



ISO 45001 - The Practical Approach: Value & Implementation

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3

Agenda

- History of OH&S Management Systems
- ISO 45001 Overview
- ISO 45001 Clauses
- Why choose ISO 45001?



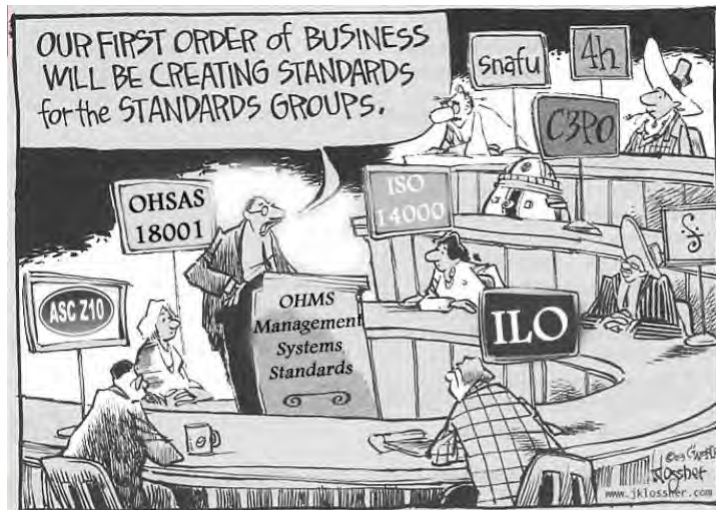
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What is an ISO Management System?

- Internationally agreed standard that sets the requirements for a management system
- Helps organizations identify, manage, monitor, and control issues in a holistic manner
- Intent: continual improvement



5



6

Evolution of OH&S MS

Year	System	Focus
1987 (2008) (2015)	ISO 9001	Quality; meeting customer expectations and product specifications; certifiable
1996 (2004) (2015)	ISO 14001	Environment; managing environmental aspects and impacts; certifiable
1996	BSI 8800	Occupational health and safety; non-certifiable guidance document
1999 (2007)	OHSAS 18001	Occupational health and safety; certifiable
2001 (2009)	ILO OHS/2001	Occupational health and safety; non-certifiable guidance document
2005 (2012)	ANSI Z10	Occupational health and safety; certifiable
2018	ISO 45001	Occupational health and safety; certifiable

7

Comparison

ANSI Z10:2005	OHSAS 18001:2007	ISO 45001:2018
US National Consensus standard	BSI-owned, EU consensus standard	International consensus standard
Z10 Committee: US industries, industry trade groups, labor, agencies, standard setting bodies	OHSAS Project Group: Consortium of 43 organization from 28 countries, chaired by BSI	TC 283: 70 participating members worldwide, chaired by BSI
Gaining recognition, can be used for accredited certification	Internationally recognized, could be used for accredited certification	Internationally recognized, essentially replaced OHSAS 18001
Elements compatible with ISO 14001, but some differences	Elements aligned with ISO 14001:2004	Elements align with ISO 14001:2015 and IOS 9001:2015
Has special significance to US as a national consensus standard	In absence of ISO standard, was the leading global standard	New! Leading international consensus standard

8

Purpose

Purpose of OHSAS 18001:

“to enable an organization to control its OH&S risks and improve its OH&S performance”

Purpose of ISO 45001:

“to enable an organization to proactively improve its OH&S performance in preventing injury and ill-health”

9

ISO 45001

- Provides a framework to increase safety, reduce workplace risks and enhance health and well-being at work, enabling an organization to proactively improve its OH&S performance.



10

Why was ISO 45001 created?

