

## ENVIRONMENTAL MANAGEMENT

We can define the environmental management as the systematic approach to the environment protection in all aspects of the business. The organization includes the environment protection to their strategy and to the operation as well.

Before the velvet revolution there were no tendencies of the environmental protection in the Czech Republic. After 1989, the majority of the firms observed laws concerning the environment but they didn't anything beyond that. The motivation to do something for the nature was missing in the companies. The situation has changed in the middle of the 90's. The consciousness of the firms became higher and the firms began to implement the ecological activities to their strategies.

Globally, the interest about the ecological topics is still growing and the people (the consumers) want more information about the possibilities how they can help to protect the environment. The consumers became more and more conscious in the environment area. Their demands for the products are ever higher in many areas, among others in the ecological area. Also the firms had to start to conform to this trend.

The ecological consciousness belongs to the Corporate Social Responsibility (CSR).

### **Why do the firms implement the environmental aspects to their strategy?**

1/ There are some **financial benefits** resulted from the implementation of the EMS. The company has the cost economies as a result of the energy, water and raw materials conservation. Another benefit can be tax allowances. Moreover the process of gaining the bank credit is a little bit easier for the firms that included some of the form of EMS.

2/ The EMS is perceived as a **marketing opportunity**. More and more consumers search for the products that are friendlier to the environment; more and more companies prefer to deal with the enterprises whose production is regardful of the environment. (F.e. if the Czech firms want to export to the European countries or they want to trade with the companies there, some certificates can be required, among the others the ISO 14000 too. The majority of the European concerns call for some form of the environmental policy in the supply firms. So with the implementation of the environmental management the trade occasions rise too.)

The EMS became an occasion how to push up the competitive advantage of the firm. It can give rise to the entrance on the new markets, new regions and so on. It leads to the improvement of the image, improvement in the relations with a public, the state institutions and the ecological groups.

On the other hand, companies have to spend some sources on the implementation of EMS:

1/ **Financial means** have to be given. The spending for the implementation of the EMS depends on a company size, the sort of activity and on an investment amount that is necessary to do in a given enterprise. It depends on a rate of support from the external specialized companies too. The enterprises can use the state assistance on some environmental projects, for example financial support from the state programmes of the environmental activities.

2/ Firms have to spend the **human resources** on the implementation and operation of EMS. Some employees have to be devoted to take for the operation of the environmental system. Further it takes the **time** too.

We'll mention just some of the concrete forms of the environmental management, but it's necessary to realize that there are a lot of other activities that come under the EMS.

## **ECOLABELLING**

Eco-labelling is a term used for products and services, which are friendlier to the environment and the health of the consumer during their entire life cycle. We have to realize that these products are not totally harmless to the environment but their impact on it is lower than the impact of the competitive non-ecological products. Meanwhile, their quality has to remain very high and comparable with the competitor's production.

Ecolabelling is a voluntary method of environmental performance certification and that is practised all around the world.

The basic difference between ecolabels and the other green symbols (f.e. Green point) is that the ecolabels are awarded by an independent third party (most often some state organization), meanwhile the other green symbols are developed and awarded by the manufacturer or service providers.

Ecological products and services are always marked with a logo that serves as an indicator for the customers. The marked products or services were subjected to evaluation by an independent third party<sup>1</sup>.

In a world, there exist the National Programmes of Ecolabelling and the International Programmes. In the Czech Republic, there exist **two trademarks** concerning the ecological impact of the product:

1. „**Environmentally Friendly Product**“ that refers to the various products
2. „**Bioproduct**“ that refers just to the food-stuff.

These marks tell us that the marked product burden less the environment and that they meet the stricter environmental demands.

### **Environmentally Friendly Product**

The National Programme for Labelling Environmentally Friendly Products was declared on 14 April 1994. The system was initiated by the Minister of the Environment and the Minister of the Economy. The practical commencement of the National Program is connected with the awarding of the first labels on June 7, 1994.

