



ENERGY STAR® BY THE NUMBERS - 2018

The simple
choice for
energy
efficiency.



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ENERGY STAR® is the government-backed symbol for energy efficiency, providing simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions. Thousands of industrial, commercial, utility, state, and local organizations—including more than 40 percent of the Fortune 500®—rely on their partnership with the U.S. Environmental Protection Agency (EPA) to deliver cost-saving energy efficiency solutions through voluntary action.

Program-wide facts

- Since 1992, ENERGY STAR and its partners helped American families and businesses save nearly **4 trillion** kilowatt-hours of electricity and achieve over **3 billion** metric tons of greenhouse gas reductions, equivalent to the annual emissions of over 600 million cars.¹
- In 2017 alone, ENERGY STAR and its partners helped Americans save approximately 370 billion kilowatt-hours of electricity and avoid **\$30 billion** in energy costs, with associated emission reductions of 290 million metric tons of greenhouse gas emissions, 190,000 short tons of sulfur dioxide, 180,000 short tons of nitrogen oxides, and 21,000 short tons of fine particulate matter (PM_{2.5}).^{1,2}
- More than **90%** of American households recognize the ENERGY STAR.³
- More than **700** utilities, state and local governments, and nonprofits leverage ENERGY STAR in their efficiency programs, reaching roughly **95%** of households in all 50 states. Nationwide, utilities invested \$7.9 billion in energy efficiency programs in 2017.⁴
- Nearly **600,000** Americans are employed in manufacturing or installing ENERGY STAR certified appliances, certified heating and cooling equipment or other non-certified efficient HVAC equipment - part of an estimated 2 million energy efficiency jobs in 2018.⁵



ENERGY STAR products

- In 2017, ENERGY STAR certified products helped consumers save 170 billion kilowatt-hours of electricity, avoid **\$18 billion** in energy costs, and achieve 130 million metric tons of greenhouse gas reductions.^{1,2}
- Americans purchased more than **300 million** ENERGY STAR certified products and more than 300 million ENERGY STAR certified lightbulbs in 2017, for cumulative totals exceeding 6 billion products and 4 billion light bulbs, respectively.
- The estimated annual market value of ENERGY STAR product sales is more than **\$100 billion**.
- EPA sets definitions of efficiency leadership for more than **75** residential and commercial product categories. Currently more than **60,000** product models have earned the ENERGY STAR based on these rigorous criteria.
- More than **2,800** product models from more than 170 manufacturers were recognized as “ENERGY STAR Most Efficient.”
- By choosing ENERGY STAR, a typical household can save about **\$575** on their energy bills and still enjoy the quality and performance they expect.⁶
- About **three-fourths** of U.S. households report the ENERGY STAR label as influential in their purchasing decisions.³
- **80%** of purchasers would recommend ENERGY STAR products to a friend.³

[Learn more about ENERGY STAR products](#)

ENERGY STAR for commercial buildings

- In 2017, the ENERGY STAR program for commercial buildings helped businesses and organizations save 160 billion kilowatt-hours of electricity, avoid **\$9 billion** in energy costs, and achieve 110 million metric tons of greenhouse gas reductions.^{1,2}
- In 2018 alone, more than **270,000** commercial properties used EPA's ENERGY STAR Portfolio Manager® tool to measure, and track their energy use, water use, and/or waste and materials.
- Over the past five years, the number of buildings actively using Portfolio Manager to benchmark their energy performance increased by more than **30%** and the commercial building square footage actively benchmarked grew by over **40%**.
- More than **8,100** buildings earned the ENERGY STAR in 2018, bringing the total to more than 34,000.
- On average, ENERGY STAR certified buildings use **35%** less energy than typical buildings nationwide.⁷
- Studies find that ENERGY STAR certified buildings command a premium of up to **16%** for sales prices and rental rates.⁸
- As of the end of 2018, **29** local governments, **three** states, and **one** Canadian province rely on EPA's ENERGY STAR Portfolio Manager® tool as the foundation for their energy benchmarking and transparency policies.

[Learn more about ENERGY STAR for commercial buildings](#)

ENERGY STAR for industrial plants

- In 2017, the ENERGY STAR program for industrial plants helped businesses save 34 billion kilowatt-hours of electricity, avoid **\$3 billion** in energy costs, and achieve 40 million metric tons of greenhouse gas reductions.^{1,2}
- As of 2018, **31** 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.
- **100** industrial plants earned the ENERGY STAR in 2018.
- **41** industrial plants achieved energy intensity reductions in the 2018 ENERGY STAR Challenge for Industry campaign.

[Learn more about ENERGY STAR for industrial plants](#)

ENERGY STAR for new and existing homes

- In 2017, the ENERGY STAR certified new homes program helped homeowners save 3 billion kilowatt-hours of electricity, avoid **\$400 million** in energy costs, and achieve 3 million metric tons of greenhouse gas reductions.^{1,2}
- More than **98,000** ENERGY STAR certified single-family homes and multifamily units were built in 2018 alone, for a total of nearly 2 million since 1995.
- As of 2018, nearly **90%** of the nation's top homebuilders build ENERGY STAR certified homes.
- Nearly **one out of every ten** single-family homes built in 2018 was ENERGY STAR certified.
- ENERGY STAR certified homes are at least 10% more energy efficient than homes built to code and achieve a **20%** improvement on average, while providing homeowners with better quality, performance, and comfort.
- Home Performance with ENERGY STAR partners completed **83,000** energy efficiency improvement projects on existing homes in 2018.

[Learn more about ENERGY STAR new and existing homes](#)



For more information on our calculation methods, see the [Technical Notes](#) (PDF, 150 KB). For ENERGY STAR facts and figures broken down geographically by state, see [ENERGY STAR State Fact Sheets](#). For achievements by ENERGY STAR Award Winners, see [ENERGY STAR Award Winners Page](#).

References

The majority of data cited is from 2018. In cases where 2018 data is not yet available, 2017 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 emission reductions do not account for overlapping impacts of regulatory programs and may be affected by other dynamics on the electrical grid.
3. EPA Office of Air and Radiation, Climate Protection Partnerships Division. (2017). *National Awareness of ENERGY STAR® for 2016: Analysis of 2016 CEE Household Survey*. <http://energy.gov/awareness>
4. ACEEE. (2018). The 2018 State Energy Efficiency Scorecard. <https://aceee.org/research-report/u1808>
5. NASEO and Energy Futures Initiative. (2018). *U.S. Energy and Employment Report*. <https://www.usenergyjobs.org/report>. Per the USEER Report, energy efficiency jobs, "include the manufacture of ENERGY STAR®-labeled products, as well as building design and contracting services that provide insulation, improve natural lighting, and reduce overall energy consumption across homes and businesses." The survey does not account for retail employment.
6. Lawrence Berkeley National Laboratory. (2016). *Typical House Estimates*. Prepared for EPA Office of Air and Radiation, Climate Protection Partnerships Division.
7. Data as of 9/26/2018. On August 26, 2018, EPA updated performance metrics for U.S. buildings in ENERGY STAR Portfolio Manager® based on the most recent market data available. On September 27, 2018, EPA implemented a review period to solicit feedback on the application of those models to various commercial building sectors and the resulting scores. During this period, EPA temporarily suspended awarding certifications for all U.S. property types with new score models.
8. Boston Green Ribbon Commission. (2012). *Benchmarking and Disclosure: Lessons from Leading Cities*, Boston Green Ribbon Commission. <https://www.abettercity.org/docs/06.2012%20-%20Benchmarking%20report%20-%20Final.pdf>