

What is ISO 14001:2015

and how can the standard help both your
business and the environment?

WHITE PAPER

Table of Contents

- Executive Summary..... 3
- What is an Environmental Management System? 4
 - Content of ISO 14001:2015 and what has changed from 14001:2004.....4
 - Adjustments and omissions from ISO 14001:2004 to 14001:2015..... 6
- ISO 14001:2015 Environmental Management System and management tool? 7
- ISO 14001:2015: What benefits can your organization expect? 9
 - Improved profitability.....9
 - Reputational benefits9
 - Assist in winning new business.....10
 - Demonstrate scalability.....10
 - Jointly increase customer and employee satisfaction10
 - Possible to integrate with other systems.....10
- Common myths surrounding ISO 14001 11
- How to get your management team on board 13
- Implementation milestones: What are they? 14
- Mandatory steps prior to the certification audit 15
- Maintaining your EMS after the certification audit 16
- Conclusion..... 17
- References 17

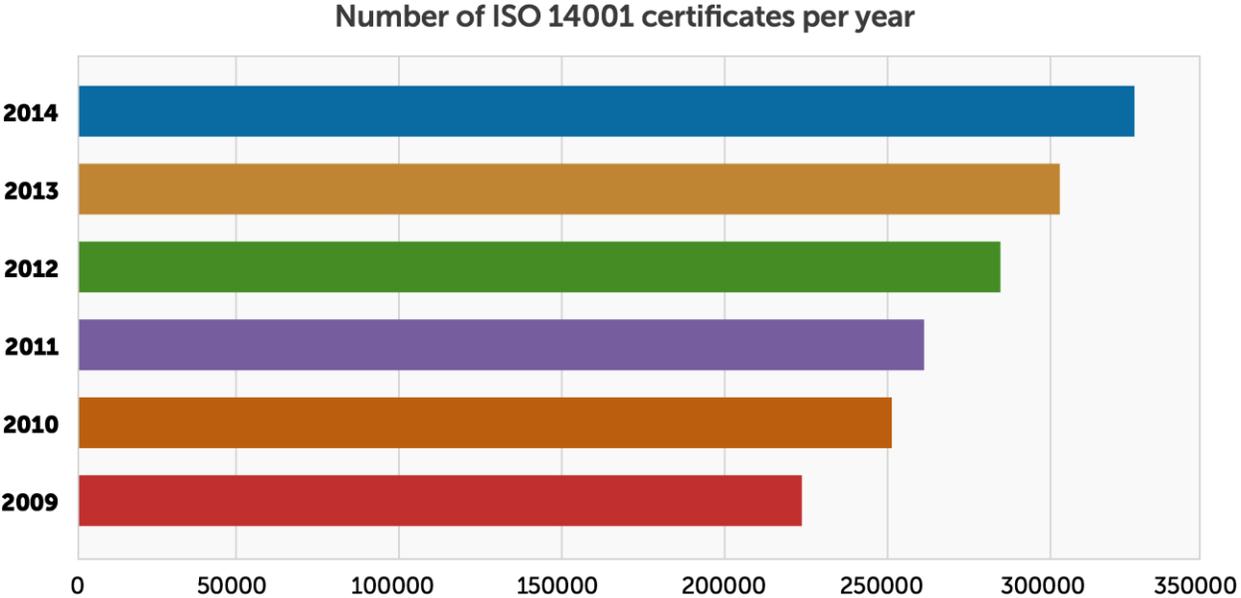
Executive Summary

The first environmental standard, BS 7750, was published by the BSI Group in 1992, and was replaced by the ISO 14001 group of standards in 1996. ISO is a non-governmental, cross-country organization that produces standards which seek to encourage standardization and innovation, using input from its 162 member bodies. The ISO 14001 standard provides guidance to organizations with respect to the design and implementation of the EMS (Environmental Management System), and has been written by industry professionals to provide direction as to how businesses can best measure, manage, and improve environmental performance. The version published in 2004 was replaced with a new revision in September 2015, which is known as ISO 14001:2015. Organizations can seek certification according to this standard via an audit process by an independent approved certification body.

ISO 14001:2015 certification gives potential customers the knowledge that a business has certain processes and is aware of its environmental impact, lessening the need for process audits. ISO 14001:2015 is designed to be effective for and applicable to businesses of all types and sizes, whether for profit, not for profit, or charity.

