**Review Article** 

# Application of the New Version of the Environmental Management System, the Impact on Eenterprise Development



#### **Economy**

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#### Abstract

A key factor in enterprise development and the quality of its products or services undoubtedly affect in the internal and external environment. Standard for Environmental Management System ISO 14001: 2004 since September 15th, 2015 is the version 14001: 2015. This standard has many changes compared to the previous version and includes some important processes such as documentation, complete meaning of a model to implement this standard, the involvement of all staff, operational processes analyzed on the basis of risk and a continuity of processes for quality maintenance and development that enables its customers a product or quality service. In this study we will see how this standard will affect in relation to the previous version.

#### Introduction

ISO 14001: 2004 environmental management system, one of the most widely used standards recently and which is currently reviewed. All ISO standards are reviewed every five years to determine whether a review is required to keep it current and relevant to the market. ISO 14001: 2015 is designed to answer the last tw trends and ensure that it is compatible with other standards management system. ISO 14001: 2015 specifies requirements for an environmental management system that an organization can use to enhance its environmental performance.

ISO 14001: 2015 is intended for use by an organization that wants to manage its environmental responsibilities in a systematic way that contributes to environmental sustainability pillar. ISO 14001: 2015 helps an organization achieve the intended results of environmental management system, which provide value to the environment, the organization itself and stakeholders.

In accordance with the organization's environmental policy, outcomes of an environmental management system include: Improving the environmental performance; Meeting compliance obligations; Achievement of environmental targets.

ISO 14001: 2015 (the most recent version of the standard) is composed of a number of different sections, each focusing on the requirements involved in various aspects of environmental management system (iso.org).

- Clause 1.2 and 3 Background and purpose of the standard
- Clause 4 The context of the organization
- Clause 5 Leadership
- Clause 6 Planning
- Item 7 Support
- Clause 8 Operations
- Clause 9 Performance
- Clause 10 Improvement (iso.org)

Environmental Management Standard ISO 14001 : 2015 is built from ten clause and more easily understood by an organization operating base model based on PDCA cycle:

PDCA model, which can help new and existing users to understand the importance of a systems approach

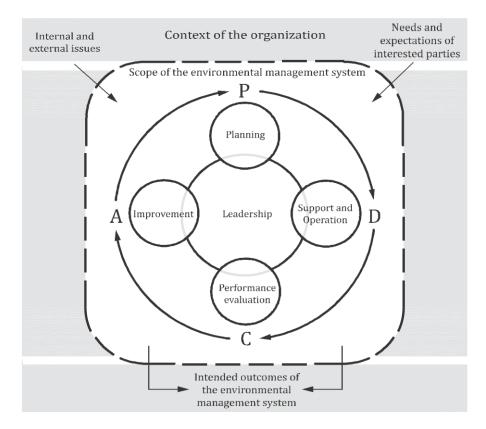
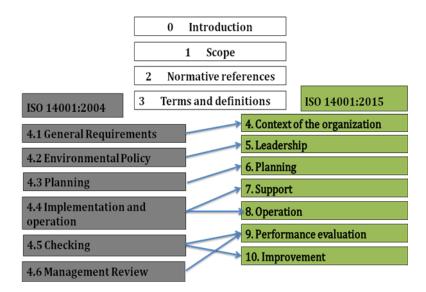


Figure 1 – Relationship between PDCA and the framework in this International Standard Source: International Organization Standard ISO, (www.iso.org) 23.09.2015.

As standard applied will share the differences between ISO 14001: 2004 after his kwrkesat EDC and HRE are recognized and ISO 14001: 2015 as shown in the table below.



Source: International Organiation Standard ISO, (www.iso.org) 23.09.2015.

