



OFFICE OF AIR AND RADIATION

September 23, 2024

Dear ENERGY STAR® Partners and Stakeholders:

The U.S. Environmental Protection Agency (EPA) is pleased to announce the final recognition criteria for ENERGY STAR Most Efficient 2025. This letter outlines the final criteria.

These criteria will recognize the most efficient ENERGY STAR products in 2024 across 14 product categories: Ceiling Fans, Clothes Dryers, Clothes Washers, Computer Monitors, Consumer Refrigeration Products, Dehumidifiers, Dishwashers, Geothermal Heat Pumps, Residential Windows and Sliding Glass Doors, Residential Skylights and Tubular Daylighting Devices, Room Air Cleaners, Room Air Conditioners, and Ventilating Fans. The proposed criteria for Air Source Heat Pumps are expected to be shared with stakeholders later this Fall as EPA continues to collaborate with the Consortium for Energy Efficiency (CEE) to better align with 25C tax credit eligibility requirements in 2025.

Products that meet the 2025 criteria will deliver significant savings over a conventional product as summarized in the recognition criteria below.

Overview of Comments on the ENERGY STAR Most Efficient 2025 Proposals

Stakeholders shared feedback with EPA through 15 sets of written comments. Commenters offered support for the proposed recognition criteria, as well as a select set of proposed adjustments that EPA summarizes and responds to in the [comment response document](#). Here is a summary of key comment responses:

Dehumidifiers: One stakeholder suggested aligning the definitions of “Portable” and “Whole Home” dehumidifiers with DOE and EPA standards. To ensure clarity, the EPA has removed definitions and referenced the ENERGY STAR specification.

Ducted and Ductless Air Source Heat Pumps: The EPA continues to collaborate with the Consortium for Energy Efficiency (CEE) to better align with 25C tax credit eligibility requirements in 2025. Comments on the heat pumps proposal will be addressed separately when EPA finalizes the criteria later this Fall.

Room Air Conditioners: One stakeholder proposed specifying the sound pressure testing standard and expanding sound requirements to include both low and high sound pressure levels for indoor and outdoor settings, while another stakeholder questioned the basis for the current sound requirement. While no criteria changes were proposed for room air conditioners, the final criteria reflect an update to remove the sound requirements based on the evolution of the market to feature only variable speed compressors, which offer improved sound performance. The EPA will consider whether sound requirements are warranted in the future through the ENERGY STAR specification revision process.

Vent Fans: One stakeholder recommended setting a minimum recognition criterion of 12 CFM/W for all duct sizes, including square ducts. The EPA is retaining the proposed size-based criteria, as increasing the performance levels to 12 CFM/W for all duct sizes would limit eligibility among higher efficient products with four-inch ducts. To address the recommendations regarding duct shapes, the Agency has adjusted the criteria to account for square, rectangle, and oval ducts in addition to circular.

ENERGY STAR Most Efficient 2025 Categories and Recognition Criteria

Ceiling Fans: The EPA is not changing the criteria for 2025. The EPA estimates that ceiling fans earning ENERGY STAR Most Efficient recognition will offer 75% in annual energy savings over the Federal Minimum. [View the full criteria here.](#)

Clothes Dryers: The EPA is not changing the criteria for 2025. The EPA estimates that clothes dryers earning ENERGY STAR Most Efficient recognition will offer 245-300 kWh/yr in annual energy savings, 40%-60% over the Federal Minimum for the most common product classes. [View the full criteria here.](#)

Clothes Washers: The EPA has revised the criteria for large clothes washers for 2025 consistent with the proposal. For models with a capacity larger than 2.5 cu-ft, the minimum IMEF value is 3.1 and maximum IWF value is 3.0. No changes were made to the criteria for smaller clothes washers. The EPA estimates that recognized clothes washers \leq 2.5 cu-ft will offer about 100 kWh/yr in annual energy savings, 25% over the

Federal Minimum and 1,500 gal/year in annual water savings. Recognized clothes washers > 2.5 cu-ft will offer more than 370 kWh/yr in annual energy savings, 46% over the Federal Minimum and 3,500 gal/yr in annual water savings. [View the full criteria here.](#)

Computer Monitors: The EPA is not changing the criteria for 2025. The EPA estimates that recognized monitors will offer 21 kWh/yr in annual energy savings, approximately 40% over a standard model. [View the full criteria here.](#)