ISO 14001:2015 has become one of the most important ISO standards and with the increased focus on environmental issues, certification against the ISO 14001:2015 standard promises to be even more desirable in the future.

The following graphic demonstrates the number of ISO 14001 certifications valid worldwide, illustrating the “year over year” increase in certification by the business community:



Source: ISO 2014 survey



What is an Environmental Management System?

An EMS is a tool that provides guidance on how to mitigate an organization's impact on the environment through knowledge of its activities and those of its suppliers and partners. The EMS will normally take the form of a set of processes and practices, supported by relevant documentation, which guides the organization's activities consistent with the terms of the standard itself.

Content of ISO 14001:2015 and what has changed from 14001:2004

ISO 14001:2004 was replaced in September 2015 by ISO 14001:2015. Here we take a section-by-section look at what the standard consists of, and where the most significant changes have come:

General Standard Structure: ISO 14001:2015 uses Annex SL, similar to ISO 9001 and ISO 27001. This makes ISO 14001:2015 more closely aligned with these other ISO standards and specifically the **"Plan, Do, Check, Act"** cycle that these standards share. Annex A provides guidance on how to use the standard itself, and you can find out more by reading **"ISO 14001:2015 – What is Annex A and how do you use it?"** This now means that the ISO 9001/14001/27001 standards share the same

format, terminology, and definitions, which means that they can be more easily understood and integrated seamlessly.

Section 4 – Context of the organization: The ISO 14001:2015 standard has a requirement for the organization to not only identify any internal or external issues that may affect its ability to meet environmental objectives, but also to understand the needs and expectations of interested parties who will ultimately allow the scope and boundaries of the EMS to be defined accurately. For more information on this topic, see **"Determining the context of the organization in ISO 14001."**

Section 5 – Leadership: One of the key changes to the ISO 14001:2015 standard is in the leadership requirement. Leaders are now asked to take responsibility for strategic objectives, integration of the EMS into other business processes, resources, communication, performance against objectives, and continual improvement. You can learn more by reading [“How to demonstrate leadership according to ISO 14001:2015.”](#)

Section 6 – Planning: The main change here is the inclusion of “risk and opportunity.” Organizations are now encouraged to not only consider environmental aspects themselves, but also other parts of the EMS such as compliance or legislation factors, along with the increased risk or opportunity that reevaluation of the organizational context may bring. Another aspect of this section is the consideration of whether the strategic direction of the organization and the EMS itself are consistent and related. You can learn more about the risk in [“The role of risk management in the ISO 14001:2015 standard.”](#) Another significant change that ISO 14001:2015 brings in terms of planning is the requirement to consider environmental performance from a “lifecycle” perspective, which is a new and more all-encompassing approach than in the previous standard. Also, from a compliance obligations perspective, it must be noted that the needs of “interested parties” now must also be considered.

Section 7 – Support: This section deals with related issues such as resources, competence, awareness, and communication, as well as documented information and the changes it brings. “Documented Information” is the newly used term here, and heads the main change to this clause. Procedures and records now come under this heading. This also presents an opportunity, while reevaluating your documents, to remove any that are no longer required; preventive action documents are an example, having been replaced by the “risk and opportunity” process explained above. You can learn more by reading [“A new approach to documented information in ISO 14001:2015.”](#) It is also prudent to note

the effects that the updated leadership requirements have on aspects such as communication, resources, and awareness.

Section 8 – Operation: This section provides guidance on how the organization should undertake operational planning and control, as well as emergency preparedness. More can be learned about emergency response preparation and requirements from the article [“How to satisfy emergency response requirements in ISO 14001:2015.”](#) Controls according to the process and operating criteria are now also required under the terms of the new standard. Controls must now be set with the lifecycle perspective in mind, including consideration of all the potential impacts that goods and services may have on the environmental objectives themselves.

Section 9 – Performance evaluation: This section deals with monitoring and measuring, including compliance evaluation, internal audit, and management review. You can learn more about the management review process in the article [“The importance of management review in the ISO 14001:2015 process,”](#) while more details about the internal audit function can be seen in the article entitled [“Internal audit in the EMS: 5 Steps.”](#) There are also extra requirements in terms of measuring and reporting arising from the management review; The organization must ensure that internal audits and the management review itself are aligned with the general requirements of the new standard, and particularly, that the changes themselves are all effective for the business. You can learn more by viewing the [“Environmental performance evaluation”](#) article.

