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## Labeling Initiative

This labeling initiative aims to increase the levels of consumer awareness regarding the life cycle, durability, and sustainability, as well as other ethical issues about electronic goods. This initiative is essential because it would promote sustainable consumption and minimize environmental harm. Numerous human activities such as exploitation of natural resources, manufacturing, and irresponsible disposal have a devastating effect on the environment. Therefore, the provision of quality and sustainability information, especially for recycled products would help increase the confidence of consumers and enable firms to meet their sustainability objectives (3). The labeling initiative will also help to increase the knowledge of clients about low quality and counterfeit products that fill markets. It would also help to increase the quality of life and wellness for all society members. Products that qualify to be awarded the label developed in this initiative will have high levels of acceptability with consumers. The label will serve as a sign of quality and trust between the manufacturers of electronic devices and their clients.

The processes of production, usage, and disposal of electronic products have devastating effects on the environment. Different information tools have focused on providing information regarding energy consumption rates of appliances to ensure that clients make correct choices about the device they wish to purchase. Effective product use, disposal, and recycling have proven adequate ways to increase the sustainability of the environment by minimizing the need for continuous exploitation of natural resources (3). Information communication and technological tools can be used to increase the effectiveness of data transmission, for example, the quality of recycled products to increase the client's confidence when making a purchase.

The current policy-development priorities in the business world focus on sustainable consumption and growth, especially in developing nations. The provision of data about product sustainability could have a positive influence on consumer behavior. Product information would guide and support consumer choices to ensure optimal and responsible use as well as the disposal of products. However, the adoption of sustainable consumption in markets encounters numerous obstacles including malpractices such as greenwashing. Consumers often encounter tremendous volumes of inaccurate, ambiguous, irrelevant, incomparable, and unsubstantiated information with the potential of misleading their choices. A significant portion of information tools for product sustainability is substandard and unchecked. This aspect makes them a threat to the reputation and credibility of the leading labels and their claims.

## Overview of Current Schemes

Numerous labeling initiatives have been made to promote sustainable consumption of electronic commodities, including EU 12 Energy Labelling of Household Appliances (Directive 92/75/EC). This measure was developed in 1992 and it provided crucial information to consumers such as the standard and energy efficiency levels of appliances (2). The primary objectives of this directive included the harmonization of national standards regarding the publication of labels and product information such as energy consumption levels, essential resources, and other essential attributes of such appliances. The measure applied to different kinds of appliances including refrigerators, washing machines, ovens, water heaters, lighting, and air-conditioning, among others. Consumers were given supplementary data using a fiche and a label for

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household appliances that were on sale, hire, or display. This standard required the documentation of technical information to determine the accuracy of the claims made in labels. The technical information includes brief product description, design, test reports, and expected usefulness.

The EU Directive 2010/30/EC replaced the old 92/75/EC measure and broadened its scope to include commercial and industrial appliances as well as some selected non-energy products. This standard aimed at providing consumers with adequate information that could help them compare and choose the most efficient appliances that would be affordable and durable (5). Another goal to provide manufacturers with an incentive for positioning their commodities in the market to optimize the benefits reaped as well as innovativeness in the production processes. Impact assessments conducted after the implementation of directive showed the need for extending the standard to all energy-related commodities to increase the scope and benefits. This approach would help to achieve energy efficiency gains and targets.

Another Energy Labelling initiative, 2017/1369, was developed in 2017 that made different changes including the reintroduction of the initial A-G scale and a new database (EPREL). Its objectives included the establishment of a centralized commodity registration database that would enhance the efforts for market surveillance (4). These labeling requirements apply to all products and the commission continues to delegate their adoption alongside different Eco-design regulations. These schemes are crucial because they help to empower clients by providing them with crucial and strategic information that informs their choices. They ensure that clients acquire quality products that reflect the value of their money.

## **Information Presented in Label**

Product labeling is a crucial aspect of marketing that helps to acquire the attention of consumers. The label developed in this initiative will disclose essential attributes of commodities such as their energy consumption requirements, carbon print, durability, effectiveness, and availability of spare parts, among others. The reduction of energy requirements and costs is one of the sustainability objectives of the electronics industry. A significant portion of consumers is concerned about the energy efficiency of different appliances to minimize the costs associated with their purchase and continuous use (5). The label will show the levels of energy requirements compared with other standard products, which will help consumers determine the quality and efficiency of such devices. Other crucial information that will be included in the label includes the carbon print of such devices. This data would include the amount of greenhouse gas produced during production and the one expected to be emitted over the lifetime of the commodity.

