

EMS Guidance

ISO 14001:2015

Contents

1 Introduction 3

2 Gap Analysis 4

3 Implementation & Development 5

4 About Your Organization 6

4.1 Organizational Context 6

4.2 Relevant Interested Parties 7

4.3 Scope of the EMS 8

4.4 EMS Processes 9

5 Leadership & Governance 10

5.1 Leadership & Commitment 10

5.2 EMS Policy 11

5.3 Roles, Responsibilities & Authorities 12

6 EMS Planning 13

6.1 General 13

6.1.1 Risks & Opportunity 13

6.1.2 Environmental Aspects 14

6.1.3 Compliance Obligations 15

6.1.4 Planning Action 16

6.2 EMS Objectives 16

6.2.1 Objectives 17

6.2.2 EMS Objectives & Planning to Achieve Them 18

7 Support 19

7.1 Resources 19

7.2 Competence 20

7.3 Awareness 21

7.4 Communication 22

7.4.1 General 22

7.4.2 Internal Communication 22

7.4.3 External Communication 23

7.5 Documented Information 24

7.5.1 General 24

7.5.2 Creating & Updating 25

7.5.3 Control of Documented Information 25

8 Operation 27

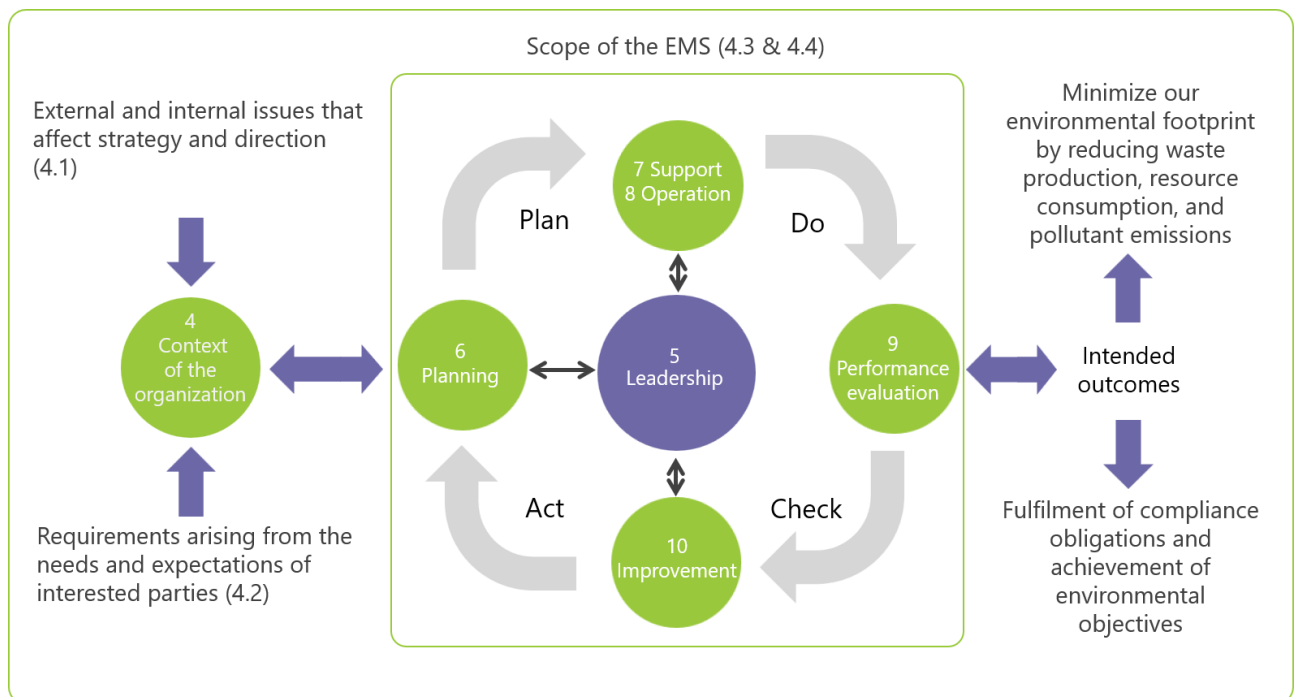
8.1	Operational Planning & Control	27
8.2	Environmental Emergency Situations	29
9	Performance Evaluation	31
9.1	Monitoring, Measurement, Analysis & Evaluation	31
9.1.1	General	31
9.1.2	Evaluation of Compliance	32
9.2	Internal Audit	32
9.2.1	General	32
9.2.2	Internal Audit Programme	33
9.2.3	Internal Audit Checklists	34
9.3	Management Review	34
9.3.1	General	34
9.3.2	Inputs	35
9.3.3	Outputs	36
10	Improvement	37
10.1	General	37
10.2	Non-conformity & Corrective Action	37
10.3	Continual Improvement	38

1 Introduction

The purpose of this document is to outline a potential environmental management system to meet the requirements of ISO 14001:2015. The environmental management system is designed to be implemented to function within current business practices and serves as an effective tool to help your business grow and improve.

The application of the environmental management system is scalable and generic; regardless of the size and type of organization. The elements that form a typical the EMS are the same; please refer to the figure below.

Figure 1: ISO 14001:2015 EMS & PDCA Interaction



The primary goal is to achieve a set of consistent processes that provide a route for enhancing customer satisfaction, mitigation uncertainty and providing meaningful data for continuous improvement activities.

You may decide to keep your current environmental management systems and simply amend them where necessary. Some of you may take this as an opportunity for a complete revamp of the management system. Both courses of action are entirely reasonable, and this guidance document will guide you through what the essential elements that you need to address in order become certified.

The environmental management system includes the processes and procedures required to achieve compliance to environmental requirements, as well as, highlight their interaction with other support processes. Top management must take responsibility for leadership, commitment and take active involvement for developing and maintaining the management system. It is necessary to have well defined processes, both operational and support, to be able to realize the product or service.

The implementation of a formal management system is best handled as a specific project that is led by someone with project management experience. Ideally, they should be a key member of the organization's management team and have sufficient authority and trust of the personnel involved. In the ideal situation this person will also be the Management Representative, but skills in project management are highly beneficial.

6. List of external and internal EMS issues and conditions.
7. EMS action plans and objectives;
8. Annual reports;
9. Minutes of meetings (Management review and, e.g. design review minutes);
10. Process maps, tables, spreadsheets, mind mapping diagrams.

In addition to reviewing any documented process, the audit approach must include interviews with relevant top management in relation to your organization's context and its strategic direction, identified issues and conditions, and how these may affect the intended outcomes of the EMS.

Reviewing your organization's context could include interviews with senior management, questionnaires, surveys and research. Cross-functional input is essential for the specific expertise required to identify the full breadth of issues, such as finance, training, human resources, commercial, engineering and design, etc. Not only will this ensure a broader appreciation of the context but also wider engagement, particularly with those functions not previously involved with the EMS.

4.2 Relevant Interested Parties

Similar to the context review discussed above, cross functional input is vital, as certain functions will identify with particular stakeholders, for example procurement with suppliers, and sales with customers.

A workshop approach should be encouraged which can be undertaken independent to, or in conjunction with the context review workshop described above, using the 'Interested Party Analysis Template' to capture the output.

Once stakeholders and their requirements are identified, the next step is to consider which stakeholder requirements generate compliance obligations. Legal requirements should be identified before other requirements. This process of adopting requirements will allow you to focus and coordinate on what's important.

You should allow additional time to determine whether your organization has adequately determined its interested parties, their requirements, and their impact upon the EMS. Determine which of these requirements are considered as organization's compliance obligations and describe the processes used by your organization to identify the interested parties.

Make reference to all objective evidence, including examples of interested parties and any resulting compliance obligations. Look for evidence that your organization has undergone a process to initially identify these groups, and then to identify any of their requirements that are relevant to your organization's EMS. Examples of interested parties might include:

1. Customers;



There is no longer a requirement for appointment of Management Representative (MR), though the duties currently assigned to the Management Representative under ISO 14001:2004 must still be undertaken but can be assigned to different personnel. Examples of objective evidence to verify implementation might include:

1. Communication of roles, responsibilities and authority;
2. Processes and procedures to fulfil requirements are adequately resourced;
3. Awareness of expectations is demonstrated in all relevant levels of the organization;
4. Reporting on the operation (audits & inspections) and performance of the EMS is done (business meetings, KPI reviews, etc.).

You should seek evidence that your organization's personnel have not only been advised of their EMS responsibilities and authorities, but also that they understand these in the context of the overall purpose of the EMS. You should also ensure that Top management have assigned responsibility and authority for preserving the integrity of the organization's EMS during changes.

6 EMS Planning

6.1 General

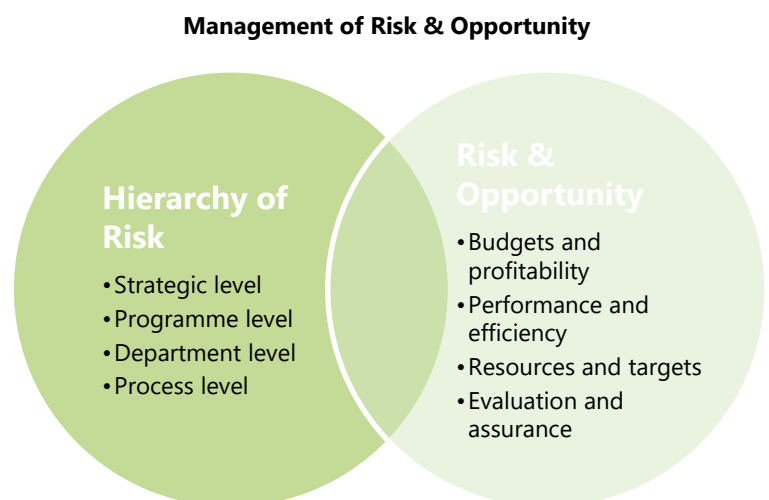
6.1.1 Risks & Opportunity

Although risks and opportunities have to be determined and addressed, there is no requirement for a formal, documented risk management process. Confirm that your organization has a methodology in place that enables them to effectively identify risks and opportunities with respect to the planning of its EMS. If not, start using the 'Risk & Opportunity Register.docx' to document the risks and opportunities related to your organizations:

1. Context;
2. Interested Parties;
3. Environmental aspects;
4. Compliance obligations.

You should ensure that your organization has applied this risk identification methodology consistently and effectively. What process has been developed to identify risks and opportunities? In the absence of documented processes/procedures, you may need to use observations and interviews (and a review of the process output, which may contain documented evidence) to assess the processes that determine whether or not undocumented processes are being carried out as planned.

External and internal issues, and relevant needs and expectations of relevant interested parties may be sources of risks. Objective evidence may be in the form of a dedicated risk matrix, risks added to other forms such as an aspect register, corrective/preventive action log and forms, etc.

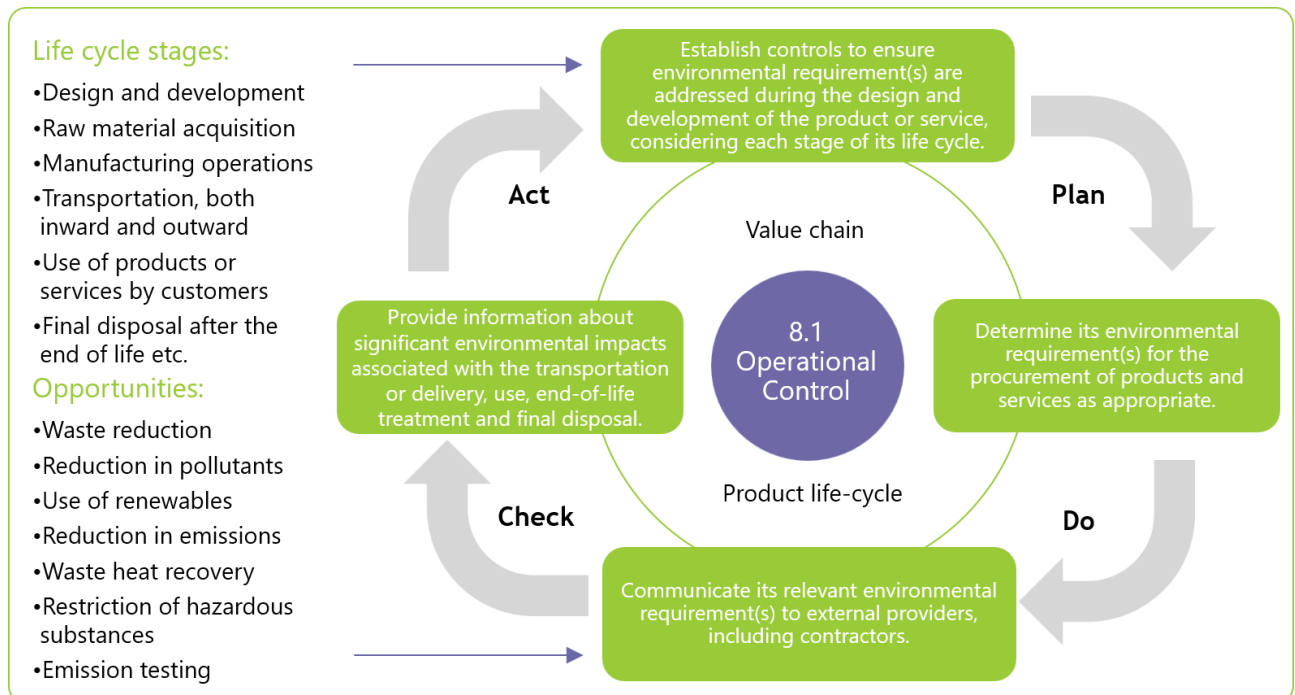


They can be implemented following a hierarchy (e.g. elimination, substitution, administrative) and can be used singly or in combination.

2. **Life cycle perspective:** To design and develop products and services taking into account the environmental impact throughout their life cycle. Include environmental requirements in the purchasing specifications of products and services, and communicate these environmental requirements to external providers. When necessary, provide information on potential environmental impacts related to the transportation, use, end of life treatment and final disposal of its products and services.

Considering that some of your organization's environmental impacts can occur once the products and services have been delivered to the customers, organizations need to provide information to those that will transport, use, treat or dispose of the products and services in order to prevent adverse environmental impacts. Your organization's ability to exert control or influence can vary from full control to no influence.

3. **Out-sourced Processes:** Outsourced process affecting EMS compliance must be controlled or influenced. Auditors will be alert and identify instances of outsourcing highly pollutant processes with the intention of dropping them out of EMS.



Considering that some of your organization's environmental impacts can occur once the products and services have been delivered to the customers, organizations need to provide information to those that will transport, use, treat or dispose of the products and services in order to prevent adverse environmental impacts. The Life cycle perspective means that your organization must also:

1. Design and develop products and services taking into account the environmental impact throughout their life cycle;
2. Include environmental requirements in the purchasing specifications of products and services;
3. Communicate these environmental requirements to external providers;
4. When necessary, provide information on potential environmental impacts related to the transportation, use, end of life treatment and final disposal of its products and services.

7. Suppliers and subcontractors.

Other potential or useful options might include:

1. Need for corrective action;
2. Opportunity for improvement;
3. Competition.

Documented information and organizational knowledge that records process data should be considered for analysis. Records are evidence of system performance and should be analyzed for potential improvements.

Monitoring and measuring EMS operations and activities will establish a mechanism to ensure that your organization is meeting its policies, objectives and targets. In order to meet this requirement, your organization must perform six steps:

1. Step 1 - Identify the activities that can have a significant impacts and risks;
2. Step 2 - Determine key characteristics of the activity to be monitored;
3. Step 3 - Select the best way to measure the key characteristics;
4. Step 4 - Record data on performance, controls and conformance with objectives and targets;
5. Step 5 - Determine the frequency with which to measure the key characteristics;
6. Step 6 - Establish management review and reporting.

Establish the monitoring and tracking criteria for each activity that has a significant impact or risk and review the action plan. You should incorporate any monitoring and measurement information to cover these same activities.

9.1.2 Evaluation of Compliance

With reference to the evaluation of compliance, your organization should set up a process that involves the determination of the frequency of the evaluation, the execution of the evaluation and the actions that need to be taken. If during a compliance evaluation, a failure to fulfil a compliance obligation is identified, the organization needs to take action to achieve compliance. This may require getting in contact with a regulatory agency to agree the action to be taken. Once that agreement is in place, it becomes another compliance obligation.

The Certification Auditor's role is not to verify the result of the compliance audit, but to assess the effectiveness of the audit process and taken actions. An understanding of compliance status must be demonstrated. Therefore, your organization must have the means (inspections, tests, audits) that are frequent and robust enough to ensure that knowledge and understanding of compliance status is maintained.

9.2 Internal Audit

9.2.1 General

This requirement is generally unchanged from the requirements of ISO 14001:2004. Your organization should establish an internal audit programme to cover all requirements of the standards. In addition, you should ensure that consideration is given to the status and importance of the processes that comprise the audit programme and the results of previous audits.

Objective evidence should demonstrate information of concerning the effective implementation the audit programme, as well as a sample of audit results.

9.2.2 Internal Audit Programme

Planning the internal audit programme, whilst taking into account process status and importance, is one of the most disregarded requirements of ISO 14001. Use the '*Process Assessment*' worksheet in the EMS Action Tracker.xlsx to help determine which of your processes and practices should be audited more frequently than others by entering a score to rank various process attributes.

Status

You should consider process status in terms of maturity and stability; a more established, proven process will be audited less frequently than a newly implemented or recently modified process and should receive a lower status score. Conversely; processes which are not performing to the planned arrangements, should be assigned a higher status score.

Practices

Consider how a failure in environmental attributes could affect your customers and stakeholders in terms of providing non-conforming product. In fact, why not ask your customers and stakeholders which attributes could affect them the most, as this method provides a great way to engage with them and to objectively justify the audit programme to Top management.

You should assess the criteria for ranking how well each process is performed. If the process consistently applies documented practice and is a possible benchmark performer, score it lower. If current practices conform but are not documented, or if practices are applied inconsistently or are non-conforming, this should score higher.

Importance

You should consider process importance as the degree of direct impact that process performance has on customer satisfaction; i.e. could the process provide the customer with non-conforming product? Support processes should be given a lower ranking than the manufacturing/service provision processes. In addition, the results of previous audits should be considered too. Processes that have been audited recently that have shown effectiveness and improvement should be audited less frequently.

Complaints

Simply put, enter the actual number of complaints in the relevant cell that is related to the process. Complaints are ranked very highly in terms of seriousness and will elicit a red warning on the total score heat map to highlight that process as requiring greater audit scrutiny.

Corrective Actions

Include the number of open corrective actions in the relevant cell that is related to the process. The corrective actions should be included and must cover all those that were raised internally or externally. External corrective actions rank higher in terms of importance than internal corrective actions. External corrective actions might arise from customer audits, registrar audits or from other stakeholders.

The resulting scores are highlighted in the '*Audit Programme*' worksheet to indicate whether the process requires more frequent auditing based on its ability to affect the customer and how well it is performing. This is a great way to mathematically substantiate your audit schedule.

You should then schedule processes with high, red scores for additional audits, perhaps or three or even more times per year.

9.2.3 Internal Audit Checklists

The audit checklist is just one of the many tools which are available from the auditor's toolbox that help ensure your audits address the necessary requirements. The checklist stands as a reference point before, during and after the audit, and will provide the following benefits:

1. Ensures the audit is conducted systematically;
2. Promotes audit planning;
3. Ensures a consistent audit approach;
4. Actively supports your organization's audit process;
5. Provides a repository for notes collected during the audit process;
6. Ensures uniformity in the performance of different auditors;
7. Provides reference to objective evidence.

We have provided you with three different audit checklists and each checklist allows you to determine the extent to which your management system conforms to the requirements by determining whether those requirements have been effectively implemented and maintained. The templates will help you to assess the status of your existing management system and identify process weakness to allow a targeted approach to prioritizing corrective action to drive improvement.

1. Audit checklist metrics dashboard graphically displays status attributes;
2. Quickly identify and target system weakness with heat maps;
3. Real time charts display audit result data - ideal for reports or presentations.

The dashboard provides fast and reliable access to system and process metrics, precluding the need to know where all performance data is stored, or for having to locate the metrics champion for current data. It also reduces the likelihood that data is lost when metrics owners change or leave the company and reduces the learning curve for new metrics owners.

1. Clearly illuminates under-performing metrics for prompt management attention;
2. Provides a unique management ally during internal and external audits;
3. Improves meeting efficiency by segregating metrics.

Auditors should not necessarily expect to find a documented internal audit procedure in place. However, they must be able to access documented information confirming the implementation of an audit programme by the organization. Documented information must also be available to evidence the results of audits. When designing the audit programme, you should ensure that customer feedback, organizational changes, and risks and opportunities have been brought into consideration.

9.3 Management Review

9.3.1 General

Top management must periodically review the EMS to ensure its continuing suitability, adequacy, and effectiveness. The frequency or intervals of the Top management's formal review must be defined in the EMS. The management review must address the possible need for changes to policy, objectives, targets, and other elements of the EMS. The management review process must ensure that the necessary information is collected ahead of time to allow management to effectively carry out this evaluation. Information that must be reviewed includes: