

Ecolabelling as a significant compound of environmental product policies

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Abstract

Ecolabel is a label which identifies overall environmental preference of a product (i.e. commodity or service) within a product category based on life cycle considerations. In contrast to a self-styled environmental symbol or claim statement developed by a manufacturer or service provider, an ecolabel is awarded by an impartial third party to products that meets established environmental leadership criteria.

Ecolabelling is the only one type of environmental [performance] labelling, and refers specifically to the provision of information to consumers about the relative environmental quality of a product.

There are many different environmental performance labels and declarations being used or contemplated around the world.

Key words

environment, product, policy, ecolabelling

Introduction

Broadening trends of the indirect tools and emphasis to the voluntary information tools appear in the environmental product policy. These tools are extensively based on the voluntary activities of the producers, as well as increased environmental awareness of the public. Systems of environmental evaluation and labelling are implemented to claim that the product (in concordance with the recent knowledge) process parameters are minimizing or eliminating its negative environmental impacts. The implementation of such systems is resulted not only from initiatives and requirements of the state administration, but also from the engagement of the producers and consumers.

The questions of different ecolabelling programmes development are dealt by several important international organizations, e.g. International Chamber of Commerce – ICC, World Trade Organization – WTO, United Nations Environmental Programme - UNEP, who assess and investigate the implemented environmental labelling programmes and who also evaluate their efficiency and effectiveness. The results achieved show that well organized programmes of environmental evaluation and labelling may serve as an effective tool not only for the environmental protection policy, but also for the trade policy.

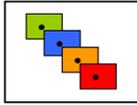
The decisive factors are quality, compatibility, transparency and stability of the programmes, increase of the environmental awareness of the producers, consumers as well as the public, information availability, and mutual acceptance of the programmes in the international frame.

The importance of the environmental labelling of products in the international community was dramatically increased by their incorporation into the international series of standards ISO 14000. These standards are voluntary; they were elaborated and implemented consensually. They precondition not only future development, but also quality increase of the environmental labelling programmes to a high extent.

Environmental product policy

Environmental product policy is in general determined by the relationships between its aims – subjects – objects - tools. It is based on the integrated approach to the product life cycle, which anticipates an enormous amount of information. It has to solve the questions of the international trade as well as the rules of the International Trade Organization. The objective of this policy is a reduction of the potential environmental impact of products to a level, which will be acceptable from the point of view of sustainable development. It means:

- highest possible raw material exploitation
- energy consumption minimization
- achieving of such product quality, which will allow for prolongation of the life span of product, its increased usefulness, waste emission reduction to an acceptable level
- environmental risk minimization linked to the product disposal after reaching its life span.



The policy is focused on the product itself, produced activity or a service offered, however, not only in their final appearance (e.g. as finalized product), but during all life cycle phases, i.e. projection, composition decision, production phase, usage and the final phase – disposal. Subjects of this process comprise high number of stakeholders – market members: producers, distributors, trade, consumers, but also the state.

Product policy results from the main elements, giving its conceptual development, political elaboration and implementation, i.e. aims and strategy, tools, subjects and products. All those main elements influence selection of the parameters, which are supposed to minimize or eliminate negative environmental effects of a product. Environmental product policy aims and strategy are focused to the sustainable development principles at present, as they were defined by the report „Our Common Future“ and confirmed by the Rio summit in 1992. [1] Certain change of the model concepts appears at present as described by the following table 1.

