

ISO 14001:2015 - Environmental Management Systems

Meeting stakeholder expectations



**Add value.
Inspire trust.**

White paper

Abstract

ISO 14001 - the international standard for environmental management is the most widely recognised environmental management system (EMS) standard in the world.

By providing a best practice approach, ISO 14001 sets out the requirements for an EMS to help organisations improve their environmental performance, e.g. through more efficient use of resources and the reduction of waste. They can also gain a competitive advantage and the trust of their stakeholders.

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About the TÜV SÜD expert



Fred Wenke

Head of Certification Body and Head of Product Compliance Management, TÜV SÜD

Over the last 25 years Fred Wenke has gained experience working worldwide as a manager and auditor in the third-party certification industry. Fred is a Diploma Chemical Engineer (BSc equivalent), specialising in waste water treatment/water chemistry, and a Biological Technical Assistant with main subjects in ecology and pollution control. He contributed to the ISO 14001:2015 revision as a German delegate and is currently the convenor of the ISO ad hoc group on the future challenges for a next revision of the standard.

Fred Wenke can be reached at fred.wenke@tuvsud.com.

Environmental management challenges

ISO 14001 is suitable for organisations of all types and sizes, be they private, not-for-profit or governmental.

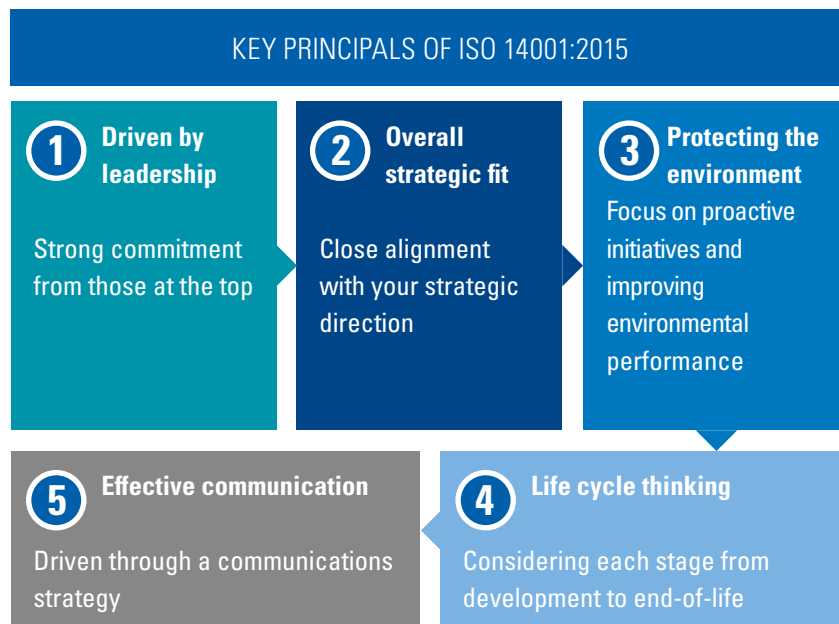
Organisations have turned to ISO 14001 for more than twenty years to help them develop an Environmental Management System (EMS) framework. The latest version of the standard was released in 2015 and included key improvements such as the increased prominence of environmental management within the organisation's strategic planning processes, greater input from leadership, and a stronger commitment to proactive initiatives that boost environmental performance.

What is an EMS?

An EMS gives organisations of any size a universal structure to ascertain and manage their environmental issues.

As ISO 14001 adopts the High-Level Structure, common to many other standards such as ISO 9001 Quality Management, ISO 45001 Occupational Health and Safety Management and ISO 50001 Energy Management, it is easy to integrate into any existing ISO management system.

ISO 14001 supports an organisation in developing and integrating its environmental management practices



Source: ISO sub-committee with responsibility for ISO 14001

to protect the environment by, for example, preventing pollution, minimising waste, and reducing energy and materials consumption. Based on the Plan-Do-Check-Act methodology, it provides a systematic framework for the organisation to establish environmental objectives and processes in accordance with the environmental policy, to implement the processes, to monitor and measure these processes against defined criteria and to take actions to continually improve.

