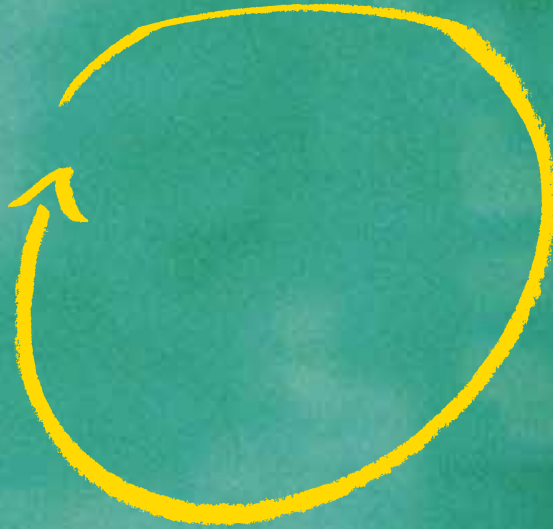


ISO 14000 – Meet the whole family!



ISO in brief

ISO is the International Organization for Standardization. It is made up of national standards institutes from countries large and small, industrialized and developing, in all regions of the world. ISO develops voluntary technical standards which add value to all types of business operations. They contribute to making the development, manufacturing and supply of products and services more efficient, safer and cleaner. They make trade between countries easier and fairer. ISO standards also serve to safeguard consumers and users in general of products and services – and to make their lives simpler.

ISO develops only those standards which are required by the market. This work is carried out by experts on loan from the industrial, technical and business sectors which have asked for the standards, and which subsequently put them to use. These experts may be joined by others with relevant knowledge, such as representatives of government agencies and testing laboratories.

Published under the designation of International Standards, ISO standards represent an international consensus on the "state of the art" in the technology concerned.

ISO/TC 207, Environmental Management

ISO/TC 207 is the ISO technical committee responsible for developing and maintaining the ISO 14000 family of standards.

Published documents and ongoing work address the following areas:

- *Environmental management systems.*
- *Environmental auditing and other related environmental investigations.*
- *Environmental performance evaluation.*
- *Environmental labelling.*
- *Life cycle assessment.*
- *Environmental aspects in product standards.*
- *Terms and definitions.*



ISO and the environment

The ISO 14000 family of International Standards on environmental management is a relative newcomer to ISO's portfolio – but environment-related standardization is far from being a new departure for ISO.

In fact, ISO has a two-pronged approach to meeting the needs of business, industry, governments, non-governmental organizations and consumers in the field of the environment.

On the one hand, it offers a wide-ranging portfolio of standardized sampling, testing and analytical methods to deal with *specific* environmental challenges. It has developed more than 350 International Standards (out of a total of more than 12 000) for the monitoring of such aspects as the quality of air, water and soil. These standards are a means of providing business and government with scientifically valid data on the environmental effects of economic activity. They also serve in a number of countries as the technical basis for environmental regulations.

On the other hand, ISO is leading a *strategic* approach by developing environmental management system standards that can be implemented in any type of organization in either public or private sectors (companies, administrations, public utilities). To spearhead this strategic approach, ISO established a new technical committee, ISO/TC 207, *Environmental management*, in 1993. This followed ISO's successful pioneering experience in management system standardization with the ISO 9000 series for quality management.

ISO's direct involvement in environmental management stemmed from an intensive consultation process, carried out within the framework of a Strategic Advisory Group on Environment (SAGE), set up in 1991, in which 20 countries, 11 international organizations and more than 100 environmental experts participated in defining the basic requirements of a new approach to environment-related standards.

This pioneering work was consolidated with ISO's commitment to support the objective of "sustainable development" discussed at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992.

Today, delegations of business and government experts from 55 countries participate actively within TC 207, and another 16 countries have observer status. These delegations are chosen by the national standards institute concerned and they are required to bring to TC 207 a national consensus on issues being addressed by the committee. This national consensus is derived from a process of consultation with interested parties.

