5. Forces Affecting Environmental Labeling Programs

The formation of labeling programs is driven largely by domestic forces. Because environmental labeling programs serve to inform the public of the relevant country, they tend to form around environmental goals and needs that are considered high priorities in that country. In general, these forces include some combination of consumer demand, competition among producers, and the leadership position of a sponsoring organization. Consumer demand drives program formation by creating a market for a reliable source of information about the environmental characteristics of a product. Competition among producers acts as a driving force as producers seek ways to communicate the environmental attributes of their products to gain a competitive edge. Finally, sponsoring organizations can also play a role in program formation by promoting the usefulness of environmental labeling as a tool in a country's overall environmental protection plan. The relative importance of each of these forces will depend on the type of environmental labeling desired. In the case of negative labeling, consumers and the sponsoring organization (typically governments) will be the major forces. On the other hand, producers will have a stake in promoting positive labeling (which is awarded only to "preferable products") and perhaps, to a greater extent, neutral labeling (which is available to all products regardless of differences in environmental attributes).

The diversity in these domestic forces across countries has resulted in a varied group of environmental labeling programs; each program differs in its mandate, operations, organizational affiliation, and role in the marketplace. For programs with government involvement, the program mandate often reflects the government's environmental policy goals, which are typically stated as the protection of human health and the environment. In such settings, labeling efforts range from regulatory programs (such as the FIFRA, ozone-depleting substances, and battery labeling requirements in the US) to "soft" policy tools (such as EPA's Energy Star program in the US, and the Blue Angel Program in Germany). In addition, there are private and quasi-government programs that may have similar mission statements but are far more limited than the government in their mandate and authority over environmental matters. For example, the keystone of the US SCS program is the dissemination of information on environmental attributes to consumers. Japan's Ecomark and the Nordic Swan programs report that environmental quality improvement and/or protection of public health are the most important mandate of their program. Few take on product categories that may be unpopular or for which the program will not be able to cover its costs. Government regulatory programs, on the other hand, can address such categories.

Although there are many other forces involved, the implications of these differences in program mandates can be profound. For example, EU sees its role as an information disseminator, responsible for formulating a consensus standard across EU markets. Consequently, the program is challenged to balance its need for consensus on labeling standards from competent bodies against the establishment of its own more stringent award criteria for the entire EU market, which might arguably provide greater environmental benefits.

Important factors influencing the formation of environmental labeling programs include public/societal interests, consumer interests, retailer interests, producer interests, operating costs/profits, standardization, and procurement applications. Each factor is discussed in detail below.

5.1. Public/Societal Interests

The attraction of environmental labeling to those involved in formulating and implementing public policies related to preserving and enhancing environmental quality is that, as a policy tool, the benefits of environmental labeling are closely connected to consumers' concerns regarding the value of product environmental aspects, general environmental concern, and any tradeoffs considered in particular purchasing decisions. Thus, the collective shifts in consumer demand might be expected to reflect the interests of a large portion of society.

For environmental labeling to be an effective policy tool, a number of conditions must hold true. First, product evaluations must be known and accurate. Second, product standards must be associated with significant environmental differences among products. Third, this information must be disseminated to consumers. Fourth, consumers must understand environmental issues and product-specific information well enough to make informed purchasing decisions. Finally, the label must have substantial market penetration in order to affect a significant number of producers.

Environmental labeling programs face several challenges in trying to provide useful information to consumers that will influence consumption patterns based on environmental considerations. For product evaluations to be known and accurate, programs must conduct reliable scientific analyses. Such analyses, however, include life-cycle assessments, which are extensive, time consuming, and often require information about processes that is not readily, if at all, available. These types of complications often require that the program make expert judgments; this practice, however, may come under close scrutiny and debate.

Programs also face the obstacle of disseminating information, a key factor in the success of the program. For example, Canada has launched a large media and marketing campaign; though it is fairly new, it could prove to be quite successful. The time, energy, and resources that go into advertising are immense, however, and pose a significant challenge to the program.

