

Home Performance with ENERGY STAR. In 2014, an estimated 93,000 homes were improved through the whole house retrofit program, Home Performance with ENERGY STAR (HPWES). This work was performed by 48 locally sponsored programs and more than 2,100 participating contractors across the nation. Since the program's inception, more than 400,000 homes have been improved through HPWES. The HPWES program is administered by the U.S. Department of Energy, with support from EPA.

<sup>\*\*</sup> Other category does not include roofing purchases.

<sup>\*\*\*</sup> Lighting category does not include purchases of light bulbs.

### **Energy Efficiency Guidance and Tools for Homeowners.**

In 2014, Americans viewed the residential section of the ENERGY STAR website nearly two million times to find information about home efficiency improvements. They also used EPA's Home Energy Yardstick and Home Energy Advisor tools to assess their homes' energy use and get recommendations to help reduce utility bills and improve comfort. EPA improved the functionality of the ENERGY STAR Home Energy Advisor in 2014 to provide homeowners customized, prioritized recommendations for energy improvements and to allow them to track their progress.

Affordable Housing. In fiscal year 2014, approximately 4,800 ENERGY STAR certified homes were built within the affordable housing sector using funding from the U.S. Department of Housing and Urban Development's HOME Investment Partnerships Program. Nearly 6,000 manufactured homes earned the ENERGY STAR label in 2014, for a cumulative total of over 63,000. In addition, more than 13,000 ENERGY STAR certified homes have been built by Habitat for Humanity, including nearly 1,100 homes built in 2014 by 132 Habitat for Humanity affiliates nationwide.

### **ENERGY STAR FOR BUSINESS**

More than 7,400 organizations have partnered with EPA to deliver GHG emissions reductions, advance their sustainability goals, and increase financial value through ENERGY STAR's program for business. These ENERGY STAR partners demonstrate practical and proven solutions to increase the efficiency of buildings and industrial plants and serve as examples for others to follow.

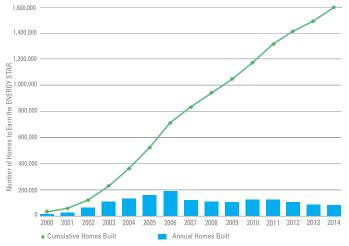
### **Benchmarking: Now Standard Practice in Commercial Buildings.**

By the end of 2014, more than 400,000 properties were benchmarked using ENERGY STAR Portfolio Manager as a standard way to measure, track, assess, and report on the energy and water consumption across more than 40% of the nation's commercial building space (see Fig. 4). With an increasing number of cities leveraging EPA's Portfolio Manager tool to implement their own climate and sustainability policies, benchmarking energy use has become a standard practice in many buildings across the nation.

### 1-100 ENERGY STAR Score Launched for Multifamily Properties.

Through a multi-year partnership with Fannie Mae, ENERGY STAR Portfolio Manager debuted a new 1-100 ENERGY STAR

Fig. 3. Nearly 1.6 Million Homes Nationwide Have Earned the ENERGY STAR Label



score for multifamily properties. The unprecedented launch enables existing apartment and condominium properties, which house 30% of the U.S. population, to measure energy performance. As ENERGY STAR certification became available in the fall of 2014, more than 20 properties earned this designation by the year's end.

ENERGY STAR Certification for Top Performance. To celebrate 15 years of ENERGY STAR certification for buildings, EPA launched special recognition for multiple-building certifications. More than 300 organizations achieved membership in Certification Nation, with 11 organizations certifying more than 150 buildings each. In total, more than 25,000 buildings and 130 industrial plants had earned ENERGY STAR certification by the end of 2014. More than 120 new design projects designated as Designed to Earn the ENERGY STAR were also certified as ENERGY STAR through 2014.

