

## MECHANISMS AND TOOLS USED IN ENVIRONMENT MANAGEMENT

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### **Abstract**

*The environment is that essential segment of a development process and, comprises the connections and interdependencies existant between people and natural resources. Therefore, the changes the environment is going through are not generated only by the natural events, but also by the practical manifestation of some development models, practices and life styles. Reciprocally, any manifestation of the physical environment has important socioeconomical consequences which influence the quality of life. The environment pollution effects, expressed by the occurrence of some serious health problems and by ecological equilibrium disturbance, recognized at international level (Conference from Stockholm) led to the occurrence of an ample "movement for environment protection" both in developed countries and in developing countries. This reaction included the active participation of the public and private sector. The main characteristic of this movement for environment protection was that it generated a new perspective for the evolution of the attitudes and knowledge in this field. Within an evolutive process at global scale, marked by the Conferences held in Rio de Janeiro and Johannesburg, a series of essential aspects for the structuring and guidance of the environment management tools were acknowledged.*

Keywords: management, environment, environment policies

### **1. INTRODUCTION**

There are numerous tools of Environment Management Systems which can be applied function on the size and the field of activity of the organization/enterprise and function on the danger represented by the activity developed by the respective enterprise to the environment. These vary from internal, unique methods, or prizes granted to the eco-aware enterprises/organizations, to the introduction of some management systems that aims to the excellency in the field of environment protection. These methods are not appointed especially to the international companies or to large firms, they can be applied in Small and Medium-sized Enterprises, public institutions, services providers. EMAS, ISO, 141001 or the environment performance indicator ISO 14031 are methods that allow the integration of the environment protection in the everyday life of an enterprise/organization.

Many of the effects generated by the human activities on the environment have a global extension; others are limited to specific geographic areas, needing solutions and measures at all levels. An outstanding example

is provided by the chlorfluorcarbides consumption, which are located mainly in developed countries, and resulting in depletion of the ozone layer, layer that protects the inhabitants and planet ecosystems from ultraviolet solar radiations.

The environment issues have become increasingly important especially because of their economical and social implications. The most relevant example is that of the greenhouse gases emission. These emissions generate climate changes; climate changes have a harmful influence on the planet ecosystems and antropic systems. By increasing temperatures, some areas can be put in the position of confronting with a water shortage, increasing spoil ersion, floods, and as a consequence a shortage in food production. At their turn, these effects can result in hunger occurrence, social riots, and expensive rehaibilitation programs of the environment especially in developing countries.

The researches provided new proofs of the crises seriosity the environment confronts with. For example, eliminating some natural habitats such as wet areas and rainforests deforestation

lead to the fauna and flora species extinction and to the carbon receptors eliminating.

The key of the international measures success for environment protection consists in a larger participation of the local communities in cooperation on technical problems and in functional application of some financing mechanisms able to support the developing countries. Suchlike, the success key of the local level measures depends on the larger inhabitants' participation, especially on the nongovernmental organization involvement to support the local initiatives in environment protection. Also, the international debates on the environment led to a general agreement settlement on the following major elements:

- ✓ The environment is a common concern of the industrialized and developing countries;
- ✓ The rich countries problems differ from the problems of the developing ones;
- ✓ The answer to the global environment problems can be found only through international cooperation and through integration of the economico-social development and environment protection, in accordance with the approach based on sustainable development.

The environment policies reunite the goals and common action principles in the field of environment, of a community or an organization at international, regional or local level, which lock on an assumed engagement in order to protect, preserve and continuous ameliorate the environment and to conform the community or organization requests to the relevant environment reglementations.

## 2. MATERIAL AND METHOD

### 1. The environment politics provide the conceptual frame for the environment management

The evolution of the measures for environment protection in the past 40 years was based on the pollution control philosophy (C.J.Barrow, 2006) [2]. It was created a large gamut of pollution control technologies and, at present, it

is technically possible to reduce or to eliminate totally the evacuation of important pollutants. However, in the developed countries, this approach leads to benefits in decrease on expenses unit, and in many of the developing countries there are not the minimum necessary conditions to implement the measures for pollution control. Also, in some certain countries there is the fear that the measures for pollution control represent a too high expense which is going to turn the resources aside a more productive use. Therefore, the actual orientation has changed to the environment management that uses a large combination of coercitive and stimulative measures for the achievement of the sustainable improvement.

This assumes:

- Environment politics definition in the terms of the followed objectives;
- Consideration and explicite specification of the priorities;
- Broader decentralization, especially with regard to the policies implementation ;
- Promotion of better performances and managerial methods instead of the simple measures of emission control ;
- Adopting some efficient strategies regarding the costs instead of some specific pollution control measures

Environment management represents the method through which the human activities affecting the environment are organized in order to maximize the social well-being and to prevent and decrease the possible effects generated upon the environment, by treating the generating causes (Allen, W.J. & Kilvington.M.J., 1999) [1]. The environment problems cannot be seen isolated, they have to be approached together with the developing ones, taking into consideration the essential importance of an adequate equilibrium between the economical development, demographic increase, rational use of natural resources, environment protection and preservation.

