



# ENERGY STAR Program

## Overview

ENERGY STAR® is an internationally recognized voluntary labeling program for energy-efficient products, homes, buildings, and manufacturing plants that is managed jointly by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). The intended purposes of the program are to reduce energy consumption; realize cost savings for citizens on their utility bills; and reduce emissions of pollutants—including greenhouse gases (GHGs)—from electric power production, and limit associated health and environmental impacts through non-regulatory means. According to EPA, in 2014 the program saved consumers \$34 billion on annual utility bills and avoided 300 million metric tons of GHGs. Issues of possible consideration for 115<sup>th</sup> Congress involve the program’s appropriations, organization, and authorizations.

- **Appropriations:** The President’s FY2019 budget request includes a proposal to convert the ENERGY STAR program to a fee-funded program in FY2019 with an upfront FY2019 appropriation of \$46 million. The intent of the fee collection would be to provide funding to replace “to the extent allowable” the upfront appropriation to maintain the program.
- **Organization:** In the explanatory statements for EPA and DOE of the FY2018 omnibus (P.L. 115-141, Division G and Division D, respectively), the agencies are directed to review the 2009 Memorandum of Understanding (MOU), which shifted some functions related to home appliance products from DOE to EPA, and to report to Congress on whether the expected efficiencies for home appliance products have been achieved.
- **Authorizations:** Legislation proposed in the 115<sup>th</sup> Congress includes provisions to codify third-party certification and direct EPA to revise the certification requirements for certain program partners.

## History and Development

The ENERGY STAR program portfolio expanded over time. EPA established ENERGY STAR in 1992 under the authority of the Clean Air Act, Section 103(g). Initially, EPA introduced the ENERGY STAR label for computers and monitors. Since 1992, EPA has expanded the number of product categories to more than 70. In 1995, ENERGY STAR was expanded to include labeling for buildings and new homes. The program added manufacturing facilities in 2006. In 2007, manufactured homes were incorporated.

DOE’s role with ENERGY STAR was established through a Memorandum of Cooperation (MOC) with EPA in 1996. Congress codified the program and this relationship in the Energy Policy Act of 2005 (P.L. 109-58, §131). The most recent MOU between EPA and DOE identifies EPA as the

lead agency for ENERGY STAR and DOE as the lead agency for the National Building Rating program. Generally, EPA sets performance levels for ENERGY STAR products and buildings, and DOE provides technical support, including the development of testing procedures and metrics for performance and program monitoring.

Certain actions of note in ENERGY STAR history are highlighted in **Table 1**, including two Government Accountability Office (GAO) reports that examined various aspects of the program’s voluntary approach.

**Table 1. Chronology of Selected Actions Related to the ENERGY STAR Program**

Timeline	Action
1992	EPA establishes ENERGY STAR under the authority of the Clean Air Act, Section 103(g)
1995	First international agreement for ENERGY STAR established with Japan regarding qualified office products
1996	EPA and DOE issue MOC on Energy Efficient, Environmentally Beneficial Buildings
2001	United States and Canada agree to partner on ENERGY STAR
2001	United States and European Union (EU) agree to partner on ENERGY STAR
2005	Energy Policy Act, Section 131 formally codifies the ENERGY STAR program within EPA and DOE
2006	United States and EU enter into an agreement on the Coordination of Energy-Efficient Labelling Programs for Office Equipment
2009	EPA and DOE issue MOU on Improving the Energy Efficiency of Products and Buildings
2010	GAO-10-470, <i>ENERGY STAR Program: Covert Testing Shows the ENERGY STAR Program Certification Process is Vulnerable to Fraud and Abuse</i>
2011	GAO-11-888, <i>ENERGY STAR: Providing Opportunities for Additional Review of EPA’s Decisions Could Strengthen the Program</i>
2013	Update of the EU and U.S. agreement
2018	The EU-U.S. ENERGY STAR agreement expired on February 20, 2018

**Source:** Clean Air Act (P.L. 101-549); EPA 2012, *ENERGY STAR: Celebrating 20 Years*; Energy Policy Act (P.L. 109-58); GAO-10-470; GAO-11-888; MOU (2009); MOC (1996); Agreements between United States and the EU.

