

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



OFFICE OF  
AIR AND RADIATION

September 3, 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 [Version 1.0 ENERGY STAR SHEMS Program Requirements](#) and [Method to Determine Field Performance](#). EPA would like to thank the many stakeholders who contributed to the development of this specification. The specification is effective immediately and service providers may begin certifying their products once they have the required field data and have signed an ENERGY STAR Partnership Agreement.

The Version 1.0 specification establishes required energy-saving SHEMS features designed to deliver cost savings as well as user convenience. These features include reliable occupancy-based control of connected devices, user feedback and display of energy use data, limiting the standby power of required devices, and the inclusion of an ENERGY STAR certified connected thermostat. The specification requires periodic submission of statistical analysis of field data gathered from installations of the certified SHEMS package. EPA will use this data to affirm specification compliance, develop a performance metric, and assess energy savings potential in the coming years.

We are excited about the potential for the ENERGY STAR label to help service providers increase the demand for qualifying SHEMS packages in an increasingly competitive market where consumers seek purchase advice and guidance. More than 90 percent of American households recognize the ENERGY STAR label, three-fourths of purchasers of ENERGY STAR products indicate the label was influential and four of five purchasers would recommend ENERGY STAR products to friends. More than 700 utilities and other energy efficiency program sponsors, reaching roughly 95 percent of U.S. households in all 50 states, leverage ENERGY STAR to deliver greater energy efficiency. The estimated annual market value of ENERGY STAR product sales is more than \$100 billion.

This specification was developed through rigorous engagement with stakeholders including working groups, three draft specifications, and numerous meetings. EPA received several comments and letters of support in response of the Final Draft specification. In response to comments received, EPA made several minor editorial changes and clarified the expectations for water heater connectivity and the applicability of the marketing requirements to packages marketed to end users. Additional comments are addressed in the accompanying comment response document. EPA appreciates all comments and letters of support.

### Next Steps

The effective date for the Version 1.0 SHEMS specification is September 3, 2019. Service providers new to the ENERGY STAR program may submit a Partnership Agreement to [join@energystar.gov](mailto:join@energystar.gov) to initiate the application process for the SHEMS program. For information about this process, please visit [www.energystar.gov/join](http://www.energystar.gov/join). Existing partners or applicants do not need to take any action to indicate their intention to certify SHEMS products.

Certification bodies (CBs) may submit applications for EPA recognition. EPA expects to announce the first set of recognized CBs in late September. Third-party laboratories interested in obtaining EPA recognition for the ENERGY STAR SHEMS program may also submit an application for EPA recognition.

Laboratories are eligible for expedited recognition if they are already accredited to IEC 62301 and recognized by EPA for testing other product categories. First-party labs can be recognized and conduct testing if they participate in a witnessed or supervised testing program run by an EPA-recognized CB. For more information, please visit [www.energystar.gov/3rdPartyCert](http://www.energystar.gov/3rdPartyCert). EPA will host a mandatory webinar for CBs seeking recognition for this category on September 4, 2019 from 2:00 PM - 3:30 PM Eastern Time. Interested CBs may register for the mandatory webinar [here](#).

### Third-Party Certification

SHEMS service providers may certify their SHEMS packages once they have compiled their initial field data submission. EPA has clarified in the Method to Determine Field Performance that platform capabilities that do not impact energy saving algorithms are not required to be present in the field data submission for initial certification.

All new products must be certified by an EPA-recognized certification body before being marketed as ENERGY STAR. Upon meeting all certification requirements, a CB will notify the Partner that the product is ENERGY STAR certified and will submit certified product data to EPA for listing on the ENERGY STAR website. For more information on the Third-Party Certification program please visit [www.energystar.gov/3rdpartycert](http://www.energystar.gov/3rdpartycert). After certification, partners will submit statistical analysis of field data gathered from installations of the certified SHEMS package to EPA every 6 months and will update their product listing if any required element of the SHEMS package changes.

Please note that ENERGY STAR partnership as a SHEMS service provider is limited to organizations that own and/or license a brand name under which they provide the SHEMS service in the United States and/or Canada. Partnership is not available to original equipment manufacturers (OEMs), in this case including original service providers that do not own a consumer-facing service brand. It is typical for hardware and service OEMs to work with ENERGY STAR partners to gather required field data and test data.

On behalf of EPA, we appreciate your participation in the development of this specification and look forward to working with each of you as you certify and promote your SHEMS products. Please contact Abigail Daken at [daken.abigail@epa.gov](mailto:daken.abigail@epa.gov) or (202) 343-9375 and Taylor Jantz-Sell (returning January 2020) at [jantz-sell.taylor@epa.gov](mailto:jantz-sell.taylor@epa.gov) or (202) 343-9042 with specific questions. General questions can be sent to [smarthomesystems@energystar.gov](mailto:smarthomesystems@energystar.gov).

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

Sincerely,



Abigail Daken & Taylor Jantz-Sell

Co-Leads, ENERGY STAR Smart Home Energy Management Systems

Enclosures:

[ENERGY STAR Program Requirements for SHEMS Version 1.0](#)  
[ENERGY STAR SHEMS Version 1.0 Method to Determine Field Performance](#)  
[ENERGY STAR SHEMS Version 1.0 Data Reporting Template](#)  
[ENERGY STAR SHEMS Final Draft Comment Response Document](#)