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ISSN: 3105-3181
ISSUE: 3 Volume2

Received: 2026/9 /14
Revision: 2026/10 /20
Accepted: 2026/10 /26
Published:2026/10/27

Growth Leadership Journal

قياس وتحسين معياري القيادة والتخطيط وفق المواصفة القياسية نظام الإدارة البيئية ISO 14001:2026/ دراسة حالة في مستشفى الامام علي (ع) في بغداد

م. حكيم عبد الواحد محمد

جهة الانتساب
قسم ادارة الاعمال/ كلية الامام الكاظم (ع)

E-mail
hakeem.abd@iku.edu.iq

Affiliation

Department of Business Administration / Imam Al-Kadhum University College

المستخلص

تسعى الدراسة الحالية الى قياس وتحسين معياري القيادة والتخطيط وفق المواصفة القياسية نظام الإدارة البيئية ISO 14001:2026 في مستشفى الامام علي (ع) في بغداد ومعرفة مدى توافر متطلباتهما وتحديد نسب التطبيق وحجم الفجوات لكل معيار، فضلا عن تقديم اليات وإجراءات عمل لتحسين واقع المستشفى وإمكانية التطبيق الناجح لمؤشرات القيادة والتخطيط وفق نظام الإدارة البيئي. تمثلت مشكلة الدراسة في ضعف تطبيق نظام الإدارة البيئية وقلة توافر متطلبات محوري القيادة والتخطيط وفقا لهذه المواصفة، اضافة الى عدم معرفة الاليات المناسبة والإجراءات اللازمة للتطبيق الناجح للمعايير. ولغرض جمع البيانات المطلوبة تم بناء قوائم الفحص التي تقيس التوثيق والتطبيق لمؤشرات المعيارين. ولتحليل البيانات تم استعمال بعض الاساليب الاحصائية واستخراج الوسط الحسابي المرجح والنسبة المئوية لتطبيق وحجم الفجوة، اظهرت نتائج البحث بوجود فجوات كبيرة بين واقع المستشفى ومتطلبات المعايير، ولقد بلغت حجم الفجوة لمعايير القيادة (55.5%) وفي معيار التخطيط قد بلغت (51.5%). يوصي البحث بضرورة تطبيق اليات العمل والاجراءات لتقليل حجم الفجوات وتحسين نسب التطبيق وتحقيق المتطلبات التي تسهم في تحقيق نظام الادارة البيئية.

الكلمات المفتاحية: نظام ادارة البيئة، المواصفة القياسية ISO 14001، معيار القيادة، معيار التخطيط، اجراءات العمل.

Measuring and Improving the Leadership and Planning Criteria According to the ISO 14001:2026 Environmental Management System Standard: A Case Study at Imam Ali (AS) Hospital in Baghdad

Hakeem Abdul Wahid Mohammed

Abstract

This study aims to assess and improve the "Leadership" and "Planning" criteria in accordance with the ISO 14001:2026 Environmental Management System (EMS), standard at Imam Ali Hospital in Baghdad. It seeks to evaluate the extent to which the requirements for these criteria are met, determine implementation rates and the magnitude of gaps for each criterion, and propose mechanisms and operational procedures to enhance the hospital's current state and facilitate the successful implementation of leadership and planning indicators under the environmental management system. The study addresses the problem of inadequate implementation of the "EMS" and a lack of compliance with the requirements for the leadership and planning components of the standard, as well as a lack of knowledge regarding the

appropriate mechanisms and procedures needed for successful implementation. To collect the required data, checklists were developed to measure the documentation and implementation of the indicators for the two standards. Data analysis involved the use of statistical methods to calculate the weighted arithmetic mean, the implementation percentage, and the magnitude of the gap. The results revealed significant gaps between the hospital's current status and the standard requirements; the gap magnitude was 55.5% for the Leadership standard and 51.5% for the Planning standard. The study recommends implementing operational mechanisms and procedures to narrow these gaps, improve implementation rates, and meet the requirements necessary to achieve an environmental management system.

Keywords: Environmental Management System, ISO 14001:2026 standard, leadership standard, planning standard, work procedures.

