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ISO 14001:2015 Transition – Evidence Guide

Purpose:

This document provides a guide about the interpretation and acceptable evidence that demonstrates compliance to the new requirements of ISO 14001:2015 Standard. It also provide examples of questions and examples of walk around evidence to help Assessors determine whether an organisation is meeting the requirements of the criterion. The questions are intended as supplement only, and do not try to cover all aspects. This document will assist clients and assessors to better understand the requirements, and accordingly assist clients to better plan their transition process.

The document does not define new structure, new numbering scheme and removed requirements as changes; rather the document only indicates new and amended requirements.

The examples of documents and/or records give guidance about some of the "paperwork" that would assist in meeting the requirements of the criterion. It must be noted however, that the examples are not suggested as the only or preferred ways of meeting the criterion, nor should they be interpreted as a list which all organisations must have. An organisation may have different ways of meeting the requirements of the criterion and the examples should not detract from this.

It is expected that there are many questions that would be asked in addition to the questions listed in this document.

Symbols Key
ⓘ   Explanation of a subclause
☐   Examples of documents / records
↻   Observations of operational activities
❓   Discussions or questions that may assist

New requirements of ISO 14001 Standard and examples of acceptable evidence
Note: A complete list of ISO 14001:2015 requirements has been provided as a checklist including the identification of the new requirements.

4.1 Understanding the organization and its context

Does the organisation determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcomes of its environmental management system?

Do such issues include environmental conditions being affected by or capable of affecting the organisation?

The context of the organisation also includes the natural environment in which it operates. The natural environmental imposes conditions, including events, which affect the organization's activities, products and services. Conditions can be existing or subject to gradual change whereas an event includes a sudden occurrence, which is typically explained by an extreme situation and should be considered when design the EMS. For business continuity and to identify business and environmental opportunities, it is of value for the organization to identify, evaluate and, where appropriate, manage the consequences of such conditions.   ⓘ   To understand which issues can be important, an organization should consider those that: - Are key drivers and trends   - Can present problems   - Reflect changing circumstances   - Can be leveraged for beneficial effect, including improved environmental performance   - Present opportunities for competitive advantage, including cost reduction, value for customer

A context review should be conducted including the following areas:
   a) Identification of the relevant internal and external issues, including environmental conditions, and events, which relate to the organisation's activities products and services
   b) Consideration of how these issues can affect the organisation's purpose and ability to achieve the intended outcomes of its EMS
   c) Understanding of how a and b can be addressed
   d) Identification of opportunities to improve its environmental performance

Environmental conditions that can affect the organisation's activities, products and services can include for example a climatic temperature change that can prevent the organization from growing particular types of agricultural products.

An example of an environmental event could be flooding as a result of extreme weather, which can affect the organisation's activities such as where and how the organization stores hazardous substances in order to prevent pollution.

Consideration of some of the following sources of information can assist an organisation to identify its environmental conditions including events:
   a) Metrological, geological hydrological and ecological information
   b) Historical disaster information relate to the organisation's location
   c) General information documents, such as brochures, catalogues, annual reports, operations manuals, process flowcharts or quality and products plans
   d) Reports from previous audits, assessments of reviews such as initial environmental reviews or life cycle assessments
   e) Information from other management systems, such as quality or occupational health and safety technical data reports, published analysis or studies or lists of toxic substances
   f) Waste inventories
   g) Monitoring data
   h) Environmental permit or licence applications
   i) Views of, requests from, or agreements with interested parties, and
   j) Reports on emergency situations and accidents.

A valuable way of understanding the context review is to hold a workshop to share ideas. A PEST analysis can be used to structure the conversation. This type of analysis can be used to develop of understanding of the external context in which an organization operates as well as the internal context. Implemented correctly, it can be used to engage senior managers not normally involved in the EMS to consider environment as a strategic issue. External sources that can contribute to the knowledge can include customers, suppliers and partners.

Below table provides examples of issues and associated risks and actions.

Issue	Risk/Opportunity to intended outcomes	Action
Natural environment		
Climate change and resource scarcity	Increased risk of flooding at site	Undertake a client change vulnerability assessment
Legal		
New environmental permitting requirements expected by early 2017		Obtain draft guidance documents, participate in consultation
Economic		
Increase in long-term energy costs due to climate change policy and availability of resources	Investment in onsite energy efficiency becomes more attractive	

Environmental condition: state or characteristic of the environment as determined at a certain point of time.

- A SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis Report
- A PEST (Political, Economic, Social and Technological) Analysis Report
- A Strategic Business Plan
- A document that lists the issues

	• A Business Continuity Plan
	• A procedure that describes how the issues are identified on an ongoing basis
	• Evidence of workshop / meeting, e.g.
	    o Calendar invitations
	    o Minutes
	    o Emails
	    o List of attendees

?	• How do you manage the current issue of …….? • What are the current external issues that might prevent you from achieving the established your environmental performance objectives? • Asking the CEO / CFO / CSO / CIO about a change / expected change in the industry that could impact on the business and how they are planning to address it?

4.2 Understanding the needs and expectations of interested parties
Does the organisation determine:

    a) the interested parties that are relevant to the environmental management system?
    b) the relevant needs and expectations (i.e. requirements) of these interested parties?
    c) which of these needs and expectations become its compliance obligations?