Section 10 – Improvement: As stated, this section deals with improvement, including continual improvement and dealing with non-conformity and corrective action. You can learn more about the corrective action process in the article [“Corrective and Preventive Actions to support Environmental Management.”](#)

Adjustments and omissions from ISO 14001:2004 to 14001:2015

Management Representative. The requirement for a management representative is not mandatory under ISO 14001:2015. The standard states that responsibilities may be assigned to a member of management, a management representative, or several individuals. It is now up to individual organizations to decide which format is most appropriate.

Environmental Manual: The environmental manual is no longer mandatory, although there is still a requirement to have an Environmental Policy. Again, this does not mean that an organization must not have a manual, but is now given the option to decide whether it is in the best interests of the business.

Preventive Action: The requirement for preventive action has now been removed, as this is now covered by “risk and opportunity.” It is expected that the consideration, appropriation, and action to mitigate or remove risk will eliminate the need for preventive action and indeed prove more proactive and effective.

Documented Information: Documents and records now become “documented information” under ISO 14001:2015. While a business is still required to document its Environmental Policy and aspects, for example, it is left to the organization to decide what processes do and do not need to be documented. With the new changes explained above, which must be evidenced under audit circumstances, it can be reasonably assumed that no other major documentation can be removed from the EMS.



ISO 14001:2015 Environmental Management System and management tool?

The primary consideration for the development of an environmental standard was to lay a foundation for the protection and improvement of the greater environment, but one of the advantages of ISO 14001:2015 is that under Annex SL, it can also be viewed as a management and business tool. So, given that the ISO 14001:2015 standard is now in the same format for the user as the ISO 9001 and 27001 standards, let us examine exactly what that structure is and what the individual “annexes” signify to the user. Firstly, it is important to understand the impact that the use of the Annex SL format has on the ISO 14001:2015 standard itself. This is the actual format that is used for several ISO standards, including ISO 9001 and ISO 27001. Annex SL is not part of the standard, as with Annexes A and B; rather, it’s the standardized format under which ISO 14001:2015 is now presented in terms of structure, definition, and terminology. This common format makes the standards simultaneously easier to understand and integrate. Now, let us examine the Annexes incorporated into the ISO 14001:2015 standard itself, and understand what they seek to achieve:

- Annex A: This is a section within the 14001 standard. Provides guidance of the standard and its clauses to prevent any misinterpretation of the standard itself when an organization matches the clause stipulations to their respective business environments.
- Annex B: This is also a section within the 14001 standard, which illustrates the cross-over sections between ISO 9001 and 14001, thereby displaying the similarities in terms of “management systems.”



Planning and improving your organization’s environmental performance by using the “Plan, Do, Check, Act” (PDCA) cycle now ensures that ISO 14001:2015 is suitable for implementation alongside other ISO standards such as ISO 9001. Therefore, your organization does not need to view your EMS as a separate entity within your strategic business processes, but rather as a management system that, if planned and operated efficiently, not only controls your organization’s environmental impact, but also eliminates unnecessary costs and waste as well as protecting the environment for future generations. Integrating your environmental, quality, health and safety, and information technology systems has never made more sense, and has never been easier.



ISO 14001:2015: What benefits can your organization expect?

There are many benefits in implementing ISO 14001:2015 for organizations of all sizes and in all sectors. Here are some of the benefits that compliance and certification according to ISO 14001:2015 can bring to your business:

Improved profitability

Elimination of waste in processes, improved review processes for supplier performance criteria, improvement of quality of goods and services purchased – these factors all drive an organization’s costs down and profits up. In the article [“Driving your supply chain to ISO 14001 compliance”](#), you can read more about the potential financial benefits of 14001 to your supply chain.

Reputational benefits

Increase your standing within the business community and with your partners, suppliers, customers, and stakeholders by complying with and being certified against ISO 14001:2015. This may be especially beneficial if your business is public facing and high profile, attracting public or media interest.