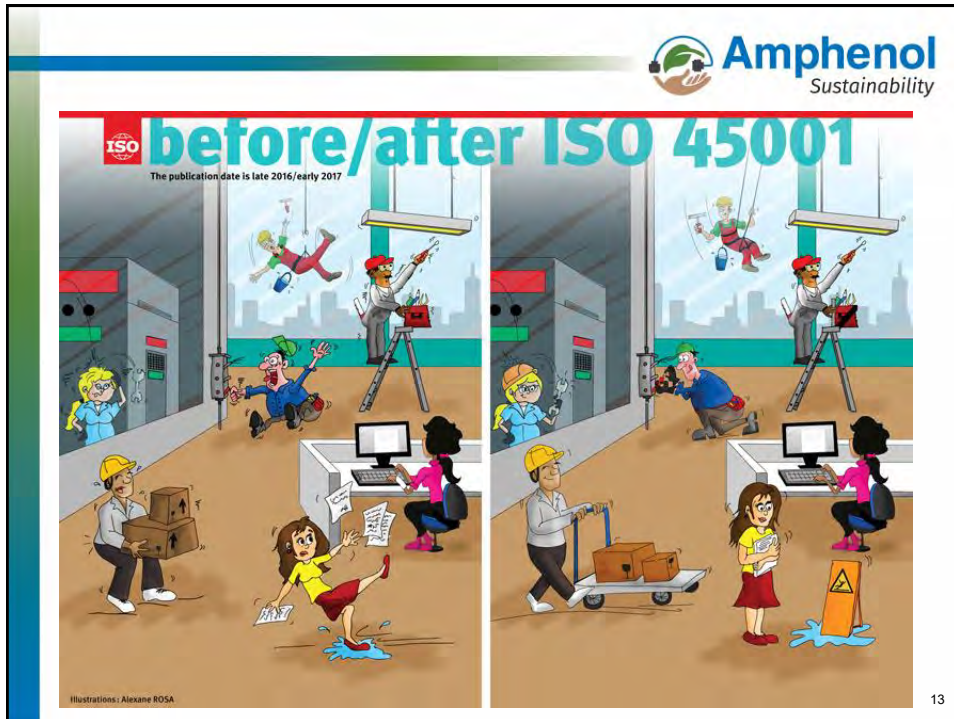

- Over 7,600 people die each day from work-related accidents or diseases - that's over 2.78 million every year.
- The burden of occupational injuries and diseases is significant, both for employers and the wider economy, resulting in losses from early retirements, staff absence and rising insurance premiums.
- ISO 45001 will help organizations reduce this burden by providing a framework to improve employee safety, reduce workplace risks and create better, safer working conditions, all over the world.
- The standard was developed by an international committee of occupational health and safety experts, and follows other generic management system approaches such as ISO 14001 and ISO 9001.
- It takes into account other International Standards, various national standards, and the ILO's international labor standards and conventions.

11

Why Implement Management Systems?



12

ISO 45001 Benefits

- Reduction of workplace incidents
- Reduced absenteeism and staff turnover, leading to increased productivity
- Reduced cost of insurance premiums
- Creation of a health and safety culture, whereby employees are encouraged to take an active role in their own OH&S
- Reinforced leadership commitment to proactively improve OH&S performance
- Ability to meet legal and regulatory requirements
- Enhanced reputation
- Improved staff morale

14



ISO 45001 Key Features

- OH&S management to be more prominent within the organization's strategic direction
- A greater commitment from leadership: safety culture
- A focus on worker participation and consultation
- An explicit requirement for risk-based thinking to support and improve the understanding and application of the process approach

15



ISO 45001 Key Features

Context of the organization must be understood

- Internal and external issues
- Increased emphasis on workers and interested parties

OH&S performance

Procurement, outsourced processes, contractors

Foundation for the integration with other management systems

16

New Terminology

- Documented information
- Worker
- Process
- Participation and consultation
- Top management
- Risks and opportunities
- Performance indicator
- Intended outcomes