ⓘ	Interested parties are part of the context in which an organisation operates. Developing a relationship with interested parties enables communication, which leads to understanding and the potential for building trust and mutual respect. This relationship need not be formal. Interested parties are any groups of people who are influenced or affected by the organisation's activities, products and services. An organisation is expected to gain a general (i.e., high-level, not detailed) understanding of the expressed needs and expectations of those internal and external interested parties that have been determined to be relevant, so that the knowledge gained can be considered. Example of interested parties and their needs and expectations<table><tr><td>Dimension</td><td>Interested parties</td><td>Examples of needs and expectations</td></tr><tr><td>By influence</td><td>NGOs</td><td>Need cooperation to meet their specific environmental objectives</td></tr><tr><td>By proximity (people with whom the organisation interacts most)</td><td>Local community</td><td>Community projects</td></tr></table> **Interested party:** person or organisation that can affect, be affected by, or perceive itself to be affected by a decision or activity. Examples: customers, communities, suppliers, regulators, non-governmental organisations, investors and employees. To "perceive itself to be affected" means the perception has been made known to the organisation.
📄	Stakeholders engagement records such as: • Meeting minutes • Emails • Relevant stakeholders list that identifies the communication methods and contact detail • Stakeholders engagement reports • Meeting calendar invitations A procedure that describes the ongoing engagement method
?	Who are your relevant stakeholders / interested parties? How do you manage the requirements of ……. (a stakeholder)? What are the requirements of …… (a stakeholder) What is the frequency of engaging with your stakeholders?

## 4.3 Determining the scope of the environmental management system

Does the organisation determine the boundaries and applicability of the environmental management system to establish its scope?

When determining this scope, does the organisation consider:

a) the external and internal issues referred to in 4.1?
b) the compliance obligations referred to in 4.2?
c) its organisational unit(s), function(s), and physical boundaries?
d) its activities, products and services?
e) its authority and ability to exercise control and influence?

Once the scope is defined, are all activities, products and services of the organisation within that scope included in the environmental management system?

Is the scope maintained as documented information and available to interested parties?

ⓘ	When documenting the scope, the organisation can consider using an approach that identifies the activities involved, the products and services that result and their application and/or the location where they occur, for example: - manufacturing machines and spare parts of combustion engines at site A, or The scope of the EMS is intended to clarify the physical and organizational boundaries to which the EMS applies, especially if the organisation is a part of larger organisation. It may choose to implement the EMS throughout the entire organisation, or only in (a) specific part(s) of the organisation, as long as the top management for that (those) part(s) has authority to establish an EMS. In setting the scope, the credibility of the EMS depends upon the choice of organizational boundaries. The organisation considers the extent of control or influence that it can exert over activities, products, services, or facilities that have or can have significant environmental aspects, or to evade its compliance obligations. The scope is a factual and representative statement of the organisation's operations included within its EMS boundaries that should not mislead interested parties. The scope of a management system can include the whole of the organisation, specific and identification functions of the organisation, specific and identification sections of the organisation, or one or more functions across a group of organisations.
📄	• Evidence of meeting of environmental representative, if applicable, with departments managers, e.g. o Meeting minutes o Emails o Calendar invitations • A document that describes the scope • Organizational diagram • Webpage

4.4 Environmental management system

Does the organisation consider the knowledge gained in 4.1 and 4.2 when establishing and maintaining the environmental management system?

ⓘ	**Environmental management system (EMS):** part of the management system used to management environmental aspects, fulfil compliance obligations, and address risks and opportunities. **Management system:** set of interrelated or interacting elements of an organisation to establish policies and objectives and processes to achieve those objectives Note 1: A management system can address a single discipline or several disciplines (e.g. quality, environmental, occupational health and safety, energy, financial management) Note 2: The system elements include the organisation's structure, roles and responsibilities, planning and operation, performance evaluation and improvement.

	Note 3: The scope of a management system can include the whole of the organisation, specific and identified functions or the organisation, specific and identified sections of the organisation, or one or more functions across a group of organisations.
📄	Evidence of policy development, e.g.: • draft versions of policy with comments from different parties • Emails demonstrating that the draft policy was submitted to senior management and legal team for approval
❓	How do you manage the requirement of …..? Of ….. (A stakeholder)?

5 LEADERSHIP
5.1 Leadership and commitment

Does top management demonstrate leadership and commitment with respect to the environmental management system by?

A-taking accountability for the effectiveness of the environmental management system?
B-ensuring that the environmental policy and environmental objectives are established and are compatible with the strategic direction and the context of the organisation?
C-ensuring the integration of the environmental management system requirements into the organisation's business processes?
D-ensuring that the resources needed for the environmental management system are available?
G-directing and supporting persons to contribute to the effectiveness of the environmental management system?
H-promoting continual improvement?
I-supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility?