The International Organization for Standardization (ISO) outlines how taking an EMS approach delivers the following environmental values and benefits:

- **Risk-based approach to protect the environment**
 - Prevent adverse impacts.
 - Pursue opportunities with beneficial impact and competitive advantage.

- **Improved product footprint**
 - Address environmental issues during product design.
 - Focus on each lifecycle stage.
- **Enhanced environmental performance**
 - Raise awareness and involvement.

The ISO also outlines the following organisational values and benefits:

- **Integrated strategic approach**
 - Align environmental management to business strategy.
 - Align environmental initiatives with business priorities.
 - Align EMS processes with other management system processes.
- **Fulfillment of compliance obligations**
- **Mitigation of adverse effects on the organisation**
 - Realise operational efficiencies and financial benefits.

Relevance of ISO 14001 in today's context

One key goal of the United Nations' 2030 Agenda for Sustainable Development is to protect the planet from degradation through sustainable consumption and production, the sustainable management of natural resources, and taking urgent action on climate change. Adopted by all United Nations Member States in 2015, at its core sit 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all developed and developing countries in a global partnership.

While the SDGs address governments and countries, their aims in many cases may also influence expectations and requirements related to commercial practices and business operations. Out of the 17 sustainable goals, several address environmental sustainability. These goals seek to reduce vulnerabilities to environmental shocks; strengthen capacity for adaptation to climate change, extreme weather, flooding, any other disasters; progressively improve land and soil quality; and reduce hazardous chemicals in the air, water and soil.

Supply chain demand

For most OEMs, their supply chain's environmental credentials are intrinsically linked to their own corporate sustainability. Upstream supply chain customers are therefore increasingly demanding that their suppliers identify and quantify environmental aspects themselves, using key performance indicators to identify areas of alignment and opportunities for improvement. To assess the environmental impact



of their entire supply chain, many businesses also require suppliers to report results at regular intervals. Supply chain sustainability is therefore a key outcome of ISO 14001 certification, as businesses are faced with customer requests to establish and document environmentally and socially responsible practices.

Supply chain sustainability is a key outcome of ISO 14001 certification.

What the end-users say

An ISO survey¹, issued via national member bodies, received an unprecedented response with close to 5,000 participants in 110 countries worldwide. The survey included questions relating to the perceived value of the ISO 14001 standard, for both environmental management and business management, and the extent to which ISO 14001 should address or strengthen attention to future challenges for EMS.

For environmental management, responses from users suggested that organisations have realised significant value from ISO 14001 in terms of meeting legal requirements, improving environmental performance, and enhancing management commitment and stakeholder engagement.

Responses from users also suggest that ISO 14001 has provided considerable value for business management, most notably for meeting stakeholder requirements, improving public image, achieving strategic objectives and integrating with business management systems.

More than half of the participants indicated 'high' to 'very high' value, and more than 80% indicated at least a moderate value in these areas.

These results correspond with reported motivations for adopting the standard. Based on user rankings of factors influencing their adoption of the standard, the strongest environmental drivers for adopting ISO 14001 included commitment to environmental protection/conservation and reduction of risk of adverse environmental impact.

Overview of ISO 14001:2015

By achieving ISO 14001 certification, an organisation demonstrates to stakeholders its commitment among others to prevent pollution, to fulfil its compliance obligations and to strive for continuous improvement of environmental performance.

Main features include:

Strategic Environmental Management

A requirement to understand the organisation's context is vital to identify and leverage opportunities for the benefit of both the organisation and the environment. Particular focus is on issues or changing circumstances related to the needs and expectations of interested parties (including regulatory requirements) and local, regional or global environmental conditions that can affect, or be affected by, the organisation. Once identified as a priority, actions to mitigate adverse risks or exploit beneficial opportunities are integrated in the operational planning of the EMS.

Leadership

To ensure the success of the system, specific responsibilities are assigned to those in leadership roles to promote environmental management within the organisation.