Legal compliance

Environmental legislation changes regularly, and given the importance of the subject, it will do so even more in the future as technology advances. ISO 14001:2015 and the supporting processes will ensure that you can seamlessly track and implement these changes. Learn more about this topic in the article [“Demystification of legal requirements in ISO 14001.”](#)

Assist in winning new business

ISO 14001:2015 is increasingly becoming an entry-level requirement for tender processes and to partner with blue chip companies. Become certified against ISO 14001:2015 and you not only demonstrate your environmental credentials, but your organization sends out the signal that you have the correct strategy and outlook to do business at the highest level.

Demonstrate scalability

One aspect that is often overlooked is that compliance with 14001:2015 and the attainment of certification against the standard demonstrates that an organization is capable of managing change and therefore scaling upwards if new business demands. The establishment of processes and documented information ensure that training, education, and the necessary increase in skilled resources can be handled in a controlled and intelligent manner in response to increased demand. You can learn more on why certification is desirable in the article [“Why should you certify your ISO 14001 EMS?”](#)

Jointly increase customer and employee satisfaction

Having strong processes, meeting objectives, and creating a positive culture can simultaneously satisfy customers and ensure employees are empowered and happy.

Possible to integrate with other systems

ISO 14001:2015 can be integrated with other management systems, such as 9001, 45001, and 27001, which share similar principles. You can find tips on how this is best done in [“How to integrate ISO 9001 and 14001.”](#)

FACTS MYTHS

Common myths surrounding **ISO 14001**

Despite the fact that environmental issues are very much in fashion, myths do persist regarding ISO 14001:2015. Let's debunk some of them right now:

My business is too small for ISO 14001: ISO 14001:2015 is designed for all sizes and shapes of business, and is equally effective if applied correctly. Organizations of all sizes have environmental impacts, and ISO 14001:2015 can help identify, mitigate, and manage them. For example, you can see the effect that 14001:2015 can have on a large organization like a local authority in the article [“Would local authorities benefit from ISO 14001?”](#) More details on ISO 14001 for small businesses can also be found in [“How small businesses can benefit from ISO 14001.”](#)

My business doesn't have an environmental impact: Wrong. Even a small office can have a surprisingly large impact on environmental resources when you analyze the habits, consumptions, and demands placed upon suppliers. That impact can be reduced through adherence to ISO 14001:2015 principles. Find out more in the article [“How to identify environmental aspects in your office using 14001.”](#)

It's nothing to do with my department: Wrong again. While the new standard stresses the importance of leadership, everyone's actions can have an environmental impact. If you are educated and vigilant, you can make a difference, provide feedback and suggestions to whoever coordinates your EMS, and play your part in making your culture a positive and proactive one. In the article [“Is the management representative still the best person to coordinate your EMS according to](#)

14001:2015", you can learn more about how employee involvement is a critical cornerstone of a safe working environment.

Implementation costs too much: As with all management systems, there is always an initial implementation cost. Whether you use an external consultant, existing resources and knowledge, or have to employ new resources, implementation of ISO 14001:2015 will cost money. However, it is now widely recognized within the business community that the benefits accrued from reduced waste and more streamlined processes will quickly recover your initial outlay, leaving you to feel the financial benefits for years to come.

These are only a sample of some of the myths you may hear as to why ISO 14001:2015 implementation is not a good idea; however, the benefits outlined above far outweigh any perceived negatives in terms of simultaneously protecting the environment and improving your business practices.



How to get your management team on board

“Top management” is a phrase that is common in the ISO 14001:2015 standard, and you will need to get that top management team on board if you wish to firstly, convince them of the merits of the standard, and secondly, implement it as smoothly as possible. This is accentuated by the new emphasis on leadership and commitment and the resulting requirements that the changes to the new standard bring to the leadership team. However, as it is likely that your top management team may be the most educated, driven, and strategically market-aware people in your organization, they should quickly be able to identify the obvious benefits of compliance and registration with ISO 14001:2015. ISO 14001:2015 provides your top management team with the power to make a decision that can play a part in securing a lasting legacy for future generations. You can learn more about this topic in the article [“How to get management buy in for your ISO 14001 project.”](#)



Implementation milestones: What are they?

Previously, in the business community it was possible for an organization to claim compliance against an ISO standard and effectively claim “self-certification.” In recent years this has been understandably frowned upon, and official certification after an audit by an ISO-approved audit body is now deemed “industry standard.” You can learn more about why certification is desirable in the article [“Why you should certify your ISO 14001 EMS.”](#) For the purposes of this paper, let us examine the milestones that must be reached and passed for that audit and certification to take place.

