

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



OFFICE OF
AIR AND RADIATION

October 24, 2014

Dear ENERGY STAR[®] Room Air Conditioner Brand Owner or Other Interested Party:

With this letter, the U.S. Environmental Protection Agency (EPA) is sharing the Draft 1, Version 4.0 ENERGY STAR Room Air Conditioner specification. EPA welcomes stakeholder input on this Draft 1 specification; please provide written comments via email to appliances@energystar.gov no later than November 19, 2014. EPA will hold a stakeholder webinar on November 24, 2014, to discuss this draft with interested parties. Details are included at the close of this letter.

Recognizing that the U.S. Department of Energy (DOE) minimum standards were revised effective June 1, 2014, the efficiency criteria proposed in the Draft 1, Version 4.0 ENERGY STAR specification will offer both greater consumer savings and better differentiation relative to standard products in the marketplace. Key elements of the Draft 1, Version 4.0 proposal include:

Revised efficiency criteria

EPA is proposing that to qualify for ENERGY STAR, room air conditioners must be 10% more efficient than those meeting the minimum federal efficiency standards. EPA outlines a number of approaches to improved efficiency in use by partners today such as enhanced/enlarged heat exchangers and efficient motors, as well as alternative refrigerants. EPA anticipates broader availability of alternative refrigerants for use in room air conditioners in accordance with the Significant New Alternatives Policy (SNAP) program, and is encouraging their use in ENERGY STAR products as a path toward efficiency and greater GHG reductions. EPA estimates that room air conditioners that are 10% more efficient than those meeting minimum standards will equate to an average national energy cost savings of over 7 million dollars and prevent 98 million pounds of carbon emissions per year.

Installation Criteria

As a part of the Version 4.0 framework document, EPA sought comment on the potential for energy savings through improved installation practices. Stakeholder comments and additional outreach informed EPA that, while many manufacturers make some effort to provide consumers with materials intended to promote air tight installations, more can be done to reduce energy losses associated with poor installation and improve consumer comfort. As a result, EPA is proposing criteria for installation materials and instructions to be included with ENERGY STAR certified products.

Sound Performance Criteria

Informed by stakeholders that increasing room air conditioner efficiency can be reasonably achieved by increasing fan speeds with a resulting effect on noise, EPA is proposing a floor for indoor sound power performance levels. As proposed ENERGY STAR Room Air Conditioners will not exceed 60dB(A). These levels and the adoption of the EN12102 test method are consistent with regulations currently in effect in Europe and are intended to guard against increasing efficiency at the expense of consumer satisfaction with product performance.

Optional 'Connected' Criteria

Consistent with the approach and connected criteria development for other ENERGY STAR appliance categories, EPA is proposing optional connected criteria for room air conditioners designed to provide enhanced functionality to consumers, such as alerts/messages, remote control, and energy information,

as well as new demand response capabilities to support future smart grid interconnection. Products that meet these optional criteria and are certified using a future test method to validate the demand response capabilities could take advantage of a 5% energy use allowance.

Comment Submittal

Stakeholders are encouraged to provide written comments via email to appliances@energystar.gov no later than November 19, 2014. All comments will be posted to the ENERGY STAR Product Development website unless the submitter requests otherwise.

Stakeholder Webinar to Discuss Draft 1

EPA intends to host a webinar on November 24, 2014 at 1pm (EST) to discuss the Draft 1 specification. You may register to participate by visiting the following Go To Webinar link [here](#).

The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. To follow EPA's progress in developing new criteria for room air conditioners please visit the [ENERGY STAR Product Development website](#).

Please direct any specific questions to Melissa Fiffer, EPA, at fiffer.melissa@epa.gov, 202-343-9494, or Jessica Lyman, ICF International at jessica.lyman@icfi.com, 202-862-1557. Room air conditioner test method questions should be directed to Bryan Berringer, DOE, at Bryan.Berringer@ee.doe.gov or (202) 586-0371. Thank you for your continued support of the ENERGY STAR program.

Sincerely,



Melissa Fiffer, Product Manager
ENERGY STAR Appliances