

# A Brief Introduction to Eco-labelling

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## *Abstract*

Eco-labelling is a process of standardizing a product as “Green” or” Eco-friendly”. Certification determines whether a given product meets those standards. Marketing develops consumer awareness of and trust in the claim. Marketing may of course also be done by the producer of the product that is eco-labelled, but the ecolabelling organization must also market the label to consumers so that they will demand to see it on the products they buy. The effectiveness of ecolabels depends on consumer awareness of the label, and consumer acceptance of the label.

**Keywords:** Ecolabels, Nudge Effect, Attributes, Price differential, Green goods, Standardization, Eco-friendly consumption.

## **Eco-Labelling: An Introduction**

Eco-labelling is a process of standardizing a product as “Green” or” Eco-friendly”. It is a means to disseminate information to the consumers regarding the quality of a product. When a product is certified as green, the consumer is given complete confidence that at no stages of its life cycle, it has harmed the nature.

Ecolabels are endorsements given to items that are considered to limitedly affect the climate than practically or seriously comparable items. Ecolabels for the most part depend on life-cycle appraisal to decide the natural effect of an item 'from cradle to grave'.

In certain occasions the initiator certifies different associations to be the certifier. An authorizing body gives some level of confirmation that the certifier has been prepared by a licensed preparing program and is able to play out an assessment against a particular arrangement of rules in a given field. While the standards might be set up through an exchange interaction among the different invested individuals, they are regularly spurred by the targets of the initiators of such plans.

❖ First party Labelling: Done by the producer

- ❖ Second party Labelling: Done by the producer's association
- ❖ Third party Labelling: Done by a government agency, NGO, or an International organization.

## Objectives

These are the important objectives of my study:

- To study about the different eco-labelling practices used around the world
- To identify the theoretical basis for eco-labelling and explore it further.
- To understand the nudge effect of eco-labels on consumption behavior

## Various Types of Ecolabels

Ecolabelling programs typically can be categorized as one of the accompanying classes

**First party labelling:** These are set up by individual organizations dependent on their own item guidelines. The principles may be founded on measures identified with explicit natural issues known to informed buyers through the media or promoting. This type of ecolabelling can likewise be alluded to as 'self-affirmation'.

**Second party labelling:** These are set up by industry associations for their individuals' items. Check of consistence is accomplished through inner accreditation methodology inside the business, or work of outer affirming organizations.

**Third party labelling:** These are normally settled by an initiator free from the makers, merchants and venders of the named items. Items provided by associations or assets that are affirmed are then named with data to the buyers that the item was delivered in a 'harmless to the ecosystem design. The mark is normally authorized to a maker and he can label it on the product.

## Eco-labelling: Theoretical Framework and Historical Underpinnings

The underlying economic theory for labelling products can be traced back to Stigler's (1961) work on the economics of information. In Stigler's work, pricing information is portrayed as

a valuable resource. Different sellers may ask varying prices for the same product. Thus, there is a "search cost" attributable to time and energy expended by the consumer in finding the seller with the lowest price. Hence, a consumer searches for information (lowest price) until the marginal benefit of additional information equals the marginal cost of obtaining the additional information. As a result, there is a market for information based on the consumer's willingness to pay for information (or demand), and producers' marginal cost of providing information (or supply).

Nelson (1970; 1974) contends that the problem of determining quality is usually more difficult to obtain than information on prices. In addition, since it is often impossible for buyers to tell the difference between high quality and low quality products, there is an incentive in some markets for sellers to promise high quality products but market poor quality products, as pointed out by Akerlof (1970).

Nelson distinguished between two types of products: search goods and experience goods. One can determine the quality of a product by searching, where quality might be defined as price, size of package, or colour. These are search goods. Nelson's search goods are defined similarly to Stigler's definition, as those goods that consumers can determine quality of by examining or researching the product. One also discerns quality by experiencing, such as taste, durability, or maintenance needs. These are experience goods. Now consumers cannot determine a product's quality until they buy and use it. Consumers will evaluate those goods they repeatedly buy in somewhat the same manner as search goods; bad-tasting food will quickly lose its share of the consumer's budget. Furthermore, producers who can make a quality claim will do so and consumers will assume that any firm not making a claim has low-quality products.

