

ENERGY STAR Residential Central Air Conditioner and Heat Pump Draft 1 Version 6.0 Comment Matrix

Topic	Comment	EPA Response
<u>Appendix M & M1 crossover</u>		
5 degree Performance	Two stakeholders voiced their support of using COP at 5 degrees as a cold climate performance metric, but requested time before the effective date to evaluate the 5 degree test as prescribed by Appendix M1. One stakeholder recommended that manufacturers be allowed to use the Alternative Efficiency Determination Method (AEDM) to determine this performance metric. The stakeholder also commented that the Appendix M1 test condition is not yet an official test condition and the difference in external static pressure would result in a 4-5% lower COP than would be measured using the static pressure specified in Appendix M. Another stakeholder stated that industry needs this time to evaluate how psychrometric rooms would perform at this low temperature test.	EPA is maintaining the 5 degree COP and percentage heating capacity criteria, but to allow for further testing and preparation for the new test method, will accept manufacturer provided application data to meet this requirement until the specification effective date. As the effective date draws closer, EPA will also continue to evaluate alternative metrics for cold climate performance as more products come into the market and there is a further understanding of heat pump low temperature performance.
Percentage Heating Capacity	This stakeholder noted that the 80% percentage heating capacity would eliminate nearly all ducted solutions from obtaining the Cold Climate recognition. Further exploration is needed to understand if the percentage of heating capacity metric would require different levels for ducted and ductless units.	EPA recognizes that this requirement is currently met mostly by ductless products. From conversations with manufacturers, the current understanding is that ducted solutions will be able to meet this criteria with time to redesign. Ultimately, units unable to meet this requirements will still be recognized under the ENERGY STAR Moderate and Hot Climate label (given that they meet the higher EER requirement), so there will still be ducted units recognized by ENERGY STAR.
<u>Climate Differentiated Heat Pump Specification</u>		
Regional label	EPA recieved many comments both in support of and against a regional standard. Many commenters did not support the state-based label that was proposed as an alternate to a climate-based label. One stakeholder expressed concern that different criteria would fragment the market and stated that that one set of specifications allows efficiency programs throughout the US and Canada to promote one set of specifications and allow for larger market impact.	The regional label is intended to help utilities to set different requirements based on the relative climate of their region. By proposing this differentiation, EPA hopes to allow utilities to rely on the ENERGY STAR climate labels to create programs that they can use, rather than setting individual programs that will vary from utility to utility. The regional labels will not prevent any unit from being sold in any market, and units not meeting cold climate will generally still be recognized under the Moderate and Hot Climate label. EPA does not expect the regional label to decrease the market size in any region, but should help direct consumers, contractors, and utilities toward the best product for their climate.
	One stakeholder recommended the elimination of the EnergyGuide label.	The EnergyGuide label is required by federal standards and is not part of the ENERGY STAR program.
<u>Connected Criteria</u>		
Connected criteria	Five stakeholders reported support for the development and inclusion of connected criteria for CAC-HP products based on the requirements of AHRI 1380. One stakeholder requested that products that are DR enabled have a lower EER requirement, based on the understanding that peak load can be better controlled with DR curtailment. Another stakeholder requested that EPA expand the Communicating Thermostat specification to recognize products that meet this standard.	<p>EPA received general comments to the inclusion of connected criteria but received few comments to the Limited Topic Proposal for Connected Criteria for CAC-HPs. EPA has included the connected criteria with some small modicfications in this Draft 2 specification.</p> <p>As EPA is allowing self-certification until the test method is finalized, there will not be an allowance for lower EER based on Connected recognition at this time.</p> <p>EPA will be considering revisions to the Connected Thermostat specification in the near future and is considering pathways for proprietary communicating thermostats to certify under that specification.</p>

General / Miscellaneous

Alignment with CEE and NEEP	Two stakeholders requested that ENERGY STAR work with NEEP and CEE to align requirements with the CEE tiers.	EPA understands the importance of alignment among these recognitions and has aligned the cold climate requirements with the NEEP ccASHP requirements to that end. EPA also understands that CEE is in the process of revising the tiers and will continue to coordinate these efforts.
CSA EXP07	Multiple stakeholders highlighted the development of the Canadian Standards Association test procedure and rating (CSA EXP07) as it provides better climate specific product performance. Two of these supported the low temperature performance requirements as a short term solution to identify cold climate suitable heat pumps until this standard is developed.	EPA encourages the continued development of the CSA EXP07 test procedure and will evaluate the standard and its potential use with the ENERGY STAR specification once it is complete and tested by industry.