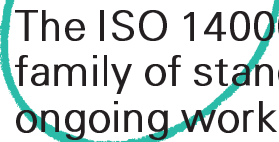
From its beginning, it was recognized that ISO/TC 207 should have close cooperation with ISO/TC 176, *Quality management and quality assurance*, in the areas of management systems, auditing and related terminology. Active efforts are under way to ensure compatibility of ISO environmental management and quality management standards, for the benefit of all organizations wishing to implement them.

This brochure provides you with:

- A list of the ISO 14000 family of standards, ongoing work and other ISO 14000 publications.
- The ISO 14000 family of standards in its entirety: two approaches to implementation.
- An outline of their application at the organizational level and to products/services.
- Business benefits of ISO 14000.

We hope this information helps you in your consideration of the ISO 14000 family, and we look forward to your input through your national delegation to ISO/TC 207 and its subgroups. We are dedicated to ensuring, on an ongoing basis, that the ISO 14000 series meets the needs of the international business community and the concerns of those interested in the environmental management of organizations.

Margaret Kerr
ISO/TC 207 Chair
Ahmad Hussein
ISO/TC 207 Secretary



The ISO 14000 family of standards, ongoing work and other ISO 14000 publications

The ISO 14000 family of standards and ongoing work

<i>Designation</i>	<i>Publication</i>	<i>Title</i>
ISO 14001:1996	1996	<i>Environmental management systems – Specification with guidance for use</i>
ISO 14004:1996	1996	<i>Environmental management systems – General guidelines on principles, systems and supporting techniques</i>
ISO 14010:1996	1996	<i>Guidelines for environmental auditing – General principles</i>
ISO 14011:1996	1996	<i>Guidelines for environmental auditing – Audit procedures – Auditing of environmental management systems</i>
ISO 14012:1996	1996	<i>Guidelines for environmental auditing – Qualification criteria for environmental auditors</i>
ISO/WD 14015	To be determined	<i>Environmental assessment of sites and entities</i>

ISO 14020:1998	1998	<i>Environmental labels and declarations – General principles</i>
ISO/DIS 14021	1999	<i>Environmental labels and declarations – Self-declared environmental claims</i>
ISO/FDIS 14024	1998	<i>Environmental labels and declarations – Type I environmental labelling – Principles and procedures</i>
ISO/WD/TR 14025	To be determined	<i>Environmental labels and declarations – Type III environmental declarations – Guiding principles and procedures</i>
ISO/DIS 14031	1999	<i>Environmental management – Environmental performance evaluation – Guidelines</i>
ISO/TR 14032	1999	<i>Environmental management – Environmental performance evaluation – Case studies illustrating the use of ISO 14031</i>
ISO 14040:1997	1997	<i>Environmental management – Life cycle assessment – Principles and framework</i>
ISO 14041:1998	1998	<i>Environmental management – Life cycle assessment – Goal and scope definition and inventory analysis</i>
ISO/CD 14042	1999	<i>Environmental management – Life cycle assessment – Life cycle Impact assessment</i>
ISO/DIS 14043	1999	<i>Environmental management – Life cycle assessment – Life cycle Interpretation</i>
ISO/TR 14048	1999	<i>Environmental management – Life cycle assessment – Life cycle assessment data documentation format</i>
ISO/TR 14049	1999	<i>Environmental management – Life cycle assessment – Examples for the application of ISO 14041</i>
ISO 14050:1998	1998	<i>Environmental management – Vocabulary</i>
ISO/TR 14061	1998	<i>Information to assist forestry organizations in the use of the Environmental Management System standards ISO 14001 and ISO 14004</i>
ISO Guide 64:1997	1997	<i>Guide for the inclusion of environmental aspects in product standards</i>

NOTE:

CD = Committee Draft;
DIS = Draft International Standard;
FDIS = Final Draft International Standard;
TR = Technical Report

Other ISO 14000 publications

ISO 14000 on CD-ROM: The complete collection of International Standards for Environmental Management

An electronic version for easy reference, with keyword search glossary and online help. (1997, ISBN 92-67-10258-3)

ISO 9000 and ISO 14000 on CD-ROM: The complete collection of International Standards for Quality Management and Environmental Management