Governmental sponsorship and involvement with labeling programs, which is common among existing environmental labeling programs, can improve the program's financial stability and credibility in the eyes of manufacturers and consumers. On the other hand, a non-governmental program run by a respected consumer or environmental organization may be more immune to the political pressure that can affect governmental decision-making, and may differ in terms of consumer credibility and confidence. Private sponsorship, however, has its own drawbacks. While not subject to the vagaries of the political climate, privately owned and operated labeling

programs may be heavily influenced by the need to cover costs, and consequently may not take on the larger environmental mission that a government-sponsored program might. Ultimately, government involvement in an environmental labeling program depends in part on the government's ability to act as an advocate in the marketplace, and the role that non-governmental groups play in consumer protection and environmental policy. One survey found that 37 percent of the people who considered themselves the "primary food shoppers" of their household believed that "environmental groups" were the best source of unbiased information about the environment, 8 percent believed the government was, and 5 percent believed that product manufacturers were.[10]

There are also several limitations in using environmental labeling programs as a policy tool. For example, these programs rely on consumers' ability and willingness to include environmental considerations in their purchase decisions. Anecdotal information from several environmental labeling programs, however, suggests that consumers in many countries are aware of environmentally-labeled products and are willing to pay a premium to purchase environmentally-preferable products. For example, in a 1988 survey of German households, 68 percent were familiar with the Blue Angel label and knew that it was linked with the concept of environmental protection. Similarly, in a 1994 survey of households in Singapore, 78 percent recognized the GreenLabel as a signature of environmentally-preferable products. Furthermore, 30 percent said they consider a product's environmental attributes as a part of their purchasing decision process. In Japan, a 1993 public opinion poll indicated that 53 percent of the population was familiar with the Japanese EcoMark. A 1996 survey of Canadians found that one in five Canadians said that they or someone in their household had purchased a product carrying the Ecologo in the past year. In France, a 1996 survey found that 54 percent of households indicated that they would be willing to pay up to 10 percent more for environmentally-preferable products (although few studies have documented such behaviors). Finally, due to a lack of awareness among consumers, the EU is in the process of revamping its environmental label and the awarding of labels. The setting of the award criteria will be reduced into a three-step process decided upon by two groups, the EU Commission and the newly established European Ecolabel Organization (EEO). The Commission hopes that criteria setting and ecolabel awards will be quicker and more routine, thus increasing the number and recognizability of EU-labeled products on the market. (For more information on reform of the EU environmental label, refer to the EU program summary in Appendix B.)

[10]Environmental Research Associates, 1990.

5.2. Consumer Interest

The power of consumer interest in and response to environmental problems is undeniable. The continued funding and expansion of both governmental and non-governmental environmental programs throughout the world, many of which have been in existence for over 25 years, is compelling evidence of the strength of individuals' concerns about environmental issues. Intermittent consumer activism in the marketplace, as seen in reactions to companies' environmental performance or disclosure of environmental attributes of particular products, has been well documented and is often referred to as the power that labeling programs seek to harness. A recent example is the successful consumer boycott of household detergents in Sweden, promoted by the Swedish Society for Nature Conservation (SSNC). The boycott gave rise to the first multi-national environmentally labeled detergent on the Swedish market.

Environmental labeling is also tied to consumer right-to-know initiatives in several developed markets, particularly the US. The premise is that consumers have a right to know about the ingredients contained in a product, as well as each ingredient's health and environmental hazards, so that they can use this information to make informed decisions regarding the products they purchase. The US Federal Trade Commission's (FTC) Guides for Environmental Marketing Claims was a direct result of an increase in consumer right-to-know developments. The concept of a consumer's right to know, however, is relatively new and not widely recognized. As such, it remains a highly contentious issue. Opponents argue that consumer right to know may, in some instances, be in direct conflict with GATT's trade efforts and manufacturers' proprietary interests.

Consumer activism has played a role in creating a market for environmental labeling programs. First-party cause-related marketing (e.g., "Proceeds donated to..." or, "company supports WWF") and environmental claims (e.g. recyclable) have sought to capitalize on this consumer demand for environmentally preferable products and services. The EPA, FTC, and others, however, have also documented confusion and misunderstanding among consumers regarding environmental issues, particularly when making choices among products. Environmental claims can create misunderstanding because they often pertain to product characteristics, such as *ozone-friendly*, with which a consumer generally has little or no experience or cannot physically perceive; consumers therefore have difficulty in evaluating the credibility or value of the claim. Furthermore, claims such as *recyclable* and *compostable* relate to more than just the inherent qualities of the product being promoted; they also reflect the context in which a product is used, recycled, or disposed. Finally, some terms used in environmental marketing, such as *source-reduced*, are often poorly understood by consumers. These kinds of claims and the existence of claims that may be false have driven the need for labels that are accurate and verifiable, and written to be simple and understandable. It has also driven most third-party environmental labeling programs to provide product-specific information with which consumers can themselves distinguish among product choices, or to identify products that cause less stress on the environment based on the program's independent evaluation.

