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ECOLABELS - IMPORTANT TOOLS IN DEVELOPING A SUSTAINABLE SOCIETY. A GLOBAL PERSPECTIVE

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Abstract: *Nowadays, a large number of environmental labels are globally used. They were created and they are used so as to respond to a general aim of efficiency increase in using resources and of consumption as well as production orientation towards products and processes having a lower impact on the environment. In this respect, this paper aims at highlighting the issues existing in eco-label development, at clarifying what labels do ensure a better fulfilment of their aim, at capturing the stage in eco-label development and at proving conclusions with regard to the next directions in their further development and use.*

Key words: *Ecolabel, Type I Environmental Label, National/Regional Ecolabels, Global Ecolabelling Network.*

1. Introduction

For several decades, the whole society has been concerned with environmental issues. This concern was mainly generated by the resource crisis and by the focus on the economic development, which considers the environment as a finite and vulnerable physical system, as well as on the sustainable development. As a result, instruments were brought forward to governments, to the economic environment and to the markets, with the aim of helping them in directing their activity and in making choices on the market.
Such instruments especially developed in the last decades are also represented by environmental labels or ecolabels.

As it appears in the documents of the Global Ecolabelling Network (GEN), an ecolabel is a label which identifies the environmental preference of a product within a product category based on life cycle considerations. The ecolabel is awarded by a third party to products or services that meet the standard criteria. The ecolabel is not a self-declared symbol developed by a manufacturer or a service provider [1].

The process of ecolabelling is based on more selection criteria used separately for every product group. It is a selective process which certifies and guarantees that the product meets the ecological criteria of the labelling according to which the eco-label was awarded. It supports the eco-label awarding for a certain specified period of time depending on the validity of the respective standard. As a consequence, the use of an ecolabel for a longer period of time implies a renewal process of the certification [2].

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Ecolabelling is a process characterized by transparency. The participation of all the interested parties in the development of new criteria within the eco-labelling programmes is very important for their impact and success. The stakeholders may include: governments, organizations that develop ecolabelling programs, companies, industry and commercial associations, retailers, consumers and consumers groups, experts, NGO's and media.

The ecolabelling programs developed so as to encourage the use of green products, by considering that the use of symbols to facilitate the differentiation of green products from the conventional ones renders easier the choice of those products with superior environmental performances.

With minor exceptions, many of the current ecolabelling schemes were developed at the end of the 1980's and the beginning of the 1990's. There are both private and governmental environmental labelling schemes. The scheme development was made both by non-governmental organizations and governmental institutions or agencies. Hence, the oldest national eco-label was developed in Germany. It is called Blue Angel and it is a program initiated in 1978.

Currently, there are more than 400 environmental labels all over the world, being used in 200 counties and including products from 25 activity fields [3]. They are very different, some of them are trustworthy while others are not, some of them are based on complex methodologies while others are simpler, some of them are more credible while others are not.

2. Objectives

The development of ecolabelling schemes is strongly connected to the increasing interest in environment protection and conservation and in sustainable development and sustainable consumption. Global data from 26 countries indicate that: 86% of the consumers are concerned with climate change, 71% say they avoid buying goods that travelled long distances whereas over 50% of the consumers look for eco-products or consider the environmental and social aspects in their purchases [4].

Underlining the same preoccupations on environmental issues, the data resulted from the Eurobarometer Survey 2014 show that 95% of the European citizens say that protecting the environment is personally important to them, 75% are ready to buy environmentally-friendly products even if this means paying a little more [5].

The development of ecolabels by voluntary labelling schemes aims at many objectives: a general objective is the conservation and protection of the environment, which favours the efficient resource management, the reduction of waste flows and material reuse and recycling. A second aim is to orient the manufacturers and the traders towards products and processes which are compatible with the environment and facilitate innovations related to the environment. The third aim is to raise awareness among consumers concerning the development of environment-compatible choices.

Moreover, we can identify more issues when referring to the development of activities and products compatible to the eco-systems and markets of such products, issues that must be also considered by those who work on eco-labels development.

Most of the time, the ecological attributes of the products and the processes according to which they are made are intangible and invisible to the purchasers. They rather surprise the long-term eco-system needs and finally generate an increase in the quality of customers' life. But there are many times that they are

misunderstood on the market.

