

Economic Efficiency As a Result of Environmental Management System

UROŠ OGRIN¹, LILIJANA EISNER,² DAVORIN KRALJ²

GRADIS skupina G, Šmartinska 134, Ljubljana, SLOVENIJA¹,
 ART-K, BusinessConsulting, Na gricu 47, 2000 Maribor, SLOVENIA GRADIS skupina G, Šmartinska
 134, Ljubljana, SLOVENIJA²

Abstract:

The article focuses on the issue of economic efficiency as a result of environmental management. Resource management should include activities for determining the needs for, and sources of, financial resources. The control of financial resources should include activities for comparing actual usage plans, and taking necessary action. Management should plan, make available and control the environmental and the financial resources necessary to implement and maintain an effective and efficient environmental management system and to achieve the organization's objectives. Economic efficiency as a result of EMS is becoming an important goal of entrepreneurial activity. Consequently, following a holistic approach to competitiveness, environment protection is becoming an important tool in improving organization efficiency and increasing competitive power on the global economy market.

Key words: business, economic, efficiency, environment, ethics, management, social responsibility

1 Introduction

The role and significance of environment ethics and social responsibility is becoming ever more important in the global competitive market. It is about a new approach in managing the organisation and environment resource planning in society. Considering long-term natural resources conservation and protection of the environment, ethics shall be essential. In a world where markets, products, technologies, competitors, regulations and even societies change rapidly, continuous innovation and have become important sources of sustainable competitive advantage [4].

Because of this is environmental management system first step to environment protection. The successful development and implementation of processes innovation in an organizational system can produce a significant saving in the amount of business and environment resources and therefore a smaller

environmental impact. It is not just about environment resource consumption, production units, but also about the improvement of economical efficiency and thereby the increased competitive capacity of organizational systems. Improving the effectiveness and efficiency of the environmental management system can influence positively the financial results of the organization, for example:

- internally, by reducing process and product failures, energy consumption, or waste in material and time, or
- externally, by reducing product failures, costs of compensation under guarantees and warranties, and costs of lost customers and markets. [18].

At the same time, the aim is to reduce harmful substances into the environment, the enhancement of relations between organizational systems and social responsibility and thereby the associated standing in

the wider social environment [9]. For this reason the care for processes innovation, the change of relation to the environment also the consequence of knowledge about the meaning of co dependence and creative collaboration to achieve the safe, environment friendly operation. The environment management is so the consequence of innovation's administration and processes in sense of consideration of dialectic system of viewpoint[12].

2 Ethics in management

Ethics are principles of conduct used to govern the decision making and behaviour of an individual or group of individuals. Because management is concerned with making decisions within an organization, the ethics of the individual or group of individuals making these decisions have significant implications for the organization's stakeholders, its employees, customers, shareholders, suppliers, government, and the public at large [13].

Special are ethics principles important in environmental management system. Organizations of all kinds are increasingly concerned with achieving and demonstrating sound environmental performance by controlling the impacts of their activities, products and services on the environment, consistent with their environmental policy and objectives.. They do so in the context of increasingly stringent legislation, the development of economic policies and other measures that foster environmental protection, and increased concern expressed by interested parties about environmental matters and sustainable development. [14] [15]. Ethics principles covering environmental management are intended to provide organizations with the elements of the following philosophical approaches: justice, individual rights and utilitarianism. The principle of justice involves making decisions based on truth, a lack of bias, and consistency. The principle of individual rights involves making decisions based on protecting human dignity. Finally, the principle of utilitarianism involves making decisions directed toward promoting the greatest good for the greatest number of people [13].

The role of ethics in management decisions is difficult, partly because it is such an emotionally charged issue and partly because of the many and varied ethical problems faced by managers.

Codes of ethics should be formal, written, and communicated to all employees. Although codes of ethics differ in content from one industry to another and from one company to another, a general list of topics covered includes:

- Fundamental honesty and adherence to the law,
- Product safety and quality,
- Health and safety in the workplace,
- Conflicts of interest,
- Employment practices,
- Fairness in selling/marketing practices,
- Financial reporting,
- Supplier relationships,
- Pricing, billing, and contracting,
- Trading in securities/using inside information,
- Payments to obtain business/Foreign Corrupt Practices Act,
- Acquiring and using information about others,
- Security,
- Political activities,
- Protection of the environment,
- Intellectual property/proprietary information [13].

