Standard Operating Procedure
Revising or Establishing an ENERGY STAR Product Specification

Purpose
The purpose of this Standard Operating Procedure (SOP) is to lay out the systematic process by which the Environmental Protection Agency (EPA) develops ENERGY STAR product specifications in a manner that prioritizes transparency, inclusiveness, and consistency. The process is intended to facilitate stakeholder input into EPA decisions regarding ENERGY STAR specifications consistent with the ENERGY STAR Strategic Vision and Guiding Principles, such that the ENERGY STAR label identifies products that meet the highest energy conservation standards.

Scope
The ENERGY STAR product specifications process, reflected in the below visual, relies on rigorous market, engineering and pollution savings analysis, and involvement from a range of stakeholders. Stakeholders include manufacturers, utilities, the efficiency community, international governmental partners, and more. The process applies to the establishment of ENERGY STAR requirements, consistent with program principles, such that products that meet them reduce greenhouse gas emissions and save consumers money without sacrificing performance. These specifications are the heart of the ENERGY STAR program’s work to direct consumers to more efficient products in partnership with manufacturers, retailers and utility efficiency program managers.

1. Specification Discussion Guide

For new product categories or significant changes in approach to existing product specifications, EPA sometimes begins with a discussion guide. This document allows the Agency to get early stakeholder input prior to formulating a formal draft proposal. The discussion guide presents the EPA’s preliminary thoughts about approach, scope, and definitions and seeks stakeholder feedback on specific questions associated with each of these topics and others key to the development of an effective specification.

2. Identification and Validation of Test Procedures

Core to each ENERGY STAR specification is a test method that allows for fair, repeatable testing of products seeking ENERGY STAR certification. In the case of products that are subject to Federal energy conservation standards, EPA directly references the Federal test method found in the CFR. For products not subject to Federal energy conservation standards, the U.S. Department of Energy (DOE) identifies an ENERGY STAR test method, which includes validating industry consensus based standards where they are available, working through the ENERGY STAR stakeholder process to do so.

3. Analysis of Performance Data

EPA’s ENERGY STAR specification process is data driven. Proposed levels are generally based on available ENERY STAR certified product data and DOE’s Compliance Certification Management System of certified ratings, sometimes supplemented by data offered by stakeholders during the specification development process. At the earliest possible point in the process, EPA shares data relied upon in specification development, including publicly-available performance data (or the source where large data sets are used), the Agency’s payback analysis in cases where a cost differential for more efficient products exists, and an estimate of savings.

In limited scenarios, establishing requirements that reflect the performance of the highest efficiency models available sometimes requires the Agency to go beyond the data at hand and anticipate market trends. To this end, EPA relies on insights, shared by stakeholders and partners, that help the Agency anticipate important trends in the market and establish ENERGY STAR requirements that will effectively differentiate the more efficient models for purchasers when the specification takes effect.
In other situations, performance data reveals a subclass based on size or performance features of interest to consumers whose energy-use exceeds what may credibly be considered energy efficient. Rather than limiting scope to exclude those products, EPA generally works to establish energy efficiency levels more in line with the performance of standard models.

4. Specification Drafts

The number of drafts required is determined by the complexity of the specification, the level of change being proposed, in the case of revisions, and the amount of feedback from stakeholders. An EPA specification development process ranges from a single draft plus a final draft to, in some instances, four drafts plus a final draft. The driver for these drafts is ensuring the specification is sound and stakeholders have had ample opportunity to engage with EPA and DOE prior to the Agency making a final decision on the specification requirements.

5. Limited-Topic Proposals

EPA sometimes finds it helpful to seek formal input on a specific topic or limited set of topics between draft proposals. This is accomplished through broad distribution of a limited-topic proposal for stakeholder comment and, if needed, a stakeholder meeting.

6. Final Drafts

Before finalizing a new specification or specification revision, EPA issues a final draft. The purpose of the final draft is to provide transparency into the decisions the Agency has made before they are finalized.

