



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

July 9, 2024

Dear ENERGY STAR® Partners and other Stakeholders:

The U.S. Environmental Protection Agency (EPA) is pleased to share both an update on ENERGY STAR Most Efficient 2024 and proposed recognition criteria for 2025. The EPA is seeking public input on these criteria no later than August 12, 2024, to MostEfficient@energystar.gov.

ENERGY STAR Most Efficient 2024

As of June 2024, 3156 models from 390 ENERGY STAR partners meet the ENERGY STAR Most Efficient 2024 recognition criteria. The number of models and partners per category is noted in the following table:

Product Category	Product Count	Partner Count
Air Source Heat Pumps (ASHP)	682	90
Ceiling Fans	113	13
Clothes Dryers	32	7
Clothes Washers	64	5
Computer Monitors	53	17
Dehumidifiers	58	20
Dishwashers	56	12
Freezers	20	10
Geothermal Heat Pumps	379	19
Refrigerators	739	70
Room Air Cleaners	54	22
Room Air Conditioners	10	5
Ventilating Fans	111	16
Windows/Sliding Glass Doors and Skylights/Tubular Daylighting Devices	785	84
Totals	3156	390

ENERGY STAR Most Efficient enjoys robust utility support and is leveraged by 46 energy efficiency program sponsors, serving over 11 million households. These rebate programs feature one or more product categories covered by ENERGY STAR Most Efficient 2024 and reflect a diverse geographic spread.

ENERGY STAR Most Efficient is also leveraged for retailer incentives as part of the ENERGY STAR Retail Products Platform (ESRPP), an innovative, nationally coordinated, market transformation initiative. ESRPP retailers now represent more than 1,750 appliance storefronts in current program sponsors' service areas. Currently, in 2024, there are 18 efficiency program sponsors participating in ESRPP currently serving 31% of U.S. households.

The EPA provides consumers with information about ENERGY STAR Most Efficient recognized products through a filter on the popular ENERGY STAR Product Finders. You can access the ENERGY STAR Product Finders [here](#).

2025 Product Categories and Recognition Criteria

The EPA completed a review of the data associated with currently recognized models and found in multiple cases updates to the ENERGY STAR Most Efficient criteria are needed to recognize the best of ENERGY STAR. The EPA is proposing changes for ASHPs, clothes washers, dehumidifiers, room air cleaners, and vent fans. Criteria for ceiling fans, clothes dryers, computer monitors, dishwashers, geothermal heat pumps, refrigerators/freezers, room air conditioners, skylights, and windows/sliding glass doors will remain the same as in 2024.

Ceiling Fans: No changes are proposed for ceiling fans for 2025. Currently, ceiling fan products recognized as ENERGY STAR Most Efficient 2024 represent 16% of certified models. [Link to full proposal document](#)

Clothes Dryers: No changes are proposed for dryers for ENERGY STAR Most Efficient 2025. Currently, 11% of all dryer base models qualify for ENERGY STAR Most Efficient 2024 recognition. [Link to full proposal document](#)

Clothes Washers: The EPA proposes to revise the criteria for large clothes washers for 2025. For models with a capacity larger than 2.5 ft³, the proposed minimum IMEF value is 3.1 and maximum IWF value is 3.0. With these changes, across all clothes washers, 16 base models from 3 brands would currently be eligible for recognition. This represents 5% of all base models. [Link to full proposal document](#)

Computer Monitors: No changes are proposed for computer monitors for 2025. With approximately 4% of certified models meeting the ENERGY STAR Most Efficient 2024 criteria, the current criteria for monitors remain a high-performance benchmark for product redesigns. [Link to full proposal document](#)

Dehumidifiers: The EPA proposes to revise the criteria for dehumidifiers for 2025. The proposed minimum criteria for portable dehumidifiers is an IEF of 1.85 for products ≤ 25 pints/day, an IEF of 2.20 for products between 25.01-50 pints/day, and an IEF of 3.40 for products ≥ 50.01 pints/day. The proposed minimum criteria for whole-home dehumidifiers are an IEF of 2.35 for products ≤ 8.0 ft³ and an IEF of 3.81 for products > 8.0 ft³. Currently, 12 base models from 7 brands meet the proposed 2025 ENERGY STAR Most

Efficient criteria, which represents 3% of all base models. [Link to full proposal document](#)

Dishwashers: No changes are proposed for dishwashers for 2025. Currently, 56 base models from 13 brands qualify for ENERGY STAR Most Efficient 2024. This represents 12% of all base models. [Link to full proposal document](#)