The environmental friendliness of a good is also an attribute of credence goods. According to Caswell (1998), labelling can transform credence attributes to search attributes, which allows the consumer to judge quality of the good before they purchase.

Labelling is often the means by which producers provide information, so that consumers may make an informed decision. However, because producers have information that consumers do not, often it is necessary that a third party intervene to ensure that the producer provides the consumer with truthful information. In this climate, either third-party certification is used, or there may be government regulations.

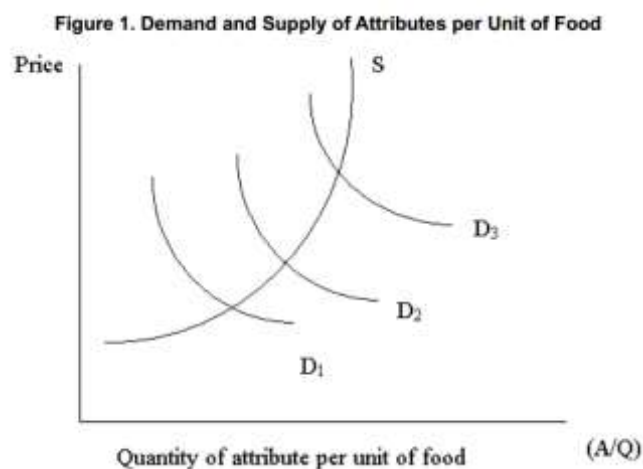
The U.S. Nutrition Labelling and Education Act of 1990 (NLEA) mandates a standardized form of nutrition information with data on macro- and micronutrients found in food. In

addition, voluntary claims such as "low fat" are required to conform to the official definition of low fat.

Recognizing that attributes of goods have value to consumers, Lancaster (1971) characterized consumer demand for products instead as consumer demand for a bundle of attributes, where each product has one or more attributes. The essence of Lancaster's framework is that a good by itself does not yield utility, but it possesses characteristics (attributes) that create utility.

Supply,  $S$ , represents quantity of attribute per unit of food available in the market as price increases. The attribute might be increasing levels of quality as measured by environmental friendliness, and the growth of marginal cost implies an increase in marginal costs as the industry supplies increasing quantities of environmental friendliness. The demand schedule,  $D$ , represents consumers' willingness to pay for various amounts of attributes per unit of food, which reflects their perceptions of the benefits they will receive from those attributes, at varying income levels.  $D$  represents the highest income level, while  $D$  represents the lowest income level. Thus, if improved quality is a superior product, then demand will shift up as the consumer becomes more affluent.

As Kinsey notes, if information on the quality per unit of food is evenly distributed between producers and consumers, then the intersection of the demand and supply curves will signal efficient market equilibrium. An example might be when producers cheat on quality standards by making claims of high quality when it is not true. This is where mandatory, or third-party labelling, can create an efficient market by removing the asymmetry of information between producers and consumers.



Environmental labelling is used to provide information to the consumers. Often the information is presented in the format of self-declarations. Thus, environmental labelling, in the form of self-declarations often preserves the information asymmetry between producers and consumers. An alternative to self-declarations is ecolabelling defined here as programmes which are voluntary and with independent third-party verification that a good meet specified environmental criteria or standards. If it meets those criteria, a *seal-of-approval* may then be affixed to the product it can be a means of achieving specific environmental policy goals. It licenses the use of its mark for a specified period of time and a specific fee.

Certification determines whether a given product meets those standards. Marketing develops consumer awareness of and trust in the claim. Marketing may of course also be done by the producer of the product that is eco-labelled, but the ecolabelling organization must also market the label to consumers so that they will demand to see it on the products they buy. The effectiveness of ecolabels depends on consumer awareness of the label, and consumer acceptance of the label. Awareness is generally the result of a successful promotion an understanding of what specific actions individuals can take in response to the information provided by the labelling programme . For ecolabelling initiatives to be broadly accepted, the issues surrounding labelling must become prominent so consumers will actively look for the labels. Thus, ecolabelling programmes perform a public education role as well.

