Toward greater ecological intelligence in the United States: ten statements with statistics and commentary regarding ecolabels

Christopher Wedding
IronOak Innovations, LLC, 1818 MLK Jr. Boulevard, Suite 261, Chapel Hill, NC 27514 USA (email: chris@ironoakinnovations.com)

Introduction

Ecolabels offer a way to address today’s most challenging global environmental problems by relying on transparency to build awareness and to change market behavior. Individuals, as consumers and citizens, are becoming increasingly aware of the environmental and social impacts of their purchase decisions and many of them are struggling with how to decide on the “greenest” choices (Bostrom & Klintman, 2008). Ecolabels can help to channel this motivation into action. In the years since the Blue Angel ecolabel was created in Germany in 1977, such labels have become widespread policy instruments for governments, nonprofit groups, and industry associations as means to create competitive advantage for businesses.

While this essay focuses on the United States, many ecolabel programs exist around the world (EUROPA, 2009; ABNT EcoLabel, 2010; AENOR, 2010; CENIA, 2010; Japan Environment Association, 2010; Nordie Swan, 2010; Umweltzeichen, 2010). A great deal has been written about their potential benefits, for example, to stimulate market transformation (Global Ecolabelling Network, 2004; Loureiro & Lotade, 2005; Parikka-Alhola, 2008; Goleman, 2009); potential problems, such as a lack of correlation among varying tiers of ecolabel certification and the expected degree of environmental responsibility (Nimon & Beghin, 1999; Dosí & Moretto, 2001; Rotherman, 2004; Wedding & Crawford-Brown, 2007; Bounds, 2009; Goleman, 2009); and qualities for success, such as being transparent, consensus-driven, and scientifically based (Bostrom & Klintman, 2008; Wedding & Crawford-Brown, 2008; Bleda & Valente, 2009; Grolleau et al. 2009; Thrane et al. 2009; Vermeer & Michalko, 2009).

The most well-known ecolabels in the United States are currently ENERGY STAR and Green Seal (TerraChoice, 2009), while other recognized ecolabels include the United States Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED) designation, the United States Department of Agriculture’s (USDA) National Organic Program, the Marine Stewardship Council’s Certified Sustainable Seafood label, and the Forest Stewardship Council’s ecolabel program for sustainable forest management. Each of these labels has perhaps received disproportionate positive attention due to documentation of the environmental benefits or impact reduction that they have helped to catalyze (Agnew et al. 2006; USEPA, 2008; Forest Stewardship Council, 2009; Watson, 2009; USDA, 2010). However, most Americans have probably not heard of the vast majority of the 325-plus ecolabels that are now used on a worldwide basis (Ecolabelling.org, 2010).

So what? On one hand, this sounds like an opportunity—a chance to fill a void and to bring new programs and brands to consumer markets that, if informed about what to do and how to do it, appear to be increasingly receptive to acting on behalf of the
environment. On the other hand, the lack of understanding of most ecolabels might be cause for concern regarding the possibility of unintentionally creating an ecolabel market that 1) overpromises and underdelivers; 2) leads to more confusion than education; and/or 3) dilutes well-crafted and authentic ecolabels. Moreover, because of their relatively attractive benefit-to-cost ratio, ecolabels may provide an attractive alternative in countries made frugal by the financial crisis that began in 2008. The following discussion seeks to place these issues into bold relief.

Ten Statements, Example Statistics, and Commentary Regarding Ecolabels

The ten statements below, with supporting statistics and commentary, illustrate that it is now time to fill this market need and to resolve confusion by crafting effective ecolabel programs that build our collective and individual ecological intelligence and help to catalyze consumer-driven environmental stewardship.

1. **Statement:** We need ecolabels for a variety of reasons.

   **Example Statistic:** The 104,000 human-made chemicals in use today mix in our environment and in our bodies, where they can combine to create over 3 billion potential combinations (Greenpeace, 2006; Goleman, 2009). Only a minute fraction of these chemicals or their mixtures have been studied for potential negative health and environmental effects (Goleman, 2009; USEPA, 2009a).

   **Commentary:** This statistic highlights just one reason why we need ecolabels, at the very least in a cautionary sense. A great deal is unknown regarding the health impacts of the products that we use every day. The other driver for ecolabels is perhaps the more obvious—we are using more natural resources than the planet can regenerate each year (EEA, 2005). Plus, the rate of consumption in the United States and other industrialized nations is many times greater than it is in developing countries (Ewing et al. 2009). This means that we have at least three reasons for needing the easily digestable and ubiquitous consumer education that ecolabels can provide: 1) human health, 2) environmental quality, and 3) global social equity.