The labelling of Environmentally Friendly Products is one of the indirect instruments of environmental protection policy. The Minister of the Environment approves Directives with lists of requirements according to which individual products are evaluated in the given categories. The enterprise that would like to use the trademark EFP, have to meet the requirements that are defined for the particular product category.

The National Programme is implemented in accord with the principles and targets of the revised EU Ecolabelling Programme, laid down by European Parliament and Council Resolution 1980/2000 (EC).

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<sup>1</sup> *About Eco-labelling* [online]. 2006 [cit. 2007-10-09]. Available at: <[http://www.cenia.cz/\\_C12572570032F2DB.nsf/\\$pid/MZPMSFIV17VH](http://www.cenia.cz/_C12572570032F2DB.nsf/$pid/MZPMSFIV17VH)>.

The range of certified environmentally friendly products is very broad – from toilet paper to paint on hot water boilers and from detergents to environmentally friendly services provided in tourism or education.

The trademark consists of the graphic letter “e” with the inscription “Environmentally Friendly Product” in the upper part and the identification numbers in the lower part. The mark may only be used and depicted in one of these colours – green or black.



The goal of the ecolabels is to provide to the consumers following informations:

- Provide a reliable and understandable information about an environmental evaluation of the product and its properties
- Provide an easier orientation in a range of nearly equivalent products
- It's a state guarantee of the fact that the negative environmental impacts of the labelled product were minimised,
- It's a proof that the negative impacts of the labelled product on the consumer's health were minimised<sup>2</sup>.

The requirements for awarding of the Ecolabel are laid down in Directives for individual, precisely defined categories of products.

Two kinds of requirements on the ecological product:

- **Basic demands** are not related to the environmental but rather the useful properties of the product, that are intended to ensure that the functional properties of the product are completely comparable with competitive products used for the same purpose. So what is important to know – the environmental friendliness was not achieved at the expense of quality and that the product was manufactured in accord with all the relevant acts and regulations
- **Specific requirements**, the fulfilling of these demands differentiates the environmental friendly product from other products. They impose far greater demands on the environmentally friendly properties of the product than those in the general regulations and standards. It is assumed that a maximum of 20–25 % of the most modern products in a given category could conform to these requirements.

The specific requirements are valid especially for savings in raw materials and energy, use of secondary raw materials, use of renewable sources of energy, limitation of emissions of pollutants, limitation or elimination of pollutants and poisonous substances, and limitation or elimination of waste.

In these days, in the Czech Republic, there is about 80 enterprises that use the ecolabel EFP on 330 products. The number of the ecolabelled products is still growing.

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<sup>2</sup> *National Eco-labelling Programme* [online]. 2006 [cit. 2007-10-09]. Available at: <[http://www.cenia.cz/\\_C12572570032F2DB.nsf/\\$pid/MZPMSFIV4BG7](http://www.cenia.cz/_C12572570032F2DB.nsf/$pid/MZPMSFIV4BG7)>.

## The EU Eco-labelling Programme

The EU eco-label is “The Flower”. Czech producers and providers of tourist accommodation services can also be awarded of the EU eco-label for their products or services. The responsibility for the implementation of the European eco-labelling programme in the Czech Republic has the Czech Ecolabelling Agency, the guarantor is the Ministry of the Environment. Similarly to the Czech National programme, the EU eco-labelling scheme is voluntary<sup>3</sup>



“The Flower” may also be awarded to services, concretely to the tourist accommodation services and camp site accommodation services.

In the Czech Republic there is 7 companies that gained „The Flower“ till this time. Six of these companies provide the services - the tourist and accommodation services.

## Perception of the ecological products

It's good to say some words about the perception of the ecological products by the consumers and now we mean the ecological products generally, not just the ecolabelled products.

There were done some researches that explored the perception of the ecological products by the consumers in a world. The basic conclusions are following:

Generally, we can definitely say that the **run for the ecological products is growing** in Europe as well as in Czech Republic.

