

## Chapter 6

# Green Environment and Management: Environmental Management System (EMS)

**Fatma Ince**  
*Mersin University, Turkey*

### ABSTRACT

*This chapter on environmental management system (EMS) addresses the relationship between organizational factors and environmental goals. Because the increasing awareness about environment affects the related groups and forces the firms have an environmental approach. The global competition, regulations and other pressures can change the tools of the sustainability. So, the firms start to consider an environmental management system as an innovative instrument as well as an adaptation strategy. Because, environmental standards and policies give the firm an opportunity to improve the business performance. From this viewpoint, this chapter provides an overview of the context, organizational drivers and implementation of the EMS.*

### INTRODUCTION

Firms start to embrace environmental practices as part of their competitive strategy. The pressure of the laws, customers, competitors, investors and employees accelerate the trend toward proactive environmental management systems. EMS is not an obligation; it helps the firm provide integrated system which includes economic, social and environmental considerations in all aspects of sustainability. Because, the firms are directly and indirectly in charge of the implementation of environmental systems. In this line, the firms can improve their capability to gain environmental goals and performance. Because of this, in this chapter, such dimensions of EMS are defined first and their relationships with organizational dimensions are explained afterwards.

For that purpose, the chapter is organized as three parts. In the first section of the chapter a review of literature on the Environmental Management System, its importance, its evolution, its scope and approaches are given. And the second part of the chapter is about organizational drivers of the EMS

DOI: 10.4018/978-1-5225-3537-9.ch006

and includes the relationship between business strategies, competitiveness, innovation, sustainable development, business performance and EMS. The remainder and also the last part of the chapter give information about the implementation of the EMS and the standards of the ISO 14001 and EMAS which are used for the sustainability environmental performance.

## **WHAT IS AN ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)?**

Environment face varied issues such as global warming, nuclear hazards, desertification, genetically modified organisms, deforestation. To face problems head on and to the preservation of the resources for the benefit of the future generations, a number of approaches emerge, such as maintaining ecosystem services, biodiversity conservation, sustainable livelihoods, human well-being, ecosystem health, integrity and sustainability (Laberge, 2007). Moreover, the interconnectedness of ecological systems and human leads to environment management, because of the growing awareness of nature. The economy and human health can be affected by pollution, deforestation, flooding and wetland loss. So these cascading effects need to new approach about the environment and human activities.

Various perspectives are available about environmental management because of the concept of subject. Saving the nature is one of the most narrow-minded viewpoints, because environmental management includes the effects and impacts of various interactions or activities that human societies have on the environment. The main point of the term is about being beneficial to the whole humanity (Sulphey and Safeer, 2015). Luke (2007) emphasizes the firms should define the managerial goals with considering the relations ecosystem and goods or services. So, EM should plan and operate with the protection and conservation of the politic and economic interest that surround the natural resources. Because modern resource management approach starts to see the nature as an economic and political asset.

More comprehensive and systematic approaches also emerge because of the rapid growth in industrial and urban development. The growing needs of population like agriculture, recreation and travel, protected areas, water resources, costs and other lands intense pressure on nature. From this point of view, the systems about human and environment became a necessity and need to planning and managing the relationship between human and nature. But this management style should include more comprehensive, participatory and integrated approach by the help of the multi-disciplinary applications.

The researches and opinions about using and conservation of natural resources, protecting of habitats, control of hazards, measuring the field of applied ecology are subjects of the environmental management. This management style is not only about industries or companies, but also about individuals that undertake to regulate and protect the health of the nature. Because the main idea behind the environmental management is to control human impact on the natural world and interaction with the nature in order to preserve the resources. This perspective comes from the aim of the improvement of human welfare for the present and future generations in the long run.

Some serious issues about nature, such as wasting resources, the sustainable development of raw materials and emission affect the business to change equipment and procedures to meet imposed standards. And consequently, the business communities try to new proactive methods to reduce the risk of noncompliance and improve the health or safety practices of society and workers. An environmental management system which is a set of processes or practices that enable the reducing damages and increasing the efficiency is one of the adaptation strategies of the business.

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/green-environment-and-management/192831](http://www.igi-global.com/chapter/green-environment-and-management/192831)

## Related Content

---

### Decision Making Approach to Fuzzy Linear Programming (FLP) Problems with Post Optimal Analysis

Monalisha Pattnaik (2015). *International Journal of Operations Research and Information Systems* (pp. 75-90).

[www.irma-international.org/article/decision-making-approach-to-fuzzy-linear-programming-flp-problems-with-post-optimal-analysis/133606](http://www.irma-international.org/article/decision-making-approach-to-fuzzy-linear-programming-flp-problems-with-post-optimal-analysis/133606)

### Effective Use of Website in Large-Scale Event Marketing: 25th East Mediterranean International Tourism and Travel (EMITT) Fair

Seda Derinalp Canakci (2021). *Impact of ICTs on Event Management and Marketing* (pp. 282-298).

[www.irma-international.org/chapter/effective-use-of-website-in-large-scale-event-marketing/267514](http://www.irma-international.org/chapter/effective-use-of-website-in-large-scale-event-marketing/267514)

### Dynamic Pricing and Ordering Policies With Quality and Physical Deterioration Under Quadratic Demand

Monika Naikand Nita H. Shah (2018). *Handbook of Research on Promoting Business Process Improvement Through Inventory Control Techniques* (pp. 107-122).

[www.irma-international.org/chapter/dynamic-pricing-and-ordering-policies-with-quality-and-physical-deterioration-under-quadratic-demand/198687](http://www.irma-international.org/chapter/dynamic-pricing-and-ordering-policies-with-quality-and-physical-deterioration-under-quadratic-demand/198687)

### Traffic Signal Control for a Single Intersection-Based Intelligent Transportation System

Nouha Rida, Mohammed Ouadoudand Abderrahim Hasbi (2020). *Digital Transformation and Innovative Services for Business and Learning* (pp. 159-180).

[www.irma-international.org/chapter/traffic-signal-control-for-a-single-intersection-based-intelligent-transportation-system/255080](http://www.irma-international.org/chapter/traffic-signal-control-for-a-single-intersection-based-intelligent-transportation-system/255080)

### Blockchain Deployment in the Retail Supply Chain: Enhancing Competitive Advantage

Pankaj M. Madhani (2022). *International Journal of Applied Management Sciences and Engineering* (pp. 1-23).

[www.irma-international.org/article/blockchain-deployment-in-the-retail-supply-chain/309409](http://www.irma-international.org/article/blockchain-deployment-in-the-retail-supply-chain/309409)