ISO Revisions
Latest update

New and Revised

Moving from ISO 14001:2004 to ISO 14001:2015
Transition Guide

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Successful businesses understand that it is the present that underwrites the future. Engaging with the commercial aspects of environmental issues is about the totality of 'now'; not just managing your organization's impacts, but taking action today that manages those impacts that will directly affect your organization and your markets.

That's why organizations need continual, robust and wide ranging environmental management.

This guide has been designed to help you meet the requirements of the new version of the international standard for Environmental Management Systems (EMS), ISO 14001:2015, which replaces ISO 14001:2004. It specifies the requirements for establishing, implementing, maintaining and continually improving an EMS for any organization, regardless of size.

So why is it changing?

All ISO management system standards are subject to a regular review under the rules by which they are written. Following a substantial user survey the committee decided that a review was appropriate and created the following objectives to maintain its relevance in today's market place and in the future:

- Integrate with other management systems
- Provide an integrated approach to organizational management
- Reflect increasingly complex environments in which organizations operate
- Enhance an organization's ability to address their environmental impacts.

ISO 14001 was originally written with the environment in mind and that remains the priority for ISO 14001:2015.

NB. *This transition guide is designed to be read in conjunction with the latest available version of ISO 14001—Environmental management systems — Requirements with guidance for use. It does not contain the complete content of the standard and should not be regarded as a primary source of reference in place of the standard itself.*

What's in the new standard and what are the benefits for organizations?

ISO 14001 – Environmental Management Systems, the world's first international environmental standard has been helping thousands of organizations to improve their environmental, sustainability and operational performance since it was first published as BS 7750 in 1992. The new version has been written to maintain its relevance in today's marketplace and to continue to offer organizations improved performance and business benefits.

With the 2015 version of ISO 14001 you can:

- Ensure your environmental management is aligned with the strategic direction of the organization
- Introduce an integrated approach with other management system standards
- Increase involvement of the leadership team
- Improve environmental performance

It's more detailed than the 2004 version providing greater clarity. This means you can make it relevant to the requirements of your own organization to gain sustainable business improvements.

One of the major changes to ISO 14001 is that it brings environmental management and continual improvement into the heart of an organization. This means that the new standard is an opportunity for organizations to align their strategic direction with their environmental management system. In addition, there is an increased focus on improving environmental performance. Organizations will need to take steps to protect the environment and improve environmental performance

Our customers tell us they get multiple benefits as a result of implementing and adopting a system that meets the requirements of ISO 14001. The new version of the standard will continue to do this and provide add additional value.

The standard:

- Improves environmental performance, saving money, reducing waste and preserving natural resources
- Improves risk and opportunity management ensuring continual improvement is systematic
- Improves lifecycle management helps identify specific product improvements
- Helps comply with legislation, reducing the risk of fines and adverse publicity
- Improves corporate responsibility to meet your supply chain requirements
- Helps you to become a more consistent competitor in your marketplace
- Motivates and engages staff with more efficient processes

Implementing ISO 14001

ISO 14001 is part of a family of sustainability and environmental management related standards. You may find this section useful for further reference in addition to ISO 14001:

1 ISO 14004:2015, Environmental Management Systems –General guidelines on principles, systems and supporting techniques

2 ISO 14006:2011, Environmental Management Systems – Guidelines for incorporating ecodesign

3 ISO 14031:2013, Environmental Management – Environmental performance evaluation guidelines

4 ISO 14044:2006, Environmental management -- Life cycle assessment -- Requirements and guidelines

4 ISO 50001:2011, Energy Management - Requirements with guidance for use

5 ISO 20121:2012, Event Sustainability Management Systems - Requirements with guidance for use

6 PAS 2050:2011, Specification for the assessment of the life cycle greenhouse gas emissions of goods and services

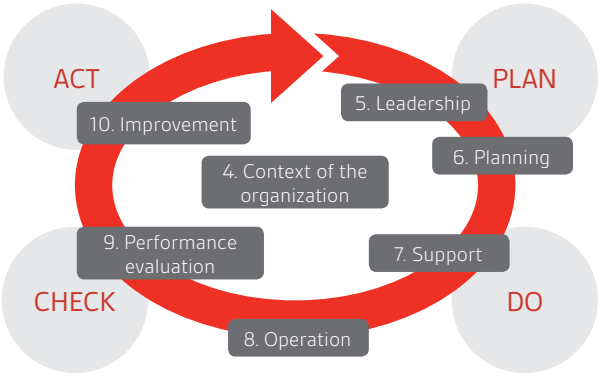
7 PAS 2060:2014, Specification for the demonstration of carbon neutrality.