1. Introduction:

The increased awareness of global environmental concerns has led organizations, and in particular, the healthcare sector to seek solutions to increase their environmental performance. Environmental Management Systems (EMS) are viewed as effective mechanisms for achieving social, economic, and environmental business objectives, as they enable organizations to meet their goals while complying with legal and stakeholder requirements; consequently, the EMS has emerged as a vital tool for sustainable development (Gianni & et al., 2017,3). Consequently, the (EMS) is considered one of the most important and widely adopted systems among hospitals, given its direct link to human life. The EMS serves as a framework for integrating environmental protection policies and programs within organizations and acts as a driving force for both environmental performance and sustainable development (Ikram et al., 2019,629). An EMS can also be considered one of an organization's comprehensive management systems; it consists of interconnected components, each contributing to the overall characteristics of the system. In accordance with international standards, this system encompasses the environmental organizational structure, activity planning, and the allocation of responsibilities, in addition to implementing procedures related to the environment, the analysis and evaluation of implementation results, and the development of methods to enhance environmental management "EM" (Zaboun,2024,22). The fundamental principle of an EMS is the continuous improvement of the environmental system within the framework of sustainable development. An environmental management system is an open system, and it is the operating base of any organization that is responsible and committed to feedback and continuous improvement of the management system. (Eliseeva, 2019,230). Hospitals urgently require standards to maintain their environmental systems and must plan for the implementation of such systems by understanding the prerequisites for successful planning. Furthermore, implementation requires leadership capable of adopting modern systems and meeting the requirements of "EMS" as well as other management systems. The study addresses "the extent to which" the

organization meets the requirements of the environmental management system specifically the "Leadership" and "Planning" criteria of the ISO 14001:2026 standard given the observed weaknesses in applying these standards at Imam Ali Hospital in Baghdad, a lack of knowledge regarding appropriate implementation procedures, and difficulties in achieving the system's sub-indicators. The study sample consisted of 22 administrative officials from the hospital's various sections, units, and departments. Using this sample, the study achieved its objectives, the research achieved its objectives: assessing the hospital's current situation, identifying strengths and weaknesses regarding the environmental system, and developing improvement mechanisms for each identified weakness within the leadership and planning dimensions. The study comprises three main sections: the first outlines the methodology and presents the problem, objectives, and significance of the study; the second covers the theoretical framework; and the third details the data analysis and study results.

2. Research methodology

2.1. Research problem

Many health institutions in Iraq have not adopted modern environmental management systems and standards that would enable them to improve performance and develop services without obstacles. One such system is the EMS specifically the ISO14001:2026 standard which is considered a fundamental requirement for hospital operations. There is a clear deficiency in the implementation of these standards and the fulfillment of their requirements; the "Leadership" and "Planning" clauses are particularly critical, as hospitals require effective planning to manage the environmental system, alongside leadership capable of meeting its prerequisites. Currently, however, there is weak implementation, a lack of adherence to the relevant indicators, and insufficient attention paid to these standards. “Based on this" context, the study's research questions can be formulated as follows

a. To what extent are leadership and planning standard requirements met at Imam Ali (AS) Hospital under the Environmental Management System?
b. What are the availability rates of the indicators of leadership, and what is the gap?
c. What are weaknesses and opportunities for improvement in the leadership and planning areas of the EMS?
d. What are the mechanisms for improving leadership and planning standards under the Environmental Management System?

2.2. Research objectives

In this section, we describe the goals of the study that it should accomplish.

a. Determine the extent to which the requirements for leadership and planning standards in accordance with environmental management systems are met at Imam Ali Hospital.
b. Determine Availability ratios and gap levels regarding the indicators for leadership and planning standards under environmental management systems.
c. Identify the strengths and weaknesses regarding leadership and planning standards within environmental management systems.
d. Suggest ways to enhance the leadership and planning standards, based on the environmental management systems.

2.3. The importance of research

The importance of this study will now be explained.

a. It highlights to hospital management the importance of focusing on "Environmental Management Systems."
b. This facilitates the proper implementation of "Environmental Management Systems" within the hospital and other healthcare institutions.
c. It fills the gap that exists in the hospital in terms of the provisions of environmental management systems.
d. It assists hospital management in implementing and prioritizing leadership standards and indicators in accordance with environmental management systems.
e. It assists hospital management and staff in implementing and prioritizing planning standards and indicators in accordance with environmental management systems.
f. It helps hospital management continuously pursue plans to improve environmental performance.
g. It raises awareness among hospital management regarding the importance of quality systems and the improvement of environmental performance.

2.4. Research sample

The study sample included “officials responsible for managing departments, sections, and units”, sections, and units involved in implementing quality programs at the hospital. They were interviewed to assess their compliance with planning and leadership standards (derived from "Environmental Management Systems"). The sample consisted of 22 officials selected using purposive sampling; information was gathered, and relevant official documents, records, evidence, and activities were reviewed.

2.5. Methods of collecting information

a. The information related to the theoretical framework was collected from books and academic university theses. reputable research papers, and the International Organization for Standardization (ISO) website.

b. Data collection related to the analytical and practical aspects was conducted using a "checklist" designed in accordance with the "Environmental Management Systems" (ISO 14001:2026) criteria; additionally, field visits and interviews with relevant department and administrative unit heads were carried out, and all associated manuals and documentation were reviewed.

