

# Benefits from Environmental Management System Implementation

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***Abstract:** Environmental management is a systematic approach to environmental protection in all aspects of business through which organizations integrate environmental concerns into their business strategy and normal operation. Approach consists in establishing, implementing and maintaining constant properly structured environmental management system, which is part of the overall management system and is associated with all elements of the environmental performance of an organization.*

***Keywords:** benefits, environment, management, system, ISO 14001*

## 1 Introduction

Nowadays, many organizations have come to expect from their suppliers more responsible approach to environmental policy and this new business ethics in many cases resulted in the requirement that these suppliers have as part of their business activities, an Environmental Management System (EMS). Descriptions of individual cases are very often limited to indicating some of the benefits of certifying an EMS against ISO 14001 standard requirements or to presenting the most frequent obstacles to overcome.

### 1.1 Benefits of the EMS Implementation

Environmental management systems based on the requirements of the international ISO 14001 standards are becoming more and more popular in Slovak Republic as well as around the world. Implementation and certification of environmental management system brings to the enterprise benefits in several areas:

- 1) Economic benefits:

- economical use of raw materials and energy,
- minimising waste (reducing disposal costs),
- minimising environmental charges and fines for environmental pollution.

2) Advantages for the organization:

- tool to obtain data needed for planning and setting of targets,
- reducing the risk of environmental accidents and emergencies,
- increased morale organizations,
- easier obtaining permits and licenses,
- gain a competitive advantage.

3) The benefits for public relations:

- improve the overall image of the company,
- increase business credibility for partners, investors, financial institutions, insurance companies, public administration and the general public.

According to Edwards there are four reasons why every organization should take environmental factors into account in its management processes:

- ethical – as human beings we have a duty to look after the world in which we live and to hand it on to our children,
- economic – conserving resources and not generating waste products or wasting energy means we save on cost,
- legal – more and more governments including our own are passing laws to control how we interact with the environment,
- commercial – more and more large organizations are taking control of their environmental responsibilities and they expect their suppliers and subcontractors to do the same.

Turner - O'Neill [1] recognized benefits of ISO 14001 certification, including the ability to increase price due to differentiation, using certification as a barrier, to enhance corporate image, to entry for potential competitors, to gain protection against claims of environmental negligence, to pre-empt government regulation, to have opportunities, to make an input on standards and to promote better management controls. According to Matuszak-Flejszman [2] implementing an environmental management system in a company brings a number of benefits not only to the company itself, but also to the whole surrounding environment. Prevention of pollution, which is the idea underlying the concept of an environmental management system generates mechanisms aimed at minimizing material, resource and energy consumption. It can bring about cost reduction as a result of [2]:

- streamlining the efficiency of running processes (decreasing resource and energy consumption and the volume of waste, as well as proper maintenance of machine and devices) and implementing new, more effective processes,

- designing products and services so as to limit natural resource consumption and at the same time maintain quality,
- providing proper waste management (recycling and other forms of economic waste utilization),
- optimizing selection of resources, materials and products.

In the international dimension is a key standard for the introduction of environmental management and certification ISO 14001 - Environmental Management Systems. EMS provides standard specification including key requirements that an organization must meet in order to obtain certification authority certificate. This certificate is an international force. Certified organization is entitled to use the certified area certification mark, which it was allocated.

ISO 14001 is an international standard that defines the principles of environmental management system by which companies control their impact on the environment. The ISO 14001 standard was adopted by the International Association for Standardization (International Organization for Standardization - ISO) in 1996. The creation of this standard was due a number of manufacturing enterprises and governmental and non-governmental organizations.

Matuszak-Flejszman [3] recognized also external benefits as a second group of benefits including:

- raising attractiveness in the eyes of investors (shareholders) as well as improving the image of the company which can give rise to more successful business negotiations,
- raising competitiveness on the internal and external market (by deepening the trust of customers and contractors),
- improving the condition of the natural environment,
- increasing market share by meeting the market requirement of 'caring for the environment',
- improving relations with the local community,
- possibility of maintaining old customers and gaining new ones,

The main purpose of the standard is to support environmental protection and pollution prevention. The standard does not provide any absolute requirements for environmental performance, however, puts the emphasis on compliance with legislative requirements relating to the individual components of the environment (air, water, soil, waste, etc.) It is essential to identify all possible aspects that have an impact on the environment.

The organization can determine what environmental burdens and find appropriate methods to gradually reduce adverse impact to the environment.

Environmental Management System according to ISO 14001 is intended for all organizations regardless of size or field of activity wishing to actively improve its approach to environmental protection and to avoid thousands of dollars of fines

from the Slovak Environmental Inspection for non-compliance with legislative requirements [4].

