





Moving from ISO 14001:2004 to ISO 14001:2015

The new international standard for environmental management systems



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, ISO 14001 being finalised in 2015.

This new version of ISO 14001 updates and extends globally recognized requirements for establishing, implementing, maintaining and continually improving an Environmental Management System (EMS) for any organization, regardless of type or 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 the increasingly complex environments in which organizations operate
- Enhance an organization's ability to address their environmental impacts.

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.



Why adopt an Environmental Management System standard?

No organization today can afford to risk it's reputation by ignoring their environmental responsibility

With ISO 14001 Environmental Management you can;

- Consistently meet your environmental responsibilities overtime
- Differentiate your company and win more business
- Improve company performance through resource savings

An ISO 14001 environmental management system will help you to monitor and manage your resources and environmental impacts whether you run a single site operation or a global business. As the world's first environmental management system, it helps you identify and control how your business affects the environment and helps put in place robust policies to conserve your resources and save money.

These are some of the benefits that our customers tell us they have received as a result of adopting and implementing a system that meets ISO 14001.

The standard allows:

- You to become a more consistent competitor in your marketplace
- Better manage your resources and reduce waste saving money
- Comply with legislation, reducing the risk of fines and adverse publicity
- Improve your corporate responsibility to meet your supply chain requirements
- Motivate and engage staff with more efficient processes
- Broaden business opportunities by demonstrating compliance.

Implementing ISO 14001

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

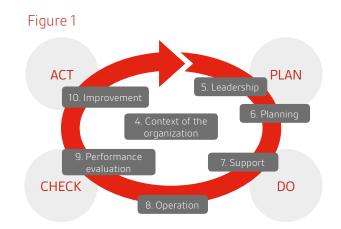
- 1 BS EN ISO 14004:2010, Environmental Management Systems General guidelines on principles, systems and supporting techniques
- 2 BS EN ISO 14006:2011, Environmental Management Systems Guidelines for incorporating ecodesign
- 3 BS EN 14031:2013, Environmental Management Environmental performance evaluation guidelines
- **4** BS EN ISO 50001:2011, Energy Management Requirements with quidance for use
- BS EN 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 will be 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.

Based on Annex SL, Fig. 1 shows how the clauses of the new high level structure could also be applied the Plan-Do-Check-Act cycle. The PDCA cycle can be applied to all processes and to the environmental management system as a whole.



New/updated concept	Comment
Context of the organization	The organization will have a greater understanding of the important issues that can affect, positively or negatively the way it manages it's 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 and people in leadership roles within the EMs
Risk associated with threats and opportunities	The context of the organization provides the framework for the evaluation of risks associated with threats and opportunities
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 associated with threats 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

Clause 4: Context of the organization

This is a new clause that in part addresses the depreciated concept of preventive action and in part establishes the context for the EMS. It meets these objectives by drawing together relevant external and internal issues (i.e. those that affect the organization's ability to achieve the intended outcome(s) of its EMS) in clause 4.1 with the requirements of interested parties in clause 4.2 to help determine, amongst other elements, the scope of the EMS in clause 4.3.

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 as any market assurance and governance goals 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.

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 wherever possible integration of environmental management into business processes.

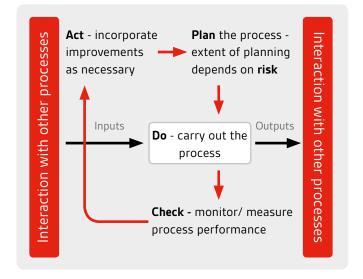
A particular responsibility of top management is to establish the environmental policy, and the standard defines the characteristics and properties that the policy is to include. This can include

commitments specific to an organization's context beyond those directly required, such as the 'protection of the environment'

Finally the clause places requirements on top management to assign and communicate the roles, responsibilities and authority for those who facilitate effective EMS.

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 and 4.2 to complete the new way of dealing with 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.





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.

Finally, there are the requirements for 'documented information'. 'Documented information' 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 enable the organization to meet their environmental policy and objectives. There are new, more specific requirements that relate to the control or influence exercised over outsourced processes.

A potentially larger change is 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 are influenced or (where possible) controlled.

In the light of these changes (including those that relate to planning outputs), users of the standard will obviously want to review their procedures relating to environmental emergencies. When they do so, they should also refer to the more detailed stipulations in clause 8.2 to ensure they are meeting the full range of requirements.

Clause 9: Performance evaluation

This covers much of what was in clause 4.5 of the previous standard.

As a general recommendation, determine what information you need to evaluate the environmental performance and the effectiveness of your EMS. Work backwards from this 'information need' to determine what to measure and monitor, when, who and how.

Organizations should also revisit their audit programme in particular to ensure that it meets the new requirements.

Clause 10: Improvement

Due to the new structure and risk focus of the standard, there are no specific requirements for preventive actions 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.