2. **Statement:** Consumers care about health and environmental quality.

   **Example Statistic:** In a survey conducted in June 2009, 83% of 923 American respondents said that a company’s sustainability commitments were “very important” or “somewhat important” in their buying decisions (CapStrat, 2009).

   **Commentary:** It is true that consumer polls can say one thing today and another tomorrow depending on who is surveyed and who is doing the surveying (although the one cited above is reputable). However, other research and polling data have validated this general attitude toward sustainability (Esty & Winston, 2009). In brief, a small percentage of consumers, in the range of 10–15%, seem inclined to pay more for environmentally friendly products or to go out of their way to obtain them (Goleman, 2009). These early adopters are a logical target for ecolabels, but the real goal of such programs is to reach the larger middle section of the market. This segment, perhaps 60–70% of the general American consumer market, could likely be motivated to purchase green products if clear, concise labels made it easy for them and if the products did not cost more (Goleman, 2009). Part of the challenge of making these purchases more convenient is to provide clarity about what constitutes the appropriate consumer choice from an environmental perspective, though often the results of calculation methods—such as life cycle analysis—that are behind some ecolabels can leave considerable ambiguity regarding, for example, the true sources and boundaries of environmental and health impacts (Malin, 2002; Khasreen et al. 2009).

3. **Statement:** Consumer decisions drive the American economy.

   **Example Statistic:** Consumer spending accounts for roughly 70% of the gross domestic product (GDP) of the United States.

   **Commentary:** For better or worse, our spending habits fuel our economy. Viewed in a positive light, the trick is to harness this powerful force to change the current trajectory of natural resource overconsumption. More importantly, it allows each of us to vote with our dollars and to take some responsibility for the environmental legacy we are leaving for future generations.

4. **Statement:** Big commercial players also want ecolabels.

   **Example Statistic:** Wal-Mart, with fiscal year 2009 sales of US$401 billion (Wal-Mart, 2009), has announced its new Sustainable Product Initiative (Greenbiz.com, 2009a) which, as a first step, will ask its 100,000 suppliers worldwide to answer fifteen
questions on the sustainability of their operations, supply chains, and products.

Commentary: It is important to keep in mind that this is likely just a first step. Wal-Mart has not said that it will stop doing business with suppliers that do not measure up in their sustainability efforts, but this certainly could happen for future contracts. And Wal-Mart, though the 800-pound gorilla, is not unique in its growing efforts toward environmental sustainability. In fact, 76% of the largest firms in the United States, more than double the number in 2006, have reported sustainability efforts and commitments that exceed what is required by law (GreenerBuildings.com, 2009).

5.Statement: Large public institutions are making environmentally friendly consumerism a priority.

Example Statistic: Institutional purchasers—including the US$700 billion of purchasing power represented by state and local governments, colleges, and universities (Responsible Purchasing Network, 2009) plus the US$350 billion in purchases made annually by the federal government (USEPA, 2009b)—are increasing environmentally responsible purchasing policies.

Commentary: Governments and nonprofit organizations, just like for-profit organizations, are all taking big strides toward environmentally responsible practices. And they are doing it for the same reason—an increasing percentage of their stakeholders want them to do so. Only time will tell which of these sectors will lead, but their efforts are surely synergistic. As one example, consider what happens to the price of green building products and services when the federal government’s General Services Administration, the nation’s largest owner of real estate, decides to make all of its facilities comply with the LEED green building certification system. (Hint: The prices do not go up.) Associations like the Responsible Purchasers Network are making these environmentally preferable purchases easier and more systematic for institutional players.

6.Statement: Real estate presents a great opportunity for ecolabeling.

Example Statistic: By 2030, estimates suggest that 50% of the buildings in the United States will have been built after the year 2000 (Nelson, 2004).

Commentary: While this Brookings Institution analysis is a few years old, it is shocking even if off by 20%–30% (because of the myriad assumptions underlying such estimates as well the impacts of the financial crisis that began in 2008). With the American population expected to grow from approximately 300 million today to almost 400 million by 2050 (United States Census Bureau, 2009), we are going to need some new buildings and substantial retrofitting of older ones. In doing so, let us hope that we have high quality ecolabel programs that ensure that our building stock in 2030 is far more energy efficient, high performing, and healthy for occupants than is the case today. The USGBC’s LEED green building program is one ecolabel that is helping to guide the market toward lower carbon, healthier buildings. As one indicator that it is doing its job, consider that the green building market in the United States, estimated to be at US$10 billion back in 2005, is expected to grow to as much as US$140 billion by 2013 (McGraw-Hill Construction, 2008). Again, these numbers do not reflect the full impact of the ongoing financial crisis, but even when accounting for this situation, the observed and projected growth is noteworthy.