An electronic version for easy reference, with keyword search, glossary and online help. (1997, ISBN 92-67-10256-7)

ISO Standards Compendium: ISO 14000 – Environmental Management

This compendium brings together in one volume all of the published International Standards developed by ISO Technical Committee 207, *Environmental Management*. It also includes draft International Standards. (1998, ISBN 92-67-10266-4)

ISO Development Manual 10: Environmental Management and ISO 14000

This manual provides parties in developing countries (and elsewhere) with an easy-to-read text that lays out the basic aspects of the environment addressed by ISO/TC 207 and the ISO 14000 family. (1998, 136 p., ISBN 92-67-10280-X)

Publicizing your ISO 9000 or ISO 14000 certification

Guidelines to help businesses and other organizations which have achieved ISO 9000 or ISO 14000 certification avoid making false or misleading claims in advertisements and other types of announcement. (1998, 20 p., ISBN 92-67-10278-8)

ISO/IEC draft Guide 66

“General requirements for bodies operating assessment and certification/registration of environmental management systems”, under development by the ISO Policy Development Committee on Conformity Assessment (CASCO).

ISO 9000 + ISO 14000 News Service

Subscribers receive *ISO 9000 + ISO 14000 News*, *ISO Bulletin* and special publications, such as the brochure *Publicizing your ISO 9000 or ISO 14000 certification*.

ISO 9000 + ISO 14000 News (six issues a year), provides comprehensive coverage of international developments relating to ISO's two families of management system standards – ISO 9000 (quality) and ISO 14000 (environment) – including news of their implementation by diverse organizations around the world.

ISO Bulletin (monthly), provides an overview of ISO's activities in international standardization in fields that range from traditional activities, such as agriculture and construction, through mechanical engineering to the newest technology developments, such as the digital coding of audio-visual signals for multimedia applications.



The ISO 14000 family of standards in its entirety: two approaches to implementation

Environmental Management Systems and environmental management tools

The series is made up of documents related to EMS – environmental management systems (i.e., ISO 14001 and ISO 14004) and documents related to environmental management tools (i.e., all other ISO 14000 series documents). This approach takes the view that establishment and implementation of an organization’s EMS is of central importance in determining the organization’s environmental policy, objectives, and targets. Environmental management tools exist to assist the organization in realizing its environmental policy, objectives, and targets.

For example:

- ISO 14001 requires the conduct of EMS audits, and guidance for the conduct of such audits can be found in ISO 14010, ISO 14011 and ISO 14012.
- ISO 14001 requires an organization to monitor and measure the environmental performance of its activities, products and services in order to continually improve such performance, and ISO 14031 provides guidance for this purpose.
- ISO 14001 requires that an organization consider the environmental aspects of its products and services. The ISO 14040 standards assist an organization in the identification and analysis of environmental aspects of

products and services. The ISO 14020 standards address guidance on providing information on the environmental aspects of products and services through labels and declarations.

Environmental Aspects

Identifying the environmental aspects of an organization’s activities, products and services, and determining their relative significance, are important elements of implementing an EMS or conducting EPE (environmental performance evaluation) in an organization. ISO 14001, ISO 14004 and ISO 14031 provide guidance on identifying significant environmental aspects. ISO 14040 states in its introduction: “LCA (life cycle assessment) is a technique for assessing the environmental aspects and potential impacts associated (with products and services) ... LCA can assist in identifying opportunities to improve the environmental aspects of (products and services) at various points in their life cycle”.

Reporting and communicating

In general, the management of an organization will decide the content and format of any environmental reporting or communicating. However, the organization may find that it has a number of different reporting needs and intended audiences. ISO 14001 and ISO 14004 provide guidance on reporting and communicating information on the environmental aspects and the EMS of an organization. ISO 14010 and ISO 14011 provide guidance on the preparation, content and distribution of audit reports. As environmental declarations and claims can be viewed as ways in which the environmental

aspects of products and services are reported or communicated, the ISO 14020 standards provide appropriate guidance. ISO 14031 provides guidance on reporting and communicating information describing the environmental performance of an organization. The ISO 14040 standards provide guidance on reporting and communicating the results of an LCA study.