Comparing the latest version of ISO 14001 with ISO 14001:2004

ISO 14001:2015 is based on Annex SL – the new high level structure (HLS) that brings a common framework to all management systems. This helps to keep consistency, align different management system standards, offer matching sub-clauses against the top-level structure and apply common language across all standards. With the new standard in place, organizations will find it easier to incorporate their environmental management system into the core business processes and get more involvement from senior management.

The Plan-Do-Check-Act (PDCA) cycle can be applied to all processes and to the environmental management system as a whole. The diagram here (Figure 1) illustrates how Clauses 4 to 10 can be grouped in relation to PDCA.

Figure 1



New/updated concept	Comment
Context of the organization	The range of issues (see below) that can affect, positively or negatively, the way an organization manages its environmental responsibilities
Issues	Issues can be internal or external, positive or negative and include environmental conditions that either affect or are affected by the organization
Interested parties	Much more detail about considering their needs and expectations, then deciding whether to adopt any of them as compliance obligations
Leadership	Requirements specific to top management who are defined as a person or group of people who directs and controls an organization at the highest level
Risk and opportunities	Refined planning process replaces preventive action. Aspects and impacts now part of risk model
Compliance obligations	Replaces the phrase 'legal requirements and other requirements to which the organization subscribes'
Environmental objectives and planning to achieve them	Greater level of detail on environmental objectives which now have to reflect changed planning process (see risk and opportunities above) and include determination of appropriate indicators
Communication	There are explicit and more detailed requirements for both internal and external communications
Documented information	Replaces documents and records
Operational planning and control	Generally more detailed requirements, including a consideration of procurement, design and the communication of environmental requirements 'consistent with a life cycle perspective'
Performance evaluation	Covers the measurement of EMS, operations that can have a significant environmental impact, operational controls, compliance obligations and progress towards objectives
Evaluation of compliance	More detailed requirements relating to maintaining the knowledge and understanding the status of compliance levels
Nonconformity and corrective action	More detailed evaluation of both the nonconformities themselves and corrective actions required
Management review	More detailed requirements relating to inputs and outputs of the review

The key requirements of ISO 14001:2015

Clause 1: Scope

This clause still relates to the scope or coverage of the standard to help organizations achieve the intended outcomes of its EMS. It now references undertaking environmental management that includes a consideration of a 'life cycle perspective'.

Clause 2: Normative references

As in earlier versions of ISO 14001, there are no normative references, for example other additional requirements in other standards, that have to be considered. The clause is retained in order to maintain the same numbering scheme as all the other management system standards.

Clause 3: Terms and definitions

At first sight, the listing of terms and definitions seems confusing as they are not in alphabetical order. Instead, the approach stipulated by ISO and new to many users, is that terms and definitions have been grouped into organization and leadership, planning, support and operation and performance evaluation and improvement. Readers new and old may find it easier to use this listing in conjunction with the alphabetical listing in Annex C.

In addition, those using an earlier version of the standard may well want to pay particular attention to the meaning of other terms included for the first time in ISO 14001, such as 'environmental condition', 'process', compliance obligations ', 'life cycle' and 'documented information.'

Clause 4: Context of the organization

The intent of this clause is to provide a high-level, strategic understanding of the important issues that can affect, either positively or negatively, the way the organization manages its environmental responsibilities. It gives an organization the opportunity to identify and understand factors and parties that affect the intended outcome(s) of the EMS. It also in part addresses the old concept of preventive action.

Firstly, the organization will need to determine external and internal issues that are relevant to its purpose i.e. what are the relevant issues, both inside and out, that have an impact on or affect its ability to achieve the intended outcome(s) of the EMS.

