

## **ENVIRONMENTAL MANAGEMENT AND COMPANIES' SUSTAINABLE DEVELOPMENT**

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### **Abstract**

*Since the beginning of 2008 the world faced multiple crises (fuel, food and financial). As a reaction to the negative effects of economic development on the environment, but also because of the multiple crises, the international community began to seek solutions to support a sustainable economy and society. One of the solutions is the implementation of the environmental management.*

*The present paper presents the core concepts regarding the environmental management and the organization benefits by implementing the environmental management systems, benefits which have a direct influence upon the companies sustainable development of the.*

**Keywords:** *sustainable development, environmental management, environmental management systems.*

**JEL classification:** *Q00, Q01, Q56.*

### **1. Introduction**

Ecological threats at the global level put under question existence of humanity. Humanity is currently facing an extraordinary pressure generated by the resource exhaustion, temperatures increasing, extreme weather, glaciers melting, sea-level rise, death of coral reefs, the disappearance of the species, of forests, erosion, soil degradation of pastures, extending desserts, excessive urbanization, waste management, phenomena with direct repercussions on management of all economic organizations [Soros, 2002].

In the current context, the economic, social and environmental challenges deeply transform our world. In the next decade they will put increasingly more questioning the current patterns of production, consumption, business and use of natural resources and common goods; the

imperative of democracy will be basic human needs and ensure the health of the planet, the supreme global asset

Globalization of ecological effects it is obvious, pollution knows no boundaries. The example of atmosphere pollution globally clearly shows that any attempt of a state to keep the environment clean, is doomed to failure if other states are also not prepared to make an effort in this regard. It is important to emphasize that not only globalization have impact on the environment, but also the environment has an impact on the rhythm, direction and quality of globalization. Both the domestic and foreign literature and research converge to a negative effect of business globalization and internationalization of companies on the environment. In regard with the globalization of ecological effects, Peter Drucker in - a work published in 1999 said that the emergence of transnational ecology is the greatest novelty in the world economy [Druker, 1999]

In essence, concern for environmental issues took as its starting point the awareness of the gravity phenomena and environmental protection need. The 70 years is a milestone in this regard, through the emergence of environmental policies. The development of Agenda 21 [UN, 1992] is the cornerstone of environmental management, the first official framework which encourages governments and other bodies to develop environmental management.

Since the beginning of 2008 the world faced multiple crises (fuel, food and financial). As a reaction to the negative effects of economic development on the environment, but also because of the financial crisis, the international community began to seek solutions to support a sustainable economy and society. The original concept of sustainable development was completed with the requirement to reduce adverse environmental impacts in order to obtain more goods and services with less consumption of natural capital, i.e. eco-efficiency and design processes that do not produce any waste, i.e. eco – effectiveness. Promotion of the eco-efficiency and eco-effectiveness led to the emergence of a new type of economy - Green Economy (also called sustainable economy). This involves reconfiguring businesses and infrastructure to achieve a better return on capital investments natural, human and economic, while reducing emissions of greenhouse gas emissions, extracting and using fewer natural resources, creating less waste and reducing social disparities. A green economy is one that results in improved human wellbeing and social equity, while significantly reducing environmental risks and ecological deficit; is a model of economic development or an economy based on sustainable development.

Today, a decade later, the world is facing environmental pressures and therefore new challenges on a scale, speed and interdependence that are unprecedented. Although environmental issues of local, regional and global

are old enough, experts say that “contemporary forms of environmental degradation are more global than ever in human history and involve the most significant set of risks and threats to human life”. [Held, 2004]

Considering all the mentioned above aspects, it is clear that firms operating at national and international markets, will not survive competitiveness without effective management and strict control of the organization's environmental issues.

## **2. Environmental management**

Environmental management is the management of those activities of an organization that have or may have an effect the environment. Any activity an organization has or may have effects upon the environment: consumption of natural resources (water, energy and non-renewable raw materials), emissions of pollutants (solid, liquid, gaseous), waste production, etc. The objective is to preserve natural resources, limiting emissions and risks for the environment and ensuring occupational safety. These interactions, direct or indirect, shall be exercised at all stages of the provided product or services life cycle, especially during the production process and so the management have to take into account:

- extraction, processing and transport of raw materials;
- production;
- product distribution;
- utilization of the product;
- product end of life.

