



August 21, 2023

Ann Bailey  
ENERGY STAR Labeling Branch  
US EPA

(Submitted via email to [MostEfficient@energystar.gov](mailto:MostEfficient@energystar.gov))

Re: Proposal to adjust the ENERGY STAR Criteria for Ductless Heat Pumps

Dear Ms. Bailey,

Thank you for the opportunity to submit comments in response to the EPA proposal to lessen the criteria for ductless air source heat pumps by removing the installation benefits requirement.

Trane Technologies is a world leader in creating comfortable, sustainable, and efficient environments and leading our industry in sustainability practices. Through our strategic brands Trane and Thermo King, and our portfolio of environmentally responsible products and services, we bring efficient and sustainable climate solutions to buildings, homes, and transportation. Our bold 2030 Sustainability Commitments are central to our business strategy and include a pledge to reduce our customers' carbon emissions by one gigaton (2% of the world's annual emissions) and to bring our own operations to carbon neutral. Our ambitious greenhouse gas (GHG) emissions reduction targets which have been verified by the [Science Based Targets Initiative \(SBTi\)](#) challenge us to lead by example, collaborate with our customers to drive sustainable innovation and create opportunity for all in our workplace and our communities.

We have a long history of supporting the EnergyStar program and are deeply aligned with its mission to promote the best-in class, most energy efficient products. Trane Technologies offers the following suggestions that EPA may wish to consider as this proposal moves forward, focused on aligning efficiency and installation requirements between ducted and ductless equipment:

- 1. EPA may wish to consider retaining installation requirements for ductless heat pumps to keep a level the playing field between ducted and ductless heat pumps and promote proper installation of all equipment.**



Trane Technologies sees no significant difference in the technical hurdles to meet the installation specifications between ducted and ductless products. For both product categories, the installation requirements add complexity and cost, but are achievable and support quality installation of heat pumps. While there is low participation in both programs due to stringent installation requirements, but Trane Technologies supports EPA’s original intention of promoting high quality installation in its Most Efficient category for heat pumps. EPA may wish to consider keeping the installation requirements aligned for all equipment, not just favoring ductless equipment, to ensure a level playing field.

- EPA may wish to consider aligning the ducted CCHP specifications with the tax credit for the North. The changes are relatively minor and would ensure all products are treated equally.**

With this proposal, Energy Star now has levels that align with all tax credit levels except for North Ducted. The tables below summarize this situation:

<b>Ducted HPs South</b>	
CEE Tier1*: 15.2 SEER2 / 11.7 EER2 / 7.8 HSPF2	<b>EnergyStar 6.1</b>
<b>Ductless HP South</b>	
CEE Tier 2*: 16.0 SEER2 / 12.0 EER2 / 9.0 HSPF2	<b>2024 EnergyStar Most Efficient</b>
<b>Ducted HPs North</b>	
CEE Tier 1*: 15.2 SEER2 / 10.0 EER2 / 8.1 HSPF2 (plus 5F COP and Capacity Ratio)	<b><i>NO EnergyStar matching level</i></b>
<b>Ductless HP North</b>	
CEE Tier 2*: 16.0 SEER2 / 9.0 EER2 / 9.5 HSPF2 (plus 5F COP and Capacity Ratio)	<b><i>EnergyStar Cold Climate</i></b>

\*Tax Credit Levels

EnergyStar had to significantly adjust the ductless specs for both most efficient and cold climate from the 2023 levels to achieve this as shown below:



Proposed 2024 Most Efficient HP Specifications	
Ducted :	16.9 SEER2 / 12.0 EER2 / 8.2 HSPF2 (plus installation criteria)
Ductless:	16.0 SEER2 / 12.0 EER2 / 9.0 HSPF2 (plus nothing)

Current 2023 Most Efficient HP Specifications	
Ducted :	16.9 SEER2 / 12.0 EER2 / 8.2 HSPF2 (plus installation criteria)
Ductless:	18.7 SEER2 / 12.0 EER2 / 8.5 HSPF2 (plus installation criteria)

Proposed 2024 CCHP Specifications	
Ducted :	15.2 SEER2 / 11.0 EER2 / 8.0 HSPF2 (plus 5F and CVP)
Ductless:	16.0 SEER2 / 9.0 EER2 / 9.5 HSPF2 (plus 5F and CVP)

Currentd 2023 CCHP Specifications	
Ducted :	15.2 SEER2 / 11.0 EER2 / 8.5 HSPF2 (plus 5F and CVP)
Ductless:	16.9 SEER2 / 11.0 EER2 / 8.5 HSPF2 (plus 5F and CVP)

To reduce confusion and ensure that all equipment is treated equally, the proposed changes should apply to both ductless and ducted equipment. In summary, EPA may wish to consider the following proposal that would ensure consistency between product categories:

Proposed 2024 CCHP Specifications	
Ducted :	15.2 SEER2 / 11.0 EER2 / 8.0 HSPF2 (plus 5F and CVP)
<b>Proposed:</b>	<b>15.2 SEER2 / 10.0 EER2 / 8.1 HSPF2 (plus 5F and CVP)</b>

As always, we appreciate your time and consideration of this feedback. Trane Technologies is happy to provide more information as EPA considers this proposal.



Sincerely,

Jennifer Kane