

Redline version
compares Third edition to
Second edition



Environmental management systems — General guidelines on implementation

*Systèmes de management environnemental — Lignes directrices
générales pour la mise en application*

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- Text example 1 — indicates added text (in green)
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DISCLAIMER

This Redline version provides you with a quick and easy way to compare the main changes between this edition of the standard and its previous edition. It doesn't capture all single changes such as punctuation but highlights the modifications providing customers with the most valuable information. Therefore it is important to note that this Redline version is not the official ISO standard and that the users must consult with the clean version of the standard, which is the official standard, for implementation purposes.



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

~~International Standards are~~ The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the ~~rules given in~~ editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

~~The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.~~

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

~~ISO 14004 was prepared by~~ The committee responsible for this document is Technical Committee ISO/TC 207, *Environmental management*, Subcommittee SC 1, *Environmental management systems*.

This ~~second~~ **third** edition cancels and replaces the ~~first~~ **second** edition (ISO 14004:1996 ~~2004~~), which has been technically revised.

Introduction

Achieving a balance between the environment, society and the economy is considered essential to meet the needs of the present without compromising the ability of future generations to meet their needs. Sustainable development is a goal achieved by balancing the three pillars of sustainability: the environment, society and the economy.

As concern grows for continually improving the quality of the environment, organizations of all types and sizes are increasingly turning their attention to the environmental impacts of their activities, products and services. The environmental performance of an organization is of importance to internal and external interested parties. Organizations, whether public or private, large or small, in developed or in emerging economies, have an impact on the environment and can be affected by the environment in return. There is a growing understanding that human development and well-being are contingent on preserving and conserving our natural resources, upon which all human activity and productivity depend. Achieving sound environmental performance requires organizational commitment to a systematic approach and to continual improvement of an environmental management system (EMS).

The general purpose of this International Standard is to provide assistance to organizations that wish to implement or improve an environmental management system and thereby improve their environmental performance. This International Standard is consistent with the concept of sustainable development and compatible with diverse cultural, social and organizational frameworks and systems of management. Societal expectations are driving the need for improved management of the resources necessary to support human development, through greater efficiency, transparency and accountability for all organizations. There are growing pressures on the environment, from climate change, over-consumption of resources and the challenges created by degradation of ecosystems and the loss of biodiversity.

This International Standard can be used by organizations of all types, sizes and levels of maturity, and in all sectors and geographic locations. The special needs of small and medium sized enterprises (SMEs) are incorporated, and this International Standard accommodates their needs and promotes their use of an environmental management system.

This International Standard is part of the series of environmental management standards established by ISO/TC 207. In this series, only ISO 14001 contains requirements that may be objectively audited for certification/registration purposes or for self-declaration purposes. This International Standard includes examples, descriptions and options that aid both in the implementation of an environmental management system and in strengthening its relation to the overall management of an organization. While the guidelines in this International Standard are consistent with the ISO 14001 environmental management system model, they are not intended to provide interpretations of the requirements of ISO 14001. For ease of use, the subclauses of Clause 4 of ISO 14001 have the same numbering as in ISO 14004. However, the latter has extra subclauses (e.g. 4.3.1.1 or 4.3.3.3), where detailed or additional guidance for an effective environmental management system implementation is considered useful. Apart from this International Standard and ISO 14001, there are numerous other environmental management standards in the series of International Standards established by ISO/TC 207. A reference to and description of these International Standards can be found in the ISO publication *The ISO 14000 Family of International Standards*.

This International Standard describes the elements of an environmental management system and provides organizations with guidance on how to establish, implement, maintain or improve an environmental management system. Such a system can substantially enhance an organization's ability to anticipate, identify and manage its interactions with the environment, meet its environmental objectives and ensure ongoing compliance with applicable legal requirements and with other requirements to which the organization subscribes.

Examples and approaches are presented throughout. The aim of this International Standard for illustrative purposes. They are not intended to represent the only possibilities, nor are they necessarily suitable for every organization. In designing and implementing or improving an environmental management system, organizations should select approaches that are appropriate to their own circumstances. Environmental management is an integral part of an organization's overall management

system. The design of an is to provide organizations with guidance for a common framework, in order to establish, implement, maintain and continually improve a system to support better environmental management. This environmental management framework should contribute to the long-term success of the organization and to the overall goal of sustainable development. The framework of a robust, credible and reliable environmental management system is an ongoing and interactive process. The structure, responsibilities, practices, procedures, processes and resources for implementing environmental policies, objectives and targets can be coordinated with existing efforts in other areas (e.g. shown in Figure 1. operations, finance, quality, occupational health and safety). It includes:

For ease of reading and understanding this International Standard, practical help and general guidance have been separated out and are shown as boxed text.