It should be noted that the term 'issue' covers not only problems, which would have been the subject of preventive action in the previous standard, but also important topics for the EMS to address, such compliance obligations that the organization might set for the EMS. Importantly, those issues should include not only environmental conditions that the organization affects but also those that it is affected by. Some further general guidance on 'issues' is given in Clause 5.3 of ISO 31000:2009.

Secondly, an organization will also need to identify the 'interested parties' relevant to their EMS, which is far more prominent in this version of the standard. These groups could include customers, communities, suppliers and non-government organizations. Determining their relevant needs and expectations is now part of establishing the context for the EMS operation. Each organization will identify their own unique set of 'interested parties' and these may change overtime.

Once the context has been established, the scope of the EMS has to be determined in relation to various additional factors. Those who have used the earlier version of the standard should review their current scope and be able to demonstrate that it meets these specific requirements.

Finally, the last requirement of Clause 4 is to establish, implement, maintain and continually improve the EMS in accordance with the requirements of the standard. This requires the adoption of a process approach and although every organization will be different, documented information such as process diagrams or written procedures could be used to support this.

Clause 5: Leadership

This clause places requirements on 'top management' which is the person or group of people who directs and controls the organization at the highest level. Note that if the organization that is the subject of the EMS is part of a larger organization, then the term 'top management' refers to the smaller organization. The purpose of these requirements is to demonstrate leadership and commitment by leading from the top and integrating environmental management into business processes.

Top management must demonstrate a greater involvement in the management system and must ensure that the requirements are integrated into the organizations processes and that the policy and objectives are compatible with the strategic direction of the organization. A particular responsibility of top management is to establish the environmental policy, and the standard defines the characteristics and properties that the policy is to include. This can include commitments specific to an organization's context beyond those directly required, such as the 'protection of the environment'

There is also a greater focus on top management to commit to continual improvement of the EMS to enhance environmental performance. Communication is key as well, and top management have a responsibility to ensure the EMS is made available, communicated, maintained and understood by all parties.

Finally, the clause places requirements on top management to assign relevant responsibilities and authorities, in order to 'facilitate environmental management', highlighting two particular roles concerning EMS conformance to ISO 14001 and reporting on EMS performance.

Clause 6: Planning

Taken as a whole, Clause 6 probably presents the greatest area of change for users of earlier versions of the standard. It works with Clauses 4.1 'context of the organization' and 4.2 'interested parties' to complete the new way of identifying and managing preventive actions. It focuses the organization on the development and use of a planning process, rather than a procedure to address both a range of factors and the risk associated with such factors.

The first part of this clause defines what needs to be considered, determined and addressed when establishing, implementing and maintaining the processes to meet the requirements of the planning clause. Sub clause 6.2.1 requires the organization to determine the environmental aspects of it activities, products and services, that it can control and influence within the defined scope. This is broadly in line with earlier versions of the standard. For the first time, there is an explicit reference to abnormal and emergency situations. Even more importantly, the reference to a consideration of a life cycle perspective and the clause notes highlights that significant aspects can give rise to risks that are both beneficial and adverse. In aligning with the principles and guidance given in ISO 31000, this clause is now a precursor to further risk identification.

Similar to the requirements in the 2004 version, another factor within this clause is the term 'compliance obligations' which replaces the term 'legal and other requirements' used in the earlier standard, though legal and other requirements is an admitted term. In many cases, the basic approach to the identification and use of information by the organization in relation to this area will still meet the new requirements.

Clause 6.1.1 represents a new requirement for organizations to determine the risks and opportunities that arise from Clause 4.1 'context of the organization', Clause 4.2 'interested parties', Clause 6.1.2 'environmental aspects' and finally Clause 6.1.3 'compliance obligations'. As risk is defined as the 'effect of uncertainty on environmental objectives' there is a direct link here to the intended outcomes of the EMS, which will obviously include basic principles such as the prevention of pollution and the maintenance of legal compliance.

There are new requirements 'Planning to take action'. This takes the more holistic approach required by the previous clause and harnesses it to action planning at a more detailed level. This will ensure that the outputs of the planning process are sufficiently complete to form a solid foundation for the rest of the system.