The society has identified valid reasons to answer to the question “why does the

environment have to be protected”? The concept of sustainable development can answer to the question “what should be done to protect the environment?”. The environment management consists in a set of practical tools which try to offer an answer to the question: “how is this objective going to be achieved?”

The natural resources represent those regenerable elements of the ecosphere, such as water and aquatic and terrestrial biomass. The non-renewable resources are in general the lands, minerals, metals and fossil combustible semirenewable elements are the soils quality and the assimilative capacity of the environment, public participation, poverty etc that can be lock on through some action plans or strategies adequate for the environment.

## **2. Elaborating some policies cannot be done without a considered value**

The value system that is at the basis of decisions has a great influence on the way decisions are made, on the factors taken into consideration and on the way the political alternatives are evaluated.

## **3. The individuals involved in formulating the politics in the field of environment must be sure that the personal values do not interfere with the national objectives**

Understanding the connections between the environment problems represent the essential element used to formulate a sustainable policy. Under economical pressure, many policies drawn up to increase production lead to inefficient use of the resources with negative effects on long term, both on the environment and on the economic development. The most common classification of the environment management tools is the one that divide the tools into:

- Command and control measures, including laws, authorization systems, recording and certification systems etc through which activities protecting the environment are reglemented ;
- Economical stimulents that look to correct the specific deficiencies of the market system.

The environment protection approaching methods in the enterprise from Damdovita

County can be classified in two main categories:

✓ “reactive” approach – seeks solutions to transform the pollution resulted from the production process in a less dangerous type. This sort of approach leads to the end-of-pipe technology application, which usually clogs the production process, increases the energy and materials consumption and also the risks. Basically, the quantity of polluting substances is not reduced (sometimes it is increased), but only transformed.

✓ “preventive” approach on the other hand, changes the production process so that the pollution to be lower from the very beginning. This strategy ( a cleaner production) researches the pollution source and reason and it is involved in the source.

The practical measures in case of preventive strategy:

- Changes done on the product (homogeneous raw materials)
- More involvement (employees motivation, working process organizing)
- Auxiliaries (natural materials, nontoxic chemicals)
- Technological changes (reduced material and energy consumption technologies)
- Internal reuse
- Recycling

## **Eco-design**

The reduction of the effects on the environment of the products during all life phases: raw material exploiting, distribution, exploitation, scrapping is tried through eco-design.

The main aspects of the eco-design are:

1. prolonging the product exploiting time;
2. a better valorification of the materials;
3. waste products emission reduction

The conscious eco-management is a process that involves both experimentation and education and informing.

To reach an efficient environment system, different phases must be run over, namely:

- planning = plan = P
- environment policies definition;

- action plan and the introduction of the Environment Management System;
- identification of the most important environment effects;
- legal requirements;
- defining the targets.

### 3. RESULTS AND DISCUSSIONS

Considering all the previously mentioned ideas and information, it is important for any enterprise/organization to define an environment policy; environmental policy is a public document, drawn up by an enterprise/organization, which describes in details the measures to be made with the view to environment protection. This engagement emitted by the organization managing staff, must be based on the following ideas:

- Examining and supervising the activity of your enterprise and analysis of critical points for environment.
  - Taking measures for decreasing, prevention and eliminating the environment pollution.
  - The preliminary evaluation of impact which the activities and new products will have on the environment.
  - Prediction or decreasing risks of polluting substances emitting and wasting the energy in case of accident.
  - Periodical comparison of the environment action program with its policy.
  - Systematic achievement of the environment achievement
  - Collaboration with the authorities with the view to minimize the environment risks and accidents by the help of some proper techniques
  - The major impact of your services, products and activities upon the environment
  - The legal requirements and provisions in the field;
  - All practices and procedures existent in the field of environment management

### 4. CONCLUSIONS

An environment management system can be very useful in respecting the specific legislation; however, the changes that occur must be pursued. In case of not respecting the laws, correction actions must be done. It is not easy to be up to date with all the laws referring to the organization activity, but at present there are numerous possibilities to get them.

The environment objectives come out of the environment policy. The environment activity plan is a well-defined method making possible the objectives reach through concrete data and a strict timing. The objectives and the Environment Management System must be written down, updated and communicated to the interested ones, regularly. They must reflect the environment policy of the enterprise/organization, with a special focus on pollution. The objectives can include engagements of the kind:

- ✓ reducing waste products and resources use;
- ✓ reducing or eliminating polluting emissions;
- ✓ reducing the product with the view to minimizing the impact upon the environment in the production process during the exploitation and elimination phases.

Promoting the environment and inciting the community members' incitement.

The preliminary analysis is compulsory; it can constitute the main support of the environment system. It can also be the basis of the environment program and of the environment objectives definition.

### 5. REFERENCES

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