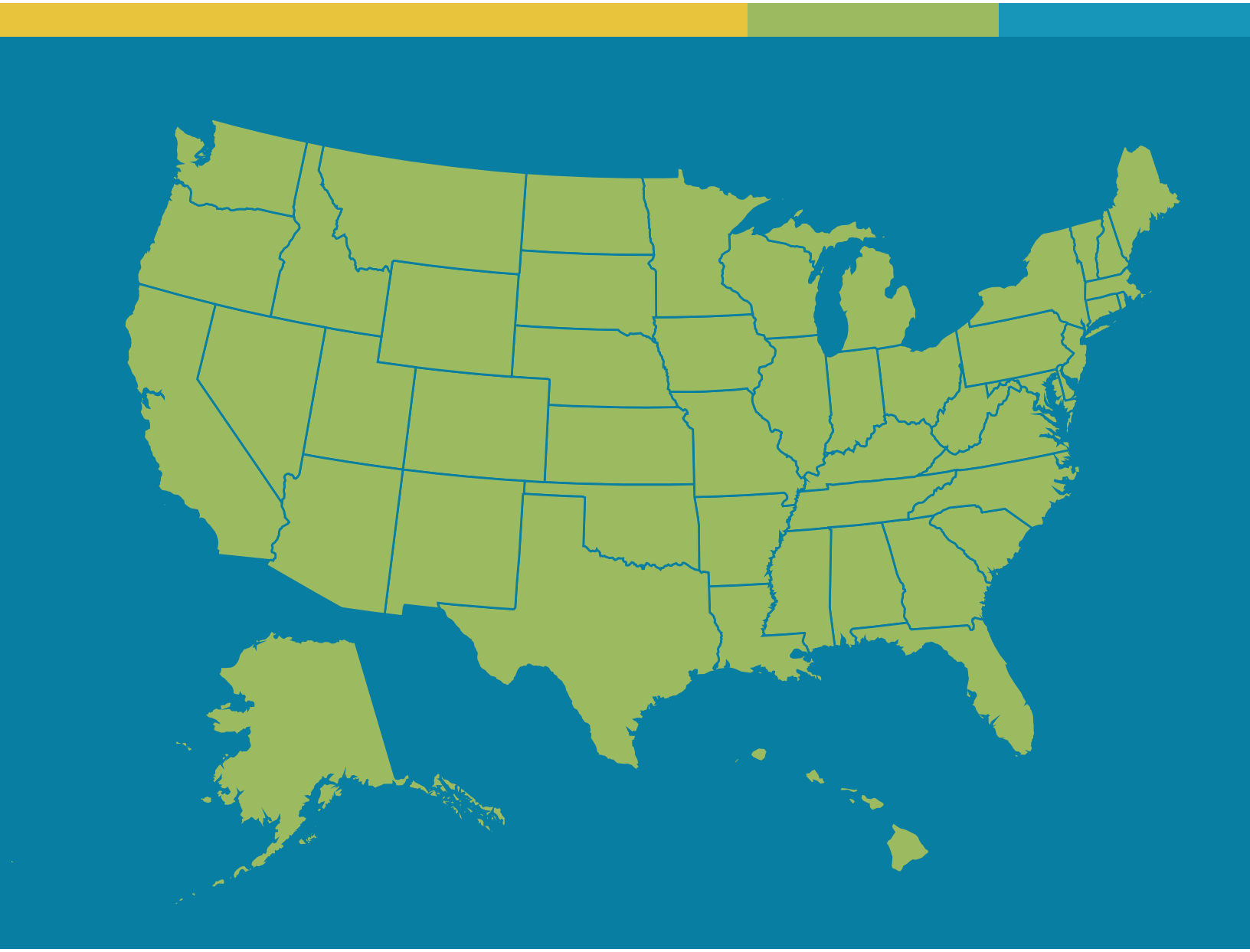
Energy Efficiency Jobs in America

NEARLY 2.4 MILLION AMERICANS WORK IN ENERGY EFFICIENCY



BUILDING PERFORMANCE FOUNDATION

NOVEMBER 2026

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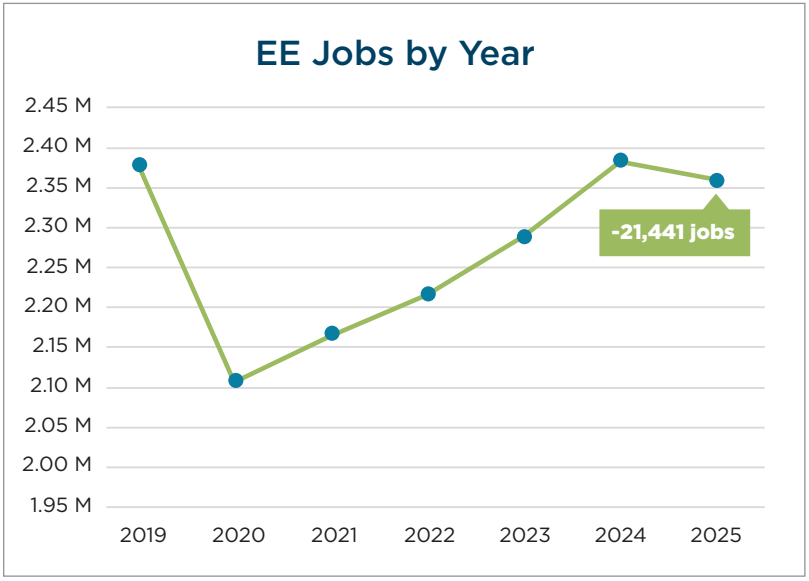
America's energy efficiency (EE) economy consists of nearly 2.4 million workers designing, manufacturing, and installing energy saving products and technologies across 50 states.

NATIONAL SUMMARY

Growth slows, but Americans with energy efficiency jobs remain critical to our economy.

Energy efficiency saves Americans money on energy bills, improves air quality and home comfort, supports U.S. energy independence, reduces energy waste, and improves grid resilience—all while supporting a sector that employs nearly 2.4 million workers. The industry consists of a wide variety of workers, from equipment manufacturers and distributors to energy auditors and insulation installers to HVAC technicians, architects, and electrical engineers.

2025 was the first year EE employment fell since 2020. The sector lost 21,441 jobs, a 0.9% drop, and ended the year at 2,360,303 workers after four years of gains. EE was not alone. As a whole, the energy economy lost 86,000 jobs in 2025, a 1% decline. Policy uncertainty and market volatility were likely contributing factors, as jobs declined and fewer EE businesses sought to hire (39.7% in 2025 vs. 42% in 2024).



KEY INSIGHTS

Energy efficiency (EE) employed **2.36 million workers** in 2025, more than one quarter of the total energy workforce.

After four years of growth, EE employment slipped 0.9% in 2025. This loss of **21,441 jobs** mirrored a 1% decline in jobs across the entire energy economy as businesses faced policy uncertainty and market volatility.

EE offers good-paying jobs. **EE wages grew 2.8%** in 2025, nearly double the 1.5% national average, and are 18% to 23% higher than the national average.

EE is the **largest energy subsector in 39 states** and the District of Columbia, and it employs nearly 1.3 million workers in the construction industry.

BIG PICTURE CONTEXT

Leveraging the U.S. Department of Energy (DOE)'s 2026 U.S. Energy & Employment Report (USEER), which reports employment at the end of 2025, this report focuses solely on the EE sector of the U.S. economy. It emphasizes the built environment, capturing only the jobs where workers use ENERGY STAR energy efficiency products and high-performance building materials. It omits EE jobs in transportation and electric grid technologies, water use or waste management, electric power generation, transmission, distribution, storage, and fuels, among other jobs where energy efficiency can also be a large component. USEER counts jobs rather than unique workers and uses survey-based estimates, so totals may not sum exactly because of rounding.[3]