During the past 20 years, environmental protection has become an important social and economic issue. This concern has reflected itself in many designed to improve the environment. A significant number of those laws directly affect business. [13]. European Union Environmental Policy followed these steps:

1982-1986	Third Community Environmental Action Programme. Emphasis on integration of environmental issues into other areas e.a. transport, energy and agriculture.
1987	Single European Act (SEA) amends the EC Treaty and states the objective of achieving a "single market" by 1992. SEA explicitly mandates EC environmental action and the need to reconcile trade and environment. SEA also establishes "subsidiarity principle" i.e. actions should take place at the lowest regulatory level.
1987-1992	Fourth Community Environmental Action Programme with focus on air pollution, water quality, chemicals and nuclear safety.
1990	Maastricht Treaty on European Union adopted . EC changed to EU and Community authority in environmental policymaking is further expanded. Member States may be granted temporary derogations from EC environmental rules and/or financial assistance in implementing them.
1991-2000	Fifth Community Environmental Action Programme adopted "Towards

	Sustainability". Close similarities to Agenda 21 developed at the 1992 Earth Summit. Focus on integrating environment into other policy areas, e.a. industry, energy, transport, agriculture and tourism. Actions target all environmental media (air, water, waste). Economic and fiscal instruments also proposed.
1993	European Environmental Agency (EEA) established.
1997	Treaty of Amsterdam – amends Maastricht Treaty and the Founding Treaties. Further expands environmental protection and sustainable development components.
2000-2001	Sixth Community Environmental Action Programme under development.

Table 1: EC Environmental Policy [1]

The environment protection and permanent development is so a basic component of the basic politics and it is confirmed by the highest administration agency. It is about the important decisions about the basic goals of operating and development. It is about the acceptance of basic principles values and rules. More than constraint of the state, the system is important, that is founded on the volunteer offer and creative cooperation. In the contemporary circumstances the creating of teams is getting most important for the creative cooperation, because they search the opportunities, solve the problems and in the end they take decisions [1]. Organizational systems or models need lean organization. Lean organization is first step of processes innovation and environmental protection [7]. Possible measures, which the lean organization can encompass, include the fields of organizational measures, reconstruction of existing processes and products, the use of modern equipment and techniques as well as the introduction of new technologies. The dimensions of business excellence, especially production excellence, of production processes renovation, a company's or other organization's capacity to innovated as well as the values, knowledge, skills and feelings of production processes innovation agents, are added to the basic model [2]. The renovation of production processes results from lean organization, which is based on up-to-date technological and organizational starting points. Market need new consumers. Consumers need new products and services. Only innovative lean flexible organization could be the answer. Lean organization is market-driven; a buyer's market and innovation

society prevail and acts as change generators in a company or other organization[17]. Figure 1 presents an approach to environmental management system integrated with other management requirements.

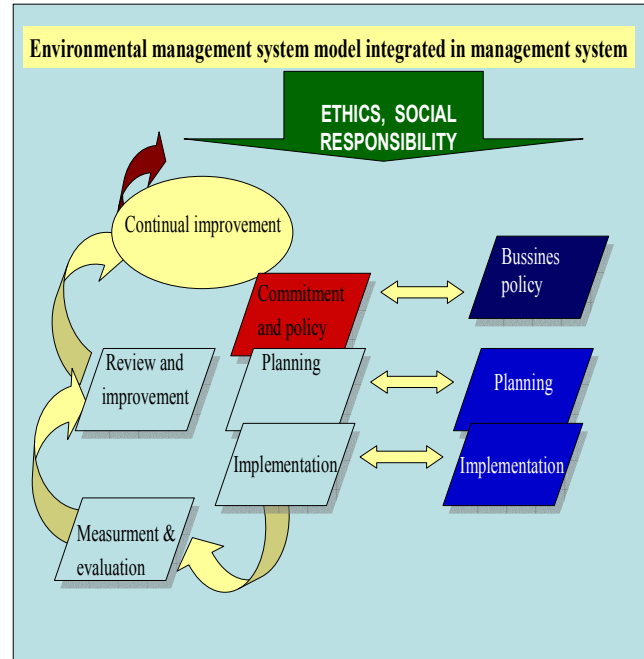


Figure 1: Ethics and Social Responsibility integrated with other management requirements [11].