Table 1 Change of the model concepts in the environmental policy

Flow-through management		Environmentally designed substance flows, reduction of the product amount used in a time period
Enormous material consumption		Effectiveness of the material change, reduction of the dangerous substances amount, raw material replacement, production technology change
Product orientation		Function orientation
Curative environmental care		Preventive environmental care
Natural resources – capital consumption		Long term sustainability of resources, renewable as well as non-renewable ones
Nature control		Orientation to the harmony with nature
Consuming and disposal mentality		Mentality appreciating values, better products, environmental impact minimization, separation and recycling of waste

Tools of the environmentally oriented policy

Environmental labelling of the products, environmental profile, and life cycle assessment are important tools of the environmentally oriented policy and environmental management. [7] The life cycle approach is a beginning at the phase of eco design of a product, and it is a systematic integration of the environmental views during the whole process of development and production. The development phase comprises several steps, since market situation analysis, via innovation search and their evaluation, up to implementation. Economical analyses emphasize that the product development gives up to 70 % of its final price. It means that the following number of degrees of freedom to the resulting influence to the costs structure is relatively low for a serial production. [4] Rubik, Petchow and Scholl assume that the environmental impact of a product is influenced by the development process to the same extent. [5] Thus, product design becomes a key issue focused on development of such parameters, which will minimize or eliminate negative impacts to the environment even before its placement to the market.

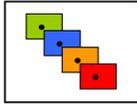
The importance of the ecodesign, LCA and environmental labelling of products in the international community was dramatically increased by their incorporation into the international series of standards ISO 14000. These standards are voluntary; they were elaborated and implemented consensually. They precondition not only future development, but also quality increase of the environmental labelling programmes to a high extent.

Ecodesign, ecolabelling, LCA and green marketing are voluntary regulative tools of environmental policy. Term a voluntary tool indicates, that its using is not ordered by the legislation and that it depends only on enterprise, if it decides for the application of some of these tools of not.

Concerning that the public environmental awareness is still spreading, so now on the market should not come the products, by which already in the product development, production, using and follow disposal were not dealt with the minimization of negative impacts to the environment. The term a regulative tool of environmental policy means that the tool's application prevents to certain release of negative impact of new product on the environment (by the comparison with the minimal impact of natural old product).

Types of environmental labelling and proclamation

"Ecolabelling" is a voluntary method of environmental performance certification and labelling that is practised around the world. An "ecolabel" is a label which identifies overall, proven environmental preference of a product or service within a specific product/service category. There are different classifications of label.



In contrast to "green" symbols, or claim statements developed by manufacturers and service providers, the most credible labels are based on life cycle considerations; they are awarded by an impartial third-party in relation to certain products or services that are independently determined to meet transparent environmental leadership criteria. [8]

There exist different types of environmental labelling and proclamation, dealing with product and services, with different links to the environment or its compartments:

- standardised in the framework of ISO/TC/207 (series of standards 14020), type I., II., III.
- standardised out of scope of ISO 14000
- non-standardised
- labelling with environmental aspects - standardised
- labelling with environmental aspects - non-standardised

Ecolabelling can be distinguished on the basis of trustworthiness and depth of information provided to the customer:

- Advertisement labelling. The aim is to attract attention of customers in order to gain their acceptance of the offer. The information on the protection of environment is not specific, often not verifiable and as such potentially misleading.
- Latent or indirect labelling. The aim is to inform the customer about particular properties of products as e.g. their safety, functionality, health protection, toxicity, flammability, explosiveness, loudness, exploitation of raw materials and energetic sources. These labels express compliance of properties with a particular set of requirements set up in advance, however not focused explicitly on the protection of environment. They testify particular properties of products without directly declaring their impact on environment.
- True Ecolabelling. The aim is to provide true and verifiable information guaranteed by so-called third party on the impact of the labelled product or service on environment.

Ecolabelling is a significant compound of environmental product policies that are generally determined by relations between their targets – objects – subjects – tools [2]. Ecolabelling is based on an integrated approach to life cycles of products, the fact of which assumes provision of significant information. It is focused on products or provided services, however not only on their final form of completed products but also on individual phases of their life cycles. The subjects of this process are represented by a number of market participants, namely producers, distributors, dealers, customers, including the state [6].

The ISO 14020 series of standards

The ISO 14020 series of standards provides businesses with a globally recognized and credible set of international benchmarks against which they can prepare their environmental labelling, which is increasingly used on products and in advertising, in response to consumer demand. With the relentless focus on climate change and health, consumers are becoming more interested in less tangible product attributes such as the ethical and environmental aspects of a product's production and supply. In response to this, manufacturers often voluntarily choose to provide information concerning the environmental aspects of their products on labelling and in advertising.

