

ECOLABEL – TOOL FOR PROMOTING SUSTAINABLE CONSUMPTION AND PRODUCTION

RATIU Mariana

*University of Oradea, Department of Engineering and Industrial Management in Textiles and Leatherwork,
Universitatii str., no. 1, 410087, Oradea, Romania, E-mail: mratiu@uoradea.ro*

Corresponding author: Ratiu Mariana, E-mail: mratiu@uoradea.ro

Abstract: *The ecolabel is one of the indicators that quantify sustainable consumption and production, and ultimately, sustainable development. Ecolabelling is only one type of environmental labelling, and refers specifically to the provision of information to consumers about the relative environmental quality of a product. Ecolabels are granted on request of various organizations, both public and private, and are recognized only locally or nationally, regionally or internationally. Often coexist at the same time and same place, several types of environmental labels. The acceptance of a particular ecolabel is optional, and is made usually based on reputation, trust and awareness about the label and the level to promote certain brands for better lifestyle and for use the eco, organic or green products. There are currently tracking worldwide by Ecolabel Index, which is the largest global directory of ecolabels, 449 ecolabels in 197 countries, and 25 industry sectors, from which 109 are for textile products. The number of EU Ecolabel greatly increased, so that in the period 2000 - 2010, the increase was more than 20 times. At the end of 2012, 17176 products or services was awarded EU Ecolabel. Currently, certainly, the number is much higher. Today, in the Ecolabel Index appear registered in Romania 23 types of ecolabels. Also, Romania currently has awarded 586 licenses for Eu Ecolabel, from which two for textile products and two for footwear.*

Key words: *ecolabel, sustainable development, consumption, production, textiles, footwear*

1. INTRODUCTION

The world leaders, at the Rio+20 Conference in June 2012 identified the green economy as an important tool for achieving sustainable development.

The EU Sustainable Development Strategy sets out the objective of promoting sustainable consumption and production patterns. Addressing social and economic development within the carrying capacity of ecosystems and decoupling economic growth from environmental degradation is an essential requirement for sustainable development.

According to Eurostat, the ecolabel is one of the indicators that quantify sustainable consumption and production, and ultimately, sustainable development.

Overall, changes in sustainable consumption and production since 2000 show a rather mixed picture:

- almost 20% increase in resource productivity, mainly driven by a fall in consumption of non-metallic materials by the construction sector
- crisis stopped the growth in material consumption, but economic recovery indicates another turnaround
- waste management improved due to EU and national efficient waste management strategies
- significant fall of four air pollutants SO_x, NO_x, NMVOC and NH₃ emissions
- increase in the number of smaller households contributed to a one-third increase in households' electricity consumption
- 1.6% drop in final energy consumption
- EMAS registrations doubled in the EU between 2004 and 2012
- more than 50% increase in organic farming between 2005 and 2011. [1]

These days all of us are trying to be more environmentally friendly and conscious. But how does a consumer judge a product's environmental impact? How does one know what to buy and what to avoid?

In response to these questions, the ecolabel helps consumers. It is a voluntary tool that provides consumers with guidance on environmental issues that include the product offered for sale. Ecological criteria considered in the eco-label are numerous and are based on life cycle assessment of products (raw materials - process - distribution - use - disposal) is reviewed periodically; in addition to environmental criteria, are included criteria of performance and durability.

An *ecolabel* is a label which identifies overall environmental preference of a product (i.e. good 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 meet established environmental leadership criteria.

Ecolabelling is 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. [2]

2. TYPES OF ECOLABELS

In the context of a wide variety of ecolabels, such standardization is necessary. This standardization process brings a number of benefits, particularly for consumers, and being able to ensure the accuracy of the information included on certified organic labels, so as not to be deceived in their choice. In this sense, the ISO working committee ISO/TC 207 - Environmental management, subcommittee SC 3 - Environmental labelling, an international forum of technical experts who, in their discussions and decisions, they take account of new trends and effects marketing of a product or service ecolabel.

As part of its ISO 14000 series of environmental standards, the International Standards Organisation has drawn up a group of standards specifically governing environmental labeling.

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.