Differences between the old version and the new version requirements, will enable us to access enterprises easier to integrate in the new version. For enterprises that have implemented and integrated the old version easily and with little changes could be integrated into the new versonin ISO 14001: 2015. The table below shows the differences between the versions:

# **Correspondence between ISO 14001:2015 and ISO 14001:2004**

ISO 14001:2015			ISO 14001:2004	
Clause Title	Clause	Clause	Clause Title	
	Number	Number		
Presentation			Presentation	
Field	1	1	Field	
Normative Reference	2	2	Normative Reference	
Terms and definitions	3	3	Terms and definitions	
The contex of the organization(title only)	4			
		4	Requirementsof the environmental meagement system	
Understanding the organization and its context	4.1			
Understanding the needs and expectations of stakeholders	4.2			
Determination of the volume of	4.3	4.1	General Requirements	
theenvironmental menagement system	7.5	7.1	General Requirements	
Environmental menagement system	4.4	4.1	General Requirements	
Leadership (title only)	5		1	
Leadership and Commitment	5.1			
Environmental Policy	5.2	4.2	Environmental Policy	
Organizational roles, responsibilities and authorities	5.3	4.4.1	Organizational roles, responsibilities and authorities	
Planning (title only)	6	4.3	Planning (title only)	
Actions to address the risks and opportunities	6.1		37	
(title only)				
General Tw	6.1.1			
Environmental Aspects	6.1.2	4.3.1	Environmental Aspects	
Compliance obligations	6.1.3	4.3.2	Compliance obligations ans others	
Action Planning	6.1.4			
Planning Environmental objectives and to				
achieve them (title only)	6.2 6.2.1			
Environmental Objectives		4.3.3		
Planning actions to achieve environmental				
Support (title only)	7	4.4	Implementation and operation (title	
Resources	7.1	4.4.1	Sources, organizational roles, responsibilities and authorities	
Jurisdiction	7.2		Competence, training and	
Awareness	7.3	4.4.2	awareness	
Communication (title only)	7.4		Communication	
Generalalizations	7.4.1			
Internal Communication	7.4.2	4.4.3		

External Communication	7.4.3		
General Documented Information (title only)	7.5		
	7.5.1	4.4.4	
General Tw	7.5.2	4.4.5	
		4.5.4	
Control of the documented information	7.5.3	4.4.5	Control of Documents
		4.5.4	Data checking
Operation(title only)	8	4.4	Implementation and operation (title only)
Planning and operational control	8.1	4.4.6	Operational Control
Emergency Preparedness and response	8.2	4.4.7	Emergency preparedness and
Performance Evaluation (title only)	9	4.5	Checking (title only)
Monitoring, measurement, analysis and	9.1	4.5.1	Monitoring and Measurement
(title only)	9.1.1		
General Tw	9.1.2	4.5.2	
Evaluation of Compliance	9.2		Evaluation of Compliance
Internal audit (title only )	9.2.1	4.5.5	
General Tw	9.2.2		
The internal audit program	9.3	4.6	Internal Audit
Menagement Review	10		
Improvement (title only)	10.1		
General Tw	10.2	4.5.3	Menagement Review
Continuous Improvement	10.3		
Guidelines for the use of this International Standard	Appendix A	Shtojca A	Guidelines for the use of this International Standard
Correspondence between ISO 14001: 2004 and ISO 14001:2015	Appendix B		Correspondence between ISO 14001: 2004 and ISO 14001:2015
ISO 14001: 2004		Shtojca B	ISO 9001:2008
			Bibliography

Resource: International Organiation Standard ISO 14001: 2015, ISO 14001: 2004, (www.iso.org) 23.09.2015.

Relying on such differences showed up and the data of 100 companies certified by the certification body EAS International Standard ISO 14001: 2004 and in relation to the changes as mentioned above, are the following key issues:

### Clause 4 - (ISO 14001: 2015) The context of the organization

This is a new clause that supports ISO 14001: 2015 and the goal is to provide a high -level understanding of the concept of important issues that may affect, either positively or negatively in the way the organization manages its environmental responsibilities. There is a requirement to identify all matters of internal and external that are relevant to the purpose of your organization, and influencing, your ability to achieve the intended results of your management system environment. An organization is expected to have a general understanding of the needs expressed and the expectations of these stakeholders that the organization has determined to be relevant.

