

TYPES I, II AND III OF ECOLABELS

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Abstract

Ecolabelling based on environmental evaluation represents labelling of products or services that are more environment-friendly than other products of comparable quality parameters (substituents). Ecolabelling can participate in forming an appropriately cautious approach of market subjects to protection as well as creation of environmental components. Environmental goals and goals of economic effectiveness should be met

in parallel. Gradual introduction of national or multinational ecolabelling systems is aimed at creating technical conditions for institutional support enabling to compete on market with substituents and to visualise the positive impact on environment. Ecolabelling systems are certification schemes managed by so-called third impartial parties operating in-between the producer, importer and consumer.

Key words

environment, information, ecolabel, consumer, ecolabelling systems, environmental evaluation, labelling of products or services

Introduction

The solution of environmental problems and environmental motivation of producers is based on establishing environmental evaluation and labelling of products as a form of protective environmental strategy. It is based on a voluntary principle. Ecolabels are awarded by third parties certifying the compliance with several environmental criteria while considering the life cycle of products. As such, ecolabelling represents an important element of combining the tools of environmental policies. The goal of ecolabelling is to inform on the superior standard of environment-friendly parameters of ecolabelled products and to encourage consumers and producers to produce or use these products.

Ecolabels should enhance the consumers to buy these products and services, which when compared to other products and services of the same product line are superior in respect of their impact on environment.

Labelling of products

Apart of responsibilities of organisations toward other issues, their social responsibility toward environment has an increasing tendency (7). In the second half of the past century, several voluntary tools of environmental management began to be introduced, namely EA, EMS, EMAS, EPE, LCA, EMA, environmental reporting, ecodesign, etc (12). This includes also a group of programmes and schemes in frame of ecolabelling of products, services, technologies, etc.

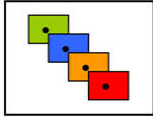
There is a technical ambiguity of the interpretation and use of the term „label“. Generally this term is considered synonymous to similar terms as declaration, marking, designation, printing of logo, pictogram, etc. In frame of technical terminology used by World Trade Organisation, the French and German equivalents are “étiquetage” and “Beschriftung”, respectively. In German and French-speaking countries, the term labelling is defined below (4).

The process of establishing a label is given by four basic aspects:

- Differentiation, i.e. the label must be defined and distinguishable.
- Relevance, i.e. the label must be personally appropriate for consumers, otherwise it would not attract them.
- Honour, i.e. how much the consumers like it and honour it; the honour relates to perception of two factors, namely quality and popularity.
- Knowledge (6).

The label represents:

- A sign of high and stable quality of brand products



- A symbol of responsible approach of the producer, whose product is a result of research and development and in addition to meeting the needs of individual consumers, it regards also the ecological requirements for products.
- A medium of communication of the producer with the consumer who in his decision to buy the product can use his own or others' experience with the given brand.
- As a registered trademark, it is a tool of legal protection as well as that of suppression of collusive competition (22).

The difference between environmental marking and ecolabel

Essentially, an environmental mark is a tag identifying the overall environmental preference of product or service based on judging its life cycle.

In common language we have a tendency to apply the term ecolabel to all tags in the field of environment but this approach is not always the correct one. There exists a numerous family of marks and declarations on the impact on environment. Ecolabels are a subgroup and they react to specific criteria (complexity, impartiality and reliability) (23).

Ecolabelling

Ecolabeling represents a voluntary tool of environmental policy.

From the terminological aspect, the used terms include:

- Ecolabelling
- Tagging of products and services that are more friendly to environment than their substituents (2).
- Ecomarking or environmental declaration, i.e. a predication highlighting the environmental aspects of products and services. This can have a form of a notice, symbol or graphic form placed on the product, tag or package, as well as that of product documentation, technical bulletin, advertisement, etc (24).

Ecolabels represent a set of tools providing relevant information on environmental behaviour of products. The main goal of ecolabelling is to enhance the demand for products with the lowest environmental impact.

