THE GREEN REVOLUTION: WHAT DOES IT MEAN TO THE BUILDING PRODUCTS INDUSTRY?

Deg Priest
Global Senior Director, Building Products, Intertek
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Introduction

This white paper presents an overview of the environmental revolution and the growing popularity of “green claims” within the building and construction industry. It discusses the challenges manufacturers face when making “green claims”, and how Intertek’s revolutionary Environmental Certification program helps manufacturers third-party validate environmental claims, protect their brand, and gain a competitive advantage in the marketplace.

Over the last decade, global warming has been in the forefront of issues around the world. What can we do about it? How can a shift in our behavior affect a solution for this problem?

It’s been clearly documented that a reduction in “greenhouse gases” is necessary to reverse and prevent the ongoing effects of global warming.

1. What are “greenhouse gases?”

Greenhouse gases are atmospheric pollutants that trap the sun’s energy and reduce heat radiation into space, thus causing a gradual increase in the earth’s temperature. A small effect, yes, but over time these greenhouses gases can have a large impact on our environment.

2. How can the Building Products Industry help reduce Greenhouse Gases?

One popular approach to dealing with the reduction in “greenhouse gases” is to produce and market products that have less carbon footprint. This means minimizing the total amount of carbon utilized in the production, installation, removal and disposal of a product over its lifetime.

This can be accomplished in several ways:

- Lower energy usage to manufacture the product
- Increase the use of recycled materials in the production
- Utilize raw materials that are sustainable (fast growing wood, etc)
- Shorten the distance the product must be transported to market
- Reduce the labor required to install the material
- Reduce the use of energy-expensive installation materials and methods
- Increase the usable lifetime of the finished product (known as sustainability)

A holistic approach is needed to maximize the effects of these details. It makes no sense to use certain building materials that will last hundreds of years, if the building is at risk of collapsing in fifty due to structural failure caused by inferior materials.
It also makes sense to manufacture products using materials that pose less health risks, such as lead content. While many people concentrate on the production and use of a product or materials, we should also consider what will happen when the product’s normal lifetime is finished. How will the product be disposed, and what will happen to any toxicants contained in the product? Materials such as lead and mercury can enter our environment and damage an already fragile eco-system. Many materials are now being recognized or developed for their ability to compost or degrade into harmless, and often beneficial compounds, or to be recycled efficiently.

So, how do buyers or specifiers of materials used in the construction of our built environment (buildings, automobiles, ships, trains, etc) recognize a material or product that has been designed to be friendly to the environment or safer for people? Many manufacturers have attempted to solve this problem by marketing “green claims” or specific eco-friendly credentials that claim to be appropriate for specific products or materials. These claims are advertised through the use of “Eco-Labels,” or “Green Certifications.” “Green Certifications” or “Eco-Labels” are marks issued by third-party certifiers that verify a manufacturer’s “green” claims are valid: that the product meets specific standards, and specific environmental criteria are met.

3. What is a Green Claim?

Green Claims are any self-declared statements, symbols or graphics that:
1. Refer to an environmental aspect of a product, a component or product packaging
2. Are made on products, on product packaging, in product literature or advertisements.

In terms of regulation, Green Claims are generally governed by marketing and consumer protection legislation as opposed to environmental or product compliance legislation.

4. Who are the Authorities for Green Claims?

There are several government organizations that are responsible for monitoring “Green Claims” around the world. Some of these include:

United States - Federal Trade Commission
- Details - US Guidance for Green Claims (Federal Trade Commission Part 260--Guides for the Use of Environmental Marketing Claims)

Canada – Canadian Competition Bureau
There are many other consumer protection authorities that exist in the European Union, specifically, but other parts of the world as well.

5. The Environmental Revolution and “Green Claims”

Over the last ten years, over 300 different types of certifications of “greenness” or “eco-labels” have become available for products of all types. So many, in fact, it is easy to become confused and unsure of the meaning of an “eco-label”. There is an environmental marketing phenomenon that is sweeping the manufacturing world known as “Greenwashing”, or making claims of insignificant or inappropriate environmental credentials, only to confuse the marketplace.

This environmental revolution has caused many abuses of the system that range from “little green lies”, to blatant misrepresentation of a product’s ecological credentials. If a company engages in “greenwashing”, it may face more consequences than potential US Federal Trade Commission (FTC) enforcement.

