

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



OFFICE OF
AIR AND RADIATION

June 11, 2019

Dear ENERGY STAR Smart Home Energy Management Systems (SHEMS) Stakeholders,

With this letter, the U.S. Environmental Protection Agency (EPA) is releasing Draft 2 of the [ENERGY STAR SHEMS Version 1.0 Specification](#), the [ENERGY STAR SHEMS Partner Commitments](#), and the [Draft 2 Method to Determine Field Performance](#). EPA thanks stakeholders for participating in the SHEMS stakeholder meeting on April 12 and submitting written feedback which has informed the proposed changes in these subsequent draft documents. All materials related to EPA's development of the specification can be found at www.energystar.gov/SHEMS.

In addition to meeting the relevant performance specifications, ENERGY STAR partners are subject to a set of partner commitments which address proper use of the label and certain additional reporting requirements. As part of this distribution, EPA is sharing the standard ENERGY STAR Partner Commitments as adapted for this category. In particular, EPA hopes to make clear how labeling will work given the unique nature of the SHEMS category.

EPA received feedback from utility stakeholders questioning the timing of this specification given a lack of data to demonstrate incremental energy savings to the consumer over a currently labeled product or service such as connected thermostats. In going forward now, our intent is to lay the foundation for energy management with smart home devices as this market develops and to pave the way for more holistic home energy management in the future. The data collected through this first phase of the program will be used to develop a savings metric which will allow the program to set objective savings targets for SHEMS going forward. EPA has carefully considered utility stakeholder program needs in designing the specification by requiring capabilities to support water heater control, time of use pricing, and basic grid services and included a specific list of encouraged products that present additional opportunities for energy efficiency and demand response for service providers to prioritize for integration. While it is impractical for the specification to require integration with all priority devices at this time, we recognize the importance of making service providers aware that utilities are unlikely to support packages that do not go beyond the minimum requirements. In addition to developing integrations with additional devices, EPA encourages service providers to engage in formal industry processes with device manufacturers to develop best practices and ensure interoperability.

Note boxes throughout the specification provide context for edits made in Draft 2 largely based on the comments received. The accompanying comment response document addresses comments that were not addressed in the specification. The Draft 2 specification and method incorporate edits to the following key elements.

Definitions

EPA revised a handful of definitions including service/device package, hub, idle and standby states, and included a new definition for Time of Use Pricing.

Eligibility Criteria

EPA has included many small edits and clarifications in the eligibility criteria section, including:

- Clarifying the minimum number of occupancy-based commands required and the level of detail required for reporting energy consumption.
- Clarifying requirements for marketing and sale of required devices.
- Indicating an intent to revisit standby power requirements in future revisions.
- Clarifying demand response reporting requirements in a new section, 4.4.C).
- Making minor updates to applicable test methods in Table 2.

Method to Determine Field Performance

EPA has made minor edits based on comments that arose during the Draft 1 webinar and through written feedback, including:

- Proposing that the reporting of installations by climate zone and number of away hours by month be mandatory rather than optional.
- Explicitly allowing for a pre-market test group to be a suitable population of analysis for the first 6-month period of analysis to be submitted to attain ENERGY STAR certification.
- Specifying a minimum sample size for data submission.
- Adding two fields corresponding to the number of installations with poor connectivity and the lighting load in nighttime/vacation mode.

To address questions and support better understanding of how the specification will roll out for third party certification and package listings will be displayed on the ENERGY STAR web site, EPA will be releasing a separate overview of anticipated public data elements for stakeholders to review and provide feedback on shortly after the release of Draft 2.

Comment Submittal

EPA encourages stakeholders to submit any additional written comments on the structure or approaches proposed in the Draft 2 documents during this comment period so that EPA can move forward with Final Draft documents in a timely manner. Any written comments should be submitted no later than **July 11, 2019**. Please send comments via email to smarthomesystems@energystar.gov. All comments received will be posted to the ENERGY STAR Product Development website, unless the submitter specifically requests otherwise.

Stakeholder Webinar

EPA will host a webinar to answer any questions on the Draft 2 specification and/or method on June 24, 2019 from 1-3pm Eastern Time. Please register [here](#) if you plan on attending. Please contact Taylor Jantz-Sell at (202) 343-9042 or Jantz-Sell.Taylor@epa.gov with additional questions or concerns. For questions pertaining to the Method to Determine Field Performance, please contact Abigail Daken at (202) 343-9375 or daken.abigail@epa.gov.

Thank you for your continued support of the ENERGY STAR program.

Sincerely,



Taylor Jantz-Sell & Abigail Daken

Co-Leads, ENERGY STAR Smart Home Energy Management Systems
U.S. Environmental Protection Agency

Enclosures:

[ENERGY STAR SHEMS Draft 2 Version 1.0 Specification](#)
[ENERGY STAR SHEMS Draft 2 Method to Determine Field Performance](#)
[ENERGY STAR SHEMS Draft Partner Commitments](#)
[ENERGY STAR SHEMS Draft 1 Comment Response Document](#)