The ISO 14020 family covers three types of labeling schemes:

- type I - is a multi-attribute label developed by a third party
- type II - is a single-attribute label developed by the producer
- type III - is an eco-label whose awarding is based on a full life-cycle assessment [3]

3. APPEARANCE AND EVOLUTION OF THE ECOLABELS

The first ecolabel, Blue Angel, appeared in 1977 in Germany, many more being created in the 90s, such as Green Seal, U.S., in 1989; Nordic Swan, Northern European countries (Finland, Iceland, Norway, Sweden and Denmark) in 1989; Umweltzeichen (Austrian Ecolabel) in Austria in 1991; NF in France, in 1991; Milieukeur in the Netherlands in 1992; Good Environmental Choice in Sweden in 1992; *EU Ecolabel* in 1992; Hungarian eco-label in Hungary in 1993; AENOR in Spain in 1993; Environmental Choice Program in Canada in 1995; Environmentally friendly products in the Czech Republic in 1998 and more.

There are currently tracking worldwide by Ecolabel Index, which is the largest global directory of ecolabels, **449 ecolabels in 197 countries, and 25 industry sectors.**

Their distribution by sector is as follows:

- appliances: 59
- building products: 115
- cleaning products: 70
- electronics: 75
- forest products / paper: 88
- *textiles: 109*
- tourism: 51
- other (campsite services, bed mattresses, *footwear*): 100

Their distribution by country is as follows:

- EU countries: Germany – 96, United Kingdom – 86, France – 69, Italy – 59, Netherlands – 57, Belgium – 55, Spain – 53, Austria – 52, Sweden – 50, Denmark – 46, Poland – 38, Finland – 35, Portugal – 35, Ireland – 31, Czech republic – 27, **Romania – 23**, Greece – 22, Luxembourg – 22, Bulgaria – 19, Slovenia – 18, Estonia – 17, Hungary – 16, Slovakia – 15, Lithuania – 14, Latvia – 13, Cyprus – 12, Malta - 10
- other relevant european countries: Switzerland – 74, Norway - 38
- other relevant countries: USA – 195, Canada – 107, China – 56, Japan – 48, India – 30, Turkey - 27

In May 2013 were monitored 435 ecolabels, which means that there were still 14 types of new labels in less than one year. [4]

4. EVOLUTION OF THE EU ECOLABELS

Ecolabel license is an indicator defined as the number of Ecolabel or "EU Flower" licences in European countries. The Community Ecolabel is awarded to products and services with reduced environmental impacts. It is administered by the European Commission and receives the support of all EU Member States and the European Free Trade Association (EFTA). Ecolabel criteria are discussed in the European Union Ecolabelling Board (EUEB) whose membership includes representatives from industry, environmental protection groups, consumer organisations and representatives for SMEs.

Criteria of the European Ecolabel product groups, directly applicable in all Member States, including Romania, are found today in subsequent decision of the European Parliament and Council Regulation no. 66/2010/CE on the EU Ecolabel. For each group of products / services are such decisions. [5]

Currently, European Ecolabel is an integral and effective part of the Sustainable Consumption and Production Action Plan, being found in other tools of this type, such as Green Public Procurement, the Eco-Management and Audit Scheme (EMAS), the Ecodesign Directive, the Environmental Technologies Action Plan (ETAP) etc.

From the appearance, in 1992, until now the number of authorizations for EU Ecolabel had an increasing trend. Thus, after the first four years, 1992-1995, in which no authorization was granted, in 1996 were issued the first six licenses for the use of European Ecolabel. Then their number greatly increased, so that in the period 2000 - 2010, the increase was more than 20 times.

Today, the EU Ecolabel (EU Flower) can be found not only in the European Union, but also in other countries such as Switzerland, Norway, New Zealand, Turkey, USA, Japan, China etc.