Firstly, in brief, the goal is to build an EMS that can be successfully audited and certified by an approved certification body. To do this, you’ll need to have top management’s commitment and leadership to establish an [Environmental Policy](#), complete with justification or context and scope of your organization. The [“ISO 14001 Implementation Diagram”](#) will also help you prepare. Next, you must develop the combination of mandatory documents, including adherence to legislation, and any other supporting documents your business requires to operate efficiently. You will then have to operate your EMS for a “reasonable” period of time, typically three to six months, to demonstrate that you have carried out vital functions such as internal audit, management review, and the new risk and opportunity considerations. When you can demonstrate that you have reviewed, actioned, and improved your outputs, you will be ready for the audit and, hopefully, certification. The free [“ISO 14001 Implementation Duration Calculator”](#) will assist you in planning your project timescale for ISO 14001:2015 implementation.



Mandatory steps prior to the certification audit

As mentioned above, you will need to demonstrate that you have completed the following steps before certification audit:

Internal audit: a vital component of your EMS where you check, analyze, and improve your existing processes. Find out more in the article [“Internal audit in the EMS: 5 main steps.”](#)

Management review: where your top team sets objectives, and reviews and sets the strategy for your organization. It is also prudent to show evidence of some of the new ISO 14001:2015 criteria here, such as risk-based thinking, evidence of leadership commitment, context of the organization, and so forth. Learn more from this article: [“The importance of the management review in the ISO 14001 process.”](#)

Corrective action: these must be formally undertaken and recorded to show your organization’s ability to deal with and eliminate root cause when dealing with

problems. You can find out more about this process [here](#).

You will now be ready for the two stages of certification audit:

Document review: The auditors will audit your documentation against the requirements of the ISO 14001:2015 standard.

Main audit: This will consist of a review of your processes, documents, and activities to ensure that they are consistent with the ISO 14001:2015 standard, and with your own documentation. You can find some relevant advice in [“5 tips to improve your EMS performance”](#), and you can also get some useful tips for your audit in the article [“What will the auditor ask you during your ISO 14001 audit?”](#)



Maintaining your EMS after the certification audit

However you choose to approach your ISO 14001:2015 implementation, and with whatever type of assistance, it is vital that you retain the ability to maintain your system effectively after the certification audit – with a surveillance audit looming one year after. With the surveillance audit in mind, reading [“5 tips to help you prepare for your ISO 14001:2015 surveillance audit”](#) may provide some beneficial information. Using a consultant can seem appealing with documents, legislation, communication, education, and training concerns, and it may seem preferable to have someone with formal audit training, but you must also consider the effect if and when that person leaves. Build your EMS on solid foundations, educate, involve and empower as you build, and the knowledge your organization gains collectively will stand you in good stead for the forthcoming period. Having a better understanding will facilitate better performance, and that all-important factor: continual improvement. Get some extra information on this topic in the article [“5 tips to maintain your ISO 14001 based EMS after certification”](#). Taking an extra half hour to educate, train, and communicate can often prove to be the difference in saving future costs, preventing non-conformity, and promoting a positive culture.

Conclusion

Environmental issues have never been so topical and prevalent as they are in today's climate, and ISO 14001:2015 is at the core of ensuring that the business community plays its part in identifying, mitigating, and eliminating its environmental aspects wherever possible. The compatibility of ISO 14001:2015 with the related set of standards ensures that environmental control within a business management system will remain very much in the focus of an ever-growing number of organizations' strategic plans for the future. That can only be a positive for all stakeholders and for the wider environment.

References

ISO Survey: <http://www.iso.org/iso/home/standards/certification/iso-survey.htm>

14001Academy: <http://advisera.com/14001academy/>



EPPS Services Ltd.
for electronic business and business consulting
Zavizanska 12, 10000 Zagreb
Croatia, European Union

Email: support@advisera.com
Phone: +1 (646) 759 9933
Toll-Free (U.S. and Canada): 1-888-553-2256
Toll-Free (United Kingdom): 0800 808 5485
Fax: +385 1 556 0711



EXPLORE THE ACADEMIES