WHAT IS AN EE JOB?[1]

EE jobs deliver goods and services that reduce energy use with a focus on ENERGY STAR appliances, buildings, financing, new technologies, and more. EE jobs do not include jobs in transportation, electric grid technologies, water use/management, electric power generation, fuels, or transmission, distribution, and storage energy subsectors.[2]



1 The USEER defines a Qualifying Worker as "an employee of a Qualifying Firm who spends some portion of their time supporting the qualifying energy portion of the business." Employees sometimes perform work across multiple energy subsectors but, per USEER methodology, they are only counted in the report under the one energy sector where they work "more of their time" (i.e., a plurality of their time) as compared to any other energy technology.

2 Please see appendix for more information on EE jobs.

3 Please see the "About the Report" section for more information about the report's data methodology.

ENERGY EFFICIENCY EMPLOYMENT DOMINATES ACROSS ALL U.S. REGIONS

EE workers often serve in roles that cannot be outsourced, making these jobs vital to local economies across all 50 states. Despite the industry's decline in job growth from 2024 to 2025, EE remains the largest energy subsector in 39 states and the District of Columbia. The EE industry employs more than twice as many workers as the oil and gas (958,000 workers), coal (125,000), and nuclear (70,000) energy subsectors combined.

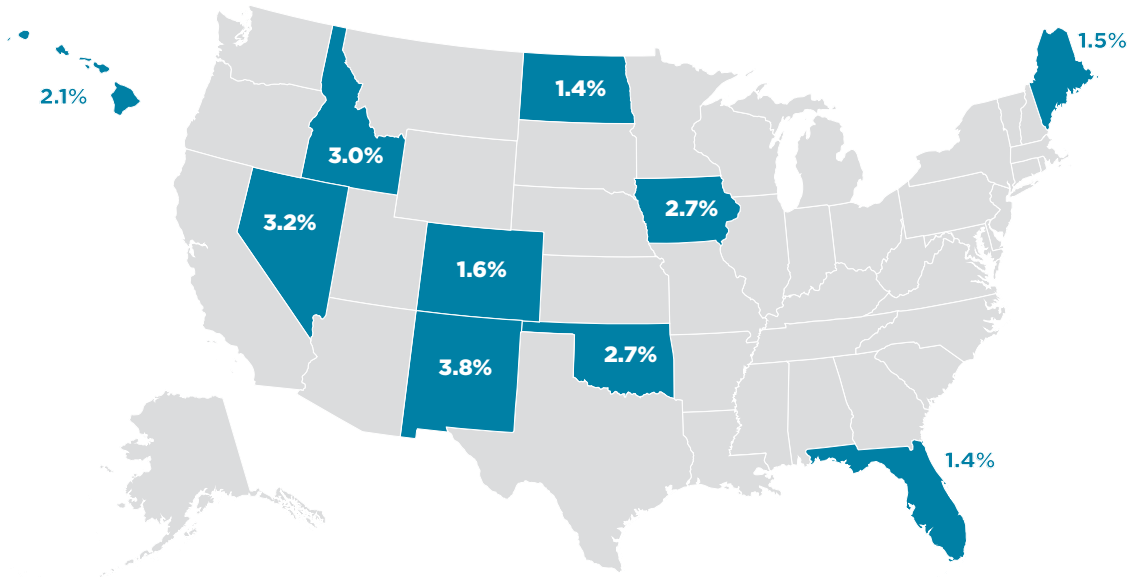
Employment fell in 34 states and the District of Columbia. California accounted for about 40% of the national decline, with a loss of 8,754 EE jobs. Maryland, Illinois, Wisconsin, and Massachusetts also experienced some of the largest state-level job losses, following California.

Of the remaining 17 states that enjoyed EE job growth, New Mexico (+3.8%), Nevada (+3.2%), Idaho (+3.0%), Iowa (+2.7%), and Oklahoma (+2.7%) led the way. New Mexico and Nevada have led the nation in year-over-year EE job growth every year since 2021.