Clause 4.1 (ISO 14001: 2015) - Understanding the Organization and its context – NEW REQUIREMENTS

There is no equivalent provision in the ISO 14001: 2004, but guidance is given in clause 4.1 and the supporting notes in Annex A4.1. You will need to be able to show that you have identified problems of exterior and interior, which you monitor and review.

# Clause 4.2 (ISO 14001: 2015) - Understanding the needs and expectations of stakeholders – NEW REQUIREMENTS

- Again there is no provision equivalent to ISO 14001: 2004 is important
- The process that you use to identify stakeholders
- Information about the stakeholders who affect or may affect your EMS
- Information about their needs and expectations
- What are making compliance obligations.

# Clause 4.3 (ISO 14001: 2015) - Determining the field of environmental management systematically – Requirement Enhanced

There was already a requirement in ISO 14001: 2004 to document the purpose of EMS. The scope of environmental management system is intended to clarify the physical and organizational boundaries that apply environmental management system, especially if the organization is in addition to a large organization.

# Clause 4.4 (ISO 14001: 2015) - Environmental management system - Requirement Enhanced

The last requirement in paragraph 4 is to achieve the intended results, including increased its environmental performance, creating, implementing, maintaining and continuously improving environmental management system, through the adoption of a process approach.

### Clause 5 (ISO 14001: 2015) - Leadership

Clause 5 is a new clause, but covers some requirements that were ISO 14001: 2004. senior managers are now required to have greater involvement in the EMS and must ensure that the requirements are integrated into the organization's processes.

# Clause 5.1 (ISO 14001: 2015) - Leadership and Commitments - NEW REQUIREMENTS

There is no equivalent provision in the ISO 14001: 2004 requirements in clauses however are generally self-explanatory.

# Clause 5.2 (ISO 14001: 2015) - Environmental Policy - OTHER CHANGES

This clause indicates only minor changes from section 4.2 in ISO 14001: 2004.

# Clause 5.3 (ISO 14001: 2015) - Organizational roles, responsibilities and authority - OTHER CHANGES

Requirements in this clause are more extensive than those provided in the version of 2004. They now apply to all "relevant role" not only to "those involved in the management system."

#### Clause 6 (ISO 14001: 2015) - Planning

Planning has always been a well-known element of ISO 14001, but now there is an increased focus on ensuring that planning considers the "context of the organization" and "stakeholders".

#### Clause 6.1 (ISO 14001: 2015) - Actions to address the risks and opportunities of the new enhanced

The overall purpose of the clause is to ensure that the organization is able to achieve the intended environmental management system, to prevent or reduce the adverse effects, and to achieve continuous improvement.

Clause 6.2 (ISO 14001: 2015) - Environmental objectives and planning to achieve other changes This provision preserves some of the requirements contained in section 4.3.3 of the 2004 version, but is more specific.

#### Clause 7 (ISO 14001: 2015) - Support

The clause begins with a request that you have the right resources, people and infrastructure need to manage, maintain and constantly improve your EMS.

# Clause 7.1 (ISO 14001: 2015) - Resources - OTHER CHANGES

Resources are necessary for the effective operation and improvement of environmental management system and increase environmental performance.

#### Clause 7.2 (ISO 14001: 2015) - Competence - OTHER CHANGES

No significant changes within this clause, when compared with 4.4.2 of ISO 14001: 2004.

#### Clause 7.3 (ISO 14001: 2015) - OTHER CHANGES

There are additional requirements in this clause with those established in the 2004 version .

#### Clause 7.4 (ISO 14001: 2015) - Communication - OTHER CHANGES

*Clause 7.4* has been divided into a number of sub clauses covering communication both internal and external. Within this clause requirements are more specific than those in the 2004 version.

# Clause 7.5 (ISO 14001: 2015) - Information documented control - OTHER CHANGES

There are additional requirements in this clause than those specified in ISO 14001: 2004.