Key tasks for managers establishing, implementing, maintaining or improving an environmental management system include the need to

- understanding the context in which the organization operates;
- recognize that environmental management is among the highest organizational priorities, determining and understanding the relevant needs and expectations of interested parties, as they relate to the environmental management system of the organization;
- establish and maintain communication and constructive relations with internal and external interested parties, establishing and implementing an environmental policy and environmental objectives;
- top management taking a leading role in improving environmental performance;
- identify the environmental identifying aspects of the organization's organization's activities, products and services; that can result in significant environmental impacts;
- identify the legal requirements and other requirements to which the organization subscribes, that relate to the organization's environmental aspects;
- ensure the commitment of management and all persons working for or on behalf of the organization to the protection of the environment, with clear assignment of accountability and responsibility; identifying the environmental conditions, including events, that can affect the organization;
- encourage environmental planning throughout the product or service life cycle;
- establish a process for achieving environmental objectives and targets;
- provide appropriate and sufficient resources, including training, to comply with applicable legal requirements and with other requirements to which the organization subscribes, and to achieve environmental objectives and targets on an ongoing basis; considering the organization's risks and opportunities that need to be addressed in relation to its:
 - environmental aspects;
 - compliance obligations;
 - other issues (see 4.1) and requirements (see 4.2);
- evaluate environmental performance against the organization's environmental policy, objectives and targets and seek improvement where appropriate; increasing awareness of the organization's interaction with the environment;
- establish a management process to audit and review the environmental management system and to identify opportunities for improvement of the system and resulting environmental performance; and establishing operational controls, as appropriate, to manage the organization's significant environmental aspects and compliance obligations, and risks and opportunities that need to be addressed;

- encourage contractors and suppliers to establish an environmental management system, evaluating environmental performance and taking actions, as necessary, for its improvement.

Organizations may use this International Standard, or related ISO documents, in various ways, including as guidance to establish, implement, maintain or improve its environmental management system, knowing that this International Standard is not intended for self-declaration or other conformity assessment purposes, and in support of the implementation or improvement of its environmental management system.

The choice will depend on factors such as

- an organization's goals,
- the maturity of an organization's management systems (i.e. whether the organization has a management system in place that is capable of supporting the inclusion of environmental concerns),
- possible advantages and disadvantages, as determined by such factors as an organization's current and desired market position, reputation, external relations and the views of interested parties, and
- the size of an organization.

An effective environmental management system helps an organization to avoid, reduce or control the adverse environmental impacts of its activities, products and services, achieve compliance with applicable legal and requirements and with other requirements to which the organization subscribes and assist in continually improving environmental performance.

Having an environmental management system can help an organization assure interested parties that a management commitment exists to meet the provisions of its policy, objectives, and targets, emphasis is placed on prevention, evidence of reasonable care and regulatory compliance can be provided, and the system's design incorporates the process of continual improvement.