Ducted and Ductless Air Source Heat Pumps: The EPA proposes to revise the criteria for air source heat pumps for 2025, based on collaboration with the Consortium for Energy Efficiency (CEE) to better align with 25C tax credit eligibility requirements in 2025. The proposed minimum SEER2 criterion is 16.0. The proposed minimum HSPF2 criteria are 8.0, 7.5, and 8.5, for split system HPs, single-package HPs, and cold climate HPs, respectively. The proposed minimum EER2 criterion for all categories is TBD, pending finalization of CEE's 2025 tax credit tiers. The EPA is also proposing to remove the installation benefits requirement for ducted models. The low ambient and CVP requirements of ENERGY STAR Version 6 cold climate recognition already correspond to the criteria in CEE optional cold climate levels. [Link to full proposal document](#)

Geothermal Heat Pumps: No changes are proposed to the criteria for geothermal heat pumps for 2025, meaning that all ENERGY STAR certified GHP will continue to be recognized as ENERGY STAR Most Efficient. They remain a small part of the residential heating and cooling market, providing radically higher efficiencies particularly at the times the grid is most stressed. Therefore, as a class, they fit the concept that this recognition is intended to highlight. [Link to full proposal document](#)

Refrigerators-Freezers and Freezers: The EPA proposes to maintain the 2024 criteria for 2025. There are 38 base models from 9 brands of bottom freezer and side-by-side refrigerators, which represents 5% of the bottom freezer and side-by-side base models. The proposal includes a large number of ENERGY STAR top freezers given their notable efficiency relative to other configurations. For compact refrigerators, there are 47 base models from 24 brands that meet the proposed criteria representing 6% of all compact refrigerator base models. There are 8 upright freezer and chest freezer base models from 6 brands that meet the criteria representing 4% of all standard-size freezer base models. For compact freezers, there are 9 base models from 6 brands that meet the proposed criteria representing 4% of all compact freezer base models. [Link to full proposal document](#)

Room Air Cleaners: The EPA proposes to revise the criteria for room air cleaners for 2025, with a change in metrics from Smoke CADR to PM2.5 CADR and Smoke CADR/W to IEF to align with the Department of Energy (DOE) minimum standards metrics. The proposed minimum criteria for products between $30 \leq \text{PM}_{2.5} \text{ CADR} < 100$ are an IEF of 5.40, for $100 \leq \text{PM}_{2.5} \text{ CADR} < 150$ are an IEF of 6.60, and for products between $150 \leq \text{PM}_{2.5} \text{ CADR}$ are an IEF of 8.60. Currently, 46 base models from 28 brands meet the proposed 2025 ENERGY STAR Most Efficient criteria, which represents 8% of all base models. [Link to full proposal document](#)

Room Air Conditioners: No changes are proposed for the room air conditioner product criteria for 2025. Currently, 11 models qualify for ENERGY STAR Most Efficient 2024 recognition. The EPA anticipates this number will increase as manufacturers redesign

models for new DOE room air conditioner efficiency standards, effective spring of 2026. [Link to full proposal document](#)

Ventilating Fans: No changes are proposed for inline fans. The EPA proposes to revise the criteria for bathroom/utility room fans for 2025. The proposed minimum criteria for efficacy at high speed will now scale with diameter (i.e. $\geq 1.9D + 2.9$ where D equals the diameter or depth of the duct in inches). This proposal is intended to more equitably recognize models designed for four-inch ducts. [Link to full proposal document](#)

Windows, Sliding Glass Doors, and Skylights: No changes are proposed for the window and sliding glass door criteria or the skylight and tubular daylighting device (TDD) criteria for 2025. Since the ENERGY STAR Version 7 effective date in the Fall of 2023 and recent alignment of 25C Federal tax credits with ENERGY STAR Most Efficient criteria, the market is still adjusting to the changes. Link to full proposal documents [here](#) and [here](#)

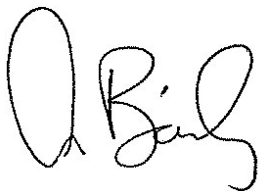
In addition to meeting these ENERGY STAR Most Efficient 2025 recognition criteria, products must be ENERGY STAR certified by an EPA-recognized certification body.

The EPA will provide additional information regarding the roll out of ENERGY STAR Most Efficient 2025 recognition with the finalization of these criteria.

The EPA will host a webinar to discuss these proposals with stakeholders on **July 18, 2024, from 1-3pm** EDT. Please register [here](#). This document as well as the criteria documents can be found [here](#). Please share written comments no later than **August 12, 2024**, with MostEfficient@energystar.gov. Unless the commenter asks otherwise, all comments will be posted to the ENERGY STAR Most Efficient criteria development page. EPA plans to finalize these recognition requirements in the coming months.

Thank you for your support of the ENERGY STAR program.

Sincerely,

A handwritten signature in black ink, appearing to read "Ann Bailey". The signature is fluid and cursive, with the first letter of each name being significantly larger and more prominent.

Ann Bailey, Director
ENERGY STAR Product Labeling