

Benefits of the ISO 14000 family of International Standards

In today's global economy, organizations are increasingly called upon to demonstrate sound management of economic, social and environmental issues. Evidence suggests that a focus on this "triple bottom line" results in advantages in financing, insurance, marketing, regulatory treatment, and other areas.

An Environmental Management System (EMS) is a structured approach to addressing the environmental bottom line. **ISO 14001** is the world's most recognized EMS framework – accepted from Argentina to Zimbabwe – that helps organizations both to manage better the impact of their activities on the environment and to demonstrate sound environmental management.

Since the publication of ISO 14001, many companies have implemented the standard and, by the end of 2001, nearly 37 000 organizations in 112 countries had their EMS certified as conforming to its requirements. ISO 14001 is designed to be flexible enough to be applied to any sized organization in both the private and public sectors. The bottom line is that certification to ISO 14001 can improve environmental management and enables equal access to a growing "green" market place. ISO 14001 is also the starting point for companies that want to use other environmental management tools developed by ISO/TC 207. For example, ISO 14004 provides additional guidance and useful explanations and complements ISO 14001.

Of course, an EMS will only be of maximum benefit if it is properly implemented. Environmental audits are important tools for assessing whether an EMS is properly implemented and maintained. The new auditing standard, **ISO 19011**, is equally useful for EMS and quality management system audits. It provides guidance on principles of auditing, managing audit programmes, the conduct of audits and on the competence of auditors. ISO 19011 replaces the ISO 14010, ISO 14011 and ISO 14012 first generation of environmental auditing standards in the ISO 14000 family.

Organizations implementing ISO 14001 can expect to improve their environmental performance. **ISO 14031** provides guidance on how an organization can evaluate its environmental performance. The standard also addresses the selection of suitable performance indicators, so that performance can be assessed against criteria set by management. This sort of information can be used as a basis for internal and external reporting on environmental performance.

Communication on the environmental aspects of products and services is an important way to use market forces to influence environmental improvement. Truthful and accurate information provides the basis on which consumers can make informed purchasing decisions. The **ISO 14020** series of standards address a range of different approaches to environmental labels and declarations, including selfdeclared environmental claims, eco-labels (seals of approval) and quantified environmental information about products and services.

ISO 14001 addresses not only the environmental aspects of an organization's processes, but also those of its products and services. Therefore ISO/TC 207 developed additional tools to assist in addressing such aspects. Life Cycle Assessment (LCA) is a tool for identifying and evaluating the environmental aspects of products and services from the "cradle to the grave": from the extraction of resource inputs to the eventual disposal of the product or its waste. The ISO 14040 standards give guidelines on the principles and conduct of LCA studies that provide an organization with information on how to reduce the overall environmental impact of its products and services.

Although the ISO 14000 standards are designed to be mutually supportive, they can also be used independently of each other to achieve environmental goals.

The whole ISO 14000 family provides management tools for organizations to control their environmental aspects and to improve their environmental performance. Together, these tools can provide significant tangible economic benefits, including:

- reduced raw material/resource use;
- reduced energy consumption;
- improved process efficiency;
- reduced waste generation and disposal costs, and
- utilization of recoverable resources.

Of course, associated with each of these economic benefits are distinct environmental benefits too. This is the contribution that the ISO 14000 series makes to the environmental and economic components of sustainable development and the triple bottom line.

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is another tool; it allows environmental aspects to be taken in account in the design and development of products.