

ISO 14000, Environmental Management Certification

ISO 14000 is a family of standards related to [environmental management](#) that exists to help organizations (a) minimize how their operations (processes etc.) negatively affect the environment (i.e. cause adverse changes to air, water, or land); (b) comply with applicable laws, regulations, and other environmentally oriented requirements, and (c) continually improve in the above.

[ISO 14000](#) is similar to [ISO 9000 quality management](#) in that both pertain to the process of how a product is produced, rather than to the product itself. As with ISO 9000, certification is performed by third-party organizations rather than being awarded by ISO directly. The [ISO 19011](#) audit standard applies when auditing for both 9000 and 14000 compliance at once.

The requirements of ISO 14000 are an integral part of the [European Union's Eco-Management and Audit Scheme](#) (EMAS). EMAS's structure and material requirements are more demanding, foremost concerning performance improvement, legal compliance and reporting duties.

ISO 14001 standard

ISO 14001 sets out the criteria for an environmental management system. It does not state requirements for environmental performance, but maps out a framework that a company or organization can follow to set up an effective environmental management system. It can be used by any organization that wants to improve resource efficiency, reduce waste and drive down costs. Using ISO 14001 can provide assurance to company management and employees as well as external stakeholders that environmental impact is being measured and improved. ISO 14001 can also be integrated with other management functions and assists companies in meeting their environmental and economic goals.

ISO 14001, as with other ISO 14000 standards, is voluntary (IISD 2010), with its main aim to assist companies in continually improving their environmental performance, whilst complying with any applicable legislation. Organizations are responsible for setting their own targets and performance measures, with the standard serving to assist them in meeting objectives and goals and the subsequent monitoring and measurement of these (IISD 2010).

The standard can be applied to a variety of levels in the business, from organizational level, right down to the product and service level (RMIT university). Rather than focusing on exact measures and goals of environmental performance, the standard highlights what an organization needs to do to meet these goals (IISD 2010). Success of the system is very dependant on commitment from all levels of the organization, especially top management, who need to be actively involved in the development, implementation and maintenance of the environmental management system.

ISO 14001 is known as a generic management system standard, meaning that it is

relevant to any organization seeking to improve and manage resources more effectively. This includes:

- single site to large multi-national companies
- high risk companies to low risk service organizations
- manufacturing, process and the service industries; including local governments
- all industry sectors including public and private sectors
- original equipment manufacturers and their suppliers.

All standards are periodically reviewed by ISO to ensure they still meet market requirements. The current version of ISO 14001 – ISO 14001:2004 is under review as of April 2012.

Benefits

ISO 14001 was developed primarily to assist companies in reducing their environmental impacts, but in addition to an improvement in environmental standards and performance, organizations can reap a number of economic benefits including higher conformance with legislative and regulatory requirements by utilizing the ISO standard. Firstly by minimizing the risk of regulatory and environmental liability fines and improving an organization's efficiency, leading to a reduction in waste and consumption of resources, operating costs can be reduced. Secondly, as an internationally recognized standard, businesses operating in multiple locations across the globe can register as ISO 14001 compliant, eliminating the need for multiple registrations or certifications. Thirdly there has been a push in the last decade by consumers, for companies to adopt stricter environmental regulations, making the incorporation of ISO 14001 a greater necessity for the long term viability of businesses and providing them with a competitive advantage against companies that do not adopt the standard. This in turn can have a positive impact on a company's asset value and can lead to improved public perceptions of the business, placing them in a better position to operate in the international marketplace. Certification to ISO 14001 can demonstrate an innovative and forward thinking approach to customers and prospective employees; it can increase a business's access to new customers and business partners; and it can potentially reduce public liability insurance costs. Finally it can serve to reduce trade barriers between registered businesses.

Organizations can significantly benefit from EMS implementation through the identification of large cleaner production projects. ISO 14001 can be a very effective tool to identify these cost savings opportunities for some organizations. Some organizations can falter in their planning, lack of senior management commitment and poor understanding of how ISO 14001 should be implemented and find themselves managing an ineffective EMS. Improvements that organizations can make include adequately planning their structure and allocating adequate resources, providing training, creating forums for discussion, setting measurable targets and working according to the philosophy of continuous improvement.

Conformity Assessment

ISO 14001 can be used in whole or in part to help an organization, for profit or not-for-profit, better manage its relationship with the environment. If all the elements of ISO 14001 are incorporated into the management process, the organization may opt to prove that it has achieved full alignment or conformity with the international standard, ISO 14001, by using one of four recognized options. These are:

- 1 make a self-determination and self-declaration, or
- 2 seek confirmation of its conformance by parties having an interest in the organization, such as customers, or
- 3 seek confirmation of its self-declaration by a party external to the organization, or
- 4 seek certification/registration of its environmental management system by an external organization.

ISO 14001 and EMAS

In 2010, the latest EMAS Regulation (EMAS III) entered into force; the scheme is now globally applicable, includes key performance indicators and a range of further improvements. Currently, more than 4,500 organisations and approximately 7,800 sites are EMAS registered.

Complementarities and Differences

ISO 14001's [environmental management system](#) requirements are an integral part of EMAS. However, EMAS is the most credible and robust environmental management instrument on the market^{[citation needed](#)}, adding several elements on top of the requirements of the international standard. Additional requirements include

- stricter requirements on the measurement and evaluation of environmental performance against objectives and targets, and the [continuous improvement](#) of that environmental performance;
- compliance with [environmental legislation](#) ensured by government supervision of the environmental verifiers verifying the correct implementation of the EMAS scheme in an organisation;
- strong employee involvement;

EMAS organisations acknowledge that active employee involvement is a driving force and a prerequisite for continuous and successful environmental improvements. Most EMAS organisations introduce employee participation schemes at all levels of the organisation to anchor the environmental management and audit system in the organisation successfully.

- [environmental core indicators](#) creating multi-annual comparability within and between organisations
- provision of information to the general public through the validated environmental statement which is based on a comprehensive [environmental](#)

impact assessment

- registration by a public authority after verification and validation by an independent and accredited/licensed environmental verifier.