To ease some of this confusion, the FTC's Guides for Environmental Marketing Claims provides manufacturers with stringent guidelines for making environmental claims on their products, which are consistent with consumer understanding of these terms.[11] Similarly, the EPA, through its Consumer Labeling Initiative (CLI), along with other US federal agencies and industry stakeholders, are investigating ways in which product labels on household cleaners, indoor insecticides, and outdoor pesticides can be improved to increase consumers' comprehension and use of information presented on these labels. (For a detailed description of the CLI, refer to the program summary in Appendix B.)

5.3. Retailer Interests

Retailers can play a role in environmental labeling programs. On the one hand, they can play a significant role in fostering environmental labeling by selecting products to sell based in part on environmental attributes. For example, in the United States, Home Depot has made a commitment to stocking products considered to be environmentally-preferable. On the other hand, retailers have also attempted introducing their own environmentally-sensitive product lines. For example, the Texas-based *Whole Foods Market* has developed its own line of organic food products as well as other "environmentally sound" products such as personal health care products. Such actions on the part of retailers can diminish the effectiveness of independent labels on the retailers' shelves because multiple, competing labeling may cause confusion. The extent of retailers' impact, however, is tempered by the size of their operations. If they handle a significant market share of a particular product type (e.g., dishwashing soap), they will have the power to educate consumers through environmental labeling (and other avenues) as well as to influence producers production/marketing strategies. By and large, however, most retailers will function only as intermediaries in the flow of environmental information from manufacturer to consumer due to their relatively small size in national markets.

5.4. Producer Interests

One of the unique qualities of environmental labeling is that it opens up an untapped source of information to consumers. Much of the information concerning the health and environmental effects of products and product constituents is currently generated by manufacturers. This information, however, typically does not make it to the ultimate consumer in a form that is readily understandable. Producers have the ability to make information easy to read and comprehend, but doing so is a double-edged sword because some consumers will switch to products deemed to be more environmentally sensitive.

Producers cannot ignore that environmental marketing has emerged as an increasingly important

[11] *Business and the Environment*, vol. 9, no. 6, June, 1998.

issue for consumers, producers, regulators, and policy makers. Producers have responded to consumer demand (real, anticipated, or perceived) for products that are manufactured with environmental considerations in mind. They have done so by increasing environmental marketing claims, submitting products to environmental labeling programs for certification, and introducing new or redesigned "green" products. Producers do this primarily to remain competitive in a market where consumers are demanding environmental information. Any competitive advantage (such as certification) or handicap (such as a hazard warning) is important to a producer in that it can set a company apart from its competitors. For example, when an American paper company was the first to be certified by the Blue Angel program, a number of German companies quickly followed suit. Conversely, California's Proposition 65 has spurred manufacturers to change their product formulations to avoid carrying a label that warns of the risk of cancer and birth defects.

In addition, producers may be motivated by liability or public image concerns. By disclosing environmental information on product labels, producers say they better equip consumers with information to use, recycle, and dispose of the product/packaging safely. This may decrease producers' liability. By having their products certified by an environmental labeling program, producers may be able to avoid financial and public relations risks as well as to increase sales. For example, Germany's Blue Angel is credited with creating incentives for manufacturers to reformulate certain products (e.g., low-VOC paints and high-recycled-fiber-content paper products) prior to any evidence of consumer demand for such products.

5.5. Operating Costs and Profit

An important factor in the success of any environmental labeling program is its ability to cover its costs and therefore stay in business. The ease with which programs will be able to cover costs varies depending on two questions:

- can the program charge enough in application, testing, audit and other fees to cover its costs; and
- can the program subsidize its environmental labeling activities from other program activities?

Subsidies may be in the form of professional and administrative time, office space and supplies, etc. Because government-sponsored and/or operated programs will typically have other resources to draw on, profitability may not be critical to the success or longevity of the program. The same may be true for quasi-government programs, where there is still some access to government resources, and for programs run by national standards institutes, for which environmental labeling is just one part of their operations. For privately-run programs and other programs that do not have other resources to draw on, however, the ability to cover costs will be critical to whether or not they remain in operation in the long run. For these programs, there is an inherent conflict in prioritizing efforts to develop award criteria and issue awards or otherwise

evaluate products. Programs can lose credibility if they are thought to be motivated by profit in their selection of product categories or in the awarding of labels.