At the start of its work, the ISO subcommittee responsible for the development classifies different types of labelling by type number. The two main types already in existence are:

- The "classic" ecolabelling schemes, which award a mark or a logo based on the fulfilment of a set of criteria – these were identified as Type I environmental labelling
- Claims which were made by manufacturers and businesses, and could be seen as being "self-declared" – these were identified as Type II self-declared environmental claims.[3]

In addition, however, it was recognized that a third type was starting to emerge which consisted of a formalized set of environmental data describing the environmental aspects of a product. These declarations were identified as Type III environmental declarations.

Several current successful programmes are used in compliance with business rules based on the principle of voluntarism, as e.g. ecolabelling, i.e. labelling of environment-friendly products and services being more inoffensive toward the environment than their substitutes. Its main aim is to support the preservation of the environment and prevention of pollution in balance with social and economic needs. The terms ecolabelling or ecolabelling system refer to a certification system ruled by a third independent party, i.e. neither by the producer or the customer.

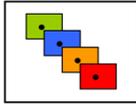


Figure 1 Type I environmental labelling

The International Organization for Standardisation (ISO) has identified three broad types of voluntary labels, with ecolabelling fitting under the Type I designation.

The ISO has undertaken efforts to attempt to standardise the principles, practices and key characteristics relating to three major voluntary environmental labelling types

- Type I - environmental labelling (i.e. ecolabels),
- Type II - self-declaration claims
- and Type III - environmental declarations (e.g. report cards/information labels).

Voluntary Environmental Performance Labelling - ISO Definitions:

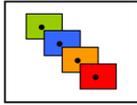
- Type I - a voluntary, multiple-criteria based, third party program that awards a license that authorises the use of environmental labels on products indicating overall environmental suitability of a product within a particular product category based on life cycle considerations
- Type II - informative environmental self-declaration claims
- Type III - voluntary programs that provide quantified environmental data of a product, under pre-set categories of parameters set by a qualified third party and based on life cycle assessment, and verified by that or another qualified third party.

Although differing in strength and authority, the different label types have been identified by the ISO as sharing a common goal, which is: "...through communication of verifiable and accurate information that is not misleading on environmental aspects of products and services, to encourage the demand for and supply of those products and services that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement." [9]

ISO14024 lists the guiding principles for Type 1 ecolabels.

Objectives of the ecolabelling programmes

Ecolabelling means labelling of products or services, which are more friendly to the environment as comparable goods of a similar qualitative properties (substituents). Ecolabelling exceeds the borders of the real time of bodies on the market regarding the positive influence to the environment – both at pre-production phase, production, use and waste disposal. It may substantially support development of a proper relationship of all stakeholders to the environmental compartments, their protection and development, to the cautious risk minimization in the decision processes, as well as damage prevention to the nature, which altogether will result in an increased economical effectiveness and results of all activities. A gradual implementation of the national or international eco-labelling schemes is aimed at elaboration of technical conditions for the institutional ensuring of the supportive activities, which will allow the development of competition environment among the substituents, as well as visualisation of their different impacts to the environment.



Eco-labelling schemes represent certification systems, managed by a third, independent party acting between producer, importer and consumer. Common targets of eco-labelling schemes are as follows:

- strengthen environmental protection by prevention
- support development of production and consumption of products with less negative impacts to the environment during their whole life-span
- improve information of the consumers and producers regarding the environmental properties of products
- participate on the minimization of environmental pollution by environmentally friendly products and by reduction of waste
- contribute to decrease the existing enormous exploitation of non-renewable natural resources and rational use of the renewable ones
- facilitate minimization of the impact of risk factors to the environment.

An eco-label indicate a positive information to the consumer, emphasizing that this particular product, keeping its qualitative characteristics is in comparison with the other substituents significantly better for the environment, according to the present capabilities of the research and science.