7. Interim Changes to Specifications (Dot Revisions)

Between major revisions, less significant changes to a specification may be warranted, that would not affect already certified products. In these situations, EPA may propose changes in a .1 or dot revision (i.e., Version 4.0 is updated to 4.1). The Agency takes this approach, for example, when eligible product scope is expanded to add additional categories or when amendments clarifying testing requirements are made that do not change the measures of consumption.

8. Public Comment

ENERGY STAR specification discussion guides, drafts, limited-topic proposals, and dot revisions are made available to the public for comment. Documents are posted on the ENERGY STAR website and notice is provided via an email distribution list open to interested partners, stakeholders and the general public. Stakeholder meetings are hosted to allow for in depth discussion of proposals. An easy opt in/opt out for ENERGY STAR distribution lists is under development. In order to ensure receipt of notices, EPA has launched a dedicated ENERGY STAR web page at www.energystar.gov/productnotice to provide real-time information on all notices for comment. Comment periods for all draft proposals are at least 30 days. Comment periods for dot revisions, limited topic proposals, and final draft specifications are at least 2 weeks with more time allotted as warranted by the particular subject matter. EPA responds to comments in note boxes in the subsequent draft as well as in a companion comment response matrix and posts the original comments along with the Agency’s responses on the ENERGY STAR website. In order to facilitate public comment, EPA hosts stakeholder meetings or conference calls/webinars for further discussion of drafts throughout the process. Agency plans for revising or establishing ENERGY STAR product specifications are shared on the ENERGY STAR website on an annual basis and updated quarterly. Specification development schedules are shared as part of the public comment process as well as through presentations at various trade associations and energy efficiency group meetings.
9. Alignment with Department of Energy Standards

EPA’s ENERGY STAR specifications align with and compliment the Federal regulations for DOE covered products to the greatest extent possible. For products that are subject to Federal energy conservation standards, ENERGY STAR references the Federal test method. For those products, DOE definitions take precedent for ENERGY STAR purposes. With respect to performance data, EPA leverages the data submitted to DOE for purposes of demonstrating compliance with Federal energy conservation standards rather than requesting the same data from manufacturers during the development of ENERGY STAR specifications.

In limited cases, consistent with ENERGY STAR’s role as a consumer label, EPA may depart from full harmonization with DOE’s requirements, always actively involving stakeholders in its consideration of these issues. Examples include:

- Requiring the use of an amended Federal test method early to reward use of new energy saving technologies (e.g., clothes dryers);
- Adding a test not required by the Federal test method that recognizes differentiation or delivers on consumer expectation for performance (e.g., light bulbs);
- Capitalizing on additional efficiency opportunities with a broader scope in an ENERGY STAR specification than DOE uses for Federal energy conservation standards (e.g., commercial clothes washers).

10. Record Keeping

Records associated with the ENERGY STAR specification setting process are maintained consistent with Environmental Protection Agency records management policies and procedures. Archives of all public-facing documents are maintained at www.energystar.gov/productdevelopment.

11. The Specification Revision Cycle

Once a specification is final, manufacturers may begin certifying products to the requirements through EPA-recognized certification bodies. EPA tracks the market reaction to the new requirements through the collection of ENERGY STAR shipment data such that the Agency is poised to begin a revision process when the desired market advances have occurred or other factors, such as a change in the Federal energy conservation standards or test procedure, prompt a reconsideration.
Specification Development Cycle

1. Complete Market and Engineering Analysis
2. Analyze Savings Potential and Consumer Payback
3. Identification and Validation of Test Procedures
4. Assemble Data
5. Release Draft Specification; Host Stakeholder Meeting
6. Release Subsequent Drafts; Host Stakeholder Meetings
7. Post Drafts and Stakeholder Comments to Website
8. Issue Final Draft Specification for Stakeholder Comment
9. Specification Effective (new spec) or Specification Transition Begins (revised spec)
10. Brand Owner Partners Begin Certifying Products
11. Finalize Specification
13. Revise Specification, when needed