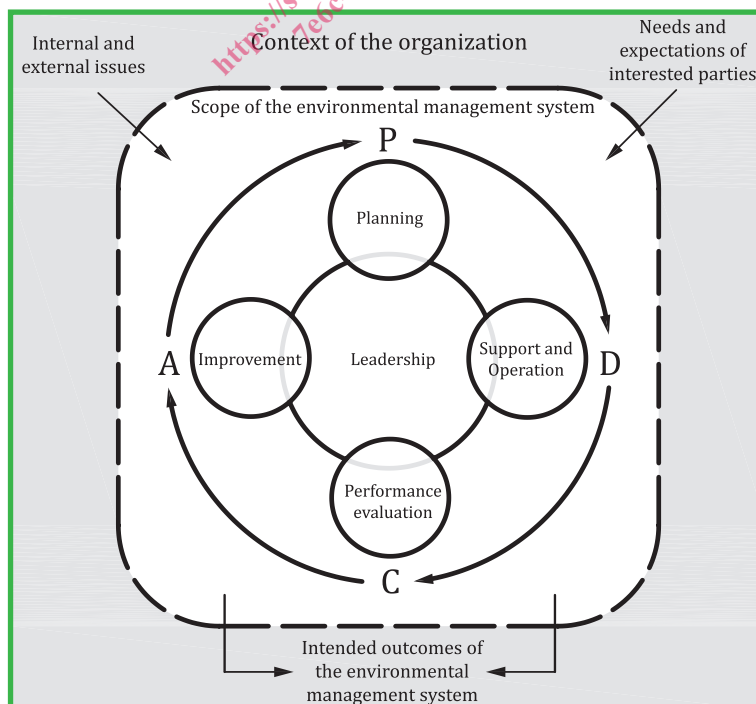


Figure 1 — Environmental management system model for this International Standard

~~Economic benefits can be gained from implementing an environmental management system. An organization whose management system incorporates an environmental management system has a framework to balance and integrate economic and environmental interests. Economic benefits can also be identified to demonstrate to interested parties the value to the organization of sound environmental management. It also provides the organization with the opportunity to link environmental objectives and targets with specific financial outcomes and thus to ensure that resources are made available where they provide the most benefit in both financial and environmental terms. An organization that has implemented an environmental management system can achieve significant competitive advantages.~~ The outcomes of a systematic approach to environmental management can provide top management with quantitative and qualitative data that enables informed business decisions that build long-term success and create options for contributing to sustainable development. The success of the environmental management system depends on commitment from all levels and functions of the organization, led by top management. The opportunities include:

- protecting the environment, including the prevention or reduction of adverse environmental impacts;
- controlling or influencing the way products and services are designed, manufactured, distributed, used and disposed;
- using a life cycle perspective to prevent environmental impacts from being unintentionally shifted elsewhere within the cycle;
- achieving financial and operational benefits that can result from implementing environmentally sound alternatives which strengthen the organization's market position;
- communicating environmental information to relevant interested parties.

In addition to ~~improved~~ enhanced environmental performance, the potential benefits associated with an effective environmental management system include:

- assuring customers of the organization's commitment to demonstrable environmental management;
- maintaining good public and community relations;
- satisfying investor criteria and improving access to capital;
- ~~obtaining insurance at reasonable cost,~~
- enhancing image and market share;
- improving cost control;
- ~~reducing~~ preventing incidents that result in liability;
- conserving input materials and energy;
- designing more environmental friendly products;
- facilitating the attainment of permits and authorizations and meeting their requirements;
- promoting environmental awareness among ~~suppliers, contractors~~ external providers and all persons ~~working for or on behalf of the organization,~~ doing work under the organization's control;
- ~~fostering development and sharing of solutions to environmental problems, and~~
- improving ~~industry government relations,~~ relations between industry and government.

It is possible for an organization to operate an integrated management system that can align with requirements from quality, occupational health and safety and environmental management systems, for example. This approach provides opportunities to reduce duplication and builds in efficiencies.

Examples and approaches are presented throughout this International Standard for illustrative purposes. They are not intended to represent the only possibilities, nor are they necessarily suitable for every organization. In designing and implementing, or improving an environmental management system, organizations should select approaches that are appropriate to their own circumstances. Practical Help Boxes are intended to provide additional information to support the guidance contained within this International Standard.

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Environmental management systems — General guidelines on implementation

1 Scope

This International Standard provides guidance for an organization on the establishment, implementation, maintenance and improvement of a robust, credible and reliable environmental management system and its coordination with other management systems. The guidance provided is intended for an organization seeking to manage its environmental responsibilities in a systematic manner that contributes to the environmental pillar of sustainability.

This International Standard helps an organization achieve the intended outcomes of its environmental management system, which provides value for the environment, the organization itself and interested parties. Consistent with the organization's environmental policy, the intended outcomes of an environmental management system include:

- enhancement of environmental performance;
- fulfilment of compliance obligations;
- achievement of environmental objectives.

The guidance in this International Standard can help an organization to enhance its environmental performance, and enables the elements of the environmental management system to be integrated into its core business process.

NOTE While the environmental management system is not intended to manage occupational health and safety issues, they may be included when an organization seeks to implement an integrated environmental and occupational health and safety management system.

The guidelines in this International Standard are applicable to any organization, regardless of its size, type, location or level of maturity and nature, and applies to the environmental aspects of its activities, products and services that the organization determines it can either control or influence, considering a life cycle perspective.