**Notes:** MOC is Memorandum of Cooperation; MOU is Memorandum of Understanding.

## Program Design

ENERGY STAR supports voluntary partnerships with manufacturers, retailers, and organizations committed to improving energy efficiency. Partners are provided access to seminars and networking events, recognition for achievement, and marketing materials. ENERGY STAR establishes voluntary certification requirements for products, buildings, and industrial facilities. Specifications are based upon energy efficiency, energy savings, product features, and performance as demanded by consumers. If the cost is more than conventional products, purchasers of certified products are expected to recoup their investment within a reasonable period of time. Product energy consumption must also be measurable and verifiable with testing. Once ENERGY STAR products meet 50% market share or higher in a category, the product specifications are typically reviewed by EPA.

The ENERGY STAR label (**Figure 1**) is affixed to products, commercial buildings, industrial plants, and new homes that use less energy but perform at least as well as standard models. Through labeling, consumers can quickly be informed about available energy-efficient product options when making purchasing decisions.

**Figure 1. ENERGY STAR Promotional Mark**



**Source:** U.S. Environmental Protection Agency, ENERGY STAR program.

## Third-Party Certification

In 2010, GAO identified vulnerabilities within the self-certification requirements of ENERGY STAR (GAO-10-470). In response to these findings, since 2011, ENERGY STAR has required products to be third-party certified and qualification tested in an EPA-recognized laboratory.

The certified laboratories are required to conduct annual verification testing. A percentage of certified models in a product category are tested. At least half of the models that undergo testing are to be randomly selected. The remainder may be selected according other factors, including prior testing failures, high sales volumes, referrals from EPA or other parties such as consumer groups, or requests to verify the performance of a competitor's product. The verification testing program is manufacturer-funded.

DOE implements a complementary testing program that does not test randomly. Instead, DOE targets products for testing based on factors including a history of failing to meet ENERGY STAR program requirements, new technologies, and categories with known performance issues. DOE's verification testing is agency-funded.

## International Partnerships

ENERGY STAR is recognized as an international standard for energy-efficient products. EPA entered into agreements with foreign governments including Canada, the European Union (EU), the European Free Trade Association, Japan, Switzerland, and Taiwan to promote specific ENERGY STAR product categories in their markets. These agreements are intended to unify voluntary energy efficient labeling programs and facilitate partner participation through a single set of energy efficiency qualifications. International programs coordinate with ENERGY STAR on the labeling of office equipment and the creation of consistent targets for manufacturers. In the case of Canada, Natural Resources Canada administers the ENERGY STAR program directly through an agreement with EPA and DOE.

## Federal Appropriations

According to GAO, combined appropriations for ENERGY STAR averaged \$58 million annually between FY2007 and FY2011 for both EPA and DOE. During that period, EPA received approximately 87% of the total appropriations, with an average of \$50 million. More recently, ENERGY STAR funding has decreased. The FY2017 enacted level for EPA was \$42 million, according to the agency.

The President's FY2018 budget request proposed to eliminate the ENERGY STAR program and explore options to transfer the program to non-governmental entities. The FY2018 omnibus (see P.L. 115-141, Division G, Title II, Explanatory Statement) maintains funding for ENERGY STAR at the FY2017 level.

For FY2019, the Administration requests an upfront appropriation of \$46 million that would support the program during rulemaking and development—pending authority for a proposed fee collection system. The proposal would allow EPA to collect fees from program participants and deposit collections into the general fund.

## ENERGY STAR Legislation in the 115<sup>th</sup>

There are a number of issues related to ENERGY STAR for consideration in the 115<sup>th</sup> Congress. Congress may consider the President's request for authorization of a fee-based program. Congress may also consider the modifying roles and responsibilities between EPA and DOE in legislation. ENERGY STAR bills in the 115<sup>th</sup> Congress include:

- S. 385, H.R. 1443, and S. 1460 would direct DOE to revise third-party certification requirements for program partners that have been in compliance for 18 months.
- H.R. 515 would authorize the Department of Housing and Urban Development (HUD) to provide assistance for ENERGY STAR-qualified manufactured or modular homes.
- H.R. 1682 would clarify that no warranty is provided through participation in the ENERGY STAR Program.

**Corrie E. Clark**, Analyst in Energy Policy

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