The most common motive for introducing a requirement for certification based on social demand, expressed publicly beneficial Meeting the State for the support programs for organizations that create a system of environmental protection in their activities. The organization in this way declares that environmental issues are not indifferent and that in order to conduct their activities without jeopardizing the environment in its site of action. Environmental issues are now becoming increasingly urgent, therefore, is the introduction of an environmental management system almost indispensable duty of the organization and a positive signal to customers of the organization [5].

## **2 Materials and Methods**

We used several methods that have served us in analysing benefits from environmental management system implementation. These methods which we used are divided into two groups:

- Theoretical.
- Empirical.

Among the theoretical methods we can include: abstraction, analysis, synthesis, comparison.

We gathered data from the literature, but also from standards and another environmental management system in practice. All these collected information has been processed into this paper.

## **3 Results and Discussion**

### **3.1 The Implementation of an Environmental Management System According to ISO 14001**

Enterprise which has decided to get a certificate attesting conformity with the requirements of ISO 14001 shall establish, document, implement and maintain an environmental management system and continually improve its effectiveness. By the introduction of environmental management is to identify the so-called. environmental aspects, that is elements of activities, products or services that may, under certain circumstances adversely affect the environment. The nature of these aspects are then unfolds with different complexity management systems in specific organizations. Of course, this character is different because a different "weight" have such aspects.

Table 1  
Advantages and disadvantages from ISO 14001 implementation

Advantages from ISO 14001 implementation	Disadvantages from ISO 14001 implementation
<p>The condition for public and private contracts, Improve the competitiveness of firms, Focus on preventing and correcting errors, Allows for rapid change and innovation in organizations The possibility of implementation in organizations that operate in different areas, Joint communication within the company and its external environment, Uniform implementation of control not just the quality.</p>	<p>When you start the implementation of increased bureaucracy and paperwork. Always check after a certain period (usually 1 every 2 years) Increased pressure on employees before checking ISO Confirmation (signature) of the employee's training does not necessarily mean that this actually occurred.</p>

Source: own processing

The procedure for developing and implementing an environmental management system, its maintenance and continuous improvement:

1. Analysis of the current situation.
2. Assessment of compliance with legal and other requirements in the field of environmental protection.
3. Analysis of the use of documentation.
4. Analysis and design of environmental aspects and impacts.
5. Draft timetable environmental management system building.

The most common motive for introducing a requirement for certification based on social demand, expressed publicly beneficial Meeting the State for the support programs for organizations that create a system of environmental protection in their activities. The organization in this way declares that environmental issues are not indifferent to her, and that in order to conduct their activities without jeopardizing the environment in its site of action. Environmental issues are now becoming increasingly urgent, therefore, is the introduction of an environmental management system almost indispensable duty of the organization and a positive signal to customers of the organization.

The organization can determine what environmental burdens and find appropriate methods to gradually reduce adverse impact to the environment. The accuracy of the auditor assessment certification company.he discussion should interpret the results in view of the results obtained in this and in past studies on this topic. State the conclusions in a few sentences at the end of the paper. The Results and Discussion sections can include subheadings, and when appropriate, both sections can be combined.

#### 4 Conclusion

In this contribution we wanted to find answer to the following question: What benefits have the organizations gained as a result of implementing environmental management systems? In order to find answer to the above question we focused on the content and scope of empirical research methodology. The main goal of our survey was to identify all the benefits of an environmental management system. An EMS is used to address an organization's impact on the environment. Organizations implement such systems to maintain compliance with environmental regulations, lower environmental costs, reduce risks, train employees, develop indicators of impact, and improve environmental performance.

#### 5 References

- [1] Turner, A. - O'neill, C. 2007. Confronting the inevitable: ISO 14001 implementation and the Durban Automotive Cluster, *South African Journal of Industrial Engineering*, Nov. 18 (2), 3, 2007.
- [2] Matuszak-Flejszman, A. 2007. Environmental management system in organization, *University of Academy Economic, Poznań*, pp. 48-54, 2007.
- [3] Matuszak-Flejszman, A. 2010. Determinants of Improving the Environmental Management System According to Requirements of the Norm ISO 14001. *Publishing House of Poznan University of Economics, Poznan*, 2010.
- [4] International Organization for Standardization - ISO. 2002. The basics: ISO 14000 and environmental management systems for busy managers. 2002.
- [5] Tse, R. Y. C. 2001. The implementation of EMS in construction firms: case study in Hong Kong. *J. Environ. Assessment Policy Manage.* p. 177-194. 2001.