The wider family of environmental designation and declaration relating to products and services are the labels with variable measure of relation to environment or its components while we can distinguish their types (20).

The problem of awareness of Slovak consumers of ecolabels has been analysed in various studies carried out in Slovakia (15, 16, 21).

On the market, there currently exist several systems and schemes of environmental marking:

- Environmental marking using environmental symbols without relaying the relation of product to environmental protection
- Environmental marking relaying the state or impact of the product on environment. There are several types as follows:
 - o Advertising
 - o Latent
 - o Mandatory
 - o Own
- types standardised in frame of ISO/TC/207 – a set of standards of order 14000, types I, II and III (Table 1) i.e. environmental marking
 - o Type I (according to ISO 14024: 1999) – selected labels are given in Table 2
 - o Type II (according to ISO 14021: 1999)
 - o Type III (according to ISO 14025: 2006)
- Types standardised apart from ISO 14000, such as:
 - o Ecolabels focused on one sector granted by institutions
 - o Ecolabels granted by private entities.
- Sub-standard types, often with no specification, sometimes misleading.

The classification of these systems is a subject of interest of many authors (5), (9), (13), (14), (23).

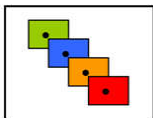




Table 1 Types of ecolabelling according to ISO 14020 norms

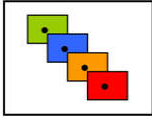
Type	Valid Documents ISO/TC 207	Valid Technical Norm / STN. In effect of TK 72	Established in Slovakia
Ecolabelling Type I	ISO 14024: 1999 Environmental labels and declarations -- Type I of environmental labelling -- Principles and procedures	STN EN ISO 14024: 1999 Environmental labels and declarations -- Type I of environmental labelling -- Principles and procedures	Act No 469/2002 of Civil Code on environmental labelling of products and its subsequent amendments, regulating the conditions and procedures in granting and using the national ecolabel „Environment-friendly product“ and ecolabel of European Union „European Flower“
Ecolabelling type II	ISO 14021: 1999 Environmental labels and declarations -- Self-declared environmental predications (Type II of environmental labelling)	STN EN ISO 14021: 1999 and declarations -- Self-declared environmental predications (Type II of environmental labelling)	Used by some companies in frame of their own environmentally focused policies
Environmental labels and environmental declarations, type III	ISO 14025: 2006 Environmental labels and declarations -- Type III of environmental declarations -- Principles and procedures	STN ISO 14025: 2006 Environmental labels and declarations -- Type III of environmental declarations -- Principles and procedures	
















Ecolabelling of type I in compliance with STN, EN, ISO 14024: 1999 is regulated by a scheme, in majority of cases on a multinational level, according to which the right to use an ecolabel is granted to products meeting the assessed requirements. The label distinguishes the products that are judged as environment-friendly among a particular group of products.

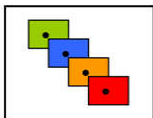
Ecolabelling of type I is based on the evaluation of several criteria of life cycle by a third party, which grants a licence justifying the use of ecolabels with products of a particular product group. The awarding of this type of ecolabel in Slovakia is guaranteed by the state and thus gives a message to consumers that the product or technology meets the assessed superior standard of environmental criteria (1). EU grants an ecolabel „European Flower“ (Tab 2) according to the regulation of EU 66/2010. In Slovakia, the Ministry of Environment grants a national environmental label „Environment-friendly Product“ (EFP) to products meeting special criteria related to specific requirements for granting the national ecolabel in respective groups of products. The procedure and conditions for granting and using ecolabels, both national and European, are regulated by Acts 469/2002, 587/2004 and 217/2007 of Civil Code. Currently, these special terms have been issued for 21 groups of products. The EFP label has been granted to 129 products and one service (18).

