ENERGY STAR® BY THE NUMBERS – 2019

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 about 40% of the Fortune 500®—partner 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 more than **4 trillion** kilowatt-hours of electricity and achieve over 3.5 billion metric tons of greenhouse gas reductions, equivalent to the annual emissions of over 750 million cars.[1]
- In 2018 alone, ENERGY STAR and its partners helped Americans save nearly 430 billion kilowatt-hours of electricity and avoid **$35 billion** in energy costs, with associated emission reductions of 330 million metric tons of greenhouse gas emissions, 220,000 short tons of sulfur dioxide, 210,000 short tons of nitrogen oxides, and 23,000 short tons of fine particulate matter ($PM_{2.5}$).[1,2]
- More than **90%** of American households recognize the ENERGY STAR.[3]
- More than **800** 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 $8 billion in energy efficiency programs in 2018.[4]
- Over **800,000** Americans are employed in manufacturing or installing ENERGY STAR certified appliances, including heating and cooling equipment–over 30% of an estimated 2.3 million U.S. energy efficiency jobs in 2019.[5]

ENERGY STAR products

- In 2018, ENERGY STAR certified products helped consumers save 200 billion kilowatt-hours of electricity, avoid **$20 billion** in energy costs, and achieve 150 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 2018, 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, approximately **70,000** product models have earned the ENERGY STAR based on these rigorous criteria.
- More than **3,000** product models from more than 180 manufacturers were recognized as "ENERGY STAR Most Efficient" in 2019.
- By choosing ENERGY STAR, a typical household can save more than **$575** on their energy bills and still enjoy the quality and performance they expect.[6]
- About **three-fourths** of U.S. households that purchased an ENERGY STAR certified product report the 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 2018, the ENERGY STAR program for commercial buildings helped businesses and organizations save 190 billion kilowatt-hours of electricity, avoid **$12 billion** in energy costs, and achieve 140 million metric tons of greenhouse gas reductions.[1,2]
- In 2019 alone, more than **260,000** commercial properties used EPA's ENERGY STAR Portfolio Manager ® tool to measure, and track their energy use, water use, and/or waste and materials. These buildings comprise 24 billion square feet of floor space—nearly a quarter of all the commercial floor space in the nation.
- More than **5,700** buildings earned the ENERGY STAR in 2019, bringing the total to more than 36,000 buildings.
- On average, ENERGY STAR certified buildings use **35%** less energy than typical buildings nationwide. [7]
- As of the end of 2019, 32 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 2018, the ENERGY STAR program for industrial plants helped businesses save 36 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 2019, **33** 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.
- **95** industrial plants earned the ENERGY STAR in 2019.
- **25** industrial plants achieved energy intensity reductions in the 2019 ENERGY STAR Challenge for Industry campaign.

Learn more about ENERGY STAR for industrial plants.

ENERGY STAR for the residential sector

- In 2018, the ENERGY STAR Residential New Construction Programs helped homeowners save 3 billion kilowatt-hours of electricity, avoid **$400 million** in energy costs, and achieve 4 million metric tons of greenhouse gas reductions.[1,2]
- More than **2 million** ENERGY STAR certified new homes and apartments have been built to date, including nearly 100,000 in 2019 alone.
- **2,800** builders, developers, and manufactured housing plants are ENERGY STAR partners, including all of the nation's 20 largest homebuilders. **One out of every 12** single-family homes built in 2019 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 over **98,000** home improvement projects to increase energy efficiency and comfort in 2019, for a total of more than 873,000 to date.

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 the **ENERGY STAR Award Winners Page**.

References

The majority of data cited is from 2019. In cases where 2019 data is not yet available, 2018 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://energystar.gov/awareness.
4. ACEEE. (2019). The 2019 State Energy Efficiency Scorecard. https://aceee.org/research-report/u1908.
5. NASEO and Energy Futures Initiative. (2019). *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.