Dehumidifiers: The EPA has made updates to the criteria for 2025 consistent with the proposal and removed definitions based on comments received and instead referenced definitions in the ENERGY STAR dehumidifier specification. The EPA estimates that recognized dehumidifiers and portable dehumidifiers will offer 110-160 kWh/yr in annual energy savings around 40% above the Federal Minimum for the most common smaller units. Recognized whole-home dehumidifiers will offer 240 kWh/yr in annual energy savings, over 33% above the Federal Minimum. [View the full criteria here.](#)

Dishwashers: The EPA is not changing the criteria for 2025. The EPA estimates that recognized dishwashers will offer 80 kWh/yr in annual energy savings, nearly 30% over the Federal Minimum and 680 gal/yr in annual water savings, 35% over the Federal Minimum. [View the full criteria here.](#)

Ducted and Ductless Air Source Heat Pumps: EPA plans to make updates to the criteria as described in the proposal. Comments on the heat pumps proposal and possible criteria adjustments will be addressed separately later this Fall.

Geothermal Heat Pumps: The EPA is not changing the criteria for 2025. The EPA estimates that recognized geothermal heat pumps can provide 1000-1600 kWh/yr in annual energy savings, 15-40% over the Federal Minimum. [View the full criteria here.](#)

Refrigerators-Freezers and Freezers: The EPA is not changing the criteria for 2025. The EPA estimates that recognized standard refrigerators will provide 40-180 kWh/yr in annual energy savings, 10-30% over the Federal Minimum while recognized standard freezers are estimated to provide 35-90 kWh/yr in annual energy savings, 15-20% over the Federal Minimum. Recognized compact refrigerators and freezers will offer 35-100 kWh/yr in annual energy savings, 20-30% over the Federal Minimum. [View](#)

[the full criteria here.](#)

Room Air Cleaners: The EPA has revised the criteria for 2025 consistent with the proposal. The EPA estimates that recognized room air cleaners will offer 165-620 kWh/yr in savings, depending on size, around 70% over the Federal Minimum. [View the full criteria here.](#)

Room Air Conditioners: The EPA has made changes to the 2025 criteria, removing requirements for sound in recognition of changes in the market. The EPA estimates that recognized room air conditioners will offer 100-600 kWh/yr in annual energy savings, 25-35% over Federal Minimum. [View the full criteria here.](#)

Ventilating Fans: The EPA has made changes to the 2025 criteria to account for a variety of duct shapes and options, retaining the proposed updates to performance levels based on size. The EPA estimates that recognized bathroom/utility ventilating fans will offer 45 kWh/yr in annual energy savings, 85% over a standard model. Recognized in-line fans are estimated to provide more than 60 kWh/yr in annual energy savings, more than 50% over a standard model. [View the full criteria here.](#)

Windows, Sliding Glass Doors, and Skylights: The EPA is not changing the criteria for 2025. The EPA does not develop a single savings estimate for residential windows, sliding glass doors, and skylights since savings vary greatly by climate and house characteristics. [View the full criteria here](#) and [here.](#)

ENERGY STAR Most Efficient 2025 Program Considerations

ENERGY STAR certified products meeting these requirements will be highlighted as ENERGY STAR Most Efficient for 2025 at: www.energystar.gov/mostefficient beginning January 1, 2025. Later this Fall, EPA will begin distributing the 2025 ENERGY STAR Most Efficient designation to brand owners of eligible products. As a reminder, usage guidelines are available at [Guidelines for Using the ENERGY STAR Most Efficient Mark.](#)

To ensure the greatest utility of the ENERGY STAR Most Efficient webpage to consumers, EPA will only highlight products that are currently available for sale in the U.S. As such, EPA reminds partners that it is critical to keep product availability information with their certification bodies current. Partners are also reminded that they must provide all information called for by the recognition criteria to their

certification body at the time of certification to be recognized as ENERGY STAR Most Efficient.

The ENERGY STAR Most Efficient 2025 designation is intended for use at point-of-sale on point-of-purchase materials, product literature, and websites. It may not be factory-applied to products or product packaging. Failure to abide by these guidelines may result in loss of recognition. EPA will highlight recognized products on the ENERGY STAR Most Efficient 2025 web page through December 31, 2025.



We look forward to working with you to market ENERGY STAR Most Efficient products in 2025. Please e-mail mostefficient@energystar.gov with any questions.

Thank you for your support of the ENERGY STAR program.

Sincerely,

A handwritten signature in black ink, appearing to read "Ann Bailey".

Ann Bailey, Director
ENERGY STAR Product Labeling