ISO 14001
the international standard for the environment

What is ISO 14001?

What impact does the delivery of our products or services have on the environment? And how can we reduce possible negative impact? More and more organizations recognize the importance of sustainable entrepreneurship. ISO 14001, the international standard for the environment, provides a framework for organizations to protect the environment and reduce environmental emissions. According to the standard, the definition of environment is the environment in which an organization operates, including air, water, soil, natural resources, flora, fauna, people and their interrelationships. Every organization has an impact on the environment and therefore the ISO 14001 standard is applicable to every organization.

Structure of the standard

ISO 14001 is, like many other ISO standards, constructed according to the High Level Structure. This makes the standard easy to combine with other ISO standards, for example ISO 9001 for quality management. The standard has 10 chapters in total. Chapters 1 to 3 contain introductory information, namely the scope, normative references and terms and definitions. Chapters 4 to 10 are based on the PDCA cycle and describe the requirements of the standard. PDCA stands for plan, do, check and act and is a model that stimulates continuous improvement. Chapter 4 of the standard relates to the context of the organization. The stakeholders and their expectations with regard to the environment are mapped out. This allows management to determine the direction for environmental policy and objectives (chapter 5: leadership). A risk analysis is then carried out (chapter 6: planning). Risks and opportunities in the field of the environment are inventoried. Measures are taken and objectives set. These measures must be implemented (chapter 7: support and chapter 8: implementation). By monitoring and measuring the processes (Chapter 9: performance evaluation) it can be determined whether improvement in the environmental policy is necessary. If necessary, corrective actions are taken (chapter 10: improvement).

Implementation of environmental management system

If an organization wants to be certified according to ISO 14001, it must implement an environmental management system that meets the requirements. The purpose of the environmental management system is to improve environmental performance, manage environmental risks and opportunities and demonstrably comply with applicable laws and regulations. The entire chain is taken into account. The advantages of an environmental management system in accordance with ISO 14001 are:

- Having and acting on the basis of an environmental policy
- Demonstrably complying with all applicable legislation and regulations in the field of sustainability
- Applying the life cycle perspective
- Gaining insight into the environmental aspects and effects of the organisation
- Continuously improving environmental performance
- Reducing the organisation’s impact on the environment
- Image improvement and strengthening of the market position

Environmental aspects and efforts

An organization must determine which environmental aspects have, or could have, an important effect on the environment. The standard makes a distinction between direct and indirect environmental aspects. The direct environmental aspects are caused by the internal organization and are often manageable. The indirect environmental aspects arise from the relationship with suppliers and/or customers, which are less easy to influence. Environmental aspects can lead to risks or opportunities. These are called the environmental effects. An example: the employees of an organization come to the office by car. Driving is then an activity of the organization. Driving a car causes CO_2 emissions. This is the environmental aspect. CO_2 emissions have a negative impact on the greenhouse effect, or the environmental effect. An organization must map and document its environmental aspects and effects.

Life cycle perspective

The environmental management system is approached from a life cycle perspective. This means that an organization not only pays attention to the environmental aspects and effects of its own activities, but is also familiar with the most important environmental aspects and effects in the chain. All phases of the life cycle of an activity, product or service are therefore taken into account. This starts with the extraction of raw materials, design, production, transport/delivery, use, and continues with end-of-life treatment until final disposal. The environmental aspects of suppliers or customers therefore also fall within the environmental management system. The environmental benefits to be achieved within the entire chain are examined.

Overview of legislation and regulations

Compliance with laws and regulations is one of the basic requirements in the ISO 14001 standard. The organization must identify and document which environmental laws regulations and other requirements apply and relate to the environmental aspects of the organization. For each requirement, the organization must determine what consequences it has for the organization and what measures and actions are required to demonstrate compliance. It is also very important that changes in legislation and regulations are kept up to date. Examples of environmental legislation and regulations and other requirements that ISO 14001 certified organizations may face are: the Activities Decree, the Environmental Management Act, the Water Act, the Building Decree and the National Waste Management Plan. Once the environmental code comes into effect, this will also have a major impact on the overview of legislation and regulations for ISO 14001 certified organizations.

Questions? Please contact your local QHSE Officer or the QHSE manager