This aspect would help the clients to realize the significant harm that production, usage, and irresponsible disposal of such commodities cause on the environment. This aspect would increase their willingness to improve their purchasing and usage behaviors to minimize the harms caused to the environment and increase the quality as well as the sustainability of living.

The label will also disclose the expected lifetime of the commodities to ensure that clients acquire upgraded versions when they begin noticing issues with the functioning of their devices. This aspect would ensure the optimization of benefits and operations, which are essential objectives of sustainable consumption. The label will also provide information about the

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effectiveness of the commodity compared to other leading brands in the market (3). This aspect would help to inform the decisions of clients and prevent them from purchasing cheap and substandard products that may not serve their needs and could increase the number of issues. The efficiency of devices would also help to compare the ratio of inputs and outputs to determine whether such appliances are beneficial or additional burdens. Another crucial piece of information that will be included in the label is the availability and potential sources of spare parts to help clients in the maintenance and improvement of commodities.

## Case Study

The electronic industry has attained high levels of global competitiveness. One of the factors that have supported such trends includes proactive government policies that have promoted the establishment of healthy environments. This aspect has promoted the growth of this industry and its influence in international markets. Most of the technologies in third world industries have been acquired through foreign direct investment and trade (6). The nation ensures the development of flexible policies that align with the rapid dynamics in the global economy. Policy-makers in these nation recognize that their domestic market is small and may not support industrialization, which has made them adopt an export-oriented growth plan. This approach required the nation to liberalize its economy, which would support the economy by promoting trade as well as investments. Boards of Investment (NOI) have developed different incentives and support systems to attract foreign investors. Although the nations managed to attract a significant amount of foreign direct investments, its activities were mainly limited to assembly operations (4). However, the industries show the potential of growing manufacturing capacities despite the low levels of product design and development skills. This aspect has influenced governments to create policies that focus on the improvement of foreign technologies to increase the nation's productivity and competitiveness.

The implementation of this labeling initiative would help to increase the acceptability of Thailand's products in international markets. The government should use such initiatives to encourage technology transfer as well as diffusion of information. This aspect would ensure that producers observe the required standards to ensure that their products are of high-quality and benefit to clients. Consumers would also benefit from the standard because they would acquire the opportunity of assessing the quality and attributes of products before deciding for purchasing. These standards should encourage the integration of local and foreign technical consultancy services to identify essential characteristics of appliances and ensure that clients can check or compare such information from a centralized site (6). These approaches would help to increase the productivity of industries as well as the acquisition of essential skills among workers. They would ensure that clients acquire accurate information that would help to compare the quality and attributes of various products. This aspect would ensure the realization of the sustainable consumption of electronic commodities and reduce the various harms caused to the environment and society.

## REFERENCES

1. Brounen, Dirk, and Nils Kok. 'On the economics of energy labels in the housing market.' *Journal of Environmental Economics and Management* 62.2 (2011): 166-179.
2. Economics, Europe, and I. S. I. Fraunhofer. 'Impact assessment study on a possible extension, tightening or simplification of the framework directive 92/75 EEC on energy

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labelling of household appliance.' Literature review carried out by Europe Economics (2007).

3. Gåvertsson, Ida, Leonidas Milios, and Carl Dalhammar. 'Quality Labelling for Re-used ICT Equipment to Support Consumer Choice in the Circular Economy.' *Journal of Consumer Policy* (2018): 1-25.
4. Lee, Gun-Hong. 'Wireless identification tag, electronic product PCB having same, and system for managing electronic products.' U.S. Patent No. 9,639,798. 2 May 2017.
5. MARINHAS, SANDRINE, and CAROLINA CARMO. 'The Energy Efficiency Transformation in the European Heating and Cooling Market.'
6. Mephokee, Chanin. 'Transfer of Technology for Successful Integration into Global Economy: A Case Study of the Electronics Industry in Thailand.' United Nations, New York and Geneva, October.(2002), "Information Technology: Some Implications for Thailand." *Digital Divide or Digital Jump: Beyond 'IT'Revolution*, Kagami and Tsuji (eds.) Institute of Developing Economics, Japan External Trade Organization (2002).