Using Certifications to Green Your Supply Chain

By Bill Gregory

The accepted certifications for choosing green products bring more than efficiency and cost savings. They influence how business is conducted and how we leave the Earth for future generations.

Well-intentioned decisions are made by manufacturers who work hard to deliver innovative and cost-effective products to the marketplace – products their customers request, and products the businesses believe will meet a need and expand market share. This process does not always take broader consequences into account. An understanding of the full impact of these daily choices requires a holistic perspective.

For example, if you were asked to choose between clean air and clean water for future generations, which would you select? When you or your company purchases a product, each selection presents an opportunity to respect the environment.

The sustainability movement has expanded global market awareness and demand. A 2007 Pew Research Center survey conducted revealed that up to 65 percent of Indians are very concerned about global warming, compared to 26 percent of Brits, 20 percent of Chinese, and 19 percent of Americans.

A flood of green products is pouring into almost every building and maintenance product segment. The Indian Green Building Council (IGBC) estimates the demand for green building materials and equipment will reach US\$4 billion per annum by 2010. Certifications offer guidance in greening the supply chain for those purchasing products in the business sector. Understanding the implications of these criteria will help you make more sustainable choices.

Consensus on the definition of sustainability is a starting point. The first use of the term "Sustainable Development" was in the UN-chartered Brundtland Commission Report on Environment and Development. Sustainability includes the practice of responsible use of limited space, scarce natural resources, and respect for the fragility of eco-systems while minimizing the environmental consequences of human activities.

The classic definition has evolved from the environmentally focused adage: "Reduce – Reuse – Recycle." Today in business sustainability represents what is often termed the *triple bottom line* balancing economy, ecology, and social equity.

From a financial point of view, having a high performance organization with a green supply chain offers direct economic benefits. Savings are found in operations; reduced waste and related waste cartage costs; and more effective management of resources. Increases are evident in new revenue streams such as sale of scrap and greenhouse gas (GHG) emission trading. Ultimately, growth in productivity, profits and company value are major drivers for business.

From an environmental perspective, greener work places preserve natural resources and minimize pollution. Fewer emissions keeps the air cleaner, less waste relieves our overtaxed landfills and minimizes potential seepage of toxic chemicals into aquifers.

Actions taken to improve the economic and environmental bottom lines may also have positive social equity impacts. Examples of benefits to people include healthier and safer work environments; improved workforce morale; reduced impacts on surrounding communities; and minimized risk of power outages and lower emissions with reduced energy use.

Less than two years ago audiences interested in sustainability were very concerned about presentations being too commercial or self-serving. Today, the plethora of green products has changed concerns. Now at speaking engagements I hear: "I understand sustainability; just tell me what products to buy or which measurements to consider."

There is not a simple solution. The goal is not to provide a list of the "greenest" products. Rather it is to help you evaluate certification programs and green marketing claims in order to focus on sustainable product attributes important to your requirements.

Until recently, inquiring about a product's impact on the environment or human health was not an option because many companies did not provide that background. Even if a business wanted to share information, it was difficult, because most did not specifically measure these impacts. Globalization and technology have changed the playing field and the demand for corporate transparency. Companies ARE filling this information gap. But YOU must ask: *Is the information complete or merely a marketing effort to be perceived as green?*

When considering products, services or a company's commitment to sustainability, this list of attributes offers focus for making decisions:

- Energy Efficient
- Water Conserving
- Low/No Volatile Organic Compounds (VOCs)
- Recycled Content
- Safe Chemical Usage
- Bio-based
- Locally Produced
- Recyclable
- From a Renewable Resource

Meeting third-party certifications provides written assurance that a product, process or service conforms to specified requirements. What promises do certifications really make? What is the best way to use third-party certification? Keep in mind that there are differences among single attribute, life cycle and multi-attribute guarantees.