2.6. Study boundaries (temporal and spatial)

a. "Spatial Scope": Imam Ali Hospital in Baghdad was selected as the location for data collection and for reviewing relevant documents and records.
b. Temporal Scope: The study's data collection and analysis phase spanned the period from July 6, 2026, to September 10, 2026.
c.

3. Theoretical background

3.1. Concept and importance of ISO 14001

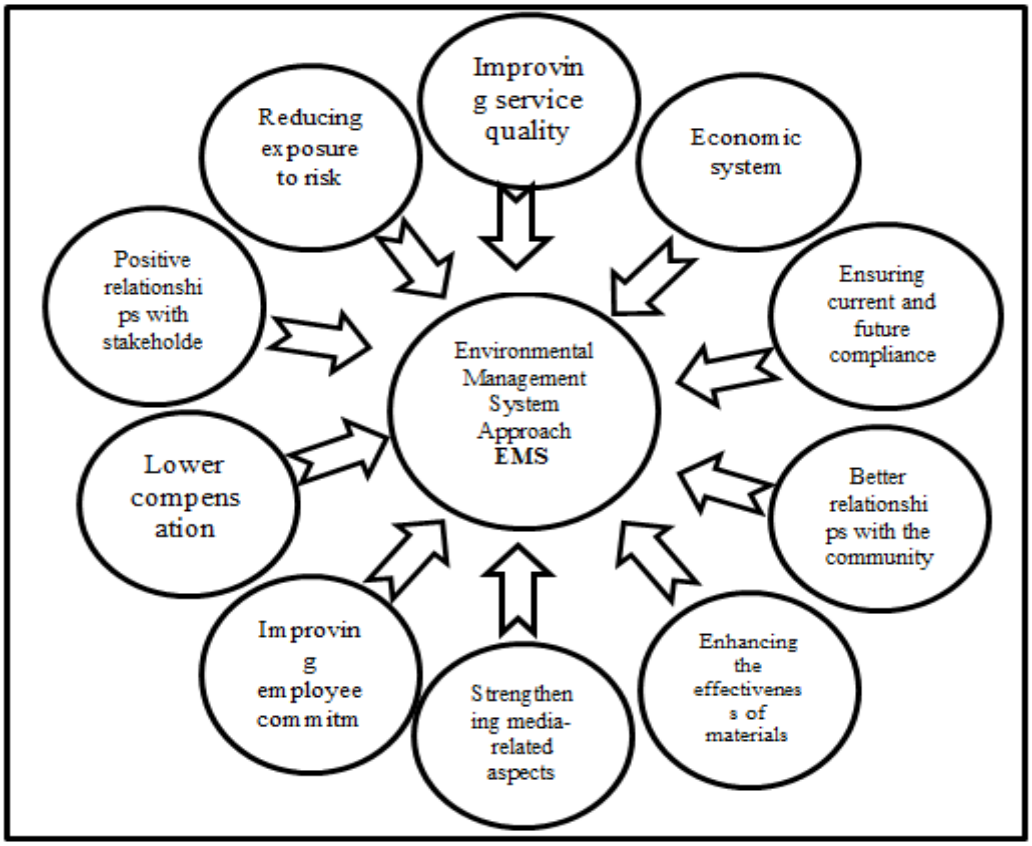
EMS and the "ISO 14001:2026 standard" provide organizations with a framework to define, improve, and monitor environmental performance. The scope of an EMS extends beyond isolated programs, integrating policies, operational procedures, responsibilities, monitoring mechanisms, and corrective actions into organizational processes. Environmental management can function as part of a broader organizational capability rather than merely serving as a compliance mechanism. This concept aligns with environmental management practices based on International Organization for Standardization" (ISO) standards, wherein environmental objectives are "integrated into planning, implementation, monitoring, review, and improvement (Ebora & Mendoza, 2026,1-2). An EMS can be defined as Processes that lead the organization to improve operational efficiency and minimize environmental impacts, thereby assisting in the management of environmental goals through the review and monitoring of operations (Chemtob, 2023,5). ISO 14001 is an international standard for "EMS" developed by the ISO; it was first published in 1996, subsequently updated "by technical committee ISO:TC 207-SC" in 2004, revised in 2015, and most recently updated in 2026 (ISO 14001:2026). An "EMS" based on the ISO:14001 standard is considered one of the most important systems organizations can adopt to reduce pollution and improve both their internal and external environments. An "EMS" relies on a set of tools and practices for assessing and managing environmental impacts and risks within an organization; consequently, organizations face pressure from environmental regulations, compelling to integrate environmental issues considerations into policies and develop new, clean alternatives to meet environmental requirements (Khudhur, 2022,20).