“Greenwashing” comes with severe consequences:

- Claims by consumers or competitors based on breach of contract, fraud, unfair competition, or detrimental reliance.
- Restrictions from selling products through retailers who have announced plans to independently assess the green attributes of the products they sell.
- Consumer backlash and brand dilution if the green claims are perceived by the public as bogus. The proliferation of social media and personal blogs has developed breeding grounds for fast-traveling information – often negative regarding a product.

In North America, the FTC has become engaged in monitoring environmental claims. The FTC’s Guides for the Use of Environmental Marketing Claims states “every express and material implied claim that the general assertion conveys to reasonable consumers about an objective quality, feature or attribute of a product or service must be substantiated.”

Under U.S. President Barack Obama’s administration, the FTC has increased its focus on environmental marketing claims. For example, a recent enforcement action against a company making unsubstantiated claims about the R-value of insulation resulted in a $155,000 civil penalty. From June 2009 though August 2009, the FTC filed no less than seven separate enforcement actions alleging misleading or deceptive practices related to environmental marketing claims.

If an organization wants to use third-party standards, logos or certification marks, it must adequately document the third-party’s approval for that particular use. For
example, the U.S. Green Building Council (USGBC), a non-profit organization that developed the nationally-recognized building rating system known as Leadership in Energy and Environmental Design (LEED), has expressed concern about the increasing trend of marketers misusing the USGBC logo and LEED ratings in a deceptive way. The USGBC only certifies buildings through LEED, and does not certify any specific products or services.

In comments submitted to the FTC, the USGBC stated that “some marketers have used the USGBC logo on product packaging and in advertisements alongside claims that products are certified by USGBC or LEED, or can be used to achieve LEED credits.”

As Greg Zimmerman stated in a July 2005 article in Building Operation Management entitled *The Rise and Significance of Eco-Labels and Green Product Certifications*, “As the demand for green products has accelerated, manufacturers have increasingly used green as a hook to market products, with little or no verification of the data being reported. Marketers have learned that green is gold and have bent over backwards to tout the greenness of their products—and that has contributed to confusion about which environmental claims are actually true.”

The unregulated use of green certifications has led to skepticism of many claims. In fact, Sara Stroud, in a July 27, 2009 article in Sustainable Industries, *The Great Eco-label Shakedown*, wrote: “A recent study of more than 20,000 people in 10 markets, Barcelona-based global marketing company Havas Media found that even in an economic downturn, about half of consumers surveyed were willing to pay 10 percent more for environmentally and socially responsible products or services. But of those surveyed, about 65 percent said companies’ communication about their efforts were little more than marketing tactics, lacking in authenticity.”

This raises a serious question: should Eco-labels be regulated by the government? The U.S. eco-labels Energy Star and WaterSense are well known, and the U.S. Department of Agriculture utilizes the well-known USDA Organic label. The federal government will play a role in determining labeling standards, if not the labels themselves. The FTC recently reevaluated its green guide about how companies can make green claims. Their key concerns were updating definitions such as renewable, sustainable, and recyclable, and how terms such as “environmentally-friendly” can be applied.

6. The New Face of Environmental Certifications for Building Products: *Intertek’s Environmental Certification Program*

Do we need government control over a situation that should be able to stabilize itself? Third-party certification companies are capable of offering appropriate certification programs that not only validate environmental credentials, but monitor and control the ongoing manufacturing of those products to ensure claims are still being met.
An appropriate certification program for environmental claims should consist of the following parts:

- Observation of the production techniques used to manufacture the product
- Test evaluation of the product or material at qualified laboratories
- On-going verification that the product is being manufactured such that the claims remain valid.

Intertek realized the urgent need for a well-designed and expert-operated certification program for certifying environmental credentials of building materials. The Environmental Certification Program will solve many of the problems and confusion inherent in the current eco-labeling marketplace.

The program is focused on single or multiple attribute certifications, and consists of five key components:

1. **Writing the Test Plan**
   During the generation of the test plan for the product, careful consideration will be given to what claims can meaningfully be made. Inappropriate claims will not be allowed. Once correct credentials are identified, nationally or internationally recognized test standards will be identified and used to validate these claims.

