

No Product Left Behind

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Whether it's "economic-environmental-social" or "people-planet-profit" positioning, the green movement has introduced myriad "eco" claims into the marketplace. But it's hard to know which are meaningful. To address the confusion, internationally recognized standards organizations are developing an ever-increasing body of voluntary, consensus-based environmental and sustainable product standards. Here's what's on the horizon.

Reposted with permission from *Contract*, April 2008.

"Eco-safe," "environmentally friendly," "clean air formula," "environ-effective," "ecoAdvantages," "green," and, one of my perennial favorites, "no chemicals"—a plethora of questionable eco claims abound in the marketing literature of a typical product library. Luckily, help is at hand. Internationally recognized standards development organizations—such as International Organization for Standardization (ISO), ASTM, and NSF, along with assorted newcomers like Green Seal and MTS—are developing an ever-increasing body of environmental and sustainable product standards.

Why do we need standards? The fact is, standards are a cornerstone of our daily living. Standards are how we know that when we flip a switch, the lights will go on; when we sit in a chair, it will support our weight; and when a retailer scans a bar code, it will identify the right product. Standards verify stain resistance, colorfastness, flame resistance, screw-pull strength, and a host of other critical performance characteristics in commercial building operations.

Until a few years ago, consensus-based performance standards for products' environmental and sustainable aspects were few and far between. With its 14,000 series of standards dealing with environmental management systems, product labeling, and life-cycle assessment, the ISO established the framework for assessment. Organizations such as the Forest Stewardship Council (FSC), and International Social and Environmental Accreditation and Labeling (ISEAL) Alliance leveraged this framework to develop internationally recognized standards that address environmentally beneficial forest management and organic growing practices, respectively.

In the United States, organizations such as Green Seal, Scientific Certification Systems (SCS), Carpet and Rug Institute (CRI), GREENGUARD, and EnergyStar, crafted standards based on the ISO product environmental labeling frameworks that address issues such as recycled content, energy efficiency, and product emissions. SCS and Green Seal also have taken on the development and implementation of more multidimensional assessments, including SCS's certification program for environmentally preferable carpet (now merged into SCS' Sustainable Choice program) and Green Seal's GS-37 certification program for green cleaning products.

While these organizations' efforts have been instrumental in holding some manufacturers accountable for their products' environmental and sustainable performance, larger-scale rollout has been constrained. Why? In significant part, the underlying standards were developed outside the internationally recognized voluntary consensus process. Without this type of standard development process, prospective product specifiers and purchasers face claims of promoting monopolistic or anti-competitive behavior—or supporting criteria deemed non-compliant with the World Trade Organization's (WTO) international trade requirements. This is particularly true for governmental purchasers, who in fact, represent some of the largest products buyers in the world.

Breaking the Logjam

A few intrepid organizations are leading the way in developing voluntary, consensus-based environmental and sustainable product standards. ASTM, one of the oldest developers of voluntary consensus standards is taking on an ever-increasing role. In particular, numerous ASTM committees are working on specific assessment methodologies that in turn are leveraged or referenced in broader sustainable product standards. The Business and Institutional Manufacturer's Association (BIFMA), recently released two ANSI-approved standards addressing the emissions of VOCs from systems furniture and seating. In development for more than three years, the standards represent thousands of hours of research, testing, analysis, and consensus negotiation.

Moving beyond single-attribute environmental assessment standards, such as IEEE Standard 1680 (regarding the environmental assessment of electronic products), is further proof that the voluntary consensus process can deliver comprehensive, progressive, and innovative standards. IEEE 1680 was developed to help purchasers evaluate, compare,

and select desktop computers and equipment based on their environmental attributes. The complete set of performance criteria includes 23 requirements and 28 optional criteria in eight categories: reduction/elimination of environmentally sensitive materials; materials selection; design for end of life; product longevity/life cycle extension; energy conservation; end-of-life management; corporate performance; and packaging. Conformance to IEEE 1680 is now required for anyone selling electronic products to the U.S. government.

Getting to Sustainability Standards

While there is much deliberation as to what is a sustainable product, there is general acceptance that the products must proactively address the three performance spheres of the triple-bottom line. Whether represented by the "economic-environmental-social" or "people-planet-profit" mantras, any product making sustainable claims must perform at a certain level of competence within all three realms.

Because of the breadth of assessment required, as well as the recognition that there is no one single way to get to sustainable products, this type of standard is the most challenging to craft as well as drive to consensus. However, the approval of NSF International's sustainable carpet assessment standard (NSF 140) in 2007 finally produced a working prototype.

In NSF 140, the purpose of the standard is clearly specified to provide a market-based definition for a path to sustainable carpet, establish performance requirements for public health and environment, and address the triple-bottom line (economic-environmental-social) throughout the supply chain.

The 124 sustainable product assessment criteria within the standard are organized around six major themes—safe for public health and environment; energy efficiency; bio-based, recycled content, or EPP materials; manufacturing (including corporate responsibility); reclamation and end of life; and innovation. Like the USGBC's LEED rating, NSF 140 is a menu-based credit assessment system, with select prerequisites that must be addressed in order to achieve recognition at increasing levels of sustainability from Silver to Gold to Platinum.

Currently, there are several commercial carpet products certified to the trial version of NSF 140, in key part due to the purchasing commitment of the State of California, which had long been seeking a more comprehensive environmental standard for carpet.

On the Horizon

The expansion of consensus-based environmental and sustainable product standards will continue. ASTM's Subcommittee on Sustainability of Buildings is working on a classification methodology for environmentally preferable products, designed to address minimal performance criteria in the area of public health protection, energy resource conservation, material optimization, and environmental commons protection. ASTM's Committee on Declarable Substances is undertaking standards to aid in the evaluation and reporting of hazardous substances within the packaging, vehicle, electrical, and electronic device markets.

Internationally, ISO recently released its ISO 21930 standard on Environmental Product Declarations (EPD) for Building Products. Think of EPDs as nutritional labels for non-food products. They don't really tell you if a product is particularly good or bad from an environmental perspective, but they do provide relevant environmental facts, such as the product's carbon footprint, so users can decide for themselves which products to specify and purchase.

NSF is facilitating the development of assessment standards for contract textiles, systems furniture and seating, resilient flooring, and flexible roofing membranes, with hopes of seeing the first round of balloting on the furniture standard by summer. The Institute for Market Transformation to Sustainability (MTS)—another, more recently approved developer of American National Standards (ANS)—is in the process of seeking ANS designation for its "SMART" sustainable building product standard.

Clearly, there is plenty going on, and the activities will only increase over time. The biggest challenge is continuing to ensure technically competent and balanced interests in the standard development process. To that end, I would encourage any interested readers to get involved in these development activities. Organizations such as ASTM and NSF are always seeking individuals to devote their time. And remember, these sustainable product standards have the capacity to significantly improve the products that are available for us to purchase. It's your participation, as standards developer, specifier, and most particularly, purchaser, that will actually facilitate the market transformation.

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