An important part of the environmental management is the environmental management system. According to the UN definition, environmental management systems (EMS) are a tool for identifying, resolving, correction and control of environmental activities in an organization that can be implemented in different ways from one entity correlated with specific conditions. It is a flexible tool that can be implemented in organizations of any size, sector or area of activity.

EMS is “that aspect of an organization’s overall management structure that addresses the immediate and long-term impact of its products, services, and processes on the environment” [Hemenway, 1995]. An environment management system has as main objective to help a company with:

- identifying and controlling the environmental aspects, the impacts and the relevant risks within the organization;
- meeting the objectives and targets of the environmental policy, including the compliance with environmental legislation;

- defining a set of basic principles in order to guide future activities targeting the environmental responsibilities;
- establishing increases in the company's environmental performance, based on a cost-benefit balance;
- determining the resources necessary to achieve goals;
- defining the responsibilities, the authority and the procedures to ensure the involvement of each employee of the company in order to reduce the negative environmental impacts;
- implementing an efficient system of communication within the company and ensuring the staff training.

Environmental management systems can be designed and certified using two different standards, complementary to each other: the international standard ISO 14001 and EMAS.

The need to introduce environmental certification systems occurred in the early 90s and was inspired by the success of quality assurance systems in the 80s, which helped improve production and increase competitiveness of organizations. At European level, through the introduction of the Fifth Environmental Action Program of the European Union in the period 1993 – 2000, it were set out innovative principles able to create an impact not only on how to set the new environmental legislation, but also on the communication with the public. Of these, those that have created environmental certification schemes, respond to demands for:

- Establish non-conflict relationships with companies, asking them a voluntary behavior oriented to environmental protection;
- Activating public participation, identifying effective environment training and information tools.

In the first case, it was intended to create conditions for enterprises to strengthen their competitiveness in the market, not only by offering products at low cost, but also technologies, production processes and products compatible with environmental protection. In the second case it was intended to promote and develop the society involvement in decision-making on environmental protection and public health, increasing awareness of the social partners on the role and contribution they can give to positively influence sustainable development.

These principles have resulted in two systems of environmental certification: EMAS and Ecolabel governed by EC Regulations. Both regulations (recently modified as part of measures for sustainable production and consumption, adopted at Community level) and have set the objective of promoting economic development in harmony with the environment, for this purpose, aiming to:

- influence the direct liability of producers goods and services, as protagonists of environmental conditions improvement;
- establish of a systematic informing process of the stakeholders (government, citizens, consumers, NGOs, etc. ) regarding the achieved improvements or the improvements under the implementation;
- introduce elements of vision for organizations with exemplary environmental practices.

The first five years of implementing the EMAS and Ecolabel Regulations in Europe demonstrated their strong value as a means of prevention, environmental improvement and communication, so that the EU's Sixth Action Program (2001-2006) invited the Member States to develop strategies for integrating voluntary instruments available (EMAS, ECOLABEL, ISO 14001 etc) with new tools such as:

- Green public procurements, for the spreading of the "green" procurement policy;
- Environmental labeling to improve environmental information between companies and to consumers;
- Lifecycle assessment studies as a systematic basis for knowing the environmental impact of products and services throughout their lifecycle.

In 2013 the EU has adopted the 7th Environment Action Programme which will guide EU policy action on environment and climate for the next seven years. 7th Environment Action Programme has set the following priority objectives [EU, 2013]:

- to protect, conserve and enhance the Union's natural capital;to turn the Union into a resource-efficient, green and competitive low-carbon economy;
- to safeguard the Union's citizens from environment-related pressures and risks to health and well-being;
- to maximize the benefits of Union environment legislation by improving implementation;
- to improve the knowledge and evidence base for Union environment policy;
- to secure investment for environment and climate policy and address environmental externalities;
- to improve environmental integration and policy coherence;
- to enhance the sustainability of the Union's cities;to increase the Union's effectiveness in addressing international environmental and climate-related challenges

Beside the EMAS, other widespread environmental standard is ISO 14001, officially published in September 1996 [Alberti et al., 2000], which provides guidance for the development of performance on the systematization of environmental management.