Finally, the last part of the clause considers 'environmental objectives and planning to achieve them'. The organization shall establish environmental objectives at relevant functions and levels. As well as being consistent with the environmental policy, environmental objectives must be measureable, monitored, communicated and updated.

In planning to achieve them, there is now a specific requirement to determine how the results of actions will be evaluated using indicators for monitoring progress. For further guidance on setting performance indicators relevant to environmental management, see ISO 14031 – Environmental performance evaluation guidelines.

Clause 7: Support

This clause begins with a requirement that organizations shall determine and provide the necessary resources to establish, implement, maintain and continually improve the EMS. Simply expressed, this is a very powerful requirement covering all EMS resource needs.

The clause continues with requirements for competence, and awareness, which are similar to their counterparts in ISO 14001:2004. Organizations will need to determine the necessary competence of people doing work that under its control that affects its environmental performance, its ability to fulfill its compliance obligationsand ensure they receive the appropriate training. Within this clause there is a requirement to retain documented information as evidence of competence.

In addition, organizations need to ensure that all people doing work under the organizations control are aware of the environmental policy, how their work may impact this and implications of not conforming with the EMS In addition, they need to be aware of their contribution to the effectiveness of the environmental management system including the benefits of enhanced environmental performance. Whilst there is no fundamental change from the previous version, there are now additional requirements covering both internal and external communication.

Finally, there are the requirements for 'documented information' which is a new term that replaces the references in the 2004 standard to 'documents' and 'records'. These requirements relate to the creation and updating of documented information and their control. The requirements are similar to their counterparts in ISO 14001:2004 for the control of documents and for the control of records.

Clause 8: Operation

This clause deals with the execution of the plans and processes that are the subject of previous clauses. This deals with the execution of the actions determined in relation to both Clause 6.1, as well as Clause 6.2. In addition, there are new, more specific requirements that relates to the control or influence exercised over outsourced processes.

A potentially even larger change for users of the earlier standard exists in relation to the new broader requirement to consider certain operational aspects 'consistent with a life cycle perspective'. This means giving serious consideration to how actual or potential environmental impacts happening upstream and downstream of an organization's site based operations are influenced or (where possible) controlled.

The new areas detailed in this clause include the procurement of products and services, and controls to ensure that environmental requirements relating to design, delivery, use and end of life treatment of an organization's products and services are considered at an appropriate stage. The organization must consider the need to provide information about potential significant environmental impacts associated with the transportation or delivery, use, end of life treatment and final disposal of its products and services.

Clause 9: Performance evaluation

Performance evaluation covers many of the areas previously featured in Clause 4.5 and 4.6 of the 2004 version. As a general recommendation, organizations should determine what information they need to evaluate the environmental performance and effectiveness. Work backwards from this 'information need' to determine what to measure and monitor, when, who and how. Documented information that provides evidence of this must be retained.

There is now more detailed requirements in sub clause 9.1.2, around the evaluation of compliance, especially the requirement to maintain 'knowledge and understanding of its status of conforming with compliance obligations'.

Internal audits must also be conducted at planned intervals with management reviews taking place to review the organizations management system and ensure its continuing suitability, adequacy and effectiveness.

Clause 10: Improvement

Due to the new structure and risk focus of the standard, there are no preventive action requirements in this clause. However, there are some new more detailed corrective action requirements. The first is to react to nonconformities and take action, as applicable, to control and correct the nonconformity and deal with the consequences. The second is to determine whether similar nonconformities exist, or could potentially occur elsewhere in the organization, leading to appropriate corrective actions across the whole organization if necessary. Although the concept of preventive action has evolved there is still a need to consider potential nonconformities, albeit as a consequence of an actual nonconformity.

The requirement for continual improvement has been extended to ensure that the suitability and adequacy of the EMS as well as its effectiveness are considered in the light of enhanced environmental performance.