The environmental aspect of the product is generally **perceived positively, as a contribution** of a given product. Nevertheless, the consumers evaluate primarily other product properties, especially price, quality and functionality. The product has to be comparable in quality with the competitor's – non ecological - product. It means that the environmental aspect is not the most important attribute for the consumers (but that's not a surprise).

What is interesting, the particular group of consumers evaluate primarily the ecological impact of the product, these people decide for the purchase according as the product or service is environmentally friendly.

Globally, the consumers attend to the environmental contribution rather in the case of the cheaper products. As for the more expensive goods, the consumer evaluates rather other properties of the product and doesn't consider the ecological impact of it.

The explorations further say that the consumers are willing to pay for the ecological product between 5 % and 20 % more than for non-ecological product or service. But it depends a lot on a product category and price.

The consumers most often buy the ecological products just occasionally. One of the reason for the purchase is that it brings them a good feeling that they do something for a nature.

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<sup>3</sup> *EU Eco-labelling* [online]. 2006 [cit. 2007-10-10]. Available at: <[http://www.cenia.cz/\\_C12572570032F2DB.nsf/\\$pid/MZPMSFIV4GCI](http://www.cenia.cz/_C12572570032F2DB.nsf/$pid/MZPMSFIV4GCI)>.

The problems of the green purchasing can be:

- The ecological products can be more expensive than the classic products.
- Worse availability (special outlets)
- Narrow assortment
- The ecological products can be perceived as inferior in some aspects  
f.e. qualitatively

## **ISO 14000**

ISO 14000 is the international standard that defines a voluntary environmental management system. Actually we may recognize that this standard is one of the most significant international initiatives for sustainable development.

It does not specify levels of environmental performance because if it did it, the standards would have to be specific to each business activity and this would require a specific EMS standard for each business<sup>4</sup>. It's not the intention of this certificate.

ISO 14000 is the universal system that gives the general requirements for an environmental management system. The universal system means that it can be applied in the companies of different size and different activity. The underlying philosophy is that whatever the organization's activity, the requirements of an effective EMS are the same. Because ISO 14001 does not lay down levels of environmental performance, the standard can be implemented by a wide variety of organizations, whatever their current level of environmental maturity.

The standard ISO 14000 was emitted in 1996 by the International Organization for Standardization (ISO). The basic idea of this standard is the continual improving and the observance of the laws. In 2004, the ISO 14000 passed through the revision. In this year it was created the standard document that is significant till this time.

The certificate ISO 14000 specifies the requirements on EMS that can be objectively audited. The standard refers to such aspects that can be influenced and controlled by a given company.

In 2005, about 110 thousands certifications ISO 14000 were awarded in the world. It was represented in 138 countries. The biggest percentage share had Europe (43%) and The Far East (42 %). The countries with the most certificates were Japan, China, than Spain, Italy, Great Britain and USA.

In the Czech Republic we can note the continual growth in ISO 14000 too. The certificate is generally implemented by the companies that already dispose of ISO 9000.

From the research that was realized by the Centre of the competitive advantage of the Czech firms, that is situated on our school, we found out that about 44% Czech firms own the standard ISO 14000 in this time. Further we can say that the process of rich implementation of ISO 14 000 passes now in the Czech firms. It means that a lot of companies think of the implementation of this certificate.

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<sup>4</sup> *Global Green Standards : ISO 14 000 and Sustainable Development* [online]. 1996 [cit. 2007-10-11]. Available at: WWW: <<http://www.iisd.org/pdf/globlgrn.pdf>>.

## EMAS

EMAS is European standard of the Environmental Management System. It's a voluntary instrument that involves the ISO 14000 requirements but also another demands. So the EMAS has the broader range of the requirements, it's stricter and more difficult for the enterprises to implement it.