Table 2. Examples of environmental labels used in frame of Type I ecolabel

Scheme	Label	Scheme	Label
Environmentally Appropriate Product Slovakia		Der Blaue Engel Germany. Organisation: Federal Environmental Agency	



<p>Ecologically Regardful Product, Czech Republic</p>		<p>Umweltzeichen Austria Organisation: The Austrian Eco-label</p>	
<p>Environmental Choice – Choix Environnemental Canada</p>	 	<p>Friendly to the Earth – Eco Mark Japan</p>	
<p>Bra Miljöval – Naturskyddsföreningen Sweden. Organisation: The Swedish Society for Nature Conservation</p>		<p>Nordic Swan - the Swan label Norway, Sweden, Iceland, Finland, Denmark Organisation: Nordic Ecolabelling Board</p>	
<p>Environmental Choice Australia. Organisation: Good Environmental Choice Australia Ltd.</p>		<p>Environmental Choice New Zealand. Organisation: Environmental Choice New Zealand</p>	
<p>The Flower [European Flower] European Union</p>		<p>Ekologično čisto ta bezpečno Ukraine</p>	
<p>El Distintiu Catalonia Organisation: The Catalonian Eco- label</p>		<p>Znak ekologiczny Poland Polish Centre for Testing and Certification</p>	
<p>The Brazilian Qualidade Ambiental eco-label, Brazil. Organisation: Associação Brasileira de Normas Técnicas</p>		<p>Israel Organisation: Green Label Program</p>	





Sweden (TCO)		Bra Miljöval Sweden Organisation: The Swedish Society for Nature Conservation	 Bra Miljöval
Vitality Leaf Russia. Organisation: Saint-Petersburg Ecological union		Ramah Lingkungan Indonesia. Organisation: Ministry of Environment	 Ramah Lingkungan

In compliance with STN, EN, ISO 14021: 1999, ecolabelling of type II is based on self-declaration of environmental predication by the producer, importer, distributor, retailer or anybody who benefits from the predication while the declaration is not certified by an impartial third party. Self-declarations can be presented with no certification by a third party. Self-declarations have to be exact, particular, verifiable and specific for the given environmental aspect and must consider the important aspects of life cycle of product.

Table 3 presents examples of schemes and labels of environmental labelling of type II. Currently three organisations in Slovakia have had the credibility of their self-declaration on environmental properties of their products approved (17).

Table 3. Environmental labels used in frame of ecolabelling of type II (according to 10, 19)

Scheme	Label
China Environmental Labelling Type II	
Ricoh Recycle Label	

Ecolabelling of type III, namely Environmental Labels and Declarations (ELD) in compliance with ISO 14025: 2006 represent a designation in form of quantified data related to the environmental load or in forms of tags bearing a graphically expressed load (8). It must be always based on information derived from the evaluation of life cycle of the product in compliance with standards ISO 14040. ELD is a quantified statement on environmental aspects of the given product in all phases of its life cycle. The declaration must be approved by an impartial third party.

In 1999, GEDnet (Global Environmental Declarations Network) was established (Tab 4). It is an international association of organisations and experts in the field of environmental declarations of type III. It is aimed at supporting the cooperation and exchange of information among the members and other parties operating or developing the schemes of Type III of environmental declarations. Table 4 presents examples of environmental labels used in frame of Type III of environmental labelling.

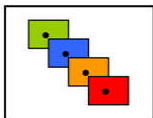





Table 4. Environmental labels used in frame of Type III of ecolabels



GEDnet - the Global Environmental Declarations Network			
AUB-Zertifikat, Institut Bauen und Umwelt e.V.; Königswinter, Germany		EcoLeaf	

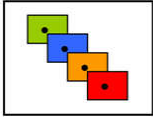
The use of individual environmental schemes or labels by individual organisations depends on the environmental focus of the given organisation, corporate culture, corporate marketing etc. They represent organisations preferring environmental labels granted by the respective state where they are established (environmental labelling of type I). Some organisations have a wider drive, as e.g. RICOH has on its respective products environmental labels of type I (Eco Mark (Japan), Blue Angel (Germany), Environmental Choice Program (Canada), The Thai Green Label Scheme (Thailand), Environmentally Friendly Label (Hungary), Environmental Choice New Zealand (New Zealand) as well as environmental labels of types II and III (11).

