

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



OFFICE OF  
AIR AND RADIATION

November 25, 2024

Dear ENERGY STAR® Packaged Terminal Air Conditioner (PTAC) or Packaged Terminal Heat Pump (PTHP) Manufacturer or Other Interested Stakeholder:

With this letter, the U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy (DOE) are releasing the enclosed [ENERGY STAR Draft Test Method to Determine Packaged Terminal Heat Pump Low Ambient Temperature Heating Mode Performance](#) for comment. The EPA and DOE will hold a public webinar on Thursday, December 12, 2024, at 2 PM ET to discuss the Draft test procedure in greater detail. The EPA invites the public to submit comments on this draft proposal no later than December 30, 2024.

In response to the Draft 1 Version 1.0 PTHP specification, the EPA received comments from stakeholders that expressed concerns that the proposal did not require PTHPs to specify their performance in heating mode at temperatures below 47°F. These stakeholders encouraged the EPA to recognize products that can heat efficiently at low ambient temperatures, especially for programs in northern states that would need assurance of efficient heat pump operation at temperatures much colder than 47°F. In response to these comments, the EPA and DOE developed a test procedure to determine low ambient temperature heating performance for ENERGY STAR PTHPs, based on the DOE's May 2023 Test Procedure Notice of Proposed Rulemaking (88 FR 30836), which proposed optional low ambient test points. The May 2023 proposal was further refined through discussions with an Air-Conditioning, Heating, and Refrigeration Institute (AHRI) standards technical committee, in consideration of updated industry rating standards for this equipment. This proposed ENERGY STAR test method follows a similar structure to the recently developed [ENERGY STAR Test Method to Determine Room Air Conditioner Heating Mode Performance](#) and notably includes COP tests at 17°F and 5°F, classifying PTHPs into Types 1-4 based on their cut-in and cut-out temperatures and whether or not the model provides active defrost.

Using this test procedure, the low ambient heating mode performance of ENERGY STAR certified PTHPs can be verified, enabling stakeholders to better identify which models are appropriate for their climate. The EPA requests feedback on the intention to reference this test procedure in the ENERGY STAR PTHP Version 1.0 specification and require COPs >1 for Type 3 and 4 PTHPs at 17°F and 5°F, respectively. In the absence of available data, a COP >1 requirement would ensure heat pump performance better than resistance heating at low ambient temperatures.

**Stakeholder Meeting:**

The EPA and DOE will host a webinar on **December 12, 2024, from 2 PM – 4 PM ET** to discuss the Draft 1 document and address initial stakeholder comments and questions. Please register to attend the webinar [here](#).

**Comment Submittal:**

The public is encouraged to provide written comments for EPA and DOE consideration to [HVAC@energystar.gov](mailto:HVAC@energystar.gov) no later than **December 30, 2024**. As a reminder, all submitted comments will be posted to the [ENERGY STAR product development website](#) unless the submitter specifically requests their respective comments remain confidential.

Please contact me, Holly Tapani, EPA, at [Tapani.Holly@epa.gov](mailto:Tapani.Holly@epa.gov) or 202-751-5089, or Megan McNelly, ICF, at [Megan.McNelly@icf.com](mailto:Megan.McNelly@icf.com) with questions or concerns. For test method questions, please contact Lucas Adin at the DOE, [lucas.adin@ee.doe.gov](mailto:lucas.adin@ee.doe.gov). Thank you for your continued support of the ENERGY STAR program.

Sincerely,

A handwritten signature in black ink that reads "Holly Tapani". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Holly Tapani, Product Manager ENERGY STAR HVAC  
U.S. Environmental Protection Agency

Enclosures:

[ENERGY STAR Draft Test Method to Determine Packaged Terminal Heat Pump Low Ambient Temperature Heating Mode Performance](#)