Protecting the environment

The expectation on organisations includes commitment to proactive initiatives that protect the environment from harm and degradation, consistent with the context of the organisation. ISO 14001:2015 does not define

'protect the environment' but it notes that it can include prevention of pollution, sustainable resource use, climate change mitigation and adaptation, protection of biodiversity and ecosystems, etc.

Environmental performance

There is a clear emphasis with regards to continual improvement, from improving the management system to improving environmental performance. Consistent with the organisation's policy commitments, it would reduce emissions, effluents and waste to levels set by the organisation, where applicable.

Lifecycle perspective

In addition to the requirement to manage environmental aspects associated with procured goods and

services, an organisation will need to extend its control and influence to the environmental impacts associated with product design and development in order to address each stage of the life cycle, i.e. acquisition of raw materials, design, production, transportation/delivery, use, end-of-life treatment and final disposal. This does not imply a requirement to do a life cycle assessment.

Outsourced processes

Organisations must effectively control or influence outsourced processes.

Communication

The development of a communication strategy with equal emphasis on external and internal communications is required. This includes a requirement to communicate



consistent and reliable information, and to establish mechanisms for persons working under the organisation's control to make suggestions on improving the environmental management system.

The decision to communicate externally is retained by the organisation, but the decision needs to take into account the information reporting that is required by regulatory agencies, as well as the expectations of other interested parties.

Documentation

Reflecting the evolution of computer and cloud-based systems for running management systems, the standard incorporates the term 'documented

information'. To align with ISO 9001, the organisation retains the flexibility to determine when procedures are needed to ensure effective process control.

ISO common framework for management systems

The standard uses the High Level Structure (HLS) for Management System Standards (MSS), which is a common framework for ISO management system standards, incorporating identical core text and common terms with core definitions. The framework is designed to benefit users implementing multiple ISO management system standards and is applicable to any management system

As the leading international standard for environmental management systems, ISO 14001 offers organisations the most comprehensive support in the quest to achieve an effective EMS.

standard. This allows compatibility across ISO management system standards while offering subject-specific flexibility.

KEY STANDARD REQUIREMENTS OF ISO 14001:2015



Leadership demonstrates commitment to environmental management



Plans must consider the organisation's context and interested parties



Environmental impact of the product life cycle must be considered



Organisation must be committed to continual EMS improvement



Communications strategy allows idea sharing for EMS improvement



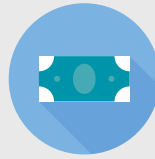
Organisation must control or influence outsourced processes

BENEFITS OF AN ENVIRONMENTAL MANAGEMENT SYSTEM



PROTECT THE ENVIRONMENT

Reduce your environmental footprint



REDUCE COST

by minimising wastage throughout the supply chain, from materials to energy consumption.



ENHANCE YOUR REPUTATION

with an internationally recognised certification mark from TÜV SÜD

How to get started

Organisations are under growing pressure to introduce initiatives that benefit the environment while improving efficiency and reducing costs.

For those organisations tackling ISO 14001 for the first time, TÜV SÜD offers IRCA certified auditor and lead auditor training courses to better equip your company for the challenges of

implementation, certification and continuous improvement. This offer is completely independent from any certification services by TÜV SÜD.

PREPARE FOR A SMOOTH CERTIFICATION PROCESS



UPSKILLING

Become familiar with ISO 14001 objectives and requirements



GAP ANALYSIS

Identify gaps against ISO 14001 requirements



IMPLEMENTATION

Outline and implement measures to comply with ISO 14001 requirements



DOCUMENTATION

Record measures and key performance indicators to document effectiveness and compliance

Third-party certification by TÜV SÜD

We can provide you with our TÜV SÜD certification mark, which is globally recognised and synonymous with quality and safety.

An internationally accredited Certification Body, TÜV SÜD provides the expertise and experience to assess your organisation to the requirements of ISO 14001 and other management system standards.