5.6. Standardization of Environmental Labeling Programs

One of the more recent forces affecting environmental labeling programs is an effort by the International Organization for Standardization (ISO) to standardize environmental labeling programs. ISO has set out standardizing criteria and is in the process of developing additional criteria that prescribe certain elements to be present in environmental labeling programs meeting the standards. Programs, in turn, have been adopting these principles even in draft form. Because each program has different product categories, criteria, and environmental preferences, labels are generally not transferable between one country and another. To avoid this problem, programs have begun to standardize around the ISO principles, finding ways to harmonize their programs.

The lack of a national, third-party labeling program in the US may affect standardization of environmental labeling programs. The majority of US government programs often exist to implement specific requirements of statutes or regulations and have been in place for many years (e.g., the US EPA's pesticide program, through FIFRA, was established in 1947). Typically, these are mandatory programs and are therefore usually hazard/warning labels. As a result, they are specific to domestic US policy needs, and only US governmental authorities have the power to impose such requirements. It may be more difficult to coordinate non-governmental US programs with other worldwide labeling programs, particularly during bilateral or multilateral harmonization and negotiations.

5.7. Procurement Programs

The procurement activities of governments and large organizations are increasingly considering environmental attributes of purchased goods and services. Such consideration is typically given because the purchaser's mandate/mission also includes stewardship of environmental quality, as is the case with governments, or because incorporating environmental attributes either benefits the organization directly (e.g., reduced costs over the life of purchased goods) or indirectly (e.g., goodwill among stockholders or customers). Use of environmental labels in purchasing decisions, however, has given rise to discussion about a number of issues, such as whether labels provide purchasers sufficient information to improve decision-making.

Nonetheless, US procurement pilot projects are providing a proving ground for the benefits and drawbacks of using environmental labels and environmental labeling information in EPA's Environmentally Preferable Purchasing Program.

The explicit consideration of environmental attributes in procurement can be addressed in a number of ways. At one end of the spectrum, the organization or government conducts it own research and establishes specific environmental attributes which may be preconditions for submitting bids, used as price preferences. In some cases, however, a third-party environmental labeling practitioner, rather than the government, may undertake the needed LCA-based analysis. In situations where a procurement program relies on information provided or analyzed by a third-party environmental labeling practitioner, it may be important for the procurement process to include careful consideration of the underlying analysis, data, evaluation methodology, and any judgments that might be used.

The use of environmental labels by procurement programs has the potential to increase the market presence of the labeled products and enhances the credibility of the labeling program. Although most procurement programs do not require that *only* labeled products be bought, many programs, such as Japan's Green Purchasing Network (GPN), encourage the purchase of "environmentally preferable products," which include ecolabeled products. GPN aims to promote "green purchasing" and has established purchasing guidelines for several product categories, as well as providing consumers with information on the environmental impact of products through guidebooks and newsletters. There are 425 companies, 107 government agencies, and over 90 non-profit organizations that are members of the GPN.

A similar program has been established in the US through Green Seal's "Environmental Partners Program." Businesses, government agencies, universities, non-profit and other organizations who join the program as Pledged Partners, commit to buying environmentally-preferable products and services as part of their procurement policies. These partners must annually provide Green Seal with a list of their purchases as a way to ensure compliance with the pledge. Green Seal provides all its Partners (pledged partners and those who simply subscribe to the program to receive information) with the *Choose Green Reports*, which provide recommendations of specific environmentally-preferable brands of products, including ecolabeled products, and list places where these products can be purchased. The Partners program currently has over 400 members, 163 of whom are pledged members.

In the case of private procurement, product evaluations and determinations of environmental preferability are a matter of cost-effective decision-making and the cost of information. Government procurement, however, can be much more complicated because of the breadth of government mandates and decision-making procedures. Though some countries, such as the Netherlands, Japan, and Germany have informal procurement policies that simply encourage the purchase of labeled products, particularly as part of a local or national government agency's policies, only a few labeling programs are associated with formal procurement requirements. For example, the countries in the Nordic Council require that their local and national governments purchase Nordic Swan labeled products whenever possible.