The guidance in this International Standard can be used in whole or in part to systematically improve environmental management. It serves to provide additional explanation of the concepts and requirements.

While the guidelines in this International Standard are consistent with the ISO 14001 environmental management system model, they are not intended to provide interpretations of the requirements of ISO 14001.

2 Normative references

No normative references are cited. This clause is included in order to retain clause numbering identical with the previous edition. (There are ISO 14004:1996 no normative references.)

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

~~3.1
auditor~~

~~person with the competence to conduct an audit~~

~~Note 1 to entry. The process need not take place in all areas of activity simultaneously.~~

~~[SOURCE: ISO 9000:2000, 3.9.9]~~

~~3.2
continual improvement~~

~~recurring process of enhancing the environmental management system (3.2) in order to achieve improvements in overall environmental performance (3.11) consistent with the organization's (3.20) environmental policy (3.13)~~

~~Note 1 to entry. The process need not take place in all areas of activity simultaneously.~~

~~[SOURCE: ISO 14001:2004, 3.2]~~

~~3.3
correction~~

~~action taken to eliminate a detected nonconformity (3.10)~~

~~Note 1 to entry. Adapted from ISO 9000:2000, 3.6.6.~~

~~3.4
corrective action~~

~~action to eliminate the cause of a detected nonconformity (3.10)~~

~~[SOURCE: ISO 14001:2004, 3.3]~~

~~3.5
document~~

~~information and its supporting medium~~

~~Note 1 to entry. The medium can be paper, magnetic, electronic or optical computer disc, photograph or master sample, or a combination thereof.~~

~~Note 2 to entry. Adapted from ISO 9000:2000, 3.7.2.~~

~~[SOURCE: ISO 14001:2004, 3.4]~~

~~3.6
environment~~

~~surroundings in which an organization (3.20) operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation~~

~~Note 1 to entry. Surroundings in this context extend from within an organization (3.20) to the global system.~~

~~[SOURCE: ISO 14001:2004, 3.5]~~

~~3.7
environmental aspect~~

~~element of an organization's (3.20) activities or products or services that can interact with the environment (3.6)~~

~~Note 1 to entry. A significant environmental aspect has or can have a significant environmental impact (3.0).~~

~~[SOURCE: ISO 14001:2004, 3.6]~~

3.8**environmental impact**

~~any change to the environment (3.6), whether adverse or beneficial, wholly or partially resulting from an organization's (3.20) environmental aspects (3.7)~~

~~[SOURCE: ISO 14001:2004, 3.7]~~

3.9**environmental management system****EMS**

~~part of an organization's (3.20) management system used to develop and implement its environmental policy (3.13) and manage its environmental aspects (3.7)~~

~~Note 1 to entry: A management system is a set of interrelated elements used to establish policy and objectives and to achieve those objectives.~~

~~Note 2 to entry: A management system includes organizational structure, planning activities, responsibilities, practices, procedures (3.23), processes and resources.~~

~~[SOURCE: ISO 14001:2004, 3.8]~~

3.10**environmental objective**

~~overall environmental goal, consistent with the environmental policy (3.13), that an organization (3.20) sets itself to achieve~~

~~[SOURCE: ISO 14001:2004, 3.9]~~

3.11**environmental performance**

~~measurable results of an organization's (3.20) management of its environmental aspects (3.7)~~

~~Note 1 to entry: In the context of environmental management systems (3.2), results can be measured against the organization's (3.20) environmental policy (3.13), environmental objectives (3.10), environmental targets (3.14) and other environmental performance requirements.~~

~~[SOURCE: ISO 14001:2004, 3.10]~~

3.12**environmental performance indicator****EPI**

~~specific expression that provides information about an organization's (3.20) environmental performance (3.11)~~

~~[SOURCE: ISO 14031:1999, 2.10]~~

3.13**environmental policy**

~~overall intentions and direction of an organization (3.20) related to its environmental performance (3.11) as formally expressed by top management~~

~~Note 1 to entry: The environmental policy provides a framework for action and for the setting of environmental objectives (3.10) and environmental targets (3.14).~~

~~[SOURCE: ISO 14001:2004, 3.11]~~

3.14**environmental target**

~~detailed performance requirement, applicable to the organization (3.20) or parts thereof, that arises from the environmental objectives (3.10) and that needs to be set and met in order to achieve those objectives~~

~~[SOURCE: ISO 14001:2004, 3.12]~~