



ABOUT ENERGY STAR® – 2022

The simple
choice for
energy
efficiency.



About ENERGY STAR

April 2023

ENERGY STAR® is the government-backed symbol for energy efficiency. The blue ENERGY STAR label provides simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions.

A Public-Private Partnership

ENERGY STAR is administered by the U.S. Environmental Protection Agency. Thousands of organizations—including nearly **40%** of the Fortune 500®—partner with ENERGY STAR. Together with EPA, they deliver cost-saving energy efficiency solutions that protect the climate, improve air quality, and protect public health.



Real-World Impacts

Since 1992, ENERGY STAR and its partners have helped American families and businesses:

- Save 5 trillion kilowatt-hours of electricity.
- Avoid more than \$500 billion in energy costs.
- Achieve 4 billion metric tons of greenhouse gas reductions.



ENERGY STAR® IMPACTS—2022

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ENERGY STAR Impacts

The U.S. Environmental Protection Agency launched the ENERGY STAR program in 1992. Since then, ENERGY STAR has grown to become the international standard for energy efficiency and one of the most successful voluntary U.S. government programs in history. Learn more about the impacts of this popular EPA program.

Savings since 1992:	2020 savings:
Electricity: 5 trillion kilowatt-hours	Electricity: 520 billion kilowatt-hours
Energy costs: More than \$500 billion ¹	Energy costs: \$42 billion ¹
Emissions: 4 billion metric tons ²	Emissions: 400 million metric tons ²

Environmental Impacts

- Since 1992, ENERGY STAR and its partners helped prevent **4 billion** metric tons of greenhouse gas emissions from entering our atmosphere.^{1,2}
 - In 2020 alone, the program's emissions reductions were equivalent to more than **five percent** of U.S. total greenhouse gas emissions.^{1,2}
- ENERGY STAR's 2020 energy savings also led to reductions of **210,000 short tons** of sulfur dioxide, **210,000 short tons** of nitrogen oxides, and **20,000 short tons** of fine particulate matter (PM2.5).
 - This avoided air pollution was responsible for an estimated **\$7 - 17 billion** in public health benefits.²

Economic Impacts

- The estimated annual market value of ENERGY STAR product sales is more than **\$100 billion**.
- Over **700,000** Americans are employed in manufacturing or installing ENERGY STAR certified products -- roughly **35%** of U.S. energy efficiency jobs.³
- Over the life of the program, every dollar EPA has spent on ENERGY STAR resulted in **\$230** invested by American businesses and households in energy efficient infrastructure and services.¹
- Since 1992, ENERGY STAR and its partners have helped American families and businesses save more than **\$500 billion** in energy costs.
- By choosing ENERGY STAR, a typical household can save about **\$450** on their energy bills each year and still enjoy the quality and performance they expect.⁴
- Over the lifetime of the program, every dollar EPA has spent on ENERGY STAR resulted in nearly **\$350** in energy cost savings for American business and households.¹

Scope and Influence

- More than **90%** of American households recognize the ENERGY STAR.⁵
- Americans purchased more than **300 million** ENERGY STAR certified products and more than **500 million** ENERGY STAR certified light bulbs in 2021.
 - A majority of American households surveyed reported purchasing an ENERGY STAR certified product in the last year.⁵
- Nearly **840** utilities, plus state/local governments and nonprofits leverage ENERGY STAR in their efficiency programs, reaching roughly **95%** of households in all 50 states.
- Approximately **1,700** manufacturers and **1,200** retailers partner with ENERGY STAR to make and sell millions of ENERGY STAR certified products.
- ENERGY STAR certification is available in more than **75** residential and commercial product categories.

- Currently, more than **80,000** product models have earned the ENERGY STAR based on these rigorous criteria.
- More than **2.4 million** ENERGY STAR certified single-family, multifamily, and manufactured new homes and apartments have been built to date, including more than **120,000** in 2021, representing more than **8.5%** of all U.S. homes built.
 - Nearly **3,000** builders, developers, and manufactured housing plants are ENERGY STAR partners, including all of the nation's twenty largest home builders.
- More than **300,000** commercial properties use EPA's ENERGY STAR Portfolio Manager® tool to measure and track their energy use, water use, and/or waste and materials.
 - These buildings comprise more than **29 billion square feet** of floorspace—more than a quarter of all the commercial floorspace in the nation.
- **45** local governments, **six** states, **one** Canadian province, and **one** Canadian city rely on EPA's ENERGY STAR Portfolio Manager® tool as the foundation for their energy benchmarking and transparency policies.
- **35** diverse industrial sectors work with ENERGY STAR to strategically manage their energy use, from cookie and cracker bakeries and pharmaceutical plants to integrated steel mills and petroleum refineries.

References

The majority of data cited is from 2022. In cases where 2022 data is not yet available, prior year data is used. All instances are noted as such.