The change has brought some changes to the terminology used as is shown in the table below:

Major differences in terminology between ISO 14001:2004 and ISO 14001:2015

ISO 14001:2004	Was not defined in ISO 14001:2004
Organization	Documented information
Interested party	Compliance obligation
Environment	Environmental condition
Environmental management system	Process
Corrective action	Top management
Continual improvement	Life cycle
	Risk

Documented information

As part of the alignment with other management systems standards a common clause on 'documented information' has been adopted.

The terms "documented procedure" and "record" have both been replaced throughout the requirements text by "documented information". Where ISO 14001:2004 would have referred to documented procedures (e.g. to define, control or support a process) this is now expressed as a requirement to maintain documented information. Where ISO 14001:2004 would have referred to records this is now expressed as a requirement to retain documented information. Requirements to maintain documented information are detailed throughout the standard and some examples are given. Please read the standard carefully particularly Clause 7.5.

4.3	Scope
5.2	Policy
6.1.1	General documented process to meet requirements of 6.1 - Information to the extent necessary to have confidence that the processes have been carried out as planned • Documented information of risks and opportunities that needs to be addressed
6.1.2	Need to have documented information on: • criteria used to determine its environmental aspects; • environmental aspects and associated environmental impacts; • significant environmental aspects
6.1.3	Documented information of compliance obligations
6.2.1	Documented information on environmental objectives
7.2	Documented information as evidence of competence
7.4.1	Documented information as evidence of communication
7.5.1	Documented information required by this International Standard as well as documented information, determined by the organization, as being required for the effectiveness of the environmental management system
7.5.3	Documented information of external origin determined by the organization to be necessary
8.1	Documented information to the extent necessary to have confidence that the processes have been carried out as planned
9.1.1	Evidence of monitoring, measurement, analysis and evaluation results
9.1.2	Evidence of compliance evaluation results
9.2.2	Evidence of the implementation of the audit programme(s) and the audit results
9.3	Documented information as evidence of the results of the management reviews
10.2	Information of the nature of the nonconformities and any subsequent actions taken, and the results of any corrective action.

Transition guidance

ISO 14001:2015 Transition Timeline

Transition is an opportunity – What do you need to do?

1. Take a completely fresh look at the EMS
2. Attend our suite of transition training courses to understand the differences in more detail
3. Highlight the key changes as opportunity for improvements
4. Make changes to your documentation to reflect new structure (as necessary)
5. Implement new requirements on leadership, risk and context of organization
6. Review effectiveness of current control set
7. Assume every control may have changed
8. Carry out an impact assessment

Your transition journey

BSI has identified a step-by-step journey to help you through the transition and realize the benefits of ISO 14001:2015. We have mapped out a framework which guides you through the options and support available from BSI to ensure you have the knowledge and information you require.

Buy a copy of the International Standard. This will help you become familiar with the new requirements, terminology and layout

Visit the BSI website to access the most up-to-date support and transition material available at bsigroup.com/isorevisions including whitepapers which can help you understand the changes

Look at the wide range of BSI transition training courses available to make sure you fully understand the changes including introduction and implementing courses as well as specific deep-dive modules designed to help you understand core ISO Standard requirements

Download our implementation toolkit developed to help you understand, implement and communicate the ISO 14001 revision changes throughout your organization

Consider further services to help implement the changes. BSI has a full range of services available including gap assessments and business improvement tools to help you manage your systems and transition. These can help you transition quickly and gain early adopter advantage.

Compare the differences between ISO 14001:2004 and ISO 14001:2015

Download our mapping guide which provides an overview of the changes, deletions, new or enhanced requirements between ISO 14001:2004 and the FDIS ISO 14001:2015
Visit **bsigroup.com/iso14001revision**

Transition training from BSI

Whatever the specific requirement, BSI has designed a series of training courses that can meet your needs. It's worth noting that all courses have been designed by experts in their fields who have been directly involved in the development of the standards.

Our experienced tutors can help you get to grips with the matters that concern you and your organization directly, whether delivered in-house or as part of an open course where other delegates can share their experience.