Documented information

The requirements for documented information are spread throughout the standard. However, in summary they are:

4.3 5.2	Scope of the EMS Policy	7.5.3	Documented information of external origin determined by the organization to be necessary.
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	8.1	Documented information to the extent necessary to have confidence that the processes have been carried out as planned.
6.1.2	planned. Need to have documented information on:	9.1.1	Evidence of monitoring, measurement, analysis and evaluation results.
J	criteria used to determine its significant	9.1.2	Evidence of compliance evaluation results
	environmental aspects; environmental aspects and associated environmental	9.2.2	Evidence of the implementation of the audit programme(s) and the audit results.
	impacts;significant environmental aspects.	9.3	Documented information as evidence of the results of the management reviews
6.1.3	Documented information of compliance obligations	10.1	Information of the nature of the nonconformities and
6.1.4	Documented information of risk associated with threats and opportunities that needs to be addressed	10.1	any subsequent actions taken, and the results of any corrective action.
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.		

Mapping table

The table below is a clause by clause comparison between the requirements of the proposed 2015 version and the current 2004 standard.

ISO	DIS 14001:2015	ISO 1	4001:2004
4	Context of the organization (title only)		
4.1	Understanding the organization and its context		
4.2	Understanding the needs and expectations of interested parties		
4.3	Determining the scope of the environmental management systems	4.1	General requirements
4.4	Environmental management system		
5	Leadership (title only)		
5.1	Leadership and commitment		
5.2	Environmental policy	4.2	Environmental policy
5.3	Organizational roles, responsibilities and authorities	4.4.1	Resources, roles, responsibility and authority
6	Planning (title only)	4.3	Planning (title only)
6.1	Actions to address risk associated with threats and opportunities (title only)		
6.1.1	General		
6.1.2	Significant environmental aspects	4.3.1	Environmental aspects
6.1.3	Compliance obligations	4.3.2	Legal and other requirements
6.1.4	Risk associated with threats and opportunities		
6.1.5	Planning to take action		
6.2	Environmental objectives and planning to achieve them (title only)	4.3.3	Objectives, targets and programme(s)
	Environmental objectives Planning actions to achieve environmental objectives	4.3.3	Objectives, targets and programme(s)
7	Support (title only)	4.4	Implementation and operation (title only)
7.1	Resources	4.4.1	Resources, roles, responsibility and authority
7.2 7.3	Competence Awareness	4.4.2	Competence, training and awareness
7.4.1 7.4.2 7.4.3	Communication (title only) General Internal communication External communication	4.4.3	Communication
7.5 7.5.1	Documented information (title only) General	4.4.4	Documentation
7.5.2	Creating and updating	4.4.5 4.5.4	Control of documentation Control of records Continued >>

Mapping table – continued

ISO	DIS 14001:2015	ISO	14001:2004
7.5.3	Control of documented information	4.4.5 4.5.4	Control of documentation Control of records
8	Operation (title only)	4.4	Implementation and operation (title only)
8.1	Operational planning and control	4.4.6	Operational control
8.2	Emergency preparedness and response	4.4.7	Emergency preparedness and response
9	Performance evaluation (title only)	4.5	Checking (title only)
9.1 9.1.1	Monitoring, measurement, analysis and evaluation (title only) General	4.5.1	Monitoring and measurement
9.1.2	Evaluation of compliance	4.5.2	Evaluation of compliance
9.2	Internal audit	4.5.5	Internal audit
9.3	Management review	4.6	Management review
10	Improvement (title only)		
10.1	Nonconformity and corrective action	4.5.3	Nonconformity, corrective action and preventive action
10.2	Continual improvement		



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
- Attend a one–day transition course to understand the differences
- **3.** Highlight the key changes as opportunity for improvements
- Make changes to your documentation to reflect new structure (as necessary)
- 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 Final Draft International Standard (FDIS) and/or International Standard on publication. 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, Entropy software to help you manage your systems and transition assessments for organizations keen to transition quick and gain early adopter advantage



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 BSI 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 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/Lead 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: Lifecycle Perspective, Risk-based Thinking, Control of External Provision and Leadership Auditing
- Valuable for anyone involved with an ISO 14001:2015 transition, including managers to implementers and auditors

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



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

NEW: ISO 14001 Whitepaper - Understanding the changes

With the key changes in the proposed standard for 2014 based on the Draft International Standard, published in May 2014, this Whitepaper looks at those changes in detail, the timeline and what you can do now to prepare.

NEW: ISO 14001 Frequently Asked Questions

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

ISO 14001:2015 Revision Webinar

Learn more about the new ISO 14001 revision and how the changes will affect your business.

ISO 14001 Whitepaper - The history and future of ISO 14001

With a revision for 2015 underway, this whitepaper looks at the history of the standard, how it has developed over the years and the changes companies can expect to see in ISO 14001:2015.

PLUS:

- Old-to-new ISO 14001 Mapping Guide
- Old-to-new ISO 14001 Transition Guide
- Self-assessment checklists for the new ISO 14001
- Your Transition Journey to the new ISO 14001:2015

We know ISO 14001; BSI shaped the original standard.

BSI...

- Shaped the original ISO 14001 standard
- Has the most highly trained and knowledgeable assessors
- Offers the widest range of support solutions in the market place
- Is the number one certification body in the UK, USA and Korea
- Looks after more than 70,000 global clients
- · Has an unrivalled international reputation for excellence

