

## **ENERGY STAR Product Specification Development Process Description**

The U.S. Environmental Protection Agency relies on a systematic process for developing ENERGY STAR specifications that prioritizes transparency, inclusiveness, and consistency. Decisions regarding ENERGY STAR specifications are made by EPA with the benefit of stakeholder input consistent with the ENERGY STAR Strategic Vision and Guiding Principles, available at [http://www.energystar.gov/ia/partners/prod\\_development/downloads/guiding\\_principles\\_2012.pdf](http://www.energystar.gov/ia/partners/prod_development/downloads/guiding_principles_2012.pdf) such that the ENERGY STAR label identifies products that meet the highest energy conservation standards. This document provides a brief overview of the ENERGY STAR specification development process.

### **Process Overview**

The ENERGY STAR product specifications process (see visual below) 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 goal of this process is to establish ENERGY STAR requirements, consistent with program principles, such that products that meet them reduce greenhouse gas emissions and save consumers money without a sacrifice in performance. These specifications are the heart of the ENERGY STAR program's work to direct consumers to more efficient products in partnership with retailers and utility efficiency program managers.

There are certain elements characteristic of any ENERGY STAR specification process: Initial research and analysis, followed by test procedure development or validation, analysis of energy use data, and then development and vetting of draft specifications. EPA invites stakeholder comment on each draft. Comment periods for draft proposals are typically 4 weeks for written comments, with a 2 week comment period for a final draft specification. EPA responds to these comments in note boxes in the subsequent draft or in a companion comment response matrix and posts the original comments along with the Agency's responses on the ENERGY STAR website. Additionally, EPA frequently hosts stakeholder meetings or conference calls/webinars for further discussion of proposals throughout the process.

The number of drafts required is determined by the complexity of the specification and the level of change being proposed, in the case of revisions. An EPA specification development process ranges from a single draft plus 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 prior to the Agency making a final decision on the requirements.

For new products or significant changes in approach to existing product specifications, EPA sometimes begins with a framework document. This document allows EPA to get early stakeholder input prior to formulating a formal proposal. The framework presents the Agency's preliminary thoughts about approach, scope, and definitions and typically seeks stakeholder feedback on specific questions associated with each of these topics and others key to the development of an effective specification. In addition, the Agency sometimes finds it helpful to seek formal input on a specific topic or limited set of topics between draft proposals. This is typically accomplished through broad distribution of a stakeholder letter with a specified comment period.

### **Test Procedure Development or Validation**

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 minimum efficiency standards, EPA references the Federal test method. For products not subject to

federal minimum efficiency standards, the U.S. Department of Energy, lead for ENERGY STAR test methods, validates industry consensus based standards or drafts a new product specific test procedure- in each scenario working through the ENERGY STAR stakeholder process to do so.

### **The Role of Performance Data**

EPA's ENERGY STAR specification process is data driven. Proposed levels tend to be based on data associated with existing certified models, as well as new data offered by manufacturer partners and other stakeholders during the specification development process. EPA also considers other data sources when evaluating potential ENERGY STAR requirements. These datasets include those developed by the U.S. Department of Energy, the Federal Trade Commission, and research and other regulatory bodies. EPA shares the data on which the Agency relies, though often in masked form to honor manufacturer requests, with all stakeholders.

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 the market. 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.

### **Consumer Payback Considerations**

In some categories, energy efficient products may have a price premium, while in others they do not. For those that do, EPA explores the extent to which consumers are likely to find ENERGY STAR certified options with a reasonable payback period. Rather than an extensive analysis of product prices and savings across an entire category, EPA works to isolate the added cost of efficiency by making individual price comparisons between select models that are similar except in terms of energy performance. Because energy efficiency is often bundled with other features, EPA does not consider the average payback period for all potential ENERGY STAR models or seek to determine whether every ENERGY STAR model would have a reasonable payback.

### **Interim Changes to Specifications**

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 revision (i.e., Version 4.0 → 4.1). The Agency takes this approach, for example, when eligible product scope is expanded or amendments clarifying testing requirements are made. EPA seeks comment on all substantive changes to specifications.

In limited circumstances, the Agency makes minor clarifications or updates a reference, without prior notification, simply indicating a change in the revision date of the document.

### **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 minimum efficiency standards prompt a reconsideration. The below visual displays this iterative specification development process.

# Specification Development Cycle

