



Annual Overview Report

2023

May 2024

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About ENERGY STAR

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.



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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 **750,000** 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

- Nearly **90%** of American households recognize the ENERGY STAR.⁵
- Americans purchased more than **400 million** ENERGY STAR certified products and more than **500 million** ENERGY STAR certified light bulbs in 2022.
 - **45%** of American households surveyed knowingly purchasing an ENERGY STAR certified product in the last year.⁵
- Over **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 **1,800** manufacturers and **1,200** retailers partner with ENERGY STAR to make and sell millions of ENERGY STAR certified products.



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- 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.
- Nearly **2.7 million** ENERGY STAR certified single-family, multifamily, and manufactured new homes and apartments have been built to date, including more than **190,000** in 2023, representing more than **12%** of all U.S. homes built (based on preliminary census data).
 - More than **2,300** builders, developers, and manufactured housing plants are active in the ENERGY STAR program, including all of the nation's twenty largest home builders.
- As part of the Inflation Reduction Act (IRA), the Section 45L Tax Credit for Energy Efficient Homes now requires certification to an eligible version of the ENERGY STAR program requirements, with the available credit ranging from **\$500-\$2,500**.
- More than **330,000** 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 **30 billion square feet** of floorspace—more than a quarter of all the commercial floorspace in the nation.
- **48** local governments, **seven** states, **two** Canadian province, and **three** Canadian cities 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 2023. In cases where 2023 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. (2023). [U.S. Energy and Employment Report](#). 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. (2023). [National Awareness of ENERGY STAR® for 2022: Analysis of 2022 CEE Household Survey](#).

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



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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 an innovative idea at the time, but within a year, the success of this new 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 2023. Visit the [Our History](#) page to learn more about the history of EPA's ENERGY STAR program.

2023

- Celebrated 25 years of achievements in lighting efficiency with more than 170 utility partners (serving nearly 60 million households) through the Light the Moment campaign
- More than 2.5 million ENERGY STAR certified homes and apartments built in the U.S. to date
- Nearly 45,000 commercial buildings and industrial plants have earned ENERGY STAR certification to date
- Launched the [Data Explorer](#) tool to help building managers unlock potential savings based on the data from ENERGY STAR Portfolio Manager®
- More than 200 organizations helped to celebrate the 30th anniversary of ENERGY STAR by joining EPA's Certification Nation campaign
- Recognized [Commercial or Industrial Heat Pump Dryers](#) with the ENERGY STAR Emerging Technology Award
- Launched 1 - 100 ENERGY STAR scores for convenience stores, distilleries, and vehicle dealerships in [ENERGY STAR Portfolio Manager](#)
- Launched the [ENERGY STAR NextGen Certified Homes and Apartments certification](#), a new, optional level of recognition for homes equipped with leading-edge, efficient electric technologies and electric vehicle charging capabilities
- New ENERGY STAR product categories introduced this year for residential electric cooking products, commercial electric cooktops, and downlights
- Updates to the ENERGY STAR product requirements for seven categories effective this year, including central air conditioners and heat pumps, light commercial HVAC, residential gas water heaters, commercial ovens, dishwashers, room air conditioners, and windows