1. Estimated energy cost savings represent the present value of net energy cost savings, calculated by taking the difference between total energy bill savings and the incremental additional investment in energy-efficient technologies and services.
2. Estimates of contributions to emissions reductions do not account for overlapping impacts of regulatory programs and may be affected by other dynamics on the electrical grid.
3. U.S. Department of Energy. (2022). *U.S. Energy and Employment Report*. <https://www.energy.gov/policy/us-energy-employment-jobs-report-useer>(link is external). The survey does not account for retail employment.
4. Lawrence Berkeley National Laboratory. (2020). *Typical House Estimates*. Prepared for EPA Office of Air and Radiation, Climate Protection Partnerships Division.
5. EPA Office of Air and Radiation, Climate Protection Partnerships Division. (2020). *National Awareness of ENERGY STAR® for 2019: Analysis of 2019 CEE Household Survey*. <http://energystar.gov/awareness>.

For more information on our calculation methods, see the [Technical Notes](#) (PDF, 228 KB)



How ENERGY STAR Works

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How ENERGY STAR Works

The ENERGY STAR program is administered by the U.S. Environmental Protection Agency (EPA). ENERGY STAR is a voluntary labeling program: EPA sets energy efficiency specifications and those that meet them can choose to display the ENERGY STAR logo. In turn, consumers and businesses who want to save energy and money can look for the ENERGY STAR label when making buying decisions.

The Five Key Areas of ENERGY STAR



Products

Products that earn the ENERGY STAR label are independently certified to meet strict standards for energy efficiency. Thousands of manufacturers and retailers partner with EPA to make and sell these products.



Existing Homes

EPA provides guidance on high-impact energy efficiency improvements for existing homes. These actions can save homeowners significant amounts of energy and money and prepare them for a clean energy future.



New Homes

EPA partners with thousands of home builders, developers, energy rating companies, and utilities across the U.S. who construct, verify, promote, and incentivize ENERGY STAR certified homes and apartments.



Commercial Buildings

ENERGY STAR helps building owners and managers determine the most cost-effective approach to managing their energy use—enabling organizations to save energy, increase profits, and boost competitiveness.



Industrial Plants

Hundreds of U.S. manufacturers have deployed the program's strategic energy management resources to foster an organizational culture focused on continuous improvement of energy performance.

The Power of Partnership

Thousands of industrial, commercial, utility, state, and local organizations—including nearly **40%** of the Fortune 500®—partner with EPA through the ENERGY STAR program. For every **\$1** EPA spends to administer ENERGY STAR, these partners add **\$230** of their own investment. The result is millions of ENERGY STAR certified products, homes, apartments, buildings, and industrial plants across the nation; utility rebate programs reaching **95%** of American households; **4 billion** tons of greenhouse gas reductions; and **\$500 billion** in cost savings.



Major Milestones – 2022

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Major Milestones

The U.S. Environmental Protection Agency (EPA) launched the ENERGY STAR program in 1992, at a time when both business leaders and environmentalists recognized that economic growth and environmental protection can—and must—go hand-in-hand. It was a radical idea at the time, but within a year, the success of this pioneering program proved that if the government empowered businesses to protect the environment at a profit, it would find a powerful partner in the fight against climate change.

Since then, EPA's ENERGY STAR program has grown to encompass tens of thousands of organizations, utilities, and state and local governments who have partnered with the government to reduce greenhouse gas emissions. With their help, EPA works to identify and dismantle the unique market barriers that prevent progress, and to provide the information and stability that private markets need to thrive. The environmental impacts are staggering, and a testament to the power of partnership: The avoidance of billions of metric tons of greenhouse gas emissions, billions of dollars of private sector investment, and millions of high-paying, fast-growing jobs.

Below are the major milestones from 2022. Visit the [Our History](#) page to learn more about the history of EPA's ENERGY STAR program.

2022

- EPA celebrated the [30th anniversary of the ENERGY STAR program](#) with "Certification Nation," a special one-time recognition to organizations who certified five or more buildings or plants in 2022
- More than 40,000 [commercial buildings and industrial plants](#) have earned ENERGY STAR certification to date
- Recognized both Adaptive Commercial Refrigeration Equipment and Residential Induction Cooking Tops with the ENERGY STAR Emerging Technology Award
- Launched the [ENERGY STAR Home Upgrade](#) to promote a carefully crafted set of six high-impact, efficient electric home improvements
- Finalized the first program requirements for [ENERGY STAR NextGen Certified Homes and Apartments](#)
- Launched a new ENERGY STAR industrial focus for the chlor alkali industry
- Launched 1 - 100 ENERGY STAR score for existing single-family homes in [ENERGY STAR Portfolio Manager](#)
- Continued to advance ENERGY STAR Residential New Construction program requirements for single-family (Version 3.2), multifamily (Version 1.2), and manufactured (Version 3) homes
- Updates to the [ENERGY STAR product requirements](#) for six categories effective this year, including televisions, residential water heaters, water coolers, commercial refrigeration, small network equipment (sunset), and roofs (sunset)