

December 24, 2024

By E-mail

Mr. Steve Leybourn  
U.S. Environmental Protection Agency  
ENERGY STAR Appliances Program

HVAC@energystar.gov

Re: Room Air Conditioner (RAC) ENERGY STAR Specifications

Dear Mr. Leybourn:

The Association of Home Appliance Manufacturers (AHAM) respectfully submits the following comments to the Environmental Protection Agency (EPA) on its ENERGY STAR Draft 1 Version 6.0 and Version 7.0 specifications.

AHAM requests that EPA reexamine payback periods for all product classes under its Version 7.0 analysis, as the lengthy payback period suggests that updated ENERGY STAR standards are unjustified under the criteria outlined in the ENERGY STAR Program's Guiding Principles. AHAM is unable to make more substantive comments on certain elements of the specifications due to a comment period that coincides with end-of-year holidays. AHAM hopes to coordinate further with members in hopes of providing EPA with such comments but needs additional time. Accordingly, AHAM strongly recommends that EPA issue a Final Draft or Draft 2 of these specifications and provide adequate time for stakeholders to prepare and submit substantive feedback. AHAM can provide the following general comments at this time.

**I. EPA Should Reexamine Payback Periods For All Product Classes Under Its Version 7.0 Analysis.**

According to EPA analysis of Version 7.0, payback periods are unjustifiably high, particularly for product classes 1, 2 (without reverse cycle room air conditioners) and Type 4 room heat pumps (with reverse cycle room air conditioners). Payback periods of 10.5 years for product class 1, 11.7 for product class 2, and 18.7 for Type 4 exceed the Guiding Principles' two to five-year payback.

EPA indicated that baseline installed costs were referenced from DOE's 2023 Room Air Conditioner Technical Support Document (TSD) and National Impact Analysis as well data provided by manufacturers for the Type 4 room heat pumps.

As the cost differential of the install cost is key to the payback period outcome, AHAM recommends EPA reassess its baseline installed costs used for all product classes, including product classes 1, 2 and Type 4. A payback period higher than the average product life, which EPA states as 9.3 years, must be justified to consumers and key stakeholders.

According to the DOE Final Rule TSD, install costs at TSL 3, the level in which DOE finalized, cite higher install costs than what is used in EPA’s analysis. Because the new federal minimum standard was set at DOE’s TSL 3 level, this should be the new baseline for any analysis going forward. EPA should reevaluate accordingly, during the next specification development whether there are efficiency opportunities at a reasonable payback for consumers.

The below table provides a summary of the install costs at TSL 3, taken from the TSD.

Cycle Type	Louvered Sides	Size Range	Analyzed Product Class	Install Cost at TSL 3
Without Reverse Cycle	With Louvered Sides	< 6,000	1	\$429.24
		6,000-7,999	2	\$463.46
		8,000-13,999	3	\$668.76
		14,000-19,999	4	\$834.56
		20,000-27,999	5a	\$1,014.33
		≥ 28,000	5b	\$1,079.52
	Without Louvered Sides	8,000-10,999	8a	\$695.10
		11,000-13,999	8b	\$737.55
		14,000-19,999	9	\$877.20
With Reverse Cycle	With Louvered Sides	< 20,000	11, Type ½	\$777.97
			11, Type 3	\$777.97
			11, Type 4	\$777.97

## II. Consumer Guidance On Room Heat Pumps Is Important

Given the variety of heat pump types and climates in which they could be used, it is important for consumers to purchase a room heat pump that can operate adequately at a given outdoor temperature. AHAM does not have specific suggestions at this time as to how EPA may achieve this in the updated specification but will continue discussions with members in hopes of offering more substantive comments in subsequent drafts. AHAM looks forward to working with ENERGY STAR to promote consistency and clarity for consumers on this new product.

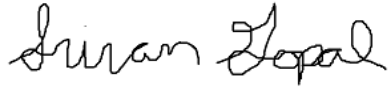
## III. Manufacturers Need More Time to Provide Substantive Comments on Version 7.0

Due to the short comment period and time of the year, manufacturers need additional time to evaluate all the proposed requirements in Version 7.0. During the EPA webinar, EPA anticipated another comment period for Version 7.0 Draft 2 or Final Draft. As EPA noted during the webinar, analysis on ENERGY STAR requirements beyond the already very stringent DOE requirements is difficult. AHAM believes it is important that another comment period, longer

than 30 days, be available so that manufacturers have time to prepare substantive feedback on the next draft.

AHAM appreciates the opportunity to submit this request to EPA and would be glad to discuss these matters in more detail should you so request.

Respectfully submitted,

A handwritten signature in black ink that reads "Sriram Gopal". The signature is written in a cursive, flowing style.

Sriram Gopal  
Director, Technology and Environmental Policy  
Association of Home Appliance Manufacturers

**About AHAM:** AHAM represents more than 150 member companies that manufacture 90% of the major, portable and floor care appliances shipped for sale in the U.S. Home appliances are the heart of the home, and AHAM members provide safe, innovative, sustainable and efficient products that enhance consumers' lives. The home appliance industry is a significant segment of the economy, measured by the contributions of home appliance manufacturers, wholesalers, and retailers to the U.S. economy. In all, the industry drives nearly \$200 billion in economic output throughout the U.S. and manufactures products with a factory shipment value of more than \$50 billion.