ISO 14001 is based on three principles: pollution prevention, continuous improvement and voluntary [Bansal & Hunter, 2003]. ISO 14001 aims to create sustainable improvements in participating companies' practices by implementing and integrating appropriate environmental management tools. After publication, several empirical studies have indicated that the implementation of a system of environmental management helps companies to reduce inputs, use of raw materials and operational security [Chavan, 2005] which resulting in operational benefits, substantial managerial and competitive adopter organizations [Corbett and Klassen, 2006].

### **3. Benefits of the EMS implementing**

By implementing an EMS the organizations can achieve a perfect monitoring of environmental legislation, with greater legal certainty and providing evidence of compliance with laws and regulations in force. The most important potential benefits of an environmental management system are:

- demonstrating to customers the appropriate care, diligence and accountability in the management of environmental issues;
- saving raw materials and energy;
- improving the organization image through the environmental certification image. Environmental certification image effect that does not necessarily translate into an increase in sales, but contribute to improving the image. One study regarding ISO 14000 points out that 96% of the certified companies were heavily promoted outside after certification;
- obtaining facilities from banks in terms of access to credit. In this regard, many banks launched banking products dedicated support of environmental certification, which helps companies reduce the risks and challenges of a increasingly competitive market, which rewards companies that are able to anticipate future requirements and convert risks opportunities.
- providing continuous monitoring of compliance with legislation and this can lead to a facilitation of relations with public authorities, materialized in the possibility of granting incentives, simplifying the licensing process, simplification of inspections and self-certification forms of recognition.
- granting additional scores within some European and regional funding schemes for organizations with an environmental management system. •
- providing incentives for insurance premiums. In fact, insurance companies assess their client's positive certification, ensuring greater

availability of useful information for an accurate determination of conditions for the conclusion policies, and guarantee the continuous monitoring of the environmental impact of activities

Regarding the internal benefits it can be distinguished benefits related by optimizing of the use of resources and benefits viewed as costs or avoided costs, if it is adopted an eco-compatible behavior, in particular: – costs for non-compliance with regulations, fines, penalties, insurance costs, legal costs and legal procedures:

- costs associated with accidental events : damage restoration , transfers;
- costs associated with relations with suppliers whose services management causes problems (waste , water , etc.).
- costs associated with the lack of damages preventing to persons outside the city (damages for bodily injury or property damage , insurance costs ).

A study conducted by DEFRA, UK Environment Ministry, in 2011, showed the following 10 basic benefits of the proper implementation of environmental management systems and periodic evaluation of performance in environmental management:

- 1) 53% of companies made a clear link between environmental performances and increase their sales, some reporting increases of up to 15% in sales as a direct consequence of better environmental performance;
- 2) 42% of companies have benefited from better positioning in the market as a direct result of improved environmental performance;
- 3) 51% of companies recorded substantial savings in resource use, energy consumption and water, in direct correlation with the adoption of voluntary environmental management initiatives;
- 4) 65% of companies reported a better image in relationship with customers and the general public;
- 5) 75% of companies reported that a better environmental performance have helped them in attracting new customers or to qualify for new business opportunities;
- 6) 65% of companies reported direct financial savings from the first year, following the establishment of appropriate targets and indicators relevant environmental performance;
- 7) 55% of companies have improved their situation towards compliance with environmental legislation, and 84% have substantially reduced the number of legal situations of non-compliance;
- 8) 98% of companies have substantially improved ability to prevent and tackle emergencies with environmental impact;
- 9) 35% of companies have been helped by the voluntary initiatives to improve environmental performance in pass more easily through the economic crisis;

10) 79% of companies reported a substantial reduction in footprint emissions of greenhouse gases since the first year they have set a target in this regard, and the average reduction in the second year was 59% higher than in the first year.

#### **4. Conclusions**

There are many reasons why an organization should take a strategic approach to improving its environmental performance. By implementing environmental management systems the organizations can obtain a series of benefits, which has an direct effect upon the sustainable development of the company: increase leadership involvement and engagement of employees, improve company reputation and the confidence of stakeholders through strategic communication, achieve strategic business aims by incorporating environmental issues into business management, provide a competitive and financial advantage through improved efficiencies and reduced costs, encourage better environmental performance of suppliers by integrating them into the organization's business systems.

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