Environmental labels focused on one sector and granted by public institutions represent designations as follows (see Table 5):

- Labels that are based on meeting or not meeting one or several criteria associated with a particular sector as e.g. energy saving. Should a particular product meet the assessed criteria, a respective label can be placed on it. Energy Star and Ecologic Farm are examples of such labels.
- Labels that are based on a system of evaluating the impact of products or services on environment in the respective sector. Energy labels are an example. This type includes also labels of automobiles containing information on fuel consumption and CO₂ emissions. It is restricted by the Regulation of European Parliament and European Council (EC) No 443/2009 as of 23 April 2009, which assesses the emission performance standards of new passenger automobiles as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles (3).

Table 5. Ecolabels focused on one sector, granted by public institutions

Scheme	Label
Energy Star – label for energy-friendly office equipment (computers, monitors, copiers, printers, faxes, etc). General conditions for granting Energy Star label are restricted by the Regulation of European Parliament and Council No 106/2008	
Organic farming – the granting of this label is restricted by the regulation of Council (EC) No 2092/91 about organic farming and labelling of organic agricultural products and food	

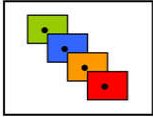


<p>Energy labels used in EU evaluate products used in households based on energy saving, while Label A means the highest and Label G the lowest measure of energy saving. Energy labelling is restricted by the regulation of Council No 92/75 EC</p>	
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Apart from the main publically granted labels, there are several private labels awarded by nongovernmental organisations, industrial groups or groups of several interested parties. Examples of labels granted by private entities in the field of forest timber products certification are shown in Table 6.

Tables 6. Forest and timber products certification

Scheme/Label	Label
Scheme for the Endorsement of Forest Certification	
Forestry Stewardship Council (FSC) 1993, International forest certification used in Europe, Northern America, Latin America, Asia, Africa	
FSC Pure Label – Products labelled with this label contain 100% of material certified by FSC. Products with this label are produced of timber from forests certified in compliance with FSC standards.	
FSC Recycled Label – Products labelled with this label contain 100% of recycled material. Products with FSC Recycled Label support the recycling process of forest resources and contain only recycled wood or fibre in compliance with FSC standards.	

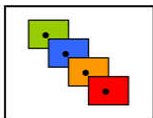


<p>FSC Mixed Sources Label – This FSC product is produced of a mixture of FSC -certified material and/or recycled material and/or of company-controlled sources (Company-controlled sources guarantee that the timber does not come from a region where forestry organisation violates human rights, from highly protected forests, genetically modified plants, from natural forests converted into plantations or into other forms of agricultural production)</p>	
<p>Cerflor: Certificação Florestal (Programa Brasileiro de Certificação Florestal); National Institute of Metrology, Standardization and Industrial Quality, Rio de Janeiro, Brazil</p>	
<p>Chilean Sustainable Forest Management Certification System; CertforChile Forest Certification Corporation, Santiago, Chile</p>	
<p>LEI Certification (Lembaga Ekolabel Indonesia)</p>	
<p>Malaysian Timber Certification Council (MTCC)</p>	
<p>Australian Forest Certification Scheme; (includes certification of forest management (FM) and chain certification (CC))</p>	

Conclusion

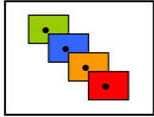
Public knowledge of the rationale for granting the ecolabels enables to inform the consumer in a non-violent and relatively fast manner about the positive approach of producers and importers to the solution of environmental problems, as well as about harming effects of various substances and processes on environment and thus to generally increase the level of public knowledge on the problematic issues of environmental protection and benefits of buying and using environment-friendly products.

Good communication and effective promotion would increase the knowledge of consumers on the advantages of buying environment-friendly products. This would also have an impact on increasing the sales of products and services bearing the environmental label and thus enhance the current as well as potential producers to further activities.



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