Table 1: Number of licenses for EU Ecolabel in Europe in period 2000 - 2010 [6]

	Number of licenses										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
EU (27 countries)	49	88	127	149	223	276	338	508	705	939	1067
EU (25 countries)	-	-	127	149	223	276	338	508	702	935	1063
EU (15 countries)	49	88	127	149	223	272	326	485	666	890	1024
Austria	-	-	2	2	7	11	12	29	24	37	48
Belgium	-	1	2	2	2	4	4	6	10	12	16
Bulgaria	-	-	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	1	2	8	13	14	11
Cyprus	-	-	-	-	-	-	1	1	1	2	3
Denmark	-	18	27	28	45	53	55	61	52	52	56
Estonia	-	-	-	-	-	-	-	-	2	2	2
Finland	-	2	1	1	2	3	3	5	6	8	9
France	-	17	27	32	43	45	50	89	137	187	245
Germany	-	1	2	3	7	13	21	29	51	59	67
Greece	-	9	9	11	14	6	16	19	21	28	28
Ireland	-	1	1	-	-	-	9	11	20	24	24
Italy	-	13	28	34	54	82	95	160	237	336	331
Latvia	-	-	-	-	-	-	-	3	3	3	-
Lithuania	-	-	-	-	-	-	-	-	1	1	1
Luxembourg	-	-	-	-	-	-	-	-	-	-	-
Malta	-	-	-	-	-	-	1	1	1	1	1

United Kingdom	-	1	2	2	4	5	7	12	17	24	33
Netherlands	-	2	3	5	11	11	11	9	17	24	43
Poland	-	-	-	-	-	2	3	6	8	11	12
Portugal	-	2	3	4	5	5	6	7	12	14	17
România	-	-	-	-	-	-	-	-	3	4	4
Slovenia	-	-	-	-	-	-	4	2	3	3	3
Slovakia	-	-	-	-	-	-	-	-	1	2	-
Spain	-	12	12	14	16	19	21	28	41	59	80
Sweden	-	9	8	11	13	15	16	20	21	26	27
Hungary	-	-	-	-	-	1	1	2	3	6	6
Switzerland	-	-	-	-	-	-	-	-	22	31	45
Norway	-	-	-	1	3	3	3	6	6	6	6

At the end of 2012, 17176 products or services was awarded EU Ecolabel. [7]. Today, certainly, the number is much higher. Here is, for example, the number of licenses for EU Ecolabel for textile products and footwear in EU, today.

Table 2: Number of licenses for EU Ecolabel for textile products and footwear in EU in April 2014 [8]

Country	Textile products EU Ecolabel	Footwear EU Ecolabel
Austria	592	2
Belgium	586	2
Bulgaria	1	2
Croatia	1	2
Cyprus	0	2
Czech Republic	6	2
Denmark	652	3
Estonia	2	2
Finland	581	6
France	588	2
Germany	591	3
Greece	2	2
Hungary	1	2
Ireland	570	2
Italy	1132	46
Latvia	2	2
Lithuania	6	2
Luxembourg	574	2
Malta	0	2
Netherlands	570	2
Poland	2	2
Portugal	8	2
România	2	2
Slovakia	2	2
Slovenia	1	2
Spain	584	8
Sweden	589	3
United Kingdom	781	2

In the European Union in October 2011, was elaborated third EU Ecolabel Work Plan for 2011-2015 (after the 2002 and 2006 versions). The purpose of this plan is to set a number of realistic and achievable objectives for these five years:

- a) expand the range of Ecolabel product groups, focusing on products having both important potential market uptake and environmental improvement potentials
- b) increase the number of articles of Ecolabel products on the market
- c) continually reinforce the overall environmental benefits of the scheme and its contribution to sustainable consumption and production.

5. ECOLABEL IN ROMANIA

Romania does not have a national ecolabel.

In the Ecolabel Index appear registered in Romania *23 types of ecolabels*, namely: AISE Charter for Sustainable Cleaning, BIO Hellas, C.A.F.E. Practices, Dolphin Safe / Dolphin Friendly, EarthCheck, Ecocert, Eco-Schools, EPEAT, **EU Ecolabel**, Fairtrade, Forest Stewardship Council (FSC) Chain of Custody Certification, Forest Stewardship Council® (FSC) Forest Management Certification, Green Globe Certification, HAND IN HAND, Hungarian Ecolabel / Környezetbarát Termék Védjegy, Marine Stewardship Council, National Programme of Environmental Assessment and Ecolabelling in the Slovak Republik (NPEHOV), Natrue-Label, Naturally Sephora, Passivhaus, Programme for the Endorsement of Forest Certification (PEFC) schemes, Sustainable Agricultural Network, TCO Certified.