ⓘ	Leadership commitment means providing physical and financial resources as well as direction, and active personal involvement that supports effective environmental management communications its importance. Leadership commitment should ensure that the EMS: - Is not managed in isolation and separately from the central strategy of the business - Is considered when strategic business decisions are made - Is aligned with business objectives - Benefits from the appropriate level of resources - Receives the appropriate involvement from across the business Top management, when planning and reviewing its strategy, should consider at an early stage the environmental performance of the product or service life cycle. For example, the opportunity for improving the environmental performance of a building or a product is greater if environmental criteria are considered at the design stage rather than leaving it until its construction or manufacture. The EMS can be more effective and enduring if it is intrinsic to the strategic direction of the organisation and integrated within business processes (e.g. corporate governance, accountancy, performance management, sales, purchasing, marketing and manufacturing). Top management should communicate the importance of effective environmental management and conformance to the EMS requirements through direct involvement or delegation of authority, as appropriate. The communication can be formal or informal, and can take many forms including visual and verbal. Leadership can be shown, for example, by decisions taken to deal with issues, communication with employees and partners or with the press. Leadership also requires supporting others in the organisation in relevant management roles so they in turn can apply leadership to their own area of responsibility, relative to the EMS. This can allow leadership and commitment with respect to the EMS to cascade down through the organisation. Integrating EMS into an organisation's business processes include: - Intended outcomes or environmental objectives of the EMS in the organisation's strategy (explicitly or implicitly)

	- Environmental requirements into the corporate governance of the organisation, - Environmental responsibilities within job descriptions - Environmental performance indicators within the organisation's business performance systems, which could include department or employee appraisals. - Environmental performance in external organisational reporting - Financial resources for environmental improvement following standard accountancy practices - Environmental criteria in business planning - Product or service design - Procurement or purchasing processes - Environmental evaluation of compliance within its organisational compliance function, or - Environmental communication into normal business communication channels and processes (e.g. company intranet).

📄	• Evidence that the changes have been considered, e.g.
	  o Evidence of meeting of environmental representative with HR, e.g.
	    ▪ Meeting minutes
	    ▪ Calendar invitations
	    ▪ Emails
	• Evidence of amending senior management job descriptions, e.g.
	  o Draft versions of Job Descriptions
	  o Draft version of employment contracts
	• Evidence of training, e.g.
	  o External training certificate regarding personal obligations of senior managers such as senior executives, board members to ensure the business remains compliant to ISO 14001:2015
	  o Induction training records
	  o Meeting minutes
	  o Calendar invitations
	  o Emails
	• A clear link between the (or total integration) between the organisation's business plan and its environmental objectives
	• Evidence that environmental criteria are embedded into product design
	• Evidence that top management request performance results and undertake feedback, review and future goal setting, e.g.
	  o Emails
	• Written description, process map(s), plans, flowchart(s), a table for a combination of documents that collectively shows how the integration of EMS with the organisation's business processes was achieved.

❓	• Asking the CEO / CIO / CFO / CSO about the new responsibilities that have been assigned to them as a result of the new change. • Asking the CEO / CIO / CFO / CSO etc. about the new activities that they are undertaking as a result of the assignment of new responsibilities. • How many members of the top management team are involved? • What is the percentage of leaders and senior managers who have completed environmental management training? • What's the number of levels of management with specific environmental responsibilities? • How are the EMS objectives established?

5.2 Environmental policy

Does top management establish, implement and maintain an environmental policy that, within the defined scope of its environmental management system:

    a) is appropriate to the purpose and context of the organisation, including the nature, scale and environmental impacts of its activities, products and services?

	• An electronic copy of the policy on the organisation's webpage
	• Policy contained in the organisation's annual report
	• Policy included in induction material
	• Policy included in tender documentation
	• Evidence of review of environmental policy, e.g.
	  o Draft versions of policy
	  o Emails

	o Meeting minutes	
	o Calendar invitations	
↻	• Policy on display in reception / visitor areas	

5.3 Organisational roles, responsibilities and authorities
N/A

6 PLANNING
6.1 Actions to address risks and opportunities
6.1.1 General

Does the organisation establish, implement and maintain the processes needed to meet the requirements in 6.1.1 to 6.1.4?

When planning for the environmental management system, does the organisation consider:
— the issues referred to in 4.1?
— the requirements referred to in 4.2?
— the scope of its environmental management system?

and determine the risks and opportunities, related to its:

— environmental aspects (see 6.1.2)?
— compliance obligations (see 6.1.3)?
— other issues and requirements, identified in 4.1 and 4.2?

Within the scope of the environmental management system, does the organisation determine potential emergency situations, including those that can have an environmental impact?

Does the organisation maintain documented information of its:

— risks and opportunities that need to be addressed?
— processes needed in 6.1.1 to 6.1.4, to the extent necessary to have confidence they are carried out as planned?

	Planning is critical for determining and taking the actions needed to ensure the EMS can achieve its intended outcomes. It is an ongoing process, used both to establish and implement elements of the EMS and to maintain and improve them based on changing circumstances and inputs and outputs of the EMS itself. Information generated in the planning process is an important input for determining operations that need to be controlled. Information can also be used in the establishment and improvement of other parts of the EMS, such as identifying training and competency, monitoring and measurement needs. Organisations face a range of risks and opportunities that can affect the achievement of its intended outcomes. The organisation first needs to identify the significant aspects associated with its activities, products and services that can interact with the environment, and any other significant sources of risks and opportunities for the organisation, considering the organisation's context.
ⓘ	Please note that risks mentioned in the standards are not risks and opportunities that affect the profitability of the organisation, rather only associated with the achievement of the EMS intended outcomes.
	Risk: effect of uncertainty Note 1: An effect is a deviation from the expected – positive or negative. Note 2: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of , an event, its consequences, or likelihood. Note 3: Risk is often characterised by reference to potential "events" (as defined in ISO Guide 73:2009) and "consequences" (as defined in ISO Guide 73:2009), or a combination of these.