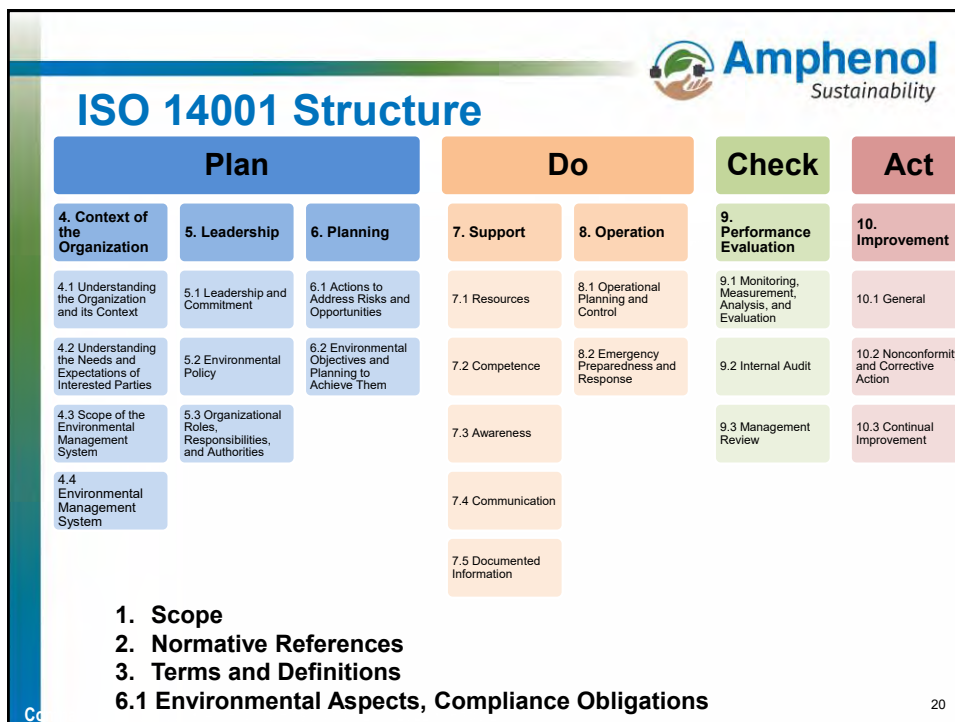
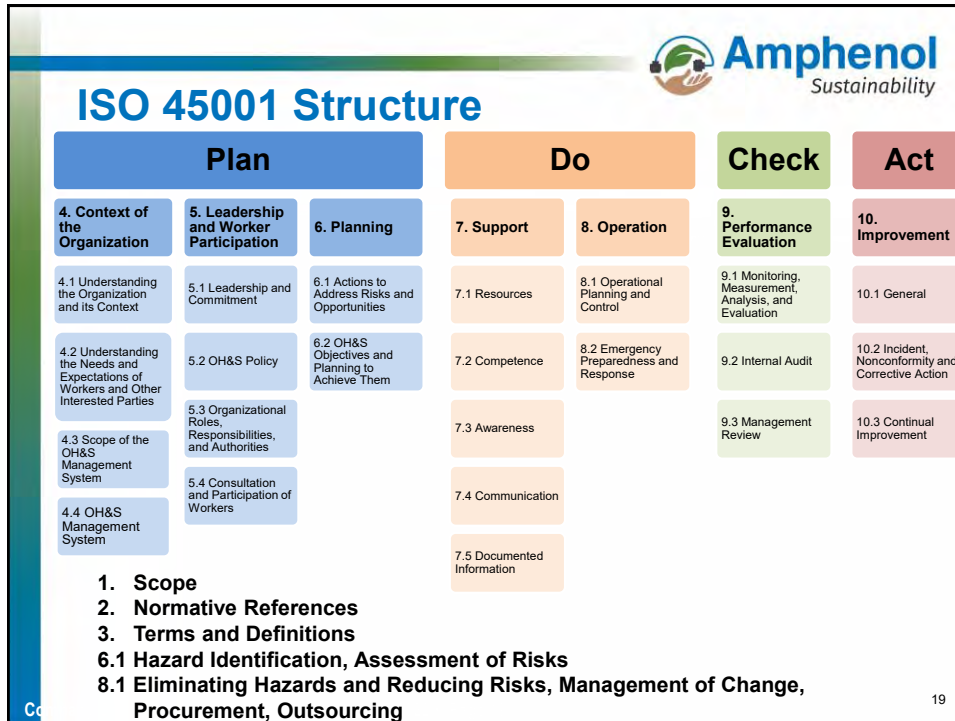
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High-Level Structure

