



NSAI

ISO 14001
Environmental
Management
Standard



DETAILED GUIDE



ISO 14001 Background

With rising public awareness of the need to protect our environment, governments and businesses are under increasing pressure to minimize their environmental footprint and promote sustainable development. The ISO 14001 - Environmental Management Systems (EMS) Standard has been developed to help organizations identify, manage and control the activities that have an environmental impact.

Industrial companies, service organisations, utility and public bodies worldwide have embraced ISO 14001 as the preferred model for environmental management and improved performance. The standard, which was published by ISO in 1996 was revised in 2004 and is compatible with other management standards particularly the widely used ISO 9001 Quality Management Standard.



ISO 14001:2004 Environment management standard has the following companion standards:

- > • I.S. EN ISO 14005:2011: Environmental management systems - Guidelines for the phased implementation of an environmental management system, including the use of environmental performance evaluation.
- > • I.S. EN ISO 14004:2004: Environmental management systems - General guidelines on principles, systems and support techniques
- > • I.S. EN ISO 14031:2000: Environmental Management - Environmental performance evaluation – Guidelines

NSAI will not be offering certification to the phased implementation standard, ISO 14005:2011, but will offer gap assessments to ISO 14001:2004 using ISO 14005 as a grading system of maturity and readiness.

Benefits for your organization include:

- > • Strengthened stakeholder confidence – ISO 14001 reduces risk of liability, keeps ahead of legislation and regulatory developments and reduces the environmental burden through elimination, reduction and options
- > • Greater competitive advantage – your organization would achieve improved cost control, improved organizational effectiveness and image of organization
- > • More secure long term viability – environmental management standard facilitates effective management, demonstrates environmental focus and introduces change in a controlled manner
- > • Employee involvement and motivation – ISO 14001 demonstrates innovation and forward thinking approach to customers and prospective employees. It clearly defines employees' functions and establishes environmental awareness and clear methodologies

Fundamental Elements of ISO 14001



The critical elements of an Environmental Management System are:

- > Defining environmental aspects
- > Analyzing relevant environmental impacts
- > Removing the impacts
- > Improving environmental performance

According to ISO 14001, the concern for the environment should be concentrated on the surroundings in which the organization operates such as air, water, land, fauna, flora and human interactions. The clear definition and differentiation between activities, associated aspects and the resulting environmental impacts is very crucial to any effective environmental management system but this does cause many companies some difficulty quite often in the initial development of their system. In order for a successful environmental management system to be implemented, the above aspects should thus be dealt with greater significance.

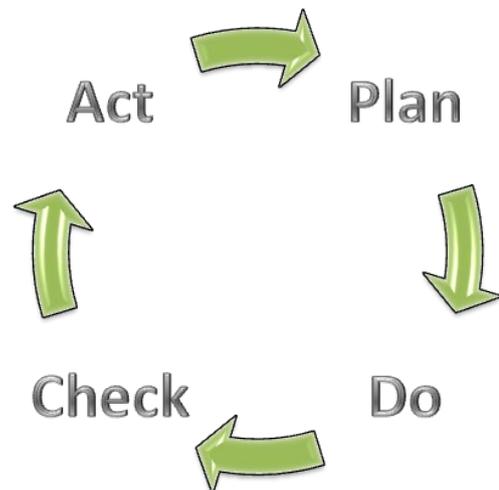
The Plan – Do – Check – Act (PDCA) cycle is the foundation of all ISO management system standards. The cycle ensures development, continuous improvement and control of the management system in question. It is a simple tool that ensures constant monitoring of your organization's effectiveness. It consists of the following:

Plan – environmental management system implementation using of ISO 14000 guidelines

Do – conducting life cycle assessment and managing environmental aspects

Check – conducting audits and evaluating environmental performance

Act – using and maintaining the environmental management system through continuous improvement



The intention of ISO 14001:2004 is to provide a framework for a holistic, systematic and strategic approach to the organization's environmental policy, plans and actions. An effective environmental management system based on ISO 14001 provides an organization's top management with a roadmap which allows them to manage environmental issues effectively by prevention and identification of areas for cost savings in energy consumption, raw material usage and waste disposal.



Understanding the Detail

Plan - Environmental Policy

The first step to getting certified with the ISO 14001 Environmental Management Standard is to define an environmental policy and establishing good environmental performance as a strategic objective. Like with other ISO management systems it is important for your organization that managers are fully focused and driven to achieving the relevant requirements.

The identification of operations that interact or might interact with the environment in the future is where your management team should start. The interactions will either be direct, such as in the manufacturing industry, or indirect, such as in the primary sector like raw materials.

In order to be successful, the goals and targets coming from your management team have to be measurable so they can be reviewed and improved by your internal audits.

The ISO 14000 guidelines will aid you in planning the required processes and systems for this environmental management standard. Some other aspects in the guidelines include:

- > • Looking at your products 'from cradle to grave'
- > • Eco – design guidelines
- > • Implementing environmental aspects into product development
- > • Addressing environmental issues in product standards

Don't worry if some aspects are not applicable to your organization, the ISO 14001 standard sets out broad principles and you should focus on the ones that are relevant to you.

Do - Implementation

The second step in the PDCA process mainly involves the implementation of the system that has been planned by the management in the step before.

The implementation of an environmental management system involves conducting a life cycle assessment and managing environmental aspects and greenhouse gases.

This stage also involves defining the resources and the members of your organization that are responsible for maintaining and control of various processes that are put in place. The members responsible for such processes should be trained and should have documentation for all procedures and processes including operational and documentation control and emergency procedures and responses.



Understanding the Detail

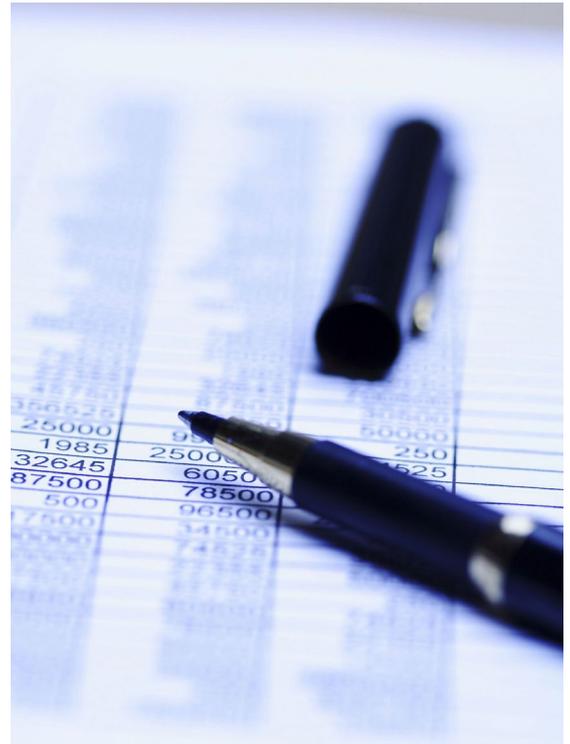


Check - Auditing

This stage of the process includes conducting internal audits and measuring environmental performance periodically, this ensures that your organization's objectives and targets are being met. The review also includes measuring the green house gas performance. Your management team needs to make sure that the employees responsible for various processes are maintaining and monitoring them adequately.

In order to make the whole audit system more effective, you should keep monitoring the requirements limited to key process characteristics. Don't forget that the ISO 14001 standard is compatible, if your organization already has a quality system in place, don't be afraid to integrate or make reference to it.

As is the case with other management system standards, there is a requirement to present documentation outlining the corrective and preventative actions for various setbacks or processes. This document ensures continuous incremental improvement and emphasizes the environmental mindset the organization needs on every level.