	Note 4: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated "likelihood" (as defined in ISO Guide 71:2009) of occurrence. **Risks and opportunities:** potential adverse effects (threats) and potential beneficial effects (opportunities).
📄	- A register that lists activities, products and services and their associated environmental aspects and impacts, risks and opportunities and actions - Risks & Opportunities Register - Evidence of risk assessment, e.g. - Meeting minutes for meeting conducted between environmental representatives and department managers - Emails - Calendar invitations - Employee Induction
❓	How do you manage the risk of ….. ? What are the most significant 3 risks that you have identified? What's the number of employees that have environmental requirements into their job descriptions What's the number of employees participating in environmental programmes (e.g. suggestion, recycle, clean-up initiatives)?

6.1.2 Environmental aspects
N/A

6.1.3 Compliance obligations
N/A

6.1.4 Planning action
Does the organisation plan:

- a) to take actions to address its:
    1) significant environmental aspects?
    2) compliance obligations?
    3) risks and opportunities identified in 6.1.1?
- b) how to:
    1) integrate and implement the actions into its environmental management system processes (see 6.2, Clause 7, Clause 8 and 9.1), or other business processes?
    2) evaluate the effectiveness of these actions (see 9.1)?

When planning these actions, does the organisation consider its technological options and its financial, operational and business requirements?

	Risk and opportunities
	
	 There are three possible sources of risks and opportunities that need to be addressed:
	    1) Significant environmental aspects
	    2) Compliance obligations; and
	    3) Other issues that need to be addressed that can affect the viability of the organisation, that is its ability to achieve the intended outcomes of the environmental management system, prevent or reduce undesired effects or achieve continual improvement.

ⓘ	Risks and opportunities related to other issues affecting the environmental management system can include external environmental conditions, including events, or inadequate human or financial resources to develop and implement the environmental management system. Relevant risks and opportunities are those that can affect the achievement of its intended outcomes. An example environmental aspects and impacts, risks, opportunities and actions associated with road construction activity:

Activity / Product / Service	Aspects	Actual or potential impacts	Risks and opportunities	Planning to take actions
Activity: Road construction				
Construction during heavy rains	Storm water runoff	Soil erosion Surface water pollution Degradation of wetland habitat	Opportunity - Access to government subsidised stormwater management advise	- Develop emergency plans to mitigate uncontrolled runoff and clean-up response - Implement operational controls to retain still runoff

Aspects	Objectives	Targets	Programmes	Indicators	Operational control	Monitoring and measurement
Service: Transportation and distribution of goods and products (fleet maintenance)						
Emission of oxides of nitrogen (NOx)	Increase positive impact on air quality by improving effectiveness of fleet maintenance	Achieve 25 % reduction of NOx emissions by 2008	Identify key maintenance parameters for NOx reduction Revise maintenance programme to incorporate key NOx reduction tasks Optimize fleet maintenance schedule through computer program	% on-time maintenance NOx emissions/ km	Maintenance procedures Training of maintenance technicians Computerized notification of scheduled maintenance	Tracking of maintenance frequency versus schedule Monitoring of vehicle fuel efficiency Quarterly testing of vehicle NOx emissions Annual assessment of NOx reductions achieved

📄	Organisational business plan that includes environmental goals Specific measurable project plans for each objectives Records on progress against each objective, e.g. KPI reports

6.2 Environmental objectives and planning to achieve them
6.2.1 Environmental objectives

Are the environmental objectives:
  c)   monitored?

ⓘ	**Objective:** result to be achieved.

	Note 1: An objective can be strategic, tactical, or operational. Note 2: Objectives can relate to different disciplines (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organisation-wide, project, product, service and process) Note 3: An objective can be expressed in other ways, e.g. as an intended outcome, a purpose, an operational criterion, as an environmental objective, or by the use of other words with similar meaning (e.g. aim, goal, or target). **Environmental objective:** objective set by the organisation consistent with its environmental policy.

📄	• A document lists all indicators and data management method , e.g.
	    o Sustainable procurement indicators, for example, "percentage of raw materials purchased from a sustainable source"
	    o Sustainable design indicators – for example, "percentage of projects achieving 4 Star for Green Star
	    o Data process steps for each indicator, detailing: data collection, meter reading, calibration, data storage and conversion.

?	• What is the number of achieved objectives and targets? • What's the number of organisational units achieving objectives and targets? • What's the number of prevention of pollution initiatives implemented? • Have you carried out a strategic evaluation of skills needed to successfully comply with the new ISO 14001?

6.2.2 Planning actions to achieve environmental objectives

When planning how to achieve its environmental objectives, does the organisation determine:

    a) what will be done?
    b) what resources will be required?
    e) how the results will be evaluated, including indicators for monitoring progress toward achievement of its measurable environmental objectives (see 9.1.1)?

Does the organisation consider how actions to achieve its environmental objectives can be integrated into the organisation's business processes?