2. **Initial Factory Inspection**
   The manufacturing facility will be audited by trained Intertek personnel to witness the production of the test items and to gather the information necessary for the preparation of a Quality Control Manual.

3. **Creation of the Quality Control Manual**
   The Quality Control Manual will adequately describe the methods and procedures utilized in the product’s manufacture.

4. **Performance of verification tests**
   Intertek will perform tests based on the sustainable attributes a manufacturer selects such as recycled content, solar reflectance, emissions, and energy efficiency, and will then third-party validate any claims made. Following a successful test evaluation, Intertek will issue the manufacturer our proprietary Green Leaf Mark to use on product packaging and marketing materials to help differentiate their products.

5. **Quarterly plant audits & retest**
   After products are issued Intertek’s Green Leaf Mark, a routine program of unannounced, quarterly plant inspections will begin to ensure the product is continuing to be manufactured to a quality commensurate with this program.

Intertek is trying to stabilize the industry, not add to the confusion. We have a close relationship with the International Code Council – Evaluation Service (ICC-ES) group
that offers a similar program called Sustainable Attributes Verification and Evaluation (SAVE). Consequently, the first nine attributes of our new program are identical to those of the SAVE program:

Attributes offered in Intertek’s Environmental Certification Program include:

1) Determination of Recycled Content of Materials
2) Determination of Biobased Material Content
3) Determination of Solar Reflectance, Thermal Emittance and Solar Reflective Index of Roof Covering Materials
4) Determination of Regionally Extracted, Harvested or Manufactured Materials or Products
5) Determination of Volatile Organic Compound (VOC) Content and Emissions of Adhesives and Sealants
6) Determination of Volatile Organic Compound (VOC) Content and Emissions of Paints and Coatings
7) Determination of Volatile Organic Compound (VOC) Content and Emissions of Floor Covering Products
8) Determination of Formaldehyde Emissions of Composite Wood and Engineered Wood Products
9) Determination of Certified Wood and Certified Wood Content in Products
10) Determination of Durability of Paints and Coatings
11) Energy efficiency: efficiency of solid-fuel heating appliances, thermal resistance value, etc.
12) Water efficiency: water use by plumbing fixtures
13) No toxic substances
14) Mold resistance
15) Heavy metals content in non-metal materials
16) Asbestos free
17) No inorganic halides or other chemicals controlled by the Montreal Protocol
18) No radioactivity

Intertek’s Environmental Certification Program will bring clarity to the “Green Revolution” for building products manufacturers and create an eco-label that is meaningful, trustworthy and valuable to manufacturers, purchasers and specifiers.

7. Conclusion

Now more than ever, a manufacturer’s reputation, growth, and success depend on its ability to bring “green” products to market faster and more cost-effectively. Success depends in part on recognizing the critical importance of product testing and certification as an integral part of the overall product development and production process.
About Intertek

Intertek does more than simply help our clients comply, we give them the competitive advantage they desire. Our Environmental solutions offer comprehensive services including, product testing and analysis, certification and corporate education appropriate for all types and levels of business. Intertek is a leader in global environmental compliance, technology services and product stewardship.

Intertek is more than a testing laboratory; we guide our clients through the "Built Environment," helping them identify all the regulatory certifications they need for the environments where their products will be used. This reduces costs and ultimately accelerates time to market.

We provide quality and safety solutions to a wide range of industries, through a network of 24,000 people in 1000 laboratories and offices in 100 countries around the world. Through our global network of labs, Intertek can test and certify your products to meet British, European and North American codes and standards, including ANSI, ASTM, CSA, EPA, ICBO, UL, and ULC. We offer manufacturers access to some of the most recognized safety certifications in the world. Our WH (Warnock Hersey) Mark for building products is recognized among industry leading manufacturers and code officials across North America and around the world. Our ETL Mark for electrical/electronic products is the fastest growing safety certification mark in North America, widely accepted by AHJs and building code officials.

The next step

Call or e-mail Intertek to get expert advice on validating your “Green Claims” and learn more on participation in the Environmental Certification Program for Building Products:
• Phone: 1 800 WORLDLAB
• Email: icenter@intertek.com
• Web: www.intertek.com

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