Act - Continuous Improvement

In order to ensure continuous improvement a planned management review has to be conducted. This involves:

- > • Evaluating audits
- > • Ensuring the meeting of your organization's objectives and targets
- > • Ensuring the meeting of ISO 14001 requirements
- > • Devising improvements to the processes
- > • Evaluating changing circumstances such as legal requirements

The continuous improvement process for ISO 14001 is slightly different than for the quality management systems. It includes 3 aspects:

- > • Expansion – more and more business areas should get covered by the implemented EMS
- > • Enrichment – more and more activities, products, processes should be involved in the EMS
- > • Upgrading – improvement in structure and framework of the EMS through know-how gained by the business when dealing with environmental issues

The continuous improvement of your environmental management system should result in the environmental thinking of the whole organization; it should move from operational measures to a strategic approach on how to deal with environmental challenges.



Key Steps To Getting Certified for ISO 14001 by NSAI

1. Applying

You can make certification application through our online quotations form or by phone, fax and email. We will review all the information and provide you with a company specific quotation. Our quotations cover a three-year period corresponding to the certification cycle and are calculated to make sure that every customer receives the certification service best suited to their needs.

2. Gap Assessment

Applicants can proceed at their own pace, with assessment dates arranged to suit. If you are unsure whether you are ready to undergo assessment for registration, we can offer you a Gap Assessment, in which we:

- > • Conduct an on-site analysis of your current system
- > • Assess this against the relevant standard
- > • Prepare a report highlighting the gaps between your current system and the standard.

A gap assessment is optional and is not a requirement of the certification process.

3. Preliminary assessment – stage 1

The Preliminary Assessment involves an inspection of your documentation and a review ranging over various areas including:

- > • The proposed scope of your registration
- > • The status of implementation of your management system
- > • The appropriate regulatory and legal requirements
- > • Your management policies and objectives
- > • Whether the system addresses the key areas of your business
- > • Your site-specific activities – top level process review
- > • Your key management elements, e.g. internal audits, reviews and complaints procedures
- > • Your readiness to move onto Stage 2 of the assessment, the Registration Assessment.

The Preliminary Assessment normally takes place on-site. We recommend an interval of several weeks between the Preliminary Assessment and the Registration Assessment to allow time to resolve any issues arising from the Preliminary Assessment.

After the Preliminary Assessment is completed, we will produce a brief report evaluating your readiness to proceed to the next stage and identifying any areas that need to be improved before moving to Stage 2.

If the Preliminary Assessment finds that your organization is not ready for full Registration Assessment, it becomes, in effect, a Gap Assessment. That means that a second Preliminary Assessment will have to be carried out.

Key Steps To Getting Certified for ISO 14001 by NSAI



4. Registration assessment – stage 2

The Registration Assessment (Stage 2) involves a full review of your management system, including relevant records and documents. Its purpose is to confirm that your management system is properly controlled and has predictable outcomes.

At the end of the Registration Assessment, NSAI issues a detailed report, together with the outcome (whether to recommend registration or not). We will identify any issues found during the assessment. You in turn will be expected to submit an action plan detailing what changes are planned to be made to the management system to eliminate or reduce the risk of the same issues re-occurring.

5. Surveillance and re-assessment

At least once a year, NSAI visits each registered company to ensure the management system is being maintained and is achieving its expected outcomes. During each visit, part of the management system is reviewed in depth.

Certificates expire every three years, with the expiry date indicated on the certificate. Before that date, we undertake a detailed reassessment, reviewing the performance of the whole management system to make sure every element is performing satisfactorily. The results of the previous visits are taken into account.

During the period of registration, changes are inevitable. NSAI works with each registered organization to make sure the management system remains sound. Normally, change can be reviewed and assessed during routine surveillance visits. In cases where change leads to the breakdown of the system, NSAI reserves the right to suspend or revoke certification.

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