Then, the efforts for environment protection and conservation made during the processes of making ecological products from the raw material and putting them into consumption, including those using recycling, reuse and disposal of waste resulting from the consumption are difficult to be made aware to customers; many times, they imply many pieces of technical information difficult to put in a simple language hinting at the general public.

Furthermore, it is difficult to communicate ecological attributes within eco-product markets for many reasons. The negative consequences of pollution are difficult to express quantitatively and to be transformed into tangible aspects in the consumers' minds. The evolution of the technological environment, sometimes very rapid, imposes a constant review of what the environment performance of products and services is. People recognize environmental changes and doubt as much as possible the ecological performance of products and companies.

The high number of environmental labels makes the consumers' orientation on the markets difficult. While some labels show credibility based on some complex standards that have been developed by experts when cooperating with all the interested parties as well as being verified and analysed by independent organizations so as to be awarded, other labels deliberately mislead consumers. According to the data offered by the Consumer Eurobarometer 2011, 50% of the 500 million consumers do not trust environmental claims and 1/3 of them are confused by self-declare claims [6].

The dishonesty of the "greenwashing", using unproven or irrelevant environmental claims, through labels, ruins the credibility of the trustworthy ones and creates administrative burden for certain companies. Thus, consumers are increasingly confused and this confusion makes it harder for companies to be green, too. To conclude, credible labels are essential to the development of sustainable consumption and sustainable economy.

3. Worldwide Development of Ecolabels

The increasing interest in environmental labels, as companies realize that they may have a market advantage by using different environmental declarations and claims, and their high number and the differences between them led to their grouping into three large categories by the International Organization for Standardization.

3.1. Types of Environmental Labels

Three major types of environmental labels have been defined. Type I is a voluntary, multiple-criteria based, third-party programme that awards a license which authorises the use of environmental labels on products indicating overall environmental preference of a product within a product category based on its life cycle considerations. This kind of eco-label is the most monitored. Type II is a self-declared environmental claim and has minimal to no verification. Type III is a voluntary program that provides quantified environmental data of a product, under pre-set categories of parameters, set by a qualified third-party and based on the life cycle assessment and verified by that or another qualified party. The third type of environmental label provides all kinds of environmental information and leaves the judging up to the consumer [7].

In this regard, there are four ISO standards for environmental labels: ISO 14020 – Environmental labels and declarations – General principles, ISO 14021 – Self-declared environmental claims (Type II environmental labelling),

ISO 14024 – Type I environmental labelling. Principles and procedures, and ISO 14025 – Type III Environmental declaration [8].

3.2. Type I Ecolabels - worldwide development

Among the three categories, the most credible and trustworthy are Type I ecolabels. These environmental labels, as resulting from ISO 14024:

- are based on complex principles resulting from the analysis of the whole product life cycle,
- are aimed at differentiating environmentally preferable products from others,
- their standards have a certain validity and are periodically revised,
- there is transparency along the stages and operations of the ecolabelling program,
- the accordance with the standard indicators is verified so as the licence to be awarded by an independent organization
- all interested parties are offered access to take part in establishing the standards and product categories for which standards are elaborated and in revising the standards as well,
- any interested company may apply for the licence,
- taxes implied in being awarded the licence are maintained at a level as lowest as possible and they fairly apply to all [9].

A reference moment in developing Type I eco-labels is represented by the founding of the Global Eco-labelling Network (GEN) in 1994. GEN is a non-profit association whose members, nowadays 27 in number, are organizations which developed and administer Type I ecolabelling programs worldwide, from Norway to the New Zeeland. The aim of this organization is to improve, promote and develop product and service eco-labelling. Until 2001, GEN predominantly functioned as a forum for information exchange and member cooperation. Then, its working programme extended. GEN does not develop its own standards and neither does it certify products and services, but it aims at providing support to its members' ecolabelling programmes which develop environmental leadership standards. GEN supports international ecolabel cooperation and recognition and ecolabelling standards harmonization by mutual recognition agreements on bilateral or regional bases. In this sense, the Global Eco-labelling Network's Internationally Coordinated Eco-labelling System – GENICES was developed. With the help of GEN, its members share their knowledge and experience. GEN promotes Type I ecolabelling whereas supporting sustainable consumption by offering scientific-based, accurate and transparent pieces of information about the environmental attributes of products or services. GEN also participates in international organizations in order to generally promote ecolabelling. GEN participated in the International Organisation for Standardization, contributing to the elaboration of the 3 types of environmental labels. Moreover, GEN is also in charge of the Green Public Procurement that it supports together with the United Nation Environmental Programme (UNEP) as being an important pillar of sustainable development [10] .