EMAS means Eco-Management and Audit Scheme (EMAS). It represents a company's active approach to the monitoring, management and gradual decrease of its environmental impact. In the Czech Republic the guarantor of the EMAS Programme is the Ministry of the Environment.<sup>5</sup>

EMAS is an instrument of the external control. It means that company with implemented EMAS ought to publish regularly the declaration about the environmental situation in a given enterprise.

In the Czech Republic, the EMS is frequently implemented in accordance with international standard - ISO 14000. EMAS is represented much less. There are only about 20 companies that gained the EMAS in ČR. The biggest difference between ISO 14000 and EMAS is that the enterprises with EMAS ought to notify the declaration of the impacts of the firm on the environment. The ISO 14000 is rather the internal control instrument, not the external. The requirements of EMAS are stricter than the demands of ISO standard. Of course, the result of that is increasing rate of the ISO 14000 certificates in comparison with the companies with EMAS.

## CLEANER PRODUCTION<sup>6</sup>

Cleaner Production is the application to processes, products, and services to increase overall efficiency, and reduce risks to humans and the environment. The main objective of this strategy is to eliminate the causes of environmental pollution from production processes or a provided service. Cleaner Production can be applied universally to processing, business or administrative organisations.

For **production processes**, Cleaner Production includes more efficient use of the raw materials, water and energy; eliminating toxic and dangerous raw materials; and reducing the quantity and toxicity of all emissions and wastes at the source during the production process.

For **products**, Cleaner Production aims to reduce the environmental health and safety impacts of products over their entire life cycles, from raw materials extraction, through manufacturing and use, to the "ultimate" disposal of the product.

For **services**, Cleaner Production implies incorporating environmental concerns into designing and delivering services.

Cleaner Production is a "win-win" strategy because it protects the environment, the consumer and the worker while improving industrial efficiency, profitability, and competitiveness.

We can name a lot of benefits that result from the cleaner production, f.e. lower production energy and material consumption, financial savings, increased production efficiency or increased competitiveness.

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<sup>5</sup> *About EMAS* [online]. 2007 [cit. 2007-10-10]. Available at: <[http://www.cenia.cz/web/www/web-pub-en.nsf/\\$pid/MZPMSFIV57AN](http://www.cenia.cz/web/www/web-pub-en.nsf/$pid/MZPMSFIV57AN)>.

<sup>6</sup> *About Cleaner Production* [online]. 2007 [cit. 2007-10-10]. Available at: <[http://www.cenia.cz/web/www/web-pub-en.nsf/\\$pid/MZPMSFIV5ZE4](http://www.cenia.cz/web/www/web-pub-en.nsf/$pid/MZPMSFIV5ZE4)>.

The application instrument of Cleaner Production is the Cleaner Production Assessment. It is a comprehensive information tool providing not only the information on negative environmental impacts, but also possible elimination strategies, including the financial impact of the corrective measures.

The Cleaner Production Assessment is a voluntary instrument. If a company did use the CPA to obtain the necessary information for improvement, the final decision as whether to implement, the measures would be up to the company's management.

The main areas of interest in Cleaner Production projects are product features, applied technology, machinery and equipment, input raw materials, organisation of work, firm management systems.

The environmental impact from all of the above areas can be decreased by either investment measures or non-investment, organisational measures. The non-investment, immediate measures are very efficient and represent nearly one quarter of the total financial effects.

Cleaner production is important because it is a universally applicable, integral preventive strategy which does not solve environmental problems by transferring them from one environmental component to another. This strategy looks for the sources of pollution and tries to minimize them. The Cleaner Production strategy is in full compliance with the concept of sustainable development.

Implementing Cleaner Production can be very beneficial to a company if it also introduces the EMS (Environmental Management System). This strategy ensures the inclusion of preventive measures which are much less expensive than typical reactive measures.

The International Declaration on Cleaner Production is a public document published by the United Nations Environmental Programme (UNEP) in 1997.

In the Czech Republic, there is about 100 enterprises that implemented the Cleaner Production. It was implemented mainly in the concerns of a light and heavy industry.