3.2 Benefits of implementing an "EMS"

Environmental responsibility among organizations and companies is considered to hold significant theoretical and practical value (Asiaei et al., 2021,77). "EMS" offers a variety of services, both in-house and external. benefits to organizations, as follows (Riillo, 2025,2)

a. They enable the organization to systematically monitor environmental performance.
b. Implementing an "EMS" reduces environmental impact and pollution.
c. They help identify opportunities for eco-innovation.
d. They improve organizational processes and foster operational consistency.
e. They increase the confidence of the stakeholders and the buyers.
f. They facilitate the market launch of new products and services.
g. Customers care about environmental sustainability. and view environmental management system certifications as credible.

Several advantages become clearly apparent when organizations implement an "EMS", as illustrated in Figure 1:



Source: Shah, K. J., Singh, A. V., Tripathi, S., Hussain, T., & You, Z. (2022). Environmental management system as sustainable tools in water environmental management: A review. *Current Chinese Science*, *2*(1), 48-56.

3.3 Types of environmental pollutants

The environment is a key factor in the continuation of life; however, rising pollution levels have become a major concern in recent years. Pollution is classified into several types, including air and water pollution; noise is also considered a form of pollution.

among others. Organizations and industries with high emission levels, such as the steel, cement, and chemical sectors have become primary targets for environmental standards and regulations due to their impact on the environment (Wu et al., 2025,2-3). Environmental management offers insights regarding the use and Natural environmental resources should be preserved, nature reserves maintained, and risks mitigated. The most prominent types of environmental pollutants are as follows (Zaidan & AL-Khateeb, 2020,95):

- Wastewater Management: Minimizing discharge into rivers and seas, and treating wastewater.
- Water Resource Management: Planning and developing water resources, and managing their environmental impact and water quality.
- Sustainable Transportation: Shaping transport planning and mitigating harmful transport impacts to generate environmental benefits for society.
- Hazardous Waste Management: Handling waste with specific physical or chemical properties, including storage and disposal methods.
- Air Quality Management: Assessing the fate of air pollutant emissions in the atmosphere and meeting air quality standards.
- Energy Management: Efficient and effective energy use, encompassing generation, distribution, and consumption.
- Soil Degradation and Management: Soil degradation represents a loss in the production of plant matter in terms of desired quantity and quality.

3.4 ISO 14001 System Certification

Any organization can obtain an "EMS" certification by meeting the requirements of the ISO14001 standard. This standard comprises ten clauses: three introductory clauses Scope, Normative References, and Terms and Definitions and seven mandatory core clauses: "Context of the Organization, Leadership, Planning, Support, Operation, Performance Evaluation, and Improvement. Obtaining ISO:14001 certification and implementing environmental management controls should enable organizations to effect substantive changes in environmental performance, rather than merely superficial or symbolic ones (Falakhn & Budiani, 20261-2). An organization may apply to a certification body or one of its branches after first conducting an internal assessment to ensure it meets the system's specific indicators and standards. This is followed by an external assessment performed by auditors competent in auditing techniques, legal regulations, and quality and environmental management standards. The process aims to compare system performance and verify processes and services against system requirements for the purpose of certification, involving the improvement of the management system through several stages: understanding the

organization and its operations, gathering documentation and evidence, establishing planning elements, preparing support elements, assessing performance, and implementing continuous improvement programs (Mohammed, 2026,3). This standard demands the organization to undergo some fundamental changes in its systems, culture and operations. “Compliance with the requirements of this standard necessitates that an organization make significant and fundamental adjustments to its operations, culture, and systems. Furthermore, organizations and institutions must establish procedures for environmental auditing, performance measurement, and review steps that foster the development of capabilities and expertise that did not previously exist” (Ikram & Ernesto, 2026,2-3). Environmental management systems have been implemented across various organizations and institutions for over two decades; these entities have either designed their own systems or adopted guidelines from external bodies, such as the International Organization for Standardization (ISO) or the European Union’s “Eco-Management and Audit Scheme (EMAS)”. There are several guiding principles that organizations must follow, which include the following: (Shah et al., 2022,49)

- Periodic environmental impact assessment procedures.
- Environmental accounting.
- Application of life-cycle methodology and eco-design.
- Environmental approach to management and logistics.
- Communication and marketing based on environmental standards.
- Environmental training.

3.5 Concept of Leadership

In organizations, leadership is expressed as the influence exerted by an individual—the leader—upon their followers or subordinates. It represents the capacity of individuals to act as influential leaders. Leadership is defined as an individual's ability to positively influence others through a unique set of qualities and skills, enabling them to guide a group toward achieving goals efficiently and effectively. Key leadership traits include the ability to provide direction, inspire, communicate effectively, make decisions, and engage in continuous learning. An accomplished leader possesses strong guidance skills and the ability to build robust, cohesive teams; they are capable of making sound, rational decisions promptly and motivating others to reach their full potential. Leaders operate based on trust and values to foster innovation (Hussein, 2025,25)

The objectives of leadership within organizations can be outlined as follows (Aziz, 2025,21-22):

- Improving organizational efficiency and opening lines of communication between management, employees, and beneficiaries.
- Strengthening ties between senior leadership and employees.
- Cultivating a positive organizational culture among employees.
- Enhancing transparency and minimizing errors.
- Securing the satisfaction of employees and beneficiaries.
- Facilitating work processes and ensuring timely completion.
- Improving the work environment.
- Reducing costs and minimizing unnecessary expenditures.

3.6 Concept of Planning

Planning in administrative organizations is "the process of defining institutional goals", identifying available resources such as material, human, financial, and informational assets and determining the methods to be adopted to achieve those objectives. Planning is considered the core of the administrative process; it serves as the initial link connecting functions such as organizing, coordinating, controlling, directing, and decision-making, all of which contribute to the application of standards and the efficient achievement of quality. It is defined as a systematic process for addressing future work challenges while taking available resources into account. The planning process may involve several stages (Salman, 2025, 406):

- Preparation phase.
- Data collection phase.
- Study and analysis phase.
- Implementation phase.
- Evaluation phase.

4. Analysis of study data

4.1. Interpretation of study results

I collected the study data using specially designed checklists in accordance with the requirements of two key clauses of the ISO: 14001:2026 international standard: Clause (5) (Leadership) and Clause (6) (Planning). A modified checklists scale was employed, based on documentation, evidence, and actual implementation at the study site. The arithmetic mean and implementation percentage were calculated for each checklist, and the gap size for each item was determined. The results are presented and interpreted; Table1 displays the analysis of the Leadership clause.

Table (1) Results of the Checklist for Item 5: Leadership

Requirements ISO 14001:2026		Non-conformity &	Conformity Partial	Conformity Partial	Conformity & Partial	Conformity &
5	**Leadership**					
5.1	Leadership and Commitment					
5.1.1	"Management bears responsibility for the effectiveness of the" environmental management system.				√	
5.1.2	Top management ensures that the environmental management system "policy and objectives are compatible with the strategic direction of the organization".			√		
5.1.3	Management ensures the integration of environmental management system requirements into the organization 's processes.		√			
5.1.4	Top management ensures the availability of the resources necessary for the environmental management system.			√		
5.1.5	Management communicates the importance of effective "EM" and its alignment with the requirements of the environmental management system.			√		
5.1.6	Top management ensures that the "EMS" "achieves its intended outcomes".		√	√		
5.1.7	Senior management participates in and supports individuals in contributing to the effectiveness of the "EMS".			√		
5.1.8	Senior management fosters continuous improvement.			√		
5.1.9	Senior management supports the role of other relevant departments in demonstrating leadership within their respective areas of responsibility.			√		
5.2	Environmental Policy					
5.2.1	The "environmental policy shall be appropriate" to the purpose and context of the organization, including the "nature of its activities, products, and services", and its environmental impacts.		√			
5.2.2	The policy provides a framework for setting "environmental objectives".		√			
5.2.3	The "environmental policy includes" a commitment to				√	

	"environmental protection, including pollution" prevention and other specific commitments relevant to the organization 's context.					
5.2.4	The "environmental policy" includes a commitment to fulfilling applicable requirements.			√		
5.2.5	The "environmental policy includes a commitment" to the continual improvement of the environmental management system to "enhance environmental" performance.			√		
5.2.6	The organization documents its environmental policy and communicates it to its personnel.			√		
5.3	Organizational roles					
5.3.1	"Top management" ensures that relevant responsibilities and authorities are defined, "communicated", and understood.				√	
5.3.2	Responsibility for the environmental management system's conformity with the standard's requirements is defined.		√			
5.3.3	Reports on the performance of the environmental management system are submitted to top management.	√				
"Weights"		0	1	2	3	4
"Repeats"		1	5	9	3	0
"Result"		0	5	18	9	0
"Weighted Mean" =	$W = \Sigma w.x \div \Sigma w$ =	1.78				
"Percentage of Match"	1.78 ÷ 4 *100 =	44.5%				
"Gap Size"	100% - 44.4 =	55.5%				

Source: Prepared by the researcher.

Table (1), regarding the "Leadership" clause, shows that the hospital achieved an implementation rate of (44.5%), with a significant gap of (55.5%, indicating) a lack of attention to many of the clause's indicators; notably, responsibility for ensuring the "EMS" compliance with standard requirements has not been defined. Table (2) presents the checklist for the "Planning" clause.

Table (2) Results of the Checklist for Item 6: Planning

Requirements ISO 14001:2026		Non-conformity & undocumented (0)	Conformity Partial Undocumented (1)	Conformity Partial documentation (2)	Conformity & Partial documentation (3)	Conformity & documented (4)
5	**Planning**					
5.1	**Measures for addressing risks and opportunities**					
5.1.1	Plan to implement an environmental management system					
5.1.1.1	The scope of the organization's environmental management system is examined.			√		
5.1.1.2	The organization's approach to interacting with its surrounding environment is studied.			√		
5.1.1.3	The organization examines how to identify potential risks and available opportunities.		√			
5.1.1.4	The method for identifying emergency situations is examined.			√		
5.1.1.5	The means by which the organization ensures the achievement of desired "EMS" outcomes are studied.				√	
5.1.1.6	The organization establishes and prepares the records and documents necessary for environmental management planning.			√		
5.1.1.7	Identified risks and opportunities are documented.		√			
5.1.1.8	Processes required for planning and managing the "EMS" are documented.		√			
5.1.1.9	Planning processes are executed and monitored based on the established documents and records.		√			
6.1.2	"Environmental aspects"					
6.1.2.1	"Environmental" aspects falling within the scope of the organization's "EMS" are identified.			√		
6.1.2.2	Environmental aspects that the organization can control and influence are identified.			√		
6.1.3	Required Obligations (Compliance)					
6.1.3.1	Compliance with environmental aspects is ensured.			√		
6.1.3.2	The method for implementing "obligations related" to "environmental aspects is determined".		√			
6.1.3.3	Required "obligations are taken into account when" "establishing, maintaining, and improving" the "EMS".				√	
6.1.3.4	Documented information regarding required obligations is maintained.			√		
6.1.4	Conducting planning					
6.1.4.1	The organization develops a plan to identify significant "environmental aspects".				√	
6.1.4.2	A plan is established to identify environmental obligations.				√	
6.1.4.3	A plan is established to identify risks and opportunities.			√		
6.1.4.4	Operational activities are organized to ensure the achievement of required outputs associated with the "EMS" .		√			
6.1.4.5	Activities are executed to ensure the achievement of "required outputs associated with the "EMS".		√			
6.2	**Environmental Goals and Their Achievement**					
6.2.1	It is ensured that the objectives incorporate the organization's environmental policy commitments.				√	
6.2.2	It is ensured that the objectives are measurable and achievable.				√	
6.2.3	The organization establishes "environment al			√		

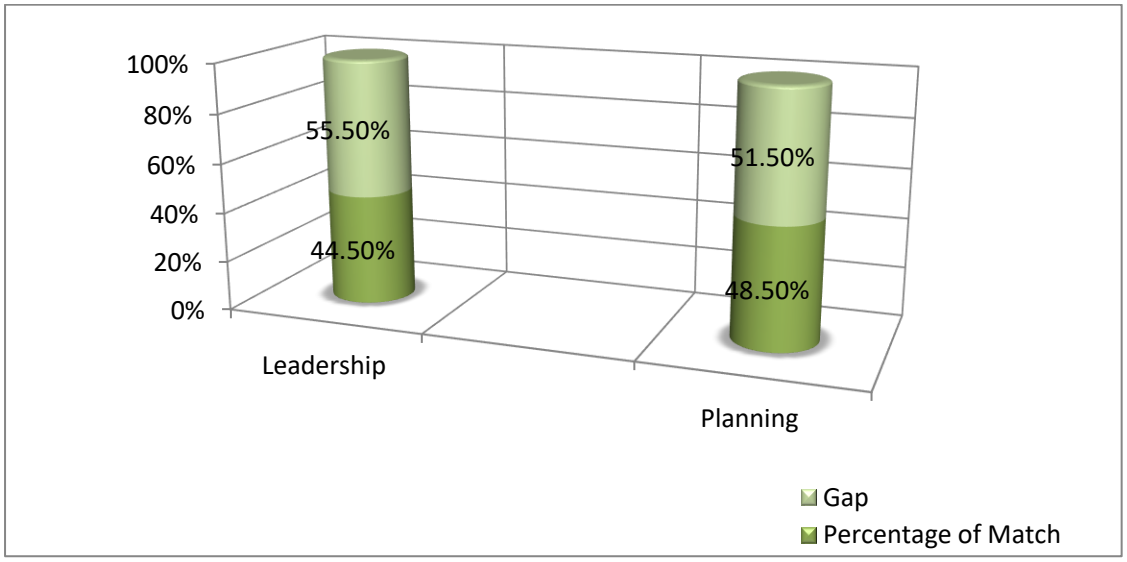
	objectives" that can be monitored.					
6.2.4	The organization establishes "environment al objectives" that are updated as needed.			√		
6.2.5	The organization determines what needs to be done when planning" to achieve its environmental "objectives.			√		
6.2.6	The organization retains the "environment al objectives" as documented information.			√		
6.2.7	The organization determines the resources required when planning to achieve the "environmental objectives".				√	
6.2.8	The organization determines who is responsible when planning to achieve the" environmental objectives".		√			
6.2.9	The organization determines when the setting of objectives will be completed when planning to achieve "environmental objectives".		√			
6.2.10	The organization determines "how results will be" evaluated when planning to achieve "environmental objectives".		√			
6.2.11	The organization considers how actions to achieve "environmental objective s" will be taken, which may be integrated into its processes.			√		
6.3	**Planning and Change Management**					
6.3.1	Internal or external changes affecting the outcomes of the "EMS" are planned and monitored.		√			
6.3.2	A documented change management workflow is established to assess environmental risks.			√		
6.3.3	The organization enhances emergency preparedness.				√	
6.3.4	It improves the anticipation of systemic risks, such as extreme weather events, climate disruptions, or the release of hazardous materials.			√		
6.3.5	Risk registers and emergency response procedures are updated to address such incidents.		√			
"Weights"		0	1	2	3	4
"Repeats"		0	12	14	10	0
"Result"		0	12	28	30	0
"Weighted Mean"		1.94				
"Percentage of Match"		48.5%				
"Gap Size"		51.5%				

Source: Prepared by the researcher

Table (2) presents the results of the checklist regarding the "Planning" element, revealing an implementation rate of (48.6%). This figure stems from insufficient attention to planning for environmental system requirements, weak documentation mechanisms, and a lack of commitment regarding environmental aspects.

The checklists indicate that the implementation rate for the "Leadership" element is (44.5%), (with a gap of (55.5%), while the rate for "Planning" is (48.5%), (with a gap of 51.5%). These findings necessitate the development of operational mechanisms and procedures to narrow such significant gaps. These findings reflect the hospital's insufficient attention to key indicators on key indicators within the Leadership and Planning elements, as further illustrated in Figure (1).

Figure (1) Implementation and gap percentages for the Leadership and Planning clauses according to the ISO 14001:2026 standard



4.2. Operational procedures to improve the Leadership and Planning clauses in accordance with the ISO 14001:2026 standard.

To achieve the study's "objectives and based on the" checklist results, we are developing operational procedures to improve the "Leadership" and "Planning" clauses in accordance with the ISO 14001:2026 standard. This process involves collaborating with a sample of experienced employees and addressing identified opportunities for improvement (which represent areas of weakness). The procedures cover every indicator where weaknesses in implementation and documentation were observed, specifically those scoring 0 or 1 on the checklist scale used for assessment. By establishing appropriate procedures that facilitate successful implementation, documentation, and compliance with "requirements for each indicator", we aim to bridge the gap and increase implementation rates, as shown in Table (3).

Table (3) Work Procedures

	Weaknesses (opportunities for improvement)	Procedures
	Leadership Clause	
1	Management's failure to integrate "EMS" requirements into the organization's processes.	- Ongoing support from management. -Assembling a team to implement the ecosystem . - Understanding, analyzing, and fulfilling requirements. - Monitoring processes.
2	Top management does not ensure that the "EMS" achieves its results.	- Precisely defining the system's objectives. - Educating employees led by management on the environmental system's objectives. - Implementing the environmental system's procedures. - Comparing performance against actual environmental results.
3	Insufficient attention to the environmental policy and its lack of suitability for the organization's purpose and context.	- Updating the environmental policy. - Communicating the "environment al policy". - Raising employee awareness to ensure services align with the - environmental policy.
4	Failure to define responsibility for the "EMS" conformity with the standard 's requirements.	- Senior management must adopt the standard 's requirements. Train personnel to conduct audits in accordance with the . -standard -"Align processes with the standard's requirements". - Develop environmentally friendly activities. - Prepare reports monitoring the "EMS" and submit them to management.
	Planning Item	
1	Inadequacy in identifying and documenting the risks the organization may face and the opportunities available to it	- Categorizing risks based on importance and priority. - Establishing appropriate risk treatment measures. - Identifying and analyzing opportunities. - Documenting and maintaining records of risk and opportunity procedures.
2	Lack of commitment to and oversight of environmental planning processes.	- Preparing long-term strategic environmental planning. - Establishing specific timeframes for actions. - Identifying those responsible for implementing environmental planning. - Periodically monitoring environmental planning processes. - Motivating employees to implement environmental planning.
3	Lack of attention to how the required obligations regarding environmental aspects are implemented.	-The need for management capable of addressing environmental aspects. - Empowering employees to manage environmental aspects - Identifying the benefits of environmental compliance - Fostering environmental awareness among employees

		- Documenting environmental commitments in specific records
4	Weakness in organizing and executing the work required to achieve the outputs "associated with the "EMS	- Forming task forces to carry out environmental activities within the hospital. - Issuing actionable administrative decisions. - Minimizing obstacles and providing necessary resources. - Measuring required outputs and comparing them against environmental standards and specifications.
5	Failure to clearly designate the person responsible when planning to achieve environmental goals, finalizing the objectives, and evaluating the results.	- Senior management must plan and clearly define environmental objectives. - Communicate environmental objectives and raise awareness about them. -The organization must establish achievable and measurable environmental objectives. - Monitor the implementation of environmental objectives and track their completion. - Evaluate the results of planning and implementing environmental objectives. - Compare planning and implementation against other environmental. activities and competitors.
6	Inadequate monitoring of internal or external planning changes affecting environmental management system outcomes, and failure to adequately update emergency response records.	- Predicting internal and external changes by analyzing change dynamics. - Examining potential changes and determining their significance. - Assessing the impact of changes on the ecosystem. - Preparing the necessary resources and procedures to address these changes without risk. - Updating and maintaining risk registers and emergency response procedures.

.**Source: Prepared by the researcher**

Conclusions

1. Failure of management to ensure the integration of (EMS) requirements into hospital operations.
2. Inadequate support and engagement by senior management to foster staff contribution to the effectiveness of the "EMS".
3. Insufficient support from senior management for other departments involved in establishing the EMS, and a lack of continuous improvement of the "EM".
4. Lack of attention to the environmental policy and failure to ensure its alignment with the organization's purpose and context, including the nature of its activities, products, services, and environmental impacts.
5. Weak definition of organizational roles and responsibilities regarding EMS compliance with standard requirements, and a lack of attention to environmental performance reports.

6. Lack of commitment by the hospital to implementing the EMS and a failure to meet its requirements.
7. Despite identifying potential risks and opportunities, the hospital fails to adequately identify emergency conditions and lacks documentation for risks, opportunities, and environmental processes.
8. Inadequate identification of environmental aspects and environmental protection activities relevant to the hospital's EMS.
9. Poor retention of documented information regarding obligations related to environmental aspects within the hospital.
10. Lack of focus on achieving the required outputs associated with the EMS.
11. While the hospital plans its environmental objectives, it fails to assign implementation responsibilities and lacks the necessary implementation procedures.
12. Inadequate planning and monitoring of internal or external changes affecting EMS outcomes, and poor documentation of records regarding environmental incident response procedures.

Recommendations

1. Management must ensure the integration of (EMS) requirements into hospital operations.
2. The hospital should implement the mechanisms and procedures proposed in this study to narrow the gaps identified in the "Leadership" and "Planning" sections.
3. Senior management must support and engage personnel to "contribute to the effectiveness" of the "EMS".
4. Senior management must support other departments involved in establishing the "EMS" and foster continuous improvement of the system.
5. Attention should be paid to the environmental policy, ensuring its alignment with the "organization's purpose and context", including the nature of its activities, products, services, and environmental impacts**.**
6. Organizational roles must be defined, responsibility for the "EMS" conformity with standard requirements established, and attention paid to environmental management performance reports.
7. 7. The hospital should focus on implementing the environmental management system and addressing any gaps in meeting its requirements.
8. 8. Risks and opportunities must be identified, as well as potential emergency situations; risks, opportunities, and environmental processes must be documented.
9. 9. Hospital management must address environmental aspects and environmental protection activities relevant to the hospital's "EMS".

10. 10. Documented information regarding "obligations related to environmental" aspects within the hospital must be maintained.
11. 11. Attention must be paid to achieving the required outputs associated with the environmental management system.
12. 12. The hospital must plan its environmental objectives, assign implementation responsibilities, and focus on the necessary implementation measures.
13. 13. The hospital must plan for and monitor internal or external changes that affect the outcomes of the environmental management system.

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