Table 1 below presents pieces of relevant information with respect to some of the most worldwide important Type I eco-labels according to the number of developed standards and the number of products they were awarded for. We can observe that most programs were introduced either in the latest 1980' or in the next decade.

Relevant information on some important Type I Ecolabelling Programs Table 1

Eco-labelling Program	Country	Year of establishment	Number of standards	Number of certified products/ services	Logo
EU Eco-label " The Flower"	Multiple Countries in the European Union	1992	30	17,100	
Nordic Eco-label "The Swan"	Multiple countries (Sweden, Denmark, Norway, Iceland and Finland)	1989	62	6,000	
Eco-label Blue Angel	Germany	1978	120	12,000	
Eco Mark Programme	Japan	1989	38	2,200	
Korea Eco – Label Programme	Korea	1992	150	9,140	
China Environmental Labelling	China	1994	97	51,621	
Environmental Choice New Zealand	New Zealand	1992	39	2,000	
Australian Ecolabel Programme	Australia	2000	38	2,000	
EcoLogo Programme	Canada	1988	76	10,000+	
Green Seal	USA	1989	32	3,808	

The number of product categories for which standards were developed varies from some tens to more than one hundred. The number of products for which ecolabels were awarded also varies from some thousands to tens of thousands, information presented in the Global Eco-labelling Network Annual Report of 2012 [11].

In 2013, 132,000 products of 20,000 companies and 57 countries worldwide were certified by Type I Ecolabelling programs of the organizations members of GEN [12].

3.3. Ecolabelling in Europe

In Europe, there are two large regional ecolabelling programs: EU Eco-label or the EU Flower and Nordic Eco-label or the Nordic Swan. Apart from these, there have been developed more national programs among which: Blue Angel in Germany, a powerful programme with 120 standards and 12,000 certified products, the National Program of Environmental Labelling in the Czech Republic with more than 400 certified products, the Israeli Green Label with more than 70 certified products and 100 standards, "Green Leaf" in Russia with more than 100 certified products, Good Environmental Choice in Sweden with more than 700 certified products and Quality and Ecolabelling Program in Sweden with more than 4,500 certified products etc. [13].

EU Ecolabelling program is the EU regional scheme. The EU Ecolabel has been managed by the European Commission since 1992. In 2013 at the GEN Annual General Meeting, Henning Scholtz, the President of the European Union Ecolabelling Board, stated that within the European programme, there were developed standards for 31 product groups and there were awarded more than 25,000 products, this being a significant increase as compared to 2011, when the number of products awarded with the EU Ecolabel was of only over 17,000 [14]. The EU Ecolabel may be awarded in all the EU counties and in Norway, Iceland and Liechtenstein which belong to the programme, too. In every member state, there are competent bodies, independent organisations, which assess applications and award the EU Ecolabel to products that meet the criteria set for them. The EU ecolabel may be awarded for a large range of products, excepting food and medical products. The European label is valid in the markets of all the member states and may be obtained by products manufactured in the member states or outside their borders. The most numerous awards were given in Italy and France. In 2011, Italy had more than 50% of the products which had been awarded the label; France surpassed 21%, whereas the UK registered only 9% [15]. So we must herein underline that Italy and the UK are countries where national programs have not been created. The EU Ecolabel is recognized all around Europe, thus producers may benefit from the advantages they offer on all their national markets where they are to sell their products. The inexistence of national ecolabelling programs in some European countries and their recognition on numerous national markets represent two important arguments that support the development of the EU Ecolabel together with the other European national schemes.