Application to organizations or application to products/services

The ISO 14000 family is made up of documents which are generally applied at the organizational level (documents for environmental management systems, environmental auditing and environmental performance evaluation) and documents which are generally applied to products and services (documents for environmental declarations and claims and documents for life cycle assessment). This brochure provides further information on the application of ISO 14000 standards at the organizational level or to products and services.

Both approaches (1 and 2 above) are equally valid for considering the ISO 14000 family of standards and they are mutually supportive.


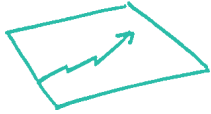

It is expected that companies and the business community will make the greatest use of the ISO 14000 standards. However, these documents have been written in order to support their application by a variety of interests, including both manufacturing and service companies, government agencies, associations and other non-governmental organizations. Therefore, the generic term used throughout the series is "organization" rather than "company".

NOTE:
 CD = Committee Draft;
 DIS = Draft International Standard;
 FDIS = Final Draft International Standard;
 TR = Technical Report;
 NWIP = New Work Item Proposal.





Application of the ISO 14000 family documents:

at the organizational level

Implementing Environmental Management Systems (EMS) 	ISO 14001:1996 ISO 14004:1996 These documents help an organization to establish a new or improve an existing EMS	ISO 14001:1996 This document specifies the requirements for an EMS that may be objectively audited for self-declaration or third-party certification/registration purposes	ISO 14004:1996 This document provides guidance to help an organization establish and implement an EMS, including guidance that goes beyond the requirements of ISO 14001	ISO/TR 14061 This document contains information that can assist in the implementation of ISO 14001 and ISO 14004 by forest management organizations and the forest products industry		
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<p>Conducting environmental auditing and other related investigations</p> 	<p>ISO 14010:1996</p> <p>This document provides the general principles common to the conduct of any environmental audit</p>	<p>ISO 14011:1996</p> <p>This document provides the procedures for the conduct of EMS audits, including the criteria for selection and composition of audit teams</p>	<p>ISO 14012:1996</p> <p>This document provides guidance on the qualifications of internal or external environmental auditors and lead auditors</p>	<p>ISO/WD 14015</p> <p>This document helps an organization to identify and assess the environmental aspects of sites and entities to support the transfer of properties, responsibilities and obligations from one party to another</p>		
<p>Evaluating environmental performance</p> 	<p>ISO/DIS 14031</p> <p>This document provides guidance on the selection and use of indicators to evaluate an organization's environmental performance</p>	<p>ISO/TR 14032</p> <p>This document provides examples from real organizations to illustrate the use of the guidance in ISO 14031</p>		<p>Understanding terms and definitions</p> 	<p>ISO 14050:1998</p> <p>This document helps an organization to understand the terms used in the ISO 14000 series standards</p>	

● **to products and services**

<p>Using environmental declarations and claims</p> 	<p>ISO 14020:1998</p> <p>This document provides general principles which serve as a basis for the development of ISO guidelines and standards on environmental claims and declarations</p>	<p>ISO/DIS 14021</p> <p>This document provides guidance on the terminology, symbols and testing and verification methodologies an organization should use for self-declaration of the environmental aspects of its products and services (Type II Environmental Labelling)</p>	<p>ISO/FDIS 14024</p> <p>This document provides the guiding principles and procedures for third-party environmental labelling certification programs (Type I Environmental Labelling)</p>	<p>ISO/WD/TR 14025</p> <p>This document provides guidance and procedures on a specialized form of third-party environmental labelling certification using quantified product information labels and preset indices (Type III Environmental Labelling)</p>		
<p>Conducting life cycle assessment (LCA)</p> 	<p>ISO 14040:1997</p> <p>This document provides the general principles, framework and methodological requirements for the LCA of products and services</p>	<p>ISO 14041:1998</p> <p>This document provides guidance for determining the goal and scope of an LCA study, and for conducting a life cycle inventory</p>	<p>ISO/CD 14042</p> <p>This document provides guidance for conducting the life cycle impact assessment phase of an LCA study</p>	<p>ISO/DIS 14043</p> <p>This document provides guidance for the interpretation of results from an LCA study</p>	<p>ISO/TR 14048</p> <p>This document provides information regarding the formatting of data to support life cycle assessment</p>	<p>ISO/TR 14049</p> <p>This document provides examples that illustrate how to apply the guidance in ISO 14041</p>
<p>Addressing environmental aspects in product standards</p> 	<p>ISO Guide 64:1997</p> <p>This document helps the writers of product standards address environmental aspects in those standards</p>			<p>Understanding terms and definitions</p> 	<p>ISO 14050:1998</p> <p>This document helps an organization to understand the terms used in the ISO 14000 series standards</p>	