3 Economic Efficiency As a Result Of Environmental Indicators

The modern concept of working out environmental protection policies is based upon the notion of sustainable development. The latter has been gaining increasing importance both in the international community and the Member States of the European Union as a form of development bringing prosperity to future generations. It fosters the prevention and mitigation of pollution at source and emphasises sound use of natural resources as well as preservation of biodiversity. In the environmental sphere, sustainable development is understood as an interdependent relationship between the economy, infrastructure, settlement and the way of living, taking into consideration the bearing capacity of the environment and natural resources [5].

For Slovenia monitoring of the state of the environment and reporting to both domestic and international public as well as respective institutions

represents a crucial novelty arising from the package of the European environmental legislation. The reporting obligation is an international exchange of environmental data and information supporting the data collection and guaranteeing access which results in the strengthening of political as well as social culture in relation to the environment. The system for reporting environmental data, monitoring the state of the environment and informing the public about environmental issues is being established at the Environmental Agency of the Republic of Slovenia (EARS), an authority within the Ministry of the Environment and Spatial Planning (MESP). [5]. Environmental indicators are among the most applicable tools used for the purposes of environmental reporting. Based upon numerical data demonstrating the status, specific characteristic or development of a certain phenomenon, they can warn of specific issues. They help us measure and determine the quantity of diverse data constituting a complete data collection. The indicators are, in fact, data that have been collected and presented in an agreed manner, with the purpose of establishing the connection between the existent data and the targets of the environmental policy. Appropriately selected indicators that are based upon an adequately extended time series of data can provide a demonstration of key trends. [5].

The European Environment Agency further divided it into a five-partite, so-called DPSIR Assessment Framework including the following set of concepts: Driving forces – Pressures – State – Impact – Responses, where each individual set conveys its own meaning:

- **Driving forces** are a social and economic factors and activities that cause either the increase or mitigation of pressures on the environment. They may, for example, include the scope of economic, transport or tourist operations.
- **Pressures** are represented by direct anthropogenic pressures and impacts on the environment, such as pollutant emissions or the consumption of natural resources.
- **State** relates to the current state and trends of the environment that determine the level of air, water body and soil pollution, the biodiversity of species within individual geographical regions, the availability of natural resources, such as timber and fresh water.

- **Impacts** are the effects that the environmental changes have on human and non-human health status.
- **Responses** are society's reactions to environmental issues. They may include specific State measures, such as taxes on the consumption of natural resources. Decisions made by companies and individuals, such as corporate investments into pollution control or purchase of recycled goods by households are also important [5].

Goal: The Resolution on the National Energy Programme adopted by the Government of the Republic of Slovenia in 2003 provides for a steady growth of final energy consumption in the period from 2000 to 2010 with an average annual growth rate of 1.9 % (2.2 % in industry, 1.3 % in transport and 2.1 % in other consumption). In 2010, the final energy consumption is expected to amount to 217.4 PJ (65,1 PJ in industry, 64,4 in transport and 88,0 PJ in other consumption).

Final energy consumption by sector of use in Slovenia

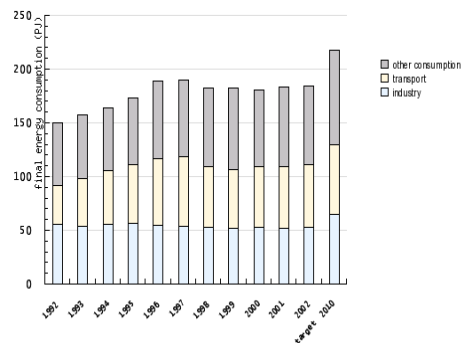


Figure 2: Final energy consumption by sector of use In Slovenia [5]

Improving the effectiveness and efficiency of the environmental management system can influence positively the financial results of the organization.

5 Conclusion

Quality and development of Environmental Management System is constantly improving. The use of incremental and breakthrough management techniques, integrated with ethics and social responsibility, to constantly improve processes, products, or services provided to internal and external customer and thus achieve higher levels of customer satisfaction. It is not just about customer satisfaction, but also about the improvement of economical efficiency and thereby the increased competitive capacity of organizational systems.

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