During a certification process, TÜV SÜD's independent and qualified auditors apply the following techniques:

- **Document review:** evaluation of the organisation's requirements and/or documentation to ensure the systematic control of all processes relevant to ISO 14001.
- **On-site-audit:** verification, in the form of interviews and on-site inspection at the customer's premises, that the requirements of ISO 14001 are being implemented effectively. This includes checking

processes based on records kept by the organisation, such as available measurement results, minutes of meetings, training and qualification records, complaints management and records, and the resulting improvement projects instigated by the organisation.

In addition to offering comprehensive evaluations and reports, we can provide you with our TÜV SÜD certification mark, which is globally recognised and synonymous with quality and safety.

GET YOUR ISO 14001 CERTIFICATION



DOCUMENTATION REVIEW AUDIT

TÜV SÜD evaluates your documentation and company records



ON-SITE AUDIT

TÜV SÜD reviews the compliance of your actual activities to standard requirements and company records.



CLOSING THE GAP

Your organisation identifies and implements measures to correct the root cause of any non-conformances identified by the audit.



CERTIFICATE ISSUANCE

TÜV SÜD issues the ISO 14001 certificate and certification mark



SURVEILLANCE AUDITS

Annual audit required to maintain certification validity

Why choose TÜV SÜD

As an internationally accredited Certification Body for various management systems, TÜV SÜD's certificates are accepted and recognised globally.

Having TÜV SÜD as your certification partner not only allows your company to lean on our experience but also lends your brand the distinction of the TÜV SÜD certification mark, a powerful demonstration of your commitment to environmental management.

TÜV SÜD is accredited by DAkkS (Germany) and other European Accreditation Bodies as well as by ANAB (U.S.), NABCB (India) and JAS-ANZ (Australia and New Zealand), all under the International Accreditation Forum Multilateral Agreement (IAF-MLA). This ensures that ISO 14001 certification is conducted with the highest degree of professionalism and conformance to international guidelines and standards.

Our international network of subsidiaries on every continent enables us to serve organisations worldwide and certify their conformity to ISO 14001 on a global scale. TÜV SÜD's experts hold various international and national accreditations to satisfy local requirements for combined auditing exercises. In addition, our auditors are required to follow a strict code of conduct through Auditor Codex that assures both you and your customers of our complete independence and professionalism.



Internationally accredited Certification Body for a wide range of management system standards



Facilitates safe and secure business operations across industries



Globally recognised TÜV SÜD certification mark



Available in all key regions across the world

Conclusion

While accredited certification to ISO 14001 is not a mandatory requirement, organisations can reap many benefits by adopting and implementing the system. With organisations under increasing scrutiny from stakeholders to minimise their environmental impact, ISO 14001 certification demonstrates a strategic commitment to continuous improvement. With a certified EMS in place, it can reduce the risks of regulatory and environmental liability fines for an organisation. Certification can also bring about reduced costs, improved

staff morale and enhanced brand reputation.

Third-party certification, where an independent certification body audits your practices against the requirements of the standard, gives a strong signal to your buyers, customers, suppliers and other stakeholders that you have implemented the standard properly. It also helps organisations to demonstrate that their system complies with regulatory and contractual requirements.

With organisations under increasing scrutiny from stakeholders to minimise their environmental impact, ISO 14001 certification demonstrates a strategic commitment to continuous improvement.

FOOTNOTES

[1] ISO 14001 Continual Improvement Survey 2013 Final Report and Analysis 1 February 2014

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www.tuvsud.com/system-certification
systemcertification@tuvsud.com

Add value. Inspire trust.

TÜV SÜD is a trusted partner of choice for safety, security and sustainability solutions. It specialises in testing, certification, auditing and advisory services. Since 1866, the company has remained committed to its purpose of enabling progress by protecting people, the environment and assets from technology-related risks. Today, TÜV SÜD is present in over 1,000 locations worldwide with its headquarters in Munich, Germany. Through expert teams represented by more than 24,000 employees, it adds value to customers and partners by enabling market access and managing risks. By anticipating technological developments and facilitating change, TÜV SÜD inspires trust in a physical and digital world to create a safer and more sustainable future.

TÜV SÜD AG
Westendstr. 199
80686 Munich Germany
+49 89 5791 0
www.tuvsud.com