# Clause 8 (ISO 14001: 2015) - Operations

This clause deals with the implementation of plans and processes that meet the requirements of the EMS and the implementation of the actions identified in 6.1 and 6.2. In addition, there are many, many new demands special dealing with the control or influence exerted over outsourced processes. A potentially major change for users of earlier standard exists regarding new requirements for durability wider with a life cycle perspective.

# Clause 8.1 (ISO 14001: 2015) - Operational planning and control - Requirement Enhanced

Requirements within this section are more specific than those in the 2004 version, for example the processes required to meet the requirements should be planned, implemented and controlled and actions identified in 6.1 and 6.2 need to be implemented.

# Clause 8.2 (ISO 14001: 2015) - Emergency preparedness and response - Requirement Enhanced

This provision is similar to section 4.4.7 in ISO 14001: 2004.

# Clause 9 (ISO 14001: 2015) - Performance evaluation

Performance evaluation covers many areas previously published in section 4.5 and 4.6 of the 2004 version .

# Clause 9.1 (ISO 14001: 2015) - Monitoring, measurement, analysis and development - OTHER CHANGES

Requirements under this paragraph are already defined more specifically than those in the 2004 version.

## Clause 9.2 (ISO 14001: 2015) - Internal Audit - OTHER CHANGES

Additional requirements are now specified in relation to the definition of "audit criteria" and to ensure that the results of the audits are reported to "proper management", but there is no fundamental change in approach when considering the guidance provided in the content clause.

# Clause 9.3 (ISO 14001: 2015) - Menagement Review - OTHER CHANGES

Management review process contained in Article 4.6 of the 2004 version remain.

# Clause 10 (ISO 14001: 2015) - Improvement

Due to the structure and focus of the new risk standards, no preventive action requirements in this clause. However, there are some new requirements, more detailed corrective action.

#### Clause 10.1 (ISO 14001: 2015) – General - OTHER CHANGES

The organization is required to determine opportunities for improvement in the analysis of 9.1, 9.2, 9.3 and to implement any action to achieve the intended results.

# Clause 10.2 (ISO 14001: 2015) - Nonconformity and corrective actions - OTHER CHANGES

Now there are additional requirements specified in connection with the management of non-conformities requires the organization to make changes in the EMS.

#### Clause 10.3 (ISO 14001: 2015) - Continuous Improvement - OTHER CHANGES

Finally, there are additional requirements related specifically to constantly improve the "suitability" and "appropriateness" of the EMS and not only "efficiency".

#### The main changes relate to:

- -Increase importance of environmental management within the strategic planning processes of the organization
- -Greater focus on leadership
- -Increase proactive initiatives to protect the environment from damage and degradation, such as sustainable use of resources and climate change mitigation
- -Improving the environmental performance
- -Life Cycle thinking when considering environmental aspects
- -Addition of a communication strategy. (iso.org)

EMS EN ISO 14001: 2015 Benefits (iso.org):

There are many reasons why an organization should take a strategic approach to improving its environmental performance. Users have reported that the standard ISO 14001 helps:

- -Demonstrate compliance with current and future legal and regulatory requirements.
- -Increased involvement of leadership and employee engagement
- -Improving the company's reputation and the trust of stakeholders through strategic communications.
- Achieving the strategic goals of the business including environmental issues in business management.
- -Provide a financial and competitive advantage through improved efficiency and reduced costs.
- -Encouraging better environmental performance of suppliers and integrate them into the organization's business systems. (iso.org)

# Conclusion

ISO 14001: 2015 is applicable to any organization, regardless of size, type and nature, and applies to the environmental aspects of its activities, products and services that the organization sets that can control or influence by taking into account the perspective of the life cycle. ISO 14001: 2015 does not define specific environmental performance criteria. ISO 14001: 2015 could be used in whole or in part to systematically improve environmental management. Compliance with the requirements of ISO 14001: 2015, however, there are only acceptable if all his requirements are included in the environmental management system of the organization and carried out without exception.

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