



Green Seal Standard Development Procedures

One of Green Seal's major programs is the development of environmental leadership standards. The purpose of our standards is to define the products¹ available on today's market that provide the greatest levels of protection for human health and environment, and still function as needed. Green Seal currently has 33 active standards that cover more than 400 product and service categories. These standards can be downloaded free of charge from our website and used as guides for product design, service implementation, and environmentally-preferable purchasing.

The key steps in the development of a Green Seal standard are:

1. Feasibility Assessment
2. Project Summary and Outreach
3. Scoping
4. Drafting
5. Proposed Standard and Public Comment Period
6. Final Review
7. Standard Issued

Both Green Seal's standard development process and certification procedures adhere to the requirements in two international ecolabelling standards: ISO-14020 and ISO-14024. These standards, developed by the International Organization for Standardization (ISO), describe legitimate practices for "Environmental Labels and Declarations" such as conducting a comprehensive life-cycle review in order to develop criteria, ensuring that the requirements in the standard are practical for companies of all sizes, and confirming that any interested individual can provide feedback during standard development.

Stakeholder Consultation

Throughout the standard development process, from initiating the project to publishing the final standard, Green Seal actively solicits feedback from a diverse group of individuals. The term "stakeholder" refers to any individual who has provided feedback that informs our standard development process. In some cases, the feedback is provided during a brief phone conversation, and in others, the stakeholder may be more actively engaged and meet several times in person with the standard development team.

¹ Although Green Seal standards address both products and services (for example, cleaning services, hotels, and restaurants), for simplicity, the term "products" is used in this document.

Green Seal makes a considerable effort to engage a diverse body of stakeholders from varied sectors including industry, academia, government, public health and consumer organizations, and public interest groups. All interested individuals are welcome and invited to provide information and their perspectives.

Outreach and Stakeholder Registration Process

Stakeholders are solicited directly through phone calls, emails, or at events, and indirectly through professional media, social media, and word of mouth. Interested parties can submit input at any time – before, during, or after the standard development process, however Green Seal will only publicly respond to comments submitted during Public Comment Periods by stakeholders. To become a registered stakeholder, individuals submit their contact information into Green Seal’s online commenting system (www.collaborase.com), review Green Seal’s standard development documents, and add comments to any specific document, document section, or sentence. Registering is also beneficial to any interested party because it ensures that they will receive Green Seal’s project status updates via email.

During the standard development process, there are two open comment periods during which Registered Stakeholders can provide written comments:

- The Scoping Period, during which we present the scope of the proposed standard and request general feedback from stakeholders.
- The Public Comment Period, during which we solicit specific and general feedback on the Proposed Standard

Stakeholders typically include manufacturers of all sizes, trade associations, purchasers, end users, research groups, nonprofit organizations, academics, and federal and state government agencies. We take particular effort to reach non-governmental organizations and small and medium companies, the latter typically through trade associations. Since Green Seal is a US-based program, these stakeholders typically come from the US, but all stakeholders are eligible and welcome to participate.

Green Seal’s Process for Developing Standards

Phase I: Selecting a Product Category

Conducting a Feasibility Assessment

The standards development team compiles information such as:

- possible product categories, their functions or purpose
- a general review of the significant environmental impacts of these products and the potential for significant environmental benefits or improvements
- other active environmental standards (e.g., the Global Ecolabelling Network (GEN) or existing programs in the U.S.) and the existence of a US standard
- existing regulations that dictate performance baselines and environmental protection requirements
- common product ingredients, the purpose or functions of ingredients, their impacts on health and environment, and a review of available alternatives to ingredients (accounting for equivalence of use)
- available packaging options
- summaries of consultations with experts (records of individuals contacted and relevant data collected)
- a summary of the market (size and growth trends)

- the ability of a standard to effectively differentiate environmentally preferable products
- the availability of resources to initiate and effectively complete the project

During this phase, Green Seal reaches out to experts to pose specific questions and confirm the results of the research.

Phase II: Scoping

Project Summary and Outreach

This key step includes the development and internal circulation of the project proposal, which includes:

- the project scope describing the proposed product or service category
- feasibility assessment results
- estimated project schedule
- future periods for stakeholder comment

Interested parties that may be directly and indirectly affected are identified as potential stakeholders to participate in the development of the standard. A notification of the intent to develop a standard for the chosen category is sent to these stakeholders, is posted on Green Seal's website, and is publicized in multiple ways, including print and social media.

Scoping Period

An initial Public Comment period is announced on Green Seal's website and stakeholders are contacted. Stakeholders are invited to register for the project on our online forum in order to receive email updates on Green Seal's standard development progress.

Scoping Comments Are Published

Following this Public Comment period, all registered stakeholder comments are addressed individually, summarized in the Scope Comment Summary (a public document) and considered during the drafting of the standard.