A new common format has been developed for use in all management system standards

- Standardized core text and structure for multiple ISO management systems for integration
- Standardized core definitions

Clause 1	Scope
Clause 2	Normative references
Clause 3	Terms and definitions
Clause 4	Context of the organization
Clause 5	Leadership
Clause 6	Planning
Clause 7	Support
Clause 8	Operation
Clause 9	Performance evaluation
Clause 10	Improvement



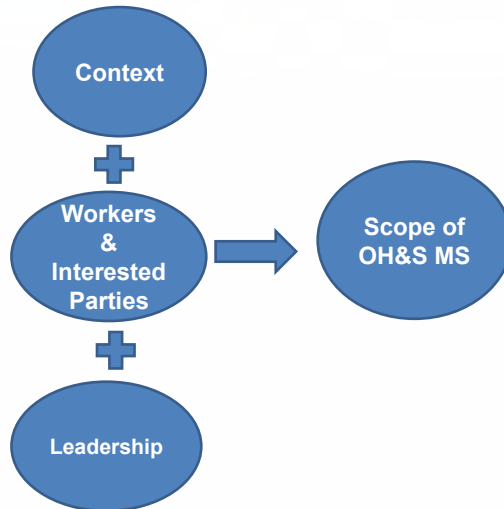
Starting Point: Scope

OH&S MS will help you:

- Identify
- Manage
- Improve

OH&S performance and meet compliance obligations

Define the boundaries and applicability of the OH&S MS to establish its scope.



21

4. Context of the Organization

4.1 Understanding the organization and its context

What does the organization do and why?

4.2 Understanding the needs and expectations of workers and other interested parties

4.3 Determining the scope of the management system

4.4 OH&S management system

22

External and Internal Factors

External Factors



Internal Factors



23

Workers and Interested Parties



24

5. Leadership

Essence: Emphasis on leadership, not just management, to enhance participation and engagement with other interested parties to provide safe and healthy working conditions

5 Leadership and worker participation

- 5.1 Leadership and commitment
- 5.2 OH&S Policy
- 5.3 Organization roles, responsibilities, and authorities
- 5.4 Consultation and participation of workers

25

6. Planning/ 8.1.2 Hazards & Risk Reduction

Planning is about defining the actions required to successfully achieve OH&S outcomes and objectives, address risks and opportunities and meet legal and other requirements while engaging with workers



26

6. Planning

6.1 Actions to address risks and opportunities

6.1.1 General

6.1.2 Hazard identification and assessment of risk and opportunities

6.1.3 Determination of legal and other requirements

6.1.4 Planning to take action

6.2 OH&S objectives and planning to achieve them

6.2.1 OH&S objectives

6.2.2 Planning to achieve OH&S objectives

27

7. Support

Centered on communication

Essence: Leaders of the organization need to provide the resources and information necessary for the establishment, maintenance and continual improvement of the OH&S management system



28



7. Support

7.1 Resources

7.2 Competence *(also applies to external workers – contractors).*

7.3 Awareness – *including the ability to remove themselves from work situations that they consider present an imminent and serious threat to life or health and protecting them from undue consequences for doing so.*

7.4 Communication –*includes external and internal communications*

7.5 Documented information – *can be on a range of media – not just hard copy paper based information and must be suitably controlled.*