The main advantages of the eco-labelling schemes follow:

- opening a chance to influence the decrease of negative environmental impacts of production, products and services
- a permanent pressure to the development of more environmentally friendly products
- possibility to use the high information eco-labelling potential to the environmental education of public
- possibility to influence whole supplier chain.

The Global Ecolabelling Network as a non-profit association of Type-1 ecolabelling

The roots of ecolabelling can be found in the growing global concern for environmental protection on the part of governments, businesses and the public. As businesses have come to recognize that environmental concerns may be translated into a market advantage for certain products and services, various environmental declarations/claims/labels have emerged on products and services in the marketplace (e.g. natural, recyclable, eco-friendly, low energy, recycled content, etc.). While these have attracted consumers looking for ways to reduce adverse environmental impacts through their purchasing choices, they have also led to some confusion and scepticism on the part of consumers. Unproven or irrelevant claims have been branded "greenways".

Without guiding standards and investigation by an independent third party, consumers may not be certain that a labelled product or service is a truly environmentally preferable alternative. This concern with credibility and impartiality has led to the formation of both private and public organisations providing third-party labelling.

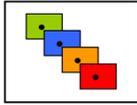
In many instances, such labelling has taken the form of ecolabels awarded to products approved by an ecolabelling program operated at a national or regional (i.e. multi-countries) level. These internationally recognised programs form the membership of GEN - Global Ecolabelling Network.

National programme for the environmental evaluation and labelling of products in the Slovak Republic

The National programme for the environmental evaluation and labelling of products in the Slovak Republic (Národný program environmentálneho hodnotenia a označovania výrobkov v Slovenskej republike - NPEHOV) was approved in April 15, 1997.

Its success is dependent on the engagement of all stakeholders in the framework of the production – distribution process, but it is mostly dependent on the interest of the consumer publics. During the start of the programme the following presumptions were dominant:

- environmental motivation of producers
- information distribution on the related environmental properties of products
- positive information on environmental friendly product („Environmentálne vhodný výrobok“ – EVV, resp. "Environmentálne vhodný produkt" - EVP) will assist individuals and households to decide in the favour of environmentally preferable purchase
- concentrating the attention to the important position of women in the households – role of consumer – with a potential influence to preference of EVV/EVP in the framework of the society purchase capacity
- increased environmental awareness
- supporting the credit of eco-labelling ideas on all management levels
- supporting the consumer's unions, social organizations, media etc., who have a crucial role in the eco-labelling schemes.



In frame of environmental lawmaking the European Community has accepted the Statute of European Council 880/92 as of 23rd March 1992 dealing with the system of granting environmental labels. Gradually a Committee assessed environmental criteria of granting the environmental EC label to relevant product classes. The EC statute No 880/92 as of 23rd March 1992 was revised in 2000, namely by Statute (EC) No 1980/2000, resp. Regulation (EC) No. 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel.



Figure 2 Mark EU-Ecolabel and „Environmentálne vhodný produkt“

The Government Decree No 97/1996 approved the national programme of environmental evaluation and labelling of products in SR declared by the Ministry of Environment of SR on 15th March 1997. Within the latter programme, the label of “Environmentally Appropriate Product” (Environment-friendly Product) has been introduced. Under the conditions of SR approximation process, the Law No 469/2002 (as amended) has ensured the implementation of the respective European Statute.

CONCLUSION

Ecolabelling offers to the consumers' information regarding the environmental profile of the product, this information is guaranteed by the state. It allows orienting the broad spectra of consumers to purchasing and use of goods with reduced negative environmental influences. The Present situation requires implementation of effective, economically and market oriented approaches of the environmental protection issues. Voluntary, i.e. self-regulating methods belong under this group. Environmental assessment and ecolabelling schemes are realized as a basic tool of the preventive environmental strategy, as well as ecological motivation of producers. Reduction of negative impacts of products to the environment is the main aim of the National programme of environmental assessment and ecolabelling in the Slovak Republic (NPEHOV). The Programme belongs to so called „second generation“, giving double profit – economical as well as environmental.

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