The transition courses include:

ISO 14001:2015 Senior management briefing

2 hour face-to-face session

- Understand the purpose of ISO 14001:2015 and the leadership responsibilities outlined in the standard
- Important for top management of organizations transitioning to ISO 14001:2015

ISO 14001:2015 Transition

1 day classroom based training course

- Learn about the new ISO high level structure and the differences between ISO 14001:2004 and ISO 14001:2015
- Essential for anyone involved with an ISO 14001:2015 transition, from managers to implementers and auditors

ISO 14001:2015 Implementing changes

2 day classroom based training course

- Discover how to apply the key changes to ISO 14001:2015 and formulate a transition action plan
- Combines the one day transition course with an additional day of implementation activities
- Recommended for those responsible for transitioning an existing system to ISO 14001:2015

ISO 14001:2015 Auditor transition

2 day classroom based training course

- Learn how to audit the key changes to ISO 14001:2015
- Combines the one day transition course, with a supplementary day of ISO 14001:2015 auditing activities
- Ideal for existing internal and lead auditors who need to convert to ISO 14001:2015

ISO 14001:2015 Deep dive

2 day classroom based training course

- Gain a deeper insight into these important ISO 14001:2015 concepts: process approach, risk-based thinking, control of external provision and auditing leadership.
- Valuable for anyone involved with an ISO 14001:2015 transition, including managers, implementers and auditors.

Additional resources

There are a variety of materials which can be accessed online at www.bsigroup.com/iso-14001 and consists of:

The importance of leadership

The new standard has an entire clause devoted to leadership and is one of the most significant changes. This whitepaper explains why management are now required to take a more active role in the QMS to ensure it is implemented, embedded, communicated and maintained.

REVISED: ISO 14001 Frequently Asked Questions

Here we aim to address those initial questions that you may have as your begin your journey towards the new standard.

Introducing Annex SL

The new generic framework with core text, common terms and definitions and the blueprint for all management system standards going forward – understand more about the structure in our whitepaper.

ISO 14001 Whitepaper - The history and future of ISO 14001

This whitepaper looks at the history of the standard and how it has it has developed over the years.

PLUS:

- Old-to-new ISO 14001 Mapping Guide
- Self-assessment checklist
- Transition Journey to the new ISO 14001:2015.

Additional services

We also have a wide range of services to help you to implement the changes and understand how well you are doing. These include:

Gap assessment

A transition gap assessment is a pre-assessment service where we take a closer look at your transition plan and environmentalmanagement system comparing it with the requirements of ISO 14001:2015. As a first step in your transition journey with BSI, the gap assessment can help confirm the areas of your system already compliant and any gaps in your system, saving you time and money.

Business improvement tools

When you implement the revised standard it's extremely important to manage and maintain it in the most efficient manner possible. Best practice organizations do this by deploying business improvement tools such as BSI Action Manager or Entropy software, as one of our clients told us, 'it's literally like having an extra member of the team'. Clients have experienced 50% reduction in the time to implement their management system.

Why BSI?

BSI has been at the forefront of ISO 14001 since the start. And it was originally based on BS 7750, the first environmental management system standard which was developed by BSI in 1992, the year of the first Earth Summit in Rio. That's why we're best placed to help you understand and transition to the new standard.

At BSI we create excellence by driving the success of our clients through standards. We enable others to perform better, manage risk and achieve sustainable growth.

For over a century our experts have been challenging mediocrity and complacency to help embed excellence into the way people and products work.
We make excellence a habit

Our products and services

We provide a unique combination of complementary products and services, managed through our three business streams; Knowledge, Assurance and Compliance.

Knowledge

BSI works with business experts, government bodies, trade associations and consumer groups to capture best practice and structure the knowledge all organizations need to succeed. The majority of the widely used and implemented international standards were originally shaped by BSI, for example ISO 9001, Quality Management and ISO/IEC 27001 for Information Security.

Assurance

Independent assessment of the conformity of a process or product to a particular standard ensures that our clients perform to a high level of excellence. We help our clients understand how they are performing, thereby identifying areas of improvement from within

Compliance

To experience real, long-term benefits, our clients need to ensure ongoing compliance to a standard so that it becomes an embedded habit. We train our clients to understand standards and how to implement them, as well as provide added value and differentiated management tools to facilitate the process of ongoing compliance.

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