29



ISO 45001 Documented Information

- 1) Scope of the OH&S MS
- 2) OH&S policy
- 3) **Responsibilities and authorities for relevant roles**
- 4) Risks and opportunities
- 5) Processes and actions to address risks and opportunities
- 6) Methodologies and criteria for the assessment of OH&S risks
- 7) Legal requirements and other requirements
- 8) OH&S objectives and plans to achieve them
- 9) Operational planning and control processes
- 10) Emergency response processes and plans
- 11) **Maintenance, calibration or verification of measuring equipment**

Evidence of:

- 11) Competence
- 12) Communications
- 13) Monitoring, measurement, analysis, performance evaluation results
- 14) Compliance evaluation results
- 15) Implementation of the audit program, audit results
- 16) Results of Management Reviews
- 17) Nature of incidents, nonconformities; corrective actions and results
- 18) **Continual improvement**

30



8. Operation

Essence: The organization needs to plan, implement, control and maintain the processes needed to meet compliance obligations, manage risk effectively and meet the requirements of the OH&S system

8.1 Operational planning and control

8.1.1 General – *including maintaining documented information and adapting work to workers.*

8.1.2 Eliminating hazards and reducing OH&S risks.

8.1.3 Management of change.

8.1.4 Procurement: General, Contractors and Outsourcing requirements.

8.2 Emergency preparedness & response

31



9. Performance Evaluation

Essence: monitor, measure, analyze, and evaluate EOH&S performance

9.1 Monitoring, measurement, analysis and performance evaluation

9.1.1 General

9.1.2 Evaluation of compliance

9.2 Internal audits

9.2.1 General

9.2.2 Internal audit program

9.3 Management review

32

10. Improvement

Essence: Enhancement of OH&S performance is a fundamental objective of the management system and Section 10 requires action to achieve this.

10.1 General

10.2 Incidents, non-conformity and corrective action

10.3 Continual improvement (*by enhancing performance, promoting a culture of support, worker participation in improvements, communication and retaining documented information*).

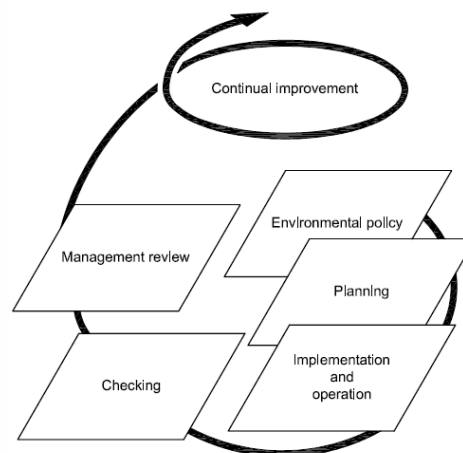
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Core Concepts

Plan-Do-Check-Act cycle

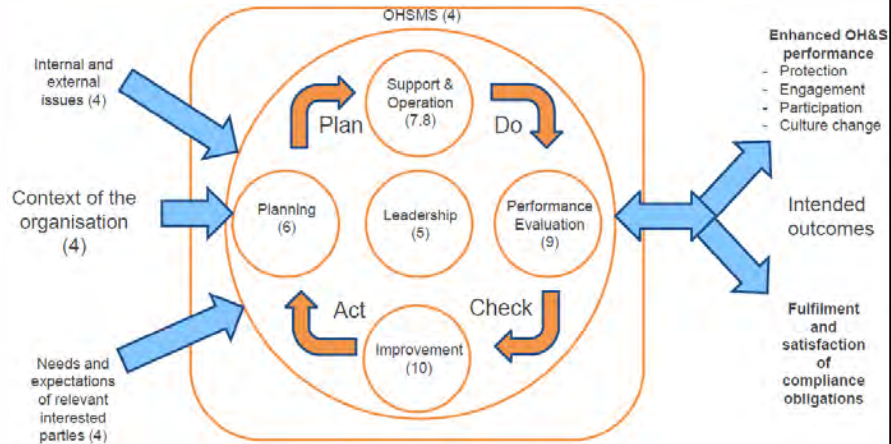
Process approach

Risk-based thinking



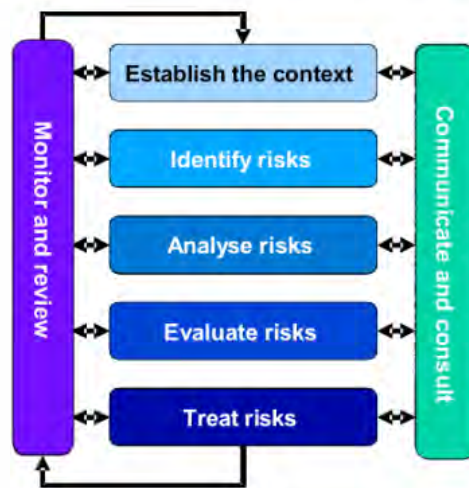
34

ISO 45001: Process Approach



35

Risk-Based Thinking



36



Steps to ISO Certification

Buy the standards and get training

Get management buy-in

Gap analysis

- Establish resources, objectives, procedures, policies, documented information

Train your employees and internal auditors

Hire third-party auditor

Application, assessment, certification

37



GO BEYOND

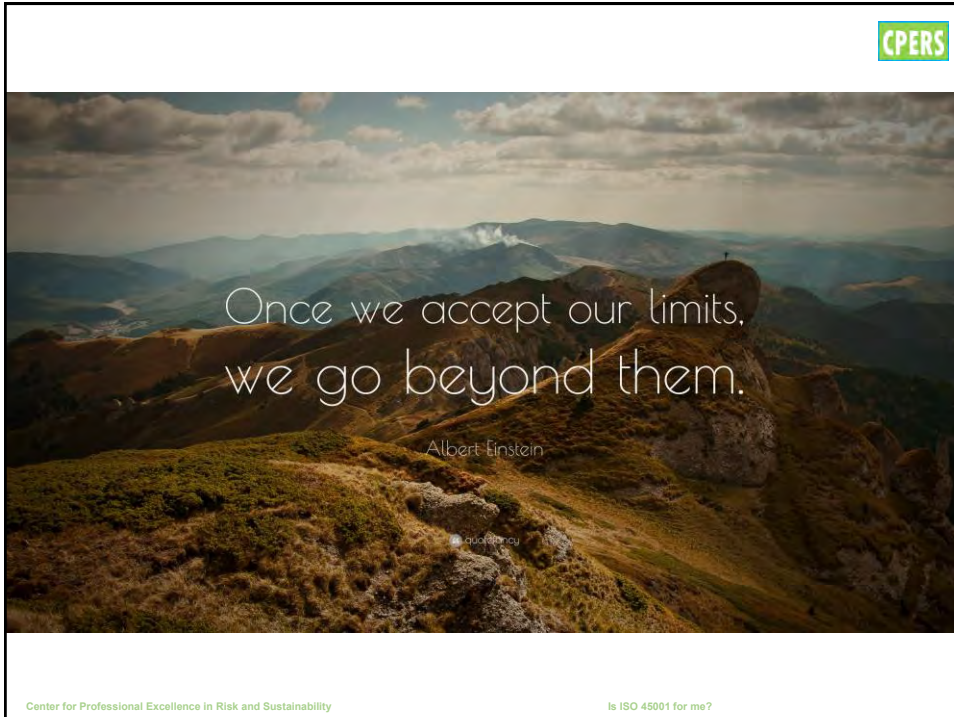
Is ISO 45001 for me?



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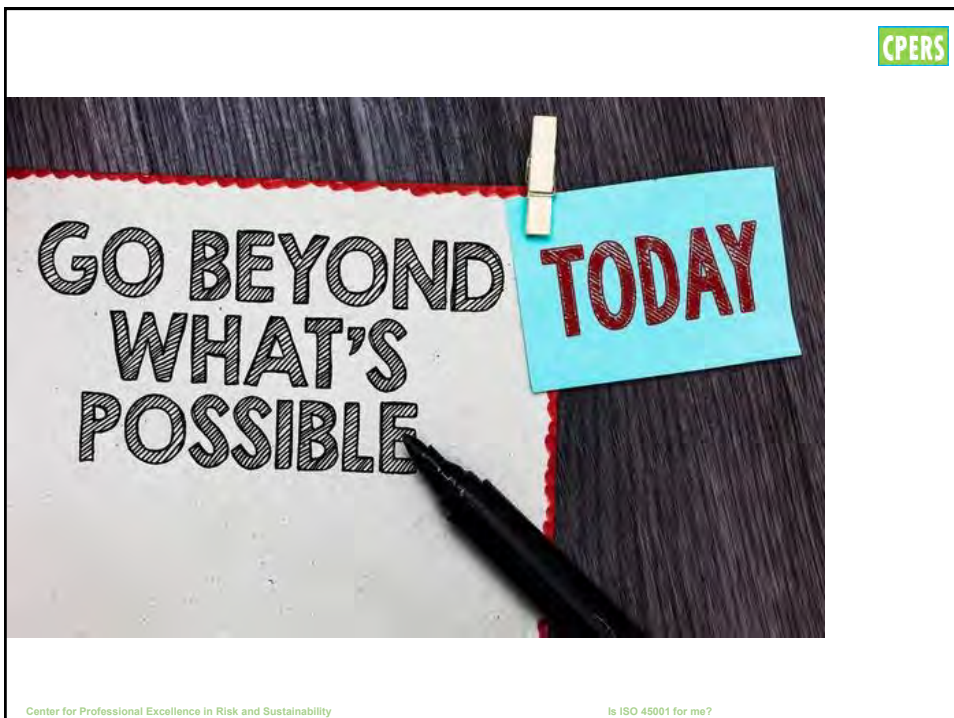
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Once we accept our limits,
we go beyond them.

Albert Einstein

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GO BEYOND
WHAT'S
POSSIBLE

TODAY

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The US context

- USA is a partner in development and acceptance of ISO 45001
- All the clauses of ISO 45001 standard are applicable to any entity in the USA
- ISO 45001 is useful to any company in the USA
- ISO 45001 certificate is directed towards your own workers and managers, unions understand this
- Companies in the USA are increasingly adopting ISO 45001

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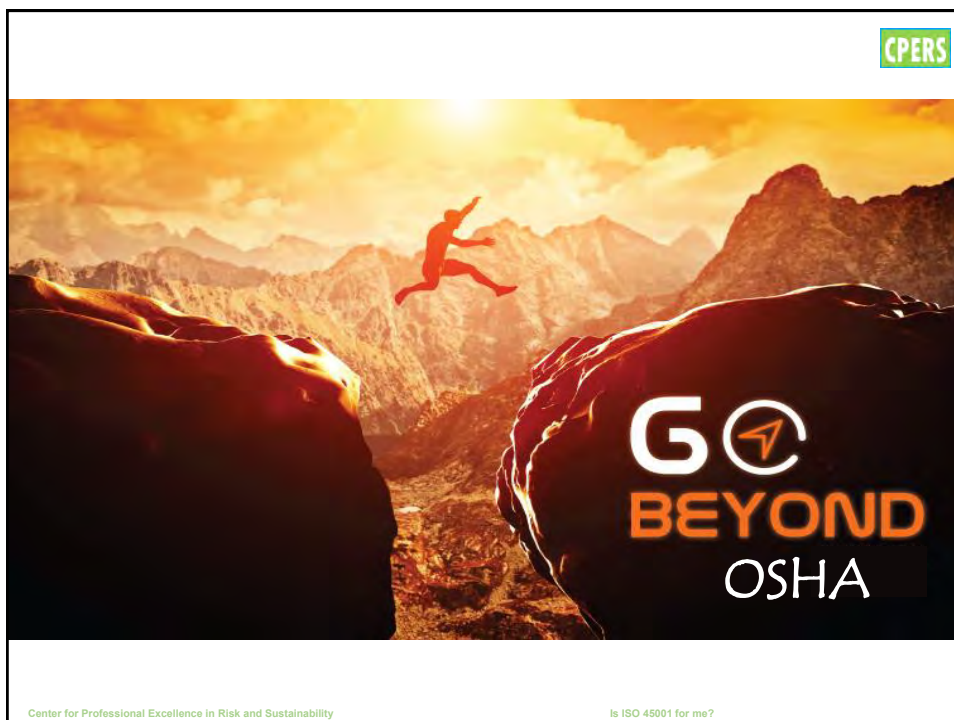
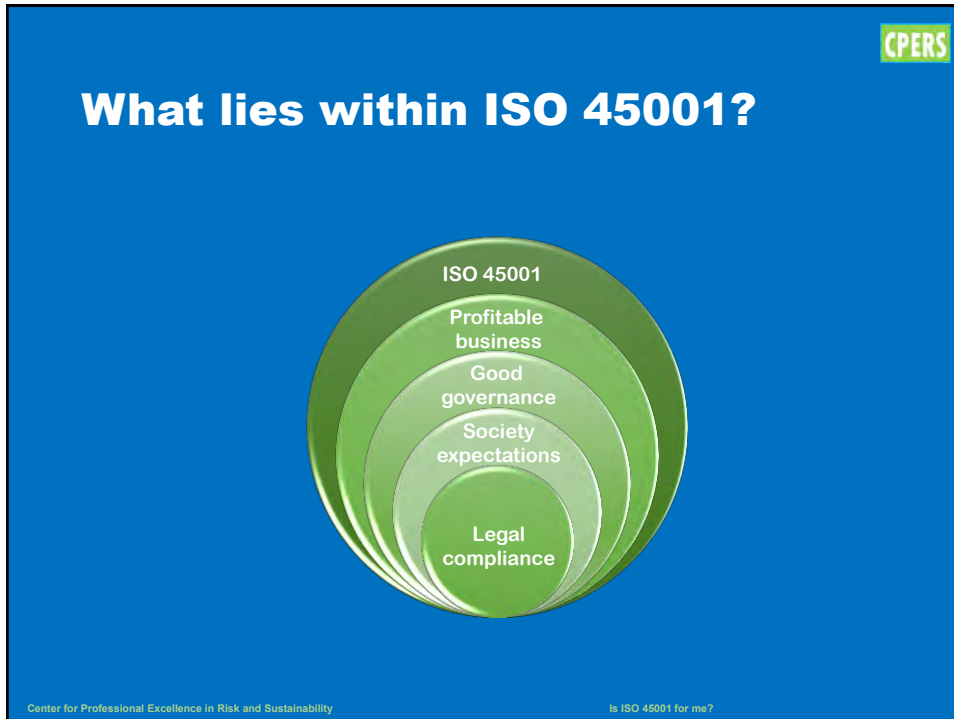


USA is a partner

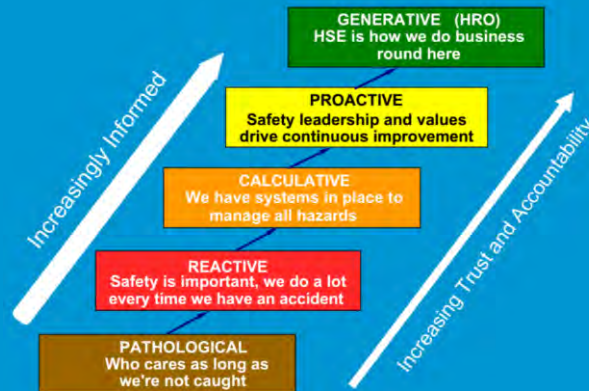
- The ISO 45001 standