



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

OFFICE OF
AIR AND RADIATION

April 5, 2021

Dear ENERGY STAR® Water Heater Brand Owner or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) is pleased to distribute the [Final Version 4.0 ENERGY STAR® Water Heater specification](#) and the [Final ENERGY STAR Test Method to Validate Demand Response](#). EPA would like to thank the many stakeholders who have invested time and effort to contribute feedback that has informed this specification revision process. Version 4.0 requirements will be effective on January 5, 2022.

The savings associated with this specification revision are significant at the product level and nationally. Electric water heaters under 55 gallons certifying to the new requirements will save consumers \$315 a year, on average. If all electric water heaters sold in the US met these criteria, the energy cost savings would grow to \$8 billion per year, and 150 billion pounds of greenhouse gas emissions would be prevented. In addition, this revision offers the option for products to be recognized as connected, with a tested ability to shift electrical load for grid stability without sacrificing consumer performance.

This specification was developed through a process that included release of two draft specifications, along with multiple stakeholder meetings and input from stakeholders. Several themes from Draft 1 comments were repeated in the latest comment period, including requests to require a physical CTA-2045 port on all connected water heaters. EPA also received suggestions about the levels proposed for the new split and 120V product classes. Further details and EPA's responses can be found in the [Final Draft Comment Response Matrix](#).

EPA made two changes in the final specification. The first is a clarification to the definition for split system water heaters, to specify that these products must include a tank that is supplied or specified by the manufacturer and rated with the product. This change to the definition is in line with the intent of the current specification and previously proposed drafts, which excluded add-on heat pump units. EPA also amended the definition of a "loss of connectivity" event based on stakeholder concerns that the previous definition and test method was not applicable to water heaters with an OpenADR 2.0b implementation. The change to the specification language and test method will allow for products with either protocol to meet the requirements for loss of connectivity.

In addition, EPA received extensive feedback about the maintain the current levels for gas-fired water heaters. While some stakeholders supported EPA's choice, the majority commented that the current levels do not reflect ENERGY STAR guiding principles, and the wide choice of labeled models will mislead consumers and manufacturers about the environmental impact of their choices. EPA understands these concerns and plans to revisit gas water heaters with a proposal later this year.

Stakeholder comments, previous drafts of the specification, and related materials are available on EPA's ENERGY STAR website at www.energystar.gov/specifications. Click on the "View the Version 4.0 Development Process" link for Water Heaters.

Test Method to Validate Demand Response

The Final Test Method to Validate Demand Response includes a minor change to the testing of loss of connectivity, aligned with the change in the specification. It is otherwise unchanged.

Timeline and Next Steps

EPA shares Partners' desire for a smooth transition from one ENERGY STAR specification to the next, so that consumers can expect ENERGY STAR labeled products to fully meet the latest requirements upon their effective date. With this in mind, EPA has established the following timeline:

- Effective immediately, manufacturers may elect to have their Certification Body (CB) certify their eligible products to the Version 4.0 requirements, including recognition as connected.
- As of July 26, 2021, CBs will be instructed to stop certifying new product submittals to Version 3.0. Note, however, that existing certifications will remain valid for purposes of ENERGY STAR qualification until January 5, 2022.
- Any water heater manufactured as of January 5, 2022, must meet Version 4.0 requirements to bear the ENERGY STAR mark. All certifications of products to the Version 3.0 specification will be invalid for purposes of ENERGY STAR qualification and the product finder will only include models certified to Version 4.0.

ENERGY STAR partnership as a manufacturer is limited to organizations that own and/or license a brand name under which they sell eligible products in the United States and/or Canada. Partnership is not available to original equipment manufacturers (OEMs) that do not sell directly to consumers or end users. OEMs may certify products on behalf of the ENERGY STAR brand owners/licensees; however the brand owner must be the ENERGY STAR partner associated directly with the certified product models, since only partners are authorized to use the ENERGY STAR certification mark.

EPA thanks stakeholders who provided feedback during the specification revision process and looks forward to working with you as you certify and market your energy-efficient water heaters. Please direct any questions regarding the specification and its timeline to Abigail Daken, EPA, at daken.abigail@epa.gov or (202) 343-9375, and Julia Hegarty, ICF, at julia.hegarty@icf.com or (202) 862-1163. For marketing or webpage questions, please contact Nate Jutras at jutras.nathaniel@epa.gov or (202) 738-3515. For test procedure inquiries, please contact Catherine Rivest, U.S. Department of Energy, at Catherine.Rivest@ee.doe.gov or 202-586-7335. Thank you for your continued support of the ENERGY STAR program.

Sincerely,



Abigail Daken, Product Manager
ENERGY STAR for HVAC

Enclosures:

[ENERGY STAR Version 4.0 Water Heaters Final Specification and Partner Commitments](#)

[ENERGY STAR Connected Residential Water Heaters Test Method to Validate Demand Response](#)

[ENERGY STAR Version 4.0 Water Heaters Final Draft Comment Response Matrix](#)

[ENERGY STAR Version 4.0 Water Heaters Final Data Package](#)