Phase III: Criteria Development

Green Seal uses the following principles when developing standard criteria:

Life Cycle Considerations

The impacts from each phase of a product's life cycle are considered. These phases include extraction of resources, manufacturing, distribution, use, reuse or end-of-life management. The possibility and likelihood of impact transfer are analyzed. The proposed criteria are developed to avoid any potential shift of environmental impact from one life-cycle phase to another, or to ensure that any transferred impact results in an overall net environmental benefit.

Selectivity and Basis of Criteria

The criteria are intended to reflect the top 15-20% of environmental leadership products that are currently available in the market, and establish what it means for a product in that category to be environmentally preferable. This comparison is always based on valid and measurable evaluations of environmental and health impact. Criteria are established to address the significant environmental impacts at a level so that the top 15-20% of the market will be able to meet them all.

The feasibility of the certification process is also considered, to ensure that accurate information relevant to each criterion is readily available and based on reliable data and testing methods. Green

Seal also ensures that a standard does not provide a commercial advantage for a particular party or require access to proprietary technology.

Criteria are verifiable and are based on peer-reviewed methods:

- The International Organization for Standardization (ISO)
- Internationally recognized groups
- National and regional standards
- Other repeatable and reproducible methods
- Manufacturer's evidence

Scientific Basis

Green Seal gathers peer-reviewed research summaries and journal articles, reports from clinical studies, toxicology data, and other relevant data in order to develop science-based health and environmental criteria. The development record for each standard documents the scientific basis for each requirement set in the standard. Green Seal publishes a Background Document, a Technical Review, and a Rationale which together detail the research and decision-making process that occurred during the development of draft and finalized criteria.

- Green Seal's standards consider a range of environmental issues relevant to the product's life cycle including potential local, regional, and global environmental concerns, available technologies, and economic trends. They also consider the variability of data, including geographic differences that affect environmental issues, limiting factors such as natural resources, transportation issues, necessary packaging, available chemical substitutes, innovations, known and unknown health impacts, and other information that will influence the development of criteria that accurately reflect leadership in the market.
- Environmental criteria must be defined in terms of impact on the environment, e.g., aquatic toxicity, biodegradability, energy consumption, or sustainable fiber sourcing for paper products. When that is not practicable, they are defined as product characteristics with environmental impact, such as VOC content.
- Avoid criteria that require or prohibit particular processes or production methods, providing instead criteria relating to the health and environmental aspects of a product.

Numerical Values for Each Relevant Criterion

Green Seal assigns numerical values to the criteria, when appropriate. These may be in the form of threshold values, minimum values, or a well-defined numerical comparison to a benchmark product.

Product Environmental Criteria and Function Characteristics

Green Seal's standards include separate criteria for measurable performance, which are intended to reflect the product's intended function (fitness for purpose). The requirements ensure that a product's performance meets the needs and expectations of purchasers. Functional requirements are taken into account because products must perform adequately in order to be considered sustainable. These functional requirements are often based on evaluations that are developed and accepted by the relevant industry (e.g., associations, product research institutes, national standards organizations).

Public Comment Period: The Proposed Standard

Green Seal publishes several documents during the Public Comment Period: the Proposed Standard, the Rationale, which describes the decisions that shaped the proposed criteria in the standard, and the Technical Review, which provides detailed descriptions of the science and sources used in Green Seal's life-cycle research. These sources include peer-reviewed journal articles, government-funded research,

market studies, and information provided by external groups such as trade associations and research organizations.

During the Public Comment Period, which extends for eight to twelve weeks, Green Seal actively promotes the opportunity to register and provide comments on the three published documents. Comments submitted by registered stakeholders are published on Green Seal's website and become part of the public and permanent record of that standard's development phase.

Green Seal's goal for the Public Comment Period is to solicit evidence-based comments on Green Seal's decisions that shaped the criteria in the Proposed Standard. Stakeholders with access to useful data and information help us to achieve our goal: to ensure that the criteria accurately define the environmental leadership products that are available on today's market.

Response to Comments Document

After the Public Comment Period, Green Seal drafts a Response to Comments document and revises the standard based on new information. Green Seal responds to all comments, either in groups or individually, as relevant for the topic. For example, in the Response to Comments, we describe how an objection was taken into consideration and provide a summary of the resulting decision – either to maintain the criterion as it was published in the Proposed Standard or to revise the criterion based on the new information provided by the stakeholder. Revisions that are made to the standard are provided in the Response to Comments so that stakeholders can clearly view the resulting changes. The Response to Comments is published at the same time as the Final Standard.

Phase III: Standard Issuance

After the criteria have been finalized, Green Seal publishes several documents, and completes the standard development process. The following documents are published on our website:

- The first edition of the standard
- The Response to Comments (described above)
- A summary of the standard
- The fee schedule which defines the price of certification based on company size and the number of products submitted for review
- A notice of issuance which also is emailed to all stakeholders to inform them that the final standard has been published

Scheduled Revisions and Minor Updates

Standard Revisions

Once the standard is issued, Green Seal's Science and Standards Department schedules a future date for review of the standard. At that time, the Department considers technological and market innovations, new health and environmental studies, and any issues that have arisen during the certification process.