

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



OFFICE OF
AIR AND RADIATION

July 29, 2019

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

With this letter, the U.S. Environmental Protection Agency (EPA) is pleased to share the Final Draft of the [ENERGY STAR SHEMS Final Draft Version 1.0 Specification and Partner Commitments](#) and the [Final Draft Method to Determine Field Performance](#). The Agency appreciates the considerable effort stakeholders have put into helping us develop this specification. All materials related to EPA's development of the specification can be found at www.energystar.gov/SHEMS. EPA anticipates finalizing the SHEMS Version 1.0 Specification by the end of August 2019.

The Final Draft specification reflects comments received in response to Draft 2 and subsequent stakeholder discussions. Stakeholders were generally supportive of the requirements proposed in the Draft 2 specification. EPA has made minor modifications to address remaining concerns. Revisions included in the Final Draft include:

Partner Commitments

Given the complexity and fast-moving market associated with SHEMS, EPA has added a partner commitment that anticipates regular communication with partners to gather program insights, monitor market developments, and work toward the development of a metric and future specification versions.

EPA has clarified the partner commitment on marketing SHEMS. The intent behind this partner commitment is to ask service providers that opt to partner with the ENERGY STAR program and leverage the ENERGY STAR label for SHEMS to prioritize the ENERGY STAR offering over similar non-conforming offerings. The approach EPA has taken with the ENERGY STAR SHEMS specification allows absolute flexibility in terms of which elements of the package the customer opts to purchase or not, but we are asking ENERGY STAR partners not to pro-actively offer and market competing packages that fall short of the ENERGY STAR specification (e.g. a package with an ENERGY STAR thermostat and lighting or a smart plug but not both). Given the care that was taken to limit the prescribed elements of the specification, we anticipate that service providers interested in participating in the program that have existing SHEMS offerings will simply adapt them to add any missing device (i.e. there is no restriction on the range of additional devices that may be included). We believe this approach is reasonable as an expectation of our partnership as it avoids undermining the objectives of the ENERGY STAR SHEMS specification while preserving consumer choice.

Definitions

In response to stakeholder suggestions, EPA has made minor revisions to the definitions of Transient Occupancy Device, Home Energy Sub Metering System, and Time of Use (TOU) Pricing. Per stakeholder request, the correction to the definition of Home Energy Sub Metering System now includes non-invasive disaggregation devices.

EPA has included new definitions of "compatible," "SHEMS-specific hub," and "Away time" (in the Method to Determine Field Performance). These definitions were added in order to provide additional clarity about the capabilities service providers are expected to deliver in order to include encouraged devices in the ENERGY STAR listing for a certified SHEMS package, the devices for which standby power must be measured and reported, and how to identify away hours.

Eligibility Criteria

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

- Requiring service providers to recommend to their customers that persistent occupancy devices be installed in high-traffic areas of the home for best results.
- Clarifying that the service must be capable of controlling the required and, as applicable, the encouraged devices in the certified package.
- Encouraging development of systems supporting load building and advanced variable rate structures.

Method to Determine Field Performance

EPA has made several adjustments and added optional fields per stakeholder comment, including:

- Clarified the method for rounding calculated statistics and the rounding precision.
- Added two optional statistics to be reported for savings metric development: average power during non-away time, and average reduction in power during away hours.
- Added an optional field in SHEMS Market Evolution to record the number of installations in each state.

Note boxes throughout the specification provide context for edits made in the Final Draft. The accompanying comment response document addresses comments that were not addressed in the specification or method to determine field performance.

Comment Submittal

Any final comments may be submitted to smarthomesystems@energystar.gov by **August 12, 2019**. All comments received will be posted to the [ENERGY STAR Product Development](#) website, unless the submitter specifically requests otherwise.

Please contact Taylor Jantz-Sell at (202) 343-9042 or Jantz-Sell.Taylor@epa.gov (until August 9th) with any specific questions or concerns, or 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

Enclosures:

[ENERGY STAR SHEMS Final Draft Version 1.0 Specification with Partner Commitments](#)

[ENERGY STAR SHEMS Final Draft Method to Determine Field Performance](#)

[ENERGY STAR SHEMS Draft 2 Comment Response Document](#)