The Nordic Ecolabelling program, as well as the EU Ecolabelling scheme is a Type I environmental labelling programme and a regional one. Since 1989, the Nordic Ecolabel is the official Ecolabel for the Nordic countries. Its founding members are Norway, Sweden, Finland and Iceland. From 1998, Denmark also joined the programme. The standard number currently reaches 63, whereas the product number for which the label was awarded surpasses 6,500 [16]. Like the EU Ecolabel, it is one of the most powerful

and credible ecolabelling programs, also being a governmental tool administered at the level of every country by a Nordic Ecolabel secretary office. It is important to mention that these secretary offices manage both the Nordic Ecolabel and the EU Ecolabel programs. Nordic Eco-label has a very good consumers' recognition. In 2008, according to a study undertaken by the Environmental Resources Management, 67% of the people in the Nordic countries recognise and understand the purpose of the label [17]. At present, this recognition of the ecolabel reaches 94%, according to a recent marketing research undertaken in the Nordic countries [20].

As far as the national programs are concerned, the oldest, the most credible and important eco-label is the German Blue Angel. Obviously, the early development of this German ecolabel is the expression of some 40 years of preoccupations for environment protection and conservation in Germany. Currently, 34% of German people look for environmental labels when they purchase something. Thus, Blue Angel has been awarded to more than 12,000 products by now, the number of developed criteria being of 120. As for the Nordic Eco-label, it benefits from the customers' high recognition. Thus, 79% of people in Germany have a brand awareness of the Blue Angel Ecolabel. Moreover, it is internationally recognized, 22% of all eco-label users being located outside Germany. Blue Angel considers as important the cooperation between eco-labels and it has signed Mutual Recognition Agreements (MRA) with Austria, China and Korea by now [19].

3.4. Ecolabelling outside Europe

In Asia, there are more functioning national schemes. The most important are the Chinese national program, for instance the China Environmental Label which developed 97 ecolabelling standards and gave labels to more than 50,000 products; in Japan, the Eco Mark Program which conceived standards for 56 product categories and awarded the ecolabel for more than 5,200 products and in Korea, Korea Ecolabelling Program with 150 standards and more than 10,000 awarded labels. Apart from the specific feature of every program, they operate similarly to the European ones, being Type I Eco-labels. It is important to note that within the Asian region, efforts are made for criteria cooperation and harmonization. The three programs have already signed more MRA for multi-functional devices, DVD's and personal computers [20].

In Northern America, the most important are the national Type I schemes from the USA – Green Seal which developed 32 standards and awarded labels for more than 3,800 products and the Canadian Program Ecologo with 76 criteria and more than 10,000 ecolabelled products. On these developed markets, there are issues with regard to the means of increasing consumer awareness on sustainability issues by offering new Databases & Mobile Applications. Furthermore, as Type I programs are few, the Federal Trade Commission's guidelines on green claims focus on "greenwashing".

In South America, 49 environmental labels are used, but only one is of Type I, namely ABNT Program from Brazil (Beija Flor) which has developed 17 standards by now and has awarded the label to 243 products. In this area, the interest of consumers, governments or other organizations which may develop ecolabelling programs or even the manufacturers' interest have not reached high levels.

4. Conclusions

All around the world, there is a variety of environmental labels of very different nature. They have been created and developed with the aim of rendering simpler the path to a sustainable society. They aim is that of directing consumers towards environmentally preferable products. It clearly seems that this can be done if consumers are or become interested in environmental issues. A greater effort is thus necessary so as to communicate information on ecolabelling. Ecolabels are important for companies too. Ecolabelled products benefit from marketing advantages whereas consumers, especially those from developed countries, are more and more interested in environment responsibility associated to the products they buy.

Not all environmental labels are created in the same way. For an ecolabel, it is very important to understand: what a standard requires, who develops the standard, the process used to develop the standard, the means a product is verified by for having met the requirements.

In order to increase the credibility of eco-labels, the development and extension of the use of Type I Ecolabels, is preferred. These are voluntary and transparent schemes based on more scientifically determined criteria and verified by independent organizations. Thus, consumers are offered a simple sign which facilitates their choice, not asking them to analyse some data that they do not know or which they cannot compare to anything familiar.

Other important aspects are: cooperation among the ecolabelling programs, mutual criteria development and mutual recognition of programs on such basis.

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