



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 consumers on their utility bills, and reduce emissions of pollutants—including greenhouse gases (GHGs)—from electric power production, thereby limiting associated health and environmental impacts through nonregulatory means. According to EPA’s most recent ENERGY STAR annual report, program participants conserved 520 billion kilowatt-hours of electricity, saved \$42 billion on annual utility bills, and avoided 400 million metric tons of GHG emissions in 2020. On March 3, 2026, EPA and DOE entered into a memorandum of agreement (MOA) to transition primary management of ENERGY STAR from EPA to DOE. Congressional interest in ENERGY STAR may include program funding and administration, the consideration or revision of specifications for selected product or building categories, use of the ENERGY STAR label in federal procurement preferences, and whether to continue, cancel, or amend the program or incentives for selected products or buildings with the ENERGY STAR label.

History and Development

EPA established ENERGY STAR in 1992 under the authority of the Clean Air Act, Section 103(g). In 1996, DOE’s role with ENERGY STAR was established through a memorandum of cooperation (MOC) with EPA. Congress codified the program and this relationship in the Energy Policy Act of 2005 (P.L. 109-58, §131). A 2009 memorandum of understanding (MOU) between EPA and DOE identified EPA as the lead agency for ENERGY STAR and DOE as the lead agency for the National Building Rating program. Generally, EPA set performance levels for ENERGY STAR products and buildings, and DOE provided technical support such as the development of testing procedures and performance metrics.

The ENERGY STAR program portfolio has expanded over time. EPA introduced the ENERGY STAR label for computers and monitors in 1992. Since that time, EPA has expanded the number of product categories to more than 70. In 1995, EPA expanded ENERGY STAR to include labeling for buildings and new homes. The program added manufacturing facilities in 2006 and manufactured homes in 2007. In 2020, ENERGY STAR launched Tenant Space to recognize energy efficiency in leased office spaces. Due to historical efficiency gains for lighting, EPA has sunset specifications for lamps and luminaires (with exceptions for recessed downlights) effective December 31, 2024. Selected actions of note in ENERGY STAR history are highlighted in **Table 1**.

Table 1. Selected Actions Related to ENERGY STAR

Year	Action
1992	EPA establishes ENERGY STAR under the authority of the Clean Air Act, Section 103(g) (P.L. 101-549)
1995	United States and Japan establish first international agreement for ENERGY STAR regarding qualified office products (e.g., computers and monitors)
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 (P.L. 109-58) formally codifies the ENERGY STAR program within EPA and DOE
2006	United States and EU enter into 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 publishes GAO-10-470, Energy Star Program: Covert Testing Shows the Energy Star Program Certification Process Is Vulnerable to Fraud and Abuse
2011	GAO publishes GAO-11-888, Energy Star: Providing Opportunities for Additional Review of EPA’s Decisions Could Strengthen the Program
2013	Update of U.S.-EU ENERGY STAR agreement
2015	Energy Efficiency Improvement Act of 2015, Section 104 (P.L. 114-11), directs EPA and DOE to establish a program to promote energy efficiency in spaces leased by tenants
2018	U.S.-EU ENERGY STAR agreement expires on February 20, 2018
2020	EPA launches ENERGY STAR Tenant Space
2023	EPA launches ENERGY STAR NextGen Certified Homes and Apartments certification
2024	EPA sunsets the ENERGY STAR specifications for lamps and luminaires
2026	EPA and DOE issue MOA to document change in leadership from EPA to DOE for ENERGY STAR

Sources: P.L. 101-549; P.L. 109-58; P.L. 114-11; EPA 2012, *ENERGY STAR: Celebrating 20 Years*; GAO-10-470; GAO-11-888; MOU (2009); MOC (1996); Agreements between United States and EU.

Notes: GAO = Government Accountability Office; MOC = memorandum of cooperation; MOU = memorandum of understanding; MOA = memorandum of agreement.

Program Design

ENERGY STAR supports voluntary partnerships with manufacturers, retailers, and organizations committed to improving energy efficiency. Partners are provided with 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 of certified products is more than the cost of conventional products, purchasers of certified products are expected to recoup their investment through utility bill savings within a reasonable period of time. Product energy consumption must also be measurable and verifiable with testing. For many product categories, once the market share of ENERGY STAR products reaches 50% or greater, the product specifications are typically reviewed. For longer-lived products such as home appliances, the 2009 MOU states that specifications may be reviewed every three years or once the market share reaches about 35%.

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, ENERGY STAR helps consumers quickly identify energy-efficient products.

Figure 1. ENERGY STAR Promotional Mark



Sources: EPA, ENERGY STAR program.

Third-Party Certification

Since 2011, ENERGY STAR has required products to be third-party-certified and qualification-tested in an EPA-recognized laboratory. The certification laboratories are required to conduct annual verification testing.

A percentage of certified models in a product category are tested each year. At least half of the models that undergo testing are to be randomly selected. The remainder may be selected according to 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 an agency-funded, complementary testing program that does not test randomly. Instead, DOE targets products for testing, for example, if they have a history of failing to meet ENERGY STAR program requirements, if they use new technologies, or if they belong to a category with known performance issues. The 2026 MOA does not discuss how certification testing might change under DOE.

International Partnerships

ENERGY STAR is recognized as an international standard for energy-efficient products. EPA has entered into agreements with foreign governments to promote specific ENERGY STAR product categories in their markets. Canada, Japan, and Switzerland currently administer the ENERGY STAR program for selected categories. International programs coordinate with ENERGY STAR on the labeling of office equipment and the creation of consistent targets for manufacturers. Natural Resources Canada administers the ENERGY STAR program directly through an agreement with EPA and DOE. EPA has had other international agreements, including with the European Union, the European Free Trade Association, Taiwan, New Zealand, and Australia. Countries without current agreements may not use the ENERGY STAR mark on products, packaging, or websites unless it is for promoting an ENERGY STAR model for the U.S. or Canadian market.

Federal Appropriations

Between FY2007 and FY2011, combined appropriations for ENERGY STAR for EPA and DOE averaged \$58 million annually in nominal dollars (with EPA receiving about 87%). More recently, ENERGY STAR funding has decreased in both inflation-adjusted and nominal dollars (**Table 2**). P.L. 119-4 provided FY2025 appropriations at FY2024 funding levels for most EPA and DOE accounts without further policy direction. For FY2026 appropriations, P.L. 119-74 did not contain policy direction for DOE and provided for EPA that "not less than \$33,024,000 is to carry out the Energy Star Program pursuant to section 324(c) of the Energy Policy and Conservation Act (42 U.S.C. 6294a(c))." H.Rept. 119-215 recommended \$32 million in total funding. S.Rept. 119-46 recommended \$36 million in total funding.

Table 2. ENERGY STAR Program Funding

Fiscal years 2015 through 2024, in millions of nominal dollars

Fiscal Year	EPA Funding	DOE Funding
2015	\$44.2	\$4.3
2016	\$43.2	\$2.9
2017	\$42.1	\$1.4
2018	\$42.1	\$3.0
2019	\$38.4	\$2.1
2020	\$36.7	\$1.4
2021	\$34.8	\$0.9
2022	\$33.9	\$2.2
2023	\$33.0	\$2.2
2024	\$32.1	\$3.6

Sources: EPA communication to CRS; DOE communication to CRS.

Notes: Values are rounded to the nearest tenth. Funding levels for ENERGY STAR reflect EPA and DOE regular annual appropriations.

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