### **The Use of Eco-labels as a tool in Behavioural Economics**

Insights from behavioural economics are likely to benefit particularly environmental policy because many of the choices that have significant environmental implications are the outcome of a complex set of motivations. Indeed, such environment-related decisions often require careful consideration between external , internal and social factors. This project aims to summarize some of the main policy implications for a sub-set of specific policy areas in which many of these apparent anomalies are important.

In the first instance it would be interesting to know whether these appeals have different impacts than information on trends on one's own consumption, and how important the impacts are likely to be. Even if the absolute impact of such information provision is not large, it is possible that when implemented in conjunction with a —harder policy measure, such as the roll-out of smart meters, they may have a much larger impact than the —hardll policy on its own. Another potential application would be in real-time metering of water consumption or fuel consumption in cars.

### **Can governments facilitate bottom-up collective action in the management of natural resources?**

It has long been known that people have difficulty assessing low-probability but high-impact risks in a consistent manner. This issue could be examined in the context of the development of residential communities in zones at risk of flooding, which has become a problem in many OECD countries. In many cases the perceived risk is not sufficiently important to have an appreciable impact on housing location decisions. Many people are not able to reason about such levels of risk in a coherent manner in terms of trade-offs with other aspects of their housing location choice.

Assessing the effect of alternative forms of risk communication on housing location decisions could be undertaken. In the area of telecommunications it has been found that people behave in an anomalous manner when comparing situations of —zero prices with exceedingly low prices. For example, does the fact of introducing a price on a resource even at very low rates, have a distinct effect on consumption relative to the effect an equal increase in a pre-existing price. An alternative case might relate to the use of voucher schemes offering discounts on goods that generate positive externalities .

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In financial decisions it has often been found that people sometimes lack —self -control. There may be analogues in the environmental sphere. Environmental economists have observed that these systems may be particularly attractive for dealing with hazardous waste, such as car batteries and e-waste. Other areas might include length of commitment to —green energy\ tariff structures, or decisions by farmers with respect to payments for environmental services.

For example, across OECD countries there is wide variation in the mechanisms used to control the ecological impacts of congestion in national parks and to raise revenue for the maintenance of biodiversity and ensuring equitable access to countries' natural heritage. Others limit congestion by issuing user permits, sometimes through lotteries. And finally, some countries may limit access by restricting nearby parking and other means of access. This is likely to be particularly true for relatively pristine areas.

Decisions over siting important infrastructure projects are often impeded by local opposition . Another potential application would be management of urban congestion. Several OECD countries have started introducing carbon footprint labelling schemes . Given that such labels can be designed in many different ways , this seems like a suitable moment to examine how the manner in which information is provided affects consumers' decisions.

For example, little work has been done on the relative importance of information which relates to the —private\ and —public\ dimensions of the good in question. Taking the example of household appliances it would be possible to —unbundle\ the two effects through an appropriately designed experiment. Mandating certain defaults has been applied in other domains of public policy. For example, in some countries pharmacies are obliged to offer a generic drug before they offer a more expensive alternative.

In the environmental domain, possible applications include defaults for information on public transport , green cab , tap water , stop&start systems , thermostat settings , —green energy\ tariffs, or parking facilities which favour bicycles relative to cars. In some cases the feasibility of mandating certain defaults will depend upon regulatory and competition frameworks, and this should be taken into account.

## Conclusion

The main essence of this paper was to introduce us to the deep ocean of eco-labels. We have seen the historical underpinnings and economic origins of Eco-labelling. Eco-labels as the Lancaster theory says can indeed influence the purchasing decisions of the consumers. That is because people care about certain attributes and characteristics more than the whole product itself. Some people buy a particular phone only because it has a given battery power or it has a given desirable RAM which enhance its performance. Just by casual observation itself, we can arrive at a hypothesis that Ecolabels do in fact affect consumption. This is my conclusion. This is my hypothesis. I have arrived at my hypothesis. This is only a explorative study with further research needed. I am opening the doors to the depths of Eco-labelling and those who can swim in this ocean with me are welcome to join me.

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