7.Statement: Awareness can change behavior.

Example Statistic: A 2009 pilot test of smart grid systems in 100 homes and businesses in the United States resulted in an average of 15% energy savings, with some utility bills down 40% (Greenbiz.com, 2009b).

Commentary: While smart grid applications are not exactly the same as ecolabel programs, both function in a similar manner by raising consumer or user awareness to drive behavior change, whether it is the setting on a thermostat, the type of laundry detergent used, or the kind of house purchased. The key point illustrated here is that transparency can be a much cheaper means to an end than, for example, more capital-intensive building systems or materials. Additional costs are not always necessary for environmentally superior products, but even before having that discussion, there are many ways to invest...
less capital in systems to raise awareness and to deliver environmental benefits.

8. **Statement:** Awareness does not always change behavior.

**Example Statistic:** Standardized nutrition labels have been on food products in the United States for twenty years, yet more than 25% of the population in 32 states is obese (US CDC, 2009).

**Commentary:** Like it or not, people and organizations move with an inertia powered by convenience and an intolerance for extra commitments of time and mental processing. This statistic could simply be an example of our desire to do what we have always done—to eat what we have always eaten, and to drink what we have always drunk. Of course, the more complete answer is that it is the result of many other factors, such as increases in suburban sprawl, growing reliance on automobiles, lack of nutrition education, and intense marketing of foods with low nutritional value. However, it is worth asking whether current nutrition labels, though standardized and well recognized, properly and most easily communicate what buyers need to know. For example, how does a hurried shopper do the mental math to balance the numbers listed among the various categories—fat, sodium, sugar, vitamins, and so forth? Clearly, one lesson for ecolabels is to eliminate this mental homework by making the right choice as easy as pushing a button.

9. **Statement:** Greenwashing can erode the power of ecolabels.

**Example Statistic:** According to a survey conducted by TerraChoice (2009), a North American environmental marketing agency, 98% of 2,219 products reviewed were guilty of greenwashing. Moreover, the number of purportedly green products per store nearly doubled between 2007 and 2008, while green advertising almost tripled between 2006 and 2008 (TerraChoice, 2009).

**Commentary:** For the last two years, TerraChoice’s reports on greenwashing—the accidental or intentional inaccuracies in a product’s environmental claims—say the same things: More and more products are using “green” to try to obtain a competitive advantage and almost all of them are not doing it properly. For example, consumer products claiming to be “CFC-free” are guilty of greenwashing because chlorofluorocarbons have been banned in the United States for years. The big concern here has to do with a potential consumer backlash. While the types of consumers that shop at Whole Foods and buy the Toyota Prius may show some forgiveness to a market where companies sometimes commit some “sins” of greenwashing, the mainstream consumers, who really matter, may not be so understanding and patient.

10. **Statement:** Labels must demonstrate excellence.

**Example Statistic:** More than 60% of products in certain categories have earned the ENERGY STAR label, the most well known ecolabel in the United States (Vestel, 2009).

**Commentary:** While ecolabels are a good idea, they also must develop into well-run programs. This means, for example, that only the best-in-class products should receive recognition and that checks and balances should be in place to prevent any conflicts of interest between the regulators and the regulated. We need to know that a green seal of approval means what it is supposed to mean. Again, the more that consumers are intentionally or accidentally “tricked” into doing what we think helps the environment, when we may just be buying status quo products, the more likely it is that we will stop concerning ourselves with ecolabels and perhaps environmental education programs generally.

In conclusion, this essay has used ten high-level statements, with select statistics and commentary, to illustrate that ecolabels can contribute to a variety of goals, including those focused on the promotion of human health (e.g., transparency regarding potential toxins in the products we use every day), the environment (e.g., guidance on more environmentally responsible building choices), and the economy (e.g., market differentiation and brand enhancement via efforts like Wal-Mart’s Sustainability Index). Most importantly, ecolabels can harness some of the most powerful forces in the United States—consumer, business, and institutional spending—to serve as a force for good rather than continuing to facilitate overconsumption and waste. However, the sponsors of ecolabel programs may encounter difficulties in raising public awareness to sufficiently high levels to change consumer behavior and in ensuring that only products demonstrating excellence above business as usual receive certification. Future research should focus on 1) defining the criteria and processes with which to gauge the quality of ecolabels and the organizations that create and manage them and 2) assessing the effectiveness of various ecolabels and the determinants of their success.
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