### Battle of the Buildings Competitors Team Up to Power Down.

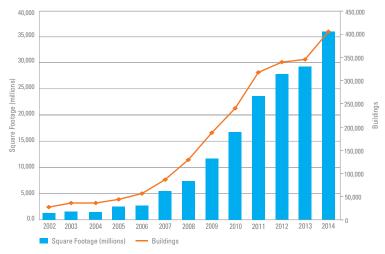
The 2014 competition hosted a field of more than 100 teams, who worked to cut energy waste across their participating buildings. Teams ranged in size from five buildings to more than 2,000 buildings. As of the competition midpoint, Team Walgreens led the field with a 10.7% reduction, and a Kroger warehouse had the largest individual reduction of 37%.

Industrial Efficiency Gets Boost from Treasure Hunts. EPA released a new tool, the ENERGY STAR Treasure Hunt Guide, as an important way to engage employees in identifying low-cost energy-saving opportunities from behavioral, operational, and maintenance actions. This popular guidebook is increasingly adopted by organizations as step-by-step guidance on how to organize and execute an energy treasure hunt to find significant energy savings in their facilities.

Industrial Plants Challenged to Improve. By the end of 2014, the number of industrial sites committed to the ENERGY STAR Challenge for Industry grew, while 306 sites met or exceeded their targets by achieving an average 20% reduction in energy intensity.

Reaching Larger Audiences. Through the ENERGY STAR partnership, service and product providers, utility companies, energy efficiency program administrators, and federal, state, and local governments continue to use ENERGY STAR tools to connect customers and stakeholders with the value of pursuing energy reductions.

Fig. 4. Steady Growth in Building Space Benchmarked



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



### **ENERGY STAR® PARTNER OF THE YEAR AWARD WINNERS**



### PARTNER OF THE YEAR – SUSTAINED EXCELLENCE

AEP Ohio Columbus, OH

AEP Texas Central Corpus Christi, TX

Allergan, Inc. *Irvine, CA* 

Arizona Public Service *Phoenix, AZ* 

Baltimore Gas and Electric Company Baltimore, MD

Beacon Capital Partners, LLC Boston, MA

Bentall Kennedy Seattle, WA

Brandywine Realty Trust Radnor, PA

BOMA International Washington, DC

Burton Energy Group Alpharetta, GA

CalPortland Company Glendora, CA

CBRE Group, Inc. Los Angeles, CA

Cenergistic Dallas, TX

CenterPoint Energy Houston, TX

Colgate-Palmolive Company New York, NY

Columbia Gas of Ohio
Columbus, OH

ComEd Chicago, IL

Des Moines Public Schools Des Moines, IA

DIRECTV El Segundo, CA

DTZ Washington, DC

Eastman Chemical Company Kingsport, TN

Ecova Spokane, WA EnergyCAP, Inc.

State College, PA
Energy Inspectors

Las Vegas, NV

Evergreen Public Schools

Vancouver, WA
Fanning Howey

Celina, OH
Focus on Energy

Madison, WI
Food Lion
Salisbury, NC

General Motors Company Detroit, MI Habitat for Humanity of Greater Nashville Nashville. TN