Business benefits of ISO 14000

Any manager will try to avoid pollution that could cost the company a fine for infringing environmental legislation. But better managers will agree that doing only just enough to keep the company out of trouble with government inspectors is a rather weak and reactive approach to business in today's increasingly environment-conscious world.

"Conformity to ISO 14001 requirements is being maintained without any special effort, as the implemented procedures seem so natural. The continuous improvement concept, which the standard intends to encourage, has been taken on board and is showing clear results."

Bernard Daloz, Environmental Programmes Coordinator, and Philippe Dumoulin, Quality and Operations Support Manager, (French unit of) Lexmark International, USA, from *ISO 9000 News* article, 'From corporate vision to ISO 14001 certification: Lexmark's environmental journey'

There is a better way. The ISO 14000 way. The ISO 14000 standards are practical tools for the manager who is not satisfied with mere compliance with legislation – which may be perceived as a cost of doing business. They're for the proactive manager with the breadth of vision to understand that implementing a strategic approach can

bring return on investment in environment-related measures.

Implementing an ISO 14000-based environmental management system, and using other tools from the ISO 14000 family, will give you far more than just confidence that you are complying with legislation. The ISO 14000 approach forces you to take a hard look at all areas where your business has an environmental impact. And this systematic approach can lead to benefits like the following:

- Reduced cost of waste management
- Savings in consumption of energy and materials
- Lower distribution costs
- Improved corporate image among regulators, customers and the public
- Framework for continuous improvement of your environmental performance.

"It makes good business sense to implement an environmental management system in our plant. In the long run, it will give rise to many benefits. These include protection of the environment and cost savings for the company."

Takeo Kaji, Managing Director, (Singapore unit of) Sony Display Devices, Japan, from *ISO 9000 News* article, 'ISO 14000 makes progress in Singapore'

The manager who is "too busy managing the business" to listen to good sense about environmental management could actually be costing the business plenty. Just think, for example, of the lost opportunities for achieving benefits like those above.

The ISO 14000 standards are management tools that will help your business achieve environmental goals that go way beyond acquiring a mere "green sheen".



"Baxter Healthcare's adherence to ISO 14001 will definitely help to sustain our long-term competitiveness, as discerning customers around the world are becoming more environmentally conscious."

Jay Rajangam, Senior Environmental Engineer, (Singapore unit of) Baxter Healthcare, USA, in *ISO 9000 News* article, 'ISO 14000 makes progress in Singapore'

For more information on ISO 14000

Contact

your national standards institute or the ISO Central Secretariat.

Read

ISO 9000 + ISO 14000 News (six issues a year), which provides comprehensive coverage of international developments relating to ISO's two families of management system standards – ISO 9000 (quality) and ISO 14000 (environment) – including news of their implementation by diverse organizations around the world.

ISO Bulletin (monthly), which provides an overview of ISO's activities in international standardization in fields that range from traditional activities, such as agriculture and construction, through mechanical engineering to the newest technology developments, such as the digital coding of audio-visual signals for multimedia applications.

Both publications are available through ISO's national members and the Central Secretariat.

Connect

with ISO Online, the electronic information service on Internet, accessible via the World Wide Web by connecting with the following Uniform Resource Locator (URL):

<http://www.iso.ch/>

Related site ISO/TC 207:

<http://www.tc207.org/home/index.html>

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