Romania currently has awarded *586 licenses for Eu Ecolabel*, categorized thereby:

- all purpose cleaner – 45
- bed mattresses – 0
- camp site services – 0
- copying and graphic paper – 185
- dishwashing detergents – 5
- flushing toilets and urinals – 0
- **footwear** – 2 (DIVISION ANATOMICOS S.L. (DIAN): EVA color Blanco and 02/S color Blanco, Azul, Negro, Verde, Rojo, Amarillo, Naranja, Violeta i Fucsia)
- growing media – 0
- hand dishwashing detergents – 3
- hard coverings – 5
- heat pumps – 0
- imaging equipment – 0
- indoor paints and varnishes – 32
- industrial and institutional automatic dishwashing detergents – 4
- industrial and institutional laundry detergents – 0
- laundry detergents – 3
- light bulbs – 0
- lubricants – 41
- newsprint paper – 10
- outdoor paints and varnishes – 10
- personal computers – 0
- portable computers – 0
- printed paper – 10
- sanitary tapware – 0
- soaps and shampoos – 8
- soft (textile) coverings – 0
- soil improvers – 0
- TVs – 57
- **textile products** – 2 (TOP SPUN YARN PTY LTD UK: Raw White Yarn 100% wool and Raw White Yarn Wool/Nylon Blend)
- tissue paper – 163
- tourist accommodation services – 3
- wooden floor coverings – 0
- wooden furniture – 0 [8]

Table 3: Number of licenses for EU Ecolabel in Romania in period 2012-2014 [8]

	Time		
	10.06.2012	15.05.2013	15.04.2014
No of license	136	280	586

As can be seen, we can say that in Romania, in recent years, the number of products / services that obtained the European Ecolabel has increased a lot. However, the number of EU Ecolabels in Romania remains at a very low level compared with many other countries, especially European.

According to the information available on the website of the Ministry of Environment of Romania, the number of Romanian companies who obtained the European Ecolabel in Romania in the period 2008-2013 increased from year to year, but the number is still very small. [9]

Table 4: Number of licenses for EU Ecolabel of Romanian companies in Romania in period 2008-2013 [9]

	Year					
	2008	2009	2010	2011	2012	2013
No of license	1	2	3	10	22	24

6. CONCLUSIONS

The purpose of introducing ecolabel is to promote products with a reduced environmental impact during their entire lifecycle in comparison to other products of the same product group. Promoting these products contribute to the efficient use of resources and a high level of environmental protection by providing consumers with accurate, exact and scientifically based information about products.

Ecolabels are granted on request of various organizations, both public and private, are recognized only locally or nationally, regionally or internationally. Often coexist at the same time and same place, several types of environmental labels. The acceptance of a particular ecolabel is optional, and is made usually based on reputation, trust and awareness about the label and the level to promote certain brands for better lifestyle and for use the eco, organic or green products.

Ecolabelling has a number of major benefits:

- informing consumer choice
- promoting economic efficiency
- stimulating market development
- encouraging continuous improvement
- promoting certification
- assisting in monitoring [10]

Taking into account the interest shown by various institutions, companies or consumers, and the upward trend in the number and types of ecolabels, we can say that truly ecolabel is an instrument of sustainable production and consumption, an instrument of sustainable development.

REFERENCES

- [1] <http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators/theme2>
- [2] www.globalecolabelling.net
- [3] www.iso.org
- [4] www.ecolabelindex.com, accessed on 13.05.2013 and on 14.04.2014
- [5] *Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel*, Official Journal of the European Union L27/1 from 30.01.2010
- [6] <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsdpc420>
- [7] *EU Ecolabel Work Plan for 2011-2015*, Version 1.7 of 15/03/2013
- [8] <http://ec.europa.eu/ecat>, accessed on 10.06.2012, 15.05.2013 and 15.04.2014
- [9] www.mmediu.ro, accessed on 10.04.2014
- [10] <http://www.iisd.org>, International Institute for Sustainable Development