Top 5 States by Total EE Jobs

1	2	3	4	5
California	Texas	New York	Florida	Illinois
303,336	183,943	134,814	133,859	88,033

Top 10 States with Fastest Job Growth 2024 to 2025



BUILDING AMERICA

Construction

EE employs nearly 1.3 million people focused on construction, installation, and repair—jobs providing critical efficiency upgrades to homes, buildings, schools, hospitals, and more. Contractors that install energy efficient products and upgrade buildings remain a key source of jobs and yet EE construction jobs fell by about 11,900 workers in 2025.

Manufacturing

From insulation to ENERGY STAR appliances, the efficiency economy is powered by American manufacturers creating the products that make homes, buildings, and businesses more efficient. Unlike other subsectors, EE production and manufacturing jobs grew 3% in 2025, adding about 10,000 workers.

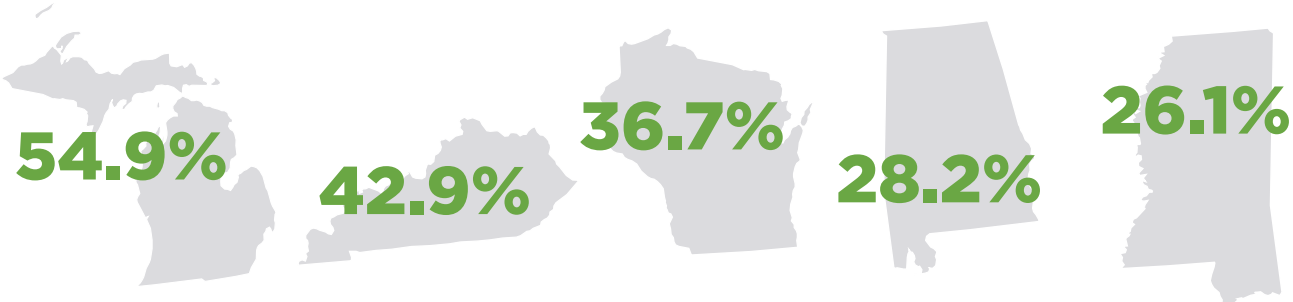
In states like Kentucky, Wisconsin, Alabama, and Mississippi, manufacturing represents more than a quarter of all EE employment, and in Michigan, more than half.



ENERGY STAR Products

Despite facing headwinds, demand for efficient products and services remains strong. Overall, jobs tied to ENERGY STAR certification (certified appliances, products, and services) grew 2.1% from 2024 to 2025, reaching a total of 619,000 workers. Even as traditional HVAC employment dropped 4.4% in 2025, jobs tied to ENERGY STAR certified HVAC (excluding heat pumps) grew 8%, while ENERGY STAR certified ground-source heat pumps grew 8.2%. Jobs associated with ENERGY STAR air-source heat pumps declined 4.2% in 2025, but employment is still up 4.6% since 2022.

States with the Highest Manufacturing Share of EE Jobs



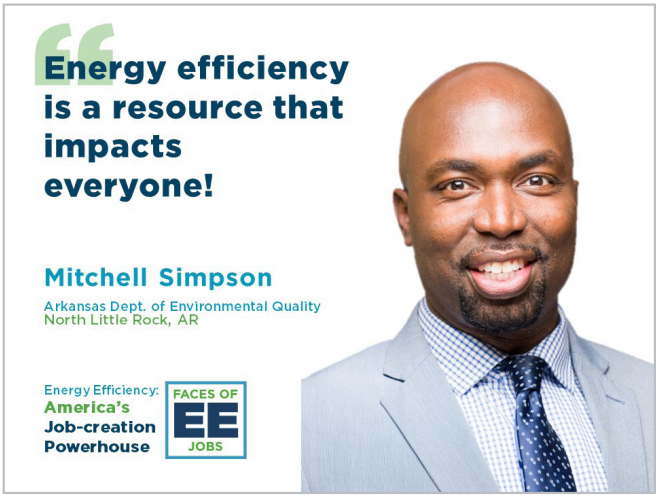
ENERGY EFFICIENCY WORKFORCE

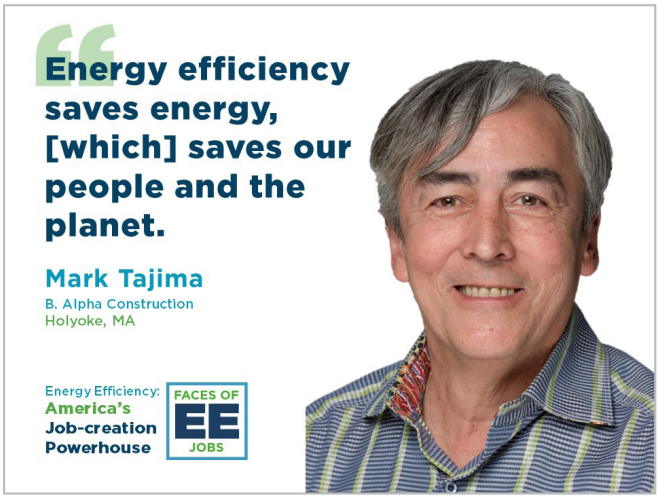
EE jobs offer highly competitive compensation, with average wages sitting 18% to 23% above the U.S. average. Across the EE industry, wages grew 2.8% from 2024 to 2025, outpacing increases for both energy jobs broadly (2.1%) and the national average across all industries (1.5%). Wages for EE workers have risen by 7.8% since 2022.

Workers 55 and older made up 15.3% of the EE workforce in 2025, about the same proportion as 2024 (15.5%). As more workers retire and leave the workforce, programs to train and onboard new contractors are critical to meeting the moment. Funds for training, from state and local training programs to federal grants like the Training for Residential Energy Contractors (TREC) program, help small businesses hire and train new EE employees, creating new jobs for workers living in the communities they serve.

Bringing new workers into the EE industry is critical to the health of the industry. Despite the decline in EE jobs from 2024 to 2025, women and veteran EE worker totals had slight increases, with veteran workers in particular growing by 1.7% to make up over 9% of the total EE workforce. Training resources aimed at these communities and others could further expand and diversify the EE workforce.













RECRUITMENT CHALLENGES

Hiring challenges remain top of mind for EE businesses. Across all EE subsectors, 74% of businesses reported difficulty hiring qualified workers. EE companies reported management roles were the hardest to fill (79%), with construction roles close behind at 78%. As noted, fewer EE companies hired at all in 2025: 39.7% compared with 42% the year before.

RECRUITMENT SOLUTIONS

Career and Technical Education schools are a natural place to recruit. They can build awareness of EE jobs and offer hands-on training, job placement, and certification. EE concepts can also be folded into existing HVAC and construction laborer curricula. Reaching students earlier prepares them for in-demand jobs and strengthens the workforce pipeline. Workforce grant programs, on-the-job training, and secondary school outreach deserve more investment.

Small businesses are the backbone of the EE industry. Nationwide, 74.7% of EE businesses employ fewer than 20 staff, and 41.4% employ fewer than 5. These small and micro-businesses often do not have bandwidth to develop their own training, education, and recruitment programs, making investment in workforce development programs like DOE's TREC grants a vital down payment on training for the industry.

ABOUT THE REPORT

The figures in this report draw from the DOE's 2026 U.S. Energy & Employment Report (USEER), which focuses on all energy jobs. The USEER analyzes data from the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) to track employment across sectors including energy production, transmission, and distribution, and it relies on a supplemental survey of business representatives across the U.S. The Energy Efficiency sector in this report is identical to the USEER EE sector, which includes ENERGY STAR HVAC, roofing, insulation and air sealing, lighting, building materials, and energy auditing services. Please note that this is not a complete list of job types in the sector. See the USEER appendices for complete methodology details.

About the Building Performance Foundation

BUILDING PERFORMANCE FOUNDATION

The Building Performance Foundation (BPF) is a 501(c)(3) charitable organization that advances building performance through education, research, workforce development, and expanded access to career opportunities. Visit foundation.building-performance.org.

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[bw] RESEARCH PARTNERSHIP

BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit bwresearch.com.

Appendix A:

Definition of EE Sector Technologies

The Energy Efficiency sector includes the manufacture, design, installation, and maintenance of various energy efficient technologies; below is a list of technologies involved in EE jobs. The list is from the 2026 USEER Appendix, in response to the question, "Which of the following Energy Efficiency, including Heating, Cooling, and Building Envelope technologies is your organization directly engaged with?"[4]

1. ENERGY STAR Certified Appliances (not including HVAC) – appliances that meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
2. ENERGY STAR Certified Heating, Ventilation, and Cooling (HVAC), except air-source and ground-source heat pumps.
3. ENERGY STAR Air-Source Heat Pumps – air-source heat pumps that meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
4. ENERGY STAR Ground-source or geothermal heat pumps – heat pumps that use the earth's natural heat to provide heating and cooling, and meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
5. Other high efficiency HVAC that are out of scope for ENERGY STAR certification (e.g. indirect evaporative coolers, air-to-water heat pumps, energy recovery systems, etc.).
6. Traditional HVAC goods, control systems, and services – includes wall units, furnaces.
7. ENERGY STAR certified water heaters – water heaters, which can come with gas, solar, or electric heat pump technology, that meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
8. ENERGY STAR Certified Electronics (TVs, telephones, audio/video, etc.) – electronic appliances such as TVs, Telephones, and Audio/Video devices that meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
9. ENERGY STAR Certified Windows, Doors, and Skylights – windows, doors, and skylights which meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
10. ENERGY STAR Certified Roofing – ENERGY STAR certified roof products which reflect more of the sun's rays and decrease the amount of heat transferred into a building.
11. ENERGY STAR Certified Insulation – insulation products, including blankets, foam boards, and loose fill, which meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
12. Air sealing – products that reduce the amount of air that leaks in and out of a building by sealing cracks and openings.
13. ENERGY STAR Certified Commercial Food Service Equipment – Commercial kitchen equipment, including refrigerators, dishwashers, and ovens, which meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.

4 Additional category detail is supplemented using the 2024 USEER (p. A-60). While the additional details are from the 2024 USEER, this information accurately reflects the 2026 USEER technology descriptions, per Appendix B of the 2026 USEER, p. 25-26 (2026 United States Energy & Employment Report: Appendix B, https://www.energy.gov/documents/2026-useer-appendices-i).

14. ENERGY STAR Certified Data Center Equipment[5] – IT equipment, such as servers, uninterruptible power supplies, data storage, and network equipment, which meets the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
15. ENERGY STAR Certified LED lighting – LED light bulbs which meet the international ENERGY STAR standard for energy efficient consumer products originated in the United States.
16. Other LED, CFL, and efficient lighting.
17. Solar thermal water heating and cooling – solar thermal uses the sun's energy to generate thermal energy.
18. Other renewable heating and cooling (biomass, etc.) – refers to establishments that are involved with heating, ventilation and air conditioning (HVAC) from Renewable Energy sources or work that increases the Energy Efficiency of HVAC systems.
19. Advanced building materials/insulation – all materials that represent advances in efficiency over the traditional materials.
20. Recycled building materials.
21. Reduced water consumption products and appliances – high efficiency (HE) washing machines, faucet aerators, low flow shower heads, etc.
22. Energy auditing services.
23. Other (Specify) – any energy efficiency that is not captured in the categories listed previously or a category that is used when unable to split employment into a single energy efficiency category where employees spend "more of their time."

5 This section mostly accounts for the manufacture and installation of energy efficient data center equipment, not the operation and/or maintenance of the data center.