	Programme(s) for achieving objectives Part of the planning process should include the elaboration of a programme for achieving the organisation's environmental objectives. The programme should address roles, responsibilities, processes, resources, timeframes, priorities and the actions necessary for achieving the environmental objectives. These actions can deal with individual processes, projects, products, services, sites or facilities within a site. Organisations can integrate programmes to achieve environmental objectives with other programmes within their strategic planning process. Programmes to achieve objectives help an organisation to improve its environmental performance. They should be dynamic. When changes in processes, activities, services and products within the scope of the environmental management system occur, the objectives and associated programmes should be revised as necessary. To achieve its objectives, an organisation can find it useful to follow a process: for each policy commitment, identify each objective that corresponds to that commitment, establish one or more programmes to achieve each objective, and identify specific performance indicators and actions to implement each programme. The specific objectives should then be redefined to ensure that the performance indicators and actions can address them. This process can be repeated as appropriate, for example if the policy is changed after a management review. **Performance indicators** An organisation should establish measurable environmental performance indicators. Such indicators should be objective, verifiable and reproducible. They should be appropriate to the organisation's activities, products and services, consistent with its environmental policy, practical, cost-effective and technologically feasible. These indicators can be used to track an organisation's progress in achieving its objectives. They can also be used for other purposes, such as part of an overall process for evaluating and improving environmental performance. The organisation should consider the use of both

	management and operational environmental performance indicators appropriate to its significant environmental aspects. **Indicator:** measurable representation of the condition or status of operation, management or conditions. **Monitoring:** determining the status of a system, a process or an activity. Note 1: To determine the status, there might be a need to check, supervise or critically observe.
📄	• An environmental program that lists the responsibilities and action steps.
❓	• What's the number of contracted individuals trained? • What is the number of costs attributed to fines and penalties? • What are the costs (operational and capital) that are associated with a product's or processes environmental aspects?

7 Support
7.1 Resources
N/A

7.2 Competence
N/A

7.3 Awareness
N/A

7.4 Communications
7.4.1 General

Does the organisation establish, implement and maintain the processes needed for internal and external communications relevant to the environmental management system, including:

a) On what it will communicate?
b) when to communicate?
c) with whom to communicate?
d) how to communicate?

When establishing its communication process(es), does the organisation:
- take into account its compliance obligations?
- ensure that environmental information communicated is consistent with information generated within the environmental management system, and is reliable?

Does the organisation respond to relevant communications on its environmental management system?

Does the organisation retain documented information as evidence of its communications, as appropriate?

	Communication of environmental information should be based on, and consistent with, the information generated within the EMS and wit the internal evaluation of the organisation's environmental performance. Communication of environmental information should be consistent with the following principles: - Transparency, appropriateness and credibility, and - Responsiveness and clarity In determining how it intends to communicate, the organisation should consider different communication methods that can encourage understanding and acceptance of an organisation environmental management efforts and promote dialogue with interested parties. Methods of communication include, for example: informal discussions, organisation open days, focus groups, community dialogue, involvement in community events, websites and email, press releases, advertisements and periodic newsletters, annual (or other periodic) reports and telephone hotlines.

An organisation should take into account its nature and size, its significant environmental aspects and the nature and needs and expectations of its interested parties when establishing its communications process(es). An organisation should consider the following steps:

- Gather information, or make inquiries including from relevant interested parties
- Determine the target audience(s) and information or dialogue needs
- Select information relevant to the audience's interests
- Decide on the information to be communicated to the target audience(s);
- Determine which methods and formats are appropriate for communication
- Evaluate and periodically determine the effectiveness of the communications process.

- Annual company report and financial accounts.
- Investor briefings/investment statements.
- Forecasts/backcasts/scenario planning/strategy planning.
- Mergers and acquisitions/due diligence/audit and review reports.
- Policies/governance/values statements.
- Regulatory reporting – for example, greenhouse-gas reporting and compliance notifications under the energy savings opportunity scheme.
- Briefings/reports to management/board/staff and associated meeting minutes.
- Company brochures, leaflets and other public relations/marketing material, including press releases/news and media articles.
- Internet/intranet (webpages)/Twitter/Facebook/other social media.
- Presentations/conference speeches.
- Employee and subcontractor recruitment/induction/awareness/training information.
- Product/services brochures/manuals/leaflets/performance claims.
- Sales claims/proposals/tender submissions/contract specifications and associated documents.
- Sponsorship/advertising campaigns.
- Community/stakeholder engagement and reporting.
- Performance review/benchmarking.
- Regulatory (environmental) permit monitoring reports.
- Sustainability/CSR/environment reports.
- Declarations/ratings/benchmark reporting – for example, DJSI, CPD, FTSE4Good.

- What is the number of inquiries or comments received since last audit about environmentally related matters?
- What is the number of press reports on the organisation's environmental performance?
- What is the number of environmental educational programmes or materials provided for the community?
- What are the resources applied to support of community environmental programmes?
- What is the number of sites with environmental reports?
- What is the number of sites with wildlife programmes?

7.4.2 Internal communication
N/A

7.4.3 External communication

N/A

7.5 Documented information
7.5.1 General
N/A

Documented information: information required to be controlled and maintained by an organisation and the medium on which it is contained:

Note: 1: documented information can be in any format and media, and from any source.

