

Appliance Standards Awareness Project
American Council for an Energy-Efficient Economy

August 19, 2021

Ann Bailey, Director
ENERGY STAR Product Labeling
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Proposed Recognition Criteria for ENERGY STAR® Most Efficient 2022

Dear Ms. Bailey,

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP) and American Council for an Energy-Efficient Economy (ACEEE) on the proposed recognition criteria for the 2022 ENERGY STAR Most Efficient designation released on July 8, 2021. We appreciate the opportunity to comment.

The ENERGY STAR Most Efficient (ESME) program recognizes products that go above and beyond the efficiency of those that qualify under ENERGY STAR criteria. This designation allows environmentally conscious consumers, early adopters, and efficiency program sponsors to identify the most efficient products on the market. Continuous updates of the ESME product criteria can help drive innovation and transform the market towards higher efficiency home appliances and equipment. We support EPA's proposal to update the 2022 ESME criteria for central air conditioners and heat pumps, ceiling fans, computer monitors, refrigerator-freezers, and room air conditioners. We have elaborated on the proposed changes for individual products below. In addition, given the objectives of reaching a net-zero economy by 2050, we encourage EPA to consider either phasing out promotion for gas products, or if EPA decides to keep gas products in the program, setting ESME at the highest levels, using gas heat pump technology.

Central air conditioners and heat pumps (CAC/HPs)

We support EPA's proposal to align the CAC/HP specifications with the changes to the installation criteria from ENERGY STAR Version 6.0. In addition, we support EPA's proposal to add criteria for cold climate heat pumps, which will help recognize high-efficiency heat pumps that provide good low-temperature performance.

Ceiling fans

According to EPA, the number of ESME designated ceiling fans has been consistently increasing since the beginning of 2019.¹ For a given fan diameter, there is a wide range of efficiency levels among ESME qualified ceiling fans. For example, for 52" standard ceiling fans that meet the ESME 2021 criteria,

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https://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Most%20Efficient%202022%20Stakeholder%20Webinar_FINAL.pdf.

airflow efficiency ranges from about 160-350 CFM/W (compared to 100-350 CFM/W for all ENERGY STAR qualified 52" standard ceiling fans).² EPA's proposed updated criteria for 2022 offers savings of 67% relative to the current DOE standard. In addition, updated ESME criteria can help to lay the groundwork for a future revised ENERGY STAR specification for ceiling fans.

Computer monitors

EPA has observed the introduction of more efficient models of computer monitors to the market in recent years. We support EPA's proposal to update the recognition criteria for computer monitors for 2022 to help differentiate between various efficient models and increase the potential for significant energy savings.

Refrigerator-freezers

EPA is proposing to revise the ESME criteria for Side-by-Side and Bottom Freezer refrigerators to greater than or equal to 30% more efficient than the Federal minimum. As EPA noted in the ESME 2022 stakeholder webinar, refrigerators with advanced adaptive compressors can meet efficiency levels similar to the proposed criteria;³ strengthening criteria for these product types can incentivize manufacturers to invest in improved technology options for greater energy savings.

In addition, we support EPA revising the criteria for compact refrigerators and refrigerator-freezers to greater than 30% more efficient than the Federal minimum. EPA reports that the number of ESME compact refrigerator models grew significantly in the last year, and there are models that are almost 50% more efficient than the Federal minimum.⁴

Room air conditioners

Current ESME qualified models of room air conditioners provide significant energy savings for households, and with the number of models meeting the current criteria doubling in the last year, higher efficiency levels can produce additional savings. Revising the criteria for room air conditioners to meet a combined energy efficiency ratio greater than or equal to 35% better than the Federal standard will continue to drive innovation and improved energy savings for these products.

Gas-fired appliances

To achieve President Biden's objective of a net-zero economy by 2050, the U.S. will need to drastically reduce fossil fuel use in buildings. As a forward-looking program, ESME should consider either phasing out promotion for gas products, or if EPA decides to keep gas products in the program, setting ESME at the highest levels, using gas heat pump technology. With today's power grid, gas heat pumps can have similar emissions as electric products in many locations and may add support for the program. But as the grid becomes cleaner, it will become harder and harder for gas heat pumps to compete with electric heat pumps on emissions reductions.

² ENERGY STAR certified models as of 5/18/21.

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https://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Most%20Efficient%202022%20Stakeholder%20Webinar_FINAL.pdf.

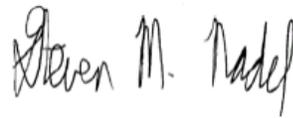
⁴ Ibid.

Thank you for considering these comments.

Sincerely,

Handwritten signature of Kanchan Swaroop in black ink.

Kanchan Swaroop
Technical Advocacy Associate
Appliance Standards Awareness Project

Handwritten signature of Steve Nadel in black ink.

Steve Nadel
Executive Director
American Council for an Energy-Efficient
Economy