The Underwriters Laboratories (UL) is a good example of a global single certification program that ensures the safety of products. Since 1894, 21 billion UL marks have appeared on products. UL delivers valuable product safety information, but does not look beyond this single attribute.

You might think you don't have time or the knowledge to ask all of the right questions. Perhaps no one does yet. The challenges of using third party certifications include the complexity of Cradle-to-Grave and Cradle-to-Cradle processes; the lack of an accepted standard to measure and report a product's level of sustainability; and a mixed commitment by manufacturers to reduce environmental footprints.

When completed in 2010, the LEED Gold ranked India Tower will be 74 stories tall. While your purchasing concerns may be more modest, it is important for anyone with this responsibility to be accountable and to hold manufacturers in their supply chain answerable for products sold and how they are marketed. As a purchasing agent you have the power to generate change.

First and foremost, the product or service needs to meet your needs. For example, if a window cleaning product can't clean a glass, it does not matter if it is low-emitting. Here are three guidelines to consider: 1) Understand the generalities of product life cycles. 2) Understand green product attributes—energy efficiency, water conserving, low/no VOCs, recycled content, organic, bio-based, locally produced, recyclability, and renewable resource content. 3) Understand the potential product life cycle impacts on the Earth.

A basic grasp of life cycle assessment or LCA is helping when making decision about the sustainability of a product. LCA provides an understanding of the full impact of a manufacturer's products and processes on the environment, known as an environmental footprint. The term "life cycle" refers to the fundamental concept that a fair, holistic assessment requires the analysis of all process elements, including raw material extraction, processing, manufacturing, distribution, use, and end-of-life outcome, including all intervening transportation steps.

The International Organization for Standardization (ISO) has developed environmental management standards (ISO 14000) that incorporate LCA protocol (ISO 14040). Using these standards (ISO 14001), organizations repetitively duplicate, measure and report, and improve how their operations impact the environment. They enable compliance with applicable laws, regulations and other environmentally oriented requirements.

The product life cycle, which covers selection of raw materials through end of useful life options, can impact the environment in a number of ways including global warming, acidification, eutrophication, habitat alteration, natural resource depletion, solid waste generation, ecological toxicity, human toxicity, ozone depletion, smog formation, Indoor Air Quality, and embodied energy content.

The challenge of gathering and comprehending this data can be overwhelming. Thus, third-party certifications are a valuable tool despite the fact that they often do not address

multiple attributes. This following list of questions may be used as an internal checklist or with the product sales representative before you make a purchasing decision. Keep in mind the explanation may be more complex than YES or NO.

- Are the company's manufacturing plants ISO 14000 certified?
- Does the company track its energy and water use annually?
- Is the amount of waste measured during manufacturing? How much goes to the landfill? How much is diverted from the landfill?
- Is the company working to reduce CO2 and other emissions? What is their carbon footprint?
- Does the company purchase or generate any energy from renewable sources?
- Does the company recycle throughout the products' life cycle?
- What natural resources go into the making of the product you are purchasing? Are there better alternatives?
- How does the product's life expectancy compare to competitors' product?
- Does the product fulfill your needs as well as being environmentally benign?
- Does the company publish a sustainability report or offer information on its Web site regarding environmental and social initiatives and activities?
- Does the company partner or support causes that benefit the environment and communities?
- Does the company disclose the good and the "in progress/needs improvement" efforts it is making related to the environment?

Being informed allows you to make choices based on economic, environmental and social equity considerations. Multi-attribute certifications are a useful tool in making comparisons. The next time it seems that a supplier is creating obstacles or making you choose between clean air clean water, remember you can have both! You are the instrument of change. Asking difficult questions and demanding informed responses is part of the transparency required to maintain a green supply chain.

Bill Gregory serves as Managing Director of Gregory & Associates, a consultancy focused on the business integration of sustainability. Formerly, he was Global Director of Sustainability for Milliken & Company. He has also served on the board of directors of numerous sustainability organizations.