Habitat for Humanity of Metro Denver Denver, CO

Hanesbrands Inc. Winston Salem, NC

Hines Houston, TX

Hoshizaki America, Inc. Peachtree City, GA

Houston Habitat For Humanity Houston, TX

ITW Food Equipment Group Glenview, IL

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

JLL *Chicago, IL* 

KB Home Los Angeles, CA

Kenton County School District Ft. Wright, KY

Kohl's Department Stores Menomonee Falls, WI

LG Electronics
Englewood Cliffs, NJ

Liberty Property Trust Malvern, PA

Loudoun County Public Schools Broadlands, VA

Manitowoc Foodservice New Port Richey, FL

Memorial Hermann Health System Houston, TX

Merck & Co., Inc. Kenilworth, NJ

Meritage Homes Corporation Scottsdale, AZ

Milford Housing Development Corporation Milford, DE

Nationwide Marketing Group Winston Salem, NC

New Jersey Board of Public Utilities Trenton, NJ

New York State Energy Research and Development Authority *Albany, NY* 

NewYork-Presbyterian Hospital New York, NY

Nissan North America, Inc. *Franklin, TN* 

North Penn School District Lansdale, PA

Northeast Energy Efficiency Partnerships (NEEP) Lexington, MA

Panasonic Eco Solutions Newark, NJ Pella Corporation Pella, IA

PepsiCo, Inc. Purchase, NY

Philips Somerset, NJ

PSEG Long Island Uniondale, NY

Raytheon Company Waltham, MA

Saint-Gobain Valley Forge, PA

Samsung Electronics Seoul, South Korea

Sears Holdings Corporation Hoffman Estates, IL

Servidyne Atlanta, GA

Southern California Edison Rosemead, CA

Southern Maryland Electric Cooperative (SMECO) Hughesville, MD

Staples, Inc. Framingham, MA

The Boeing Company Chicago, IL

The Home Depot Atlanta, GA

The NH Energy Efficiency Team Manchester, NH

TIAA-CREF New York, NY

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

TRANSWESTERN Houston, TX

USAA Real Estate Company San Antonio, TX

Verizon New York, NY

Vornado Realty Trust New York, NY

# PARTNER OF THE YEAR – CLIMATE COMMUNICATIONS

Des Moines Public Schools Des Moines, IA

General Motors Company Detroit, MI

JLL Chicago, IL KB Home Los Angeles, CA

Metro Lighting

LG Electronics Englewood Cliffs, NJ

Brentwood, MO
Samsung Electronics Co.
Seoul, South Korea

#### **PARTNER OF THE YEAR**

AEP Southwestern Electric Power Company (SWEPCO) Shreveport, LA

Best Buy Co., Inc. Richfield, MN

Brighton Homes Boise, ID

Bristol-Myers Squibb New York, NY

Building Energy, Inc. Star, ID

Cherokee County Schools Murphy, NC

Cobblestone Homes Saginaw, MI

Consumers Energy Jackson, MI

Corning Incorporated Corning, NY

Eaton's Cooper Lighting Business *Peachtree City, GA* 

Efficiency Vermont Burlington, VT EnergyPrint

St. Paul, MN Enersafe, LLC Linwood, MI

Fannie Mae Multifamily Washington, DC

Fulton Homes Tempe, AZ

Goby Chicago, IL

Good Earth Lighting Mount Prospect, IL

Illinois Energy & Recycling Office at the Department of Commerce and Economic Opportunity Springfield, IL

Intertape Polymer Group, Inc. Sarasota, FL

Jacksonville Building Science, LLC Jacksonville, FL

Kentucky School Boards Association Frankfort, KY

Kilroy Realty Corporation Los Angeles, CA

Mansfield Independent School District Mansfield, TX

MaxLite West Caldwell, NJ

New Mexico Gas Company, a TECO Energy Company Albuquerque, NM

Parmenter Miami, FL

PECO Philadelphia, PA PEG Fairfax, VA

Pentair Aquatic Systems Sanford, NC

Potomac Electric Power Company ("Pepco") Washington, DC

PPL Electric Utilities Allentown, PA

Providence Homes Jacksonville, FL

Sacramento Municipal Utility District Sacramento, CA

Salt River Project Agricultural Improvement and Power District *Tempe, AZ* 

Scott County Schools Georgetown, KY

SkyeTec Jacksonville, FL

SL Green Realty Corp New York, NY

SoCalGas Los Angeles, CA

Soft-Lite Windows Streetsboro, OH The Kroger Co.

Cincinnati, OH
The Lighting & Products
Sponsors of Mass Save®
Westwood, MA

Tishman Speyer New York, NY

TopBuild Home Services
Daytona Beach, FL

Whirlpool Corporation Benton Harbor, MI

## AWARDS FOR EXCELLENCE

### **ENERGY STAR Promotion**

Columbia Association Columbia, MD

National Grid Waltham, MA

ProVia Sugarcreek, OH

The United Illuminating Company Orange, CT

#### Deteilin

Metro Lighting Brentwood, MO

#### Affordable Housing

NeighborWorks® TOLEDO REGION Toledo, OH