Note 2: documented information can refer to:
- The EMS including its processes
- Information create in order for the organisation to operate (can be referred to as documentation)

- Evidence of results achieved (can be referred to as records).

7.5.2 Creating and updating
N/A

7.5.3 Control of documented information
N/A

8 OPERATION
8.1 Operational planning and control

Does the organisation establish, implement, control and maintain the processes needed to meet environmental management system requirements, and to implement the actions identified in 6.1 and 6.2, by:

- Implementing control of the process(es), in accordance with the operating criteria?

Does the organisation ensure that (an) outsourced process(es) is (are) controlled or influenced. Is the type and extent of control or influence to be applied to the process(es) defined within the environmental management system?
Consistent with a life cycle perspective, does the organisation:

a) establish controls, as appropriate, to ensure that its environmental requirement(s) is (are) addressed in the design and development process for the product or service, considering each stage of its life cycle?
b) determine its environmental requirement(s) for the procurement of products and services, as appropriate?
c) communicate its relevant environmental requirement(s) to external providers, including contractors?
d) consider the need to provide information about potential significant environmental impacts associated with the transportation or delivery, use, end-of-life treatment and final disposal of its products and services?

Does the organisation maintain documented information to the extent necessary to have confidence that the process(es) has (have) been carried out as planned?

Life cycle: consecutive and interlinked stages of a product (or service) system, from raw material acquisition or generation from natural resources to final disposal Note 1: the life cycle stages include acquisition of raw materials, design, production, transportation / delivery, use, end-of-life treatment and final disposal. **Outsource:** make an arrangement where an external organisation performs part of an organisation's function of process. Note 1: An external organisation is outside the scope of the management system, although the outsourced function or process is within the scope.

• Suppliers induction records, e.g.
   o Emails
   o Meeting minutes
   o Induction checklist
   o Calendar invitations
• Supplier induction guide / checklist outlining the environmental responsibilities of suppliers
• Suppliers approval criteria
• Suppliers ongoing evaluation criteria
• Supplier approval and ongoing evaluation records

- Evidence of integrating environmental requirements into procurement process and design and development processes, e.g.
  - Draft versions of purchasing / sub-contractor management and design and development procedures
  - Meeting minutes
  - Calendar invitations
  - Emails
- Product / Service Data Sheet that provides information about impacts associated with transportation or delivery, use, end of life treatment and final disposal or its products
- Product environmental certification, e.g. GECA Certification, carbon neutral
- Environmental Product Declaration (EPD) Report
- Subcontractors / supplier contracts showing that environmental performance criteria are written into contracts / purchase orders - for example, FSC timber, GreenPalm, EU Ecolabel, GECA
- Completed audit report demonstrating compliance with a framework for procuring sustainability, e.g. complying with BS 8903
- Lifecycle assessment reports of products or services
- Report showing the use of environmental design indicators
- Product Data Sheet providing end-of-use information such as take-back schemes, reuse or recycling
- Product Data Sheet providing information to minimise the environmental impacts associated with use such as correct setup or storage.

?
- What are the environmental impacts associated with the design?
- How do you manage your product environmental impact of …. (An impact)?
- What is the number of suppliers and contractors quarried about environmental issues?
- What is the number of contracted service providers with an implemented or certified EMS?
- What is the number of products with explicit "product stewardship" plans?
- What is the number of products designed to disassembly, recycling or reuse?
- What is the number of products with instructions regrading environmental safe use and disposal?

8.2 Emergency preparedness and response
Note: although this clause is similar as the ISO 14001:2004, a commentary has been avoid misinterpretation of this clause.

ⓘ

In planning a response to an emergency situation consideration should be given to the initial environmental impact that can result, and secondary impact that can occur as a result of responding to the initial environmental impact. For example, in responding to a fire, the potential for contaminated fire-water runoff should be taken into account.

In planning the emergency preparedness, potential consequences of abnormal operating conditions and emergency situations and their mitigation should be taken into account.

When identifying potential emergency situations special attention should be paid to start-up and shutdown conditions and reasonably foreseeable emergency conditions that can result from this. This include different types of situations, such as small scale spillages of chemicals or failure of emissions abatement equipment, and serious environmental situations, endangering humans and environment to a bread extent. The organisation should be prepared to each type of reasonable foreseeable emergency situations.

Environmental emergencies include those that derive from external environmental conditions, including events, e.g. flooding or from acts by other organisations such as discharges to land or water combining with those from another organisation operating on the same site.

It is the responsibility of each organisation to establish an emergency preparedness and response procedure(s) that suits its own particular needs. In establishing its procedure(s), the organisation should include consideration of:
- Actual and potential external environmental conditions, including natural disasters
- The nature of on-site hazards, e.g. flammable liquid, storage tanks, compressed gases and measures to be taken in the event of spillages or accidental releases,
- The most likely type and scale of an emergency situation or accident
- Equipment and resources needed,
- The potential for an emergency situation(s) or accident(s) at a nearby facility (e.g. plant, road, railway line),
- The most appropriate method(s) for responding to an accident or emergency situation.
- The actions required to minimise environmental damage,
- Emergency organisation and responsibilities,
- Evacuation routes and assembly points,
- A list of key personnel and aid agencies, including contact details, e.g. fire department, spillage clean-up services
- The possibility of mutual assistance from neighbouring organisations,
- Internal and external communication processes.

9 Performance evaluation
9.1 Monitoring, measurement, analysis and evaluation
9.1.1 General

Does the organisation monitor, measure, analyse and evaluate its environmental performance?

Does the organisation determine:
a) what needs to be monitored and measured?
b) the methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results?
c) the criteria against which the organisation will evaluate its environmental performance, and appropriate indicators?
d) when the monitoring and measuring shall be performed?
e) when the results from monitoring and measurement shall be analysed and evaluated?

Does the organisation ensure that calibrated or verified monitoring and measurement equipment is used and maintained, as appropriate?

Does the organisation evaluate its environmental performance and the effectiveness of the environmental management system?

Does the organisation communicate relevant environmental performance information both internally and externally, as identified in its communication process(es) and as required by its compliance obligations?

Does the organisation retain appropriate documented information as evidence of the monitoring, measurement, analysis and evaluation results?

Measurement: process to determine a value.

Performance: measurable result.

Note 1: Performance can relate either to quantitative or qualitative finding.

Note 2: Performance can relate to the management of activities, process, products (including services), systems or organisations.

	Environmental performance: performance related to the EMS aspects. Note 1: For an EMS, results can be measured against the organisations environmental policy, environmental objectives or other criteria, using indicators.
📄	• A document lists all indicators and data management method , e.g. 　○ Sustainable procurement indicators, for example, "percentage of raw materials purchased from a sustainable source" 　○ Sustainable design indicators – for example, "percentage of projects achieving 4 Star for Green Star 　○ Data process steps for each indicator, detailing: data collection, meter reading, calibration, data storage and conversion.
?	• What is the return on investment (ROI) for environmental improvement projects? • What are the savings achieved through reductions in resource usage, prevention of pollution of waste recycling? • What is the sales revenue attributable to a new product or a by-product designed to meet environmental performance or design objectives? • What are the research and development funds applied to projects with environmental significance? • What are the environmental liabilities that may have a material impact on the financial status of the organisation? • What is the number of hours per year a specific piece of equipment is in operation? • What is the number of emergency (e.g. explosions) or non-routine operations (e.g. shut-downs) per year? • What is the number of vehicles in fleet with pollution-abatement technology? • What is the average fuel consumption of vehicle fleet? • What is the number of hours of preventive maintenance to equipment per year? • What is the average fuel consumption of vehicle fleet? • What is the number of freight deliveries by mode of transportation per day? • What is the number of business trips saved through other means of communication? • What is the percentage of a product's content that can be reused or recycled? • What is the duration of product use? • What is the number of products which can be reused or recycled? • What is the quantity of waste per year per unit of product?

9.1.2 Evaluation of compliance

Does the organisation:
　a) determine the frequency that compliance will be evaluated?
　b) evaluate compliance and take action if needed?
　c) maintain knowledge and understanding of its compliance status.

ⓘ	The organisation should evaluate its compliance by monitoring measuring, analysing and reviewing its performance against its compliance obligations (as determined in 4.2 and 6.1.3). This process allows the organisation to demonstrate its commitment to satisfy compliance obligations and to mitigate potential legal action or action from its interested parties. All compliance obligations need to be evaluated periodically although the frequency and the timing of each can differ. Evaluation of compliance should be an interactive process which utilises the output from other areas of the EMS when determining the compliance status of the organisation. The organisation can choose to review reports and communication provided by interested parties (e.g. regulatory site inspection reports or customer audits) , or communicate with them specifically on their compliance obligations.

Where a failure or potential failure to meet the compliance obligation is identified, the organisation should take action. The organisation's nonconformity and corrective action procedure (as required by 10.1) could be used to deal with such nonconformities. Where appropriate the organisation can communicate or report on nonconformities to the relevant interested party for that compliance obligation (7.4).

By evaluating compliance, the organisation should gain knowledge and understanding of its compliance status. Top management should maintain an awareness of the organisation's compliance status and review the organisation's fulfilment of its compliance obligations at the management review (9.1). The frequency of compliance evaluation activities should be appropriate to maintain knowledge and understanding of its status of conforming to its compliance obligations. Compliance evaluation should be conducted in a timely manner in relation to the management review.

In a management system audit, Assessors don't need to assess that the client is complying with legislation, rather they have a process to demonstrate they comply. However, in order to effectively assess the compliance process, an Assessor needs to have an idea about the compliance requirements of the auditee.

Compliance obligations: legal requirements that an organisation has to comply with and other requirements that an organisation has to or chooses to comply with.

Note: Compliance obligations are related to the EMS

Note: Compliance obligations can arise from mandatory requirements, such as applicable laws and regulations, or voluntary commitments, such as organisational and industry standards, contractual relationships, codes of practice and agreements with community groups or non-governmental organisations.

- internal and external audit reports
- results of monitoring and measurement
- internal and external communication reports

9.2 Internal audit
9.2.1 General
N/A

9.2.2 Internal audit programme
N/A

9.3 Management review

Does the management review include consideration of:
b)changes in:
   1) external and internal issues that are relevant to the environmental management system?
   2) the needs and expectations of interested parties, including compliance obligations?
   3) its significant environmental aspects?
   4) risks and opportunities?

d)information on the organisation's environmental performance, including trends in:
   1) nonconformities and corrective actions?
   2) monitoring and measurement results?
   3) fulfilment of its compliance obligations?
   4) audit results?

Do the outputs of the management review include:
- any implications for the strategic direction of the organisation.

Changing circumstances include, but not limited to:
- results of evaluation of significant environmental aspects, risks and opportunities from planned or new developments
- lessons learned from emergency situations and accidents, and
- advances in science and technology
- changes in the organisation's products, activities and services.

The planned intervals for a management review can be coordinated with the organisation's planning and budgeting cycle and top management's review of its overall business performance.

Each organisation can decide for itself those who should participate in the management review. Typically, this includes environmental staff (who compile and present the information), managers of key units (whose operations include significant environmental aspects or who are responsible for key EMS elements, such as competence, documented information, etc.), and top managers (who evaluate performance of the EMS, identify improvement priorities, provide resources and ensure that follow-up is effective).

- copies of meeting agenda items
- lists of attendees
- presentation material or hand-outs
- management decisions recorded in a memo to file
- reports
- minutes
- tracking system

10 IMPROVEMENT
10.1 General

Does the organisation determine opportunities for improvement (see 9.1, 9.2 and 9.3) and implement necessary actions to achieve the intended outcomes of its environmental management system?

When opportunities for improvement are identified, they should be evaluated to determine what actions should be taken. The actions for improvement should be planned, and changes to the environmental management system should be implemented accordingly. Some examples of improvement include:

- establishing a process for evaluating new materials to promote the use of less harmful materials
- improving an organisation's process for identifying its compliance obligations so that new compliance obligations are identified in a more timely fashion
- introducing waste water treatment processes to allow water reuse
- implement changes in default setting on reproduction equipment print two-sided copies at a printing office
- redesigning delivery routes to reduce fossil fuel consumption by transportation companies
- setting objectives to implement fuel substitution in boiler operations and reduce particulate emissions.

The term "intended outcomes" means what the organisation intends to achieve by implementing its EMS, which includes enhancement of environmental performance, conformance to compliance obligations and fulfilment of environmental objectives. These are the minimal core outcomes. However, the organisation can set additional intended outcomes, such as going beyond the EMS or legislative requirements, for example by adopting social and environmental sustainability principles, if it decides that it could benefit from this.

Prevention of pollution: use of processes, practices, techniques, materials, products, services or energy to avoid, reduce or control (separately or in combination) the creation,

	emission or discharge of any type of pollutant or waste, in order to reduce adverse environmental impacts.
🗒	• Annual company report and financial accounts. • Forecasts/backcasts/scenario planning/strategy planning • Strategic report • Sustainability report listing ongoing and planning projects / investments • Capital allocation report
↻	• Inspection of new facilities, equipment • Interview of new recruited skilled employees
❓	• What's the % of training budget allocated to environmental management? • What's the number of prevention of pollution initiatives implemented?

10.2 Nonconformity and corrective action

When a nonconformity occurs, does the organisation:
      b)evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:

            3) determining if similar nonconformities exist, or could potentially occur?

   e) make changes to the environmental management system, if necessary.

Does the organisation retain documented information as evidence of:

— the results of any corrective action.

	Nonconformity is a non-fulfilment of a requirement. A requirement can be stated in relation to the management system or in terms of environmental performance. Situations can occur where part of the system cannot function as intended or environmental performance requirements are not met. **Definitions** **Nonconformity:** non-fulfilment of a requirement. Note: Nonconformity relates to requirements in this Standard and additional EMS requirements that an organisation establishes for itself. **Corrective action:** action to eliminate the cause of a nonconformity and to prevent recurrence. Note 1: There can be more than one cause for nonconformity.
🗒	Corrective action register

10.3 Continual improvement
Does the organisation continually improve the suitability, adequacy and effectiveness of the environmental management system to enhance environmental performance.

	Continual improvement is a key attribute of an effective EMS. Continual improvement is accomplished through the achievement of environmental objectives and the overall enhancement of the environmental management system or any of its components. An organisation should continually evaluate its environmental performance and the performance of its EMS processes to identify opportunities for improvement. Top management should be involved directly in this evaluation through the management review process. The identification of EMS deficiencies also provide significant opportunities for improvement.

Some useful sources of information for continual improvement include:

- Experience gained from corrective actions
- External benchmarking against best practice
- Intended or proposed changes to compliance obligations
- Results of EMS and compliance audits
- Results of monitoring of key characteristics of operations
- Results of progress towards achieving objectives, and
- Views of interested parties, including employees, customers and suppliers.

Continual improvement: recurring activity to enhance performance.

Note 1: Enhancing performance relates to the use of the EMS to enhance environmental performance consistent with the organisation's environmental policy.

Note 2: The activity need not take place in all areas simultaneously, or without interruption.

Effectiveness: extent to which planned activities are realised and planned results achieved.

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Note 1: Roberts, G is an environmental consultant at EEF and the UK expert on the ISO technical committee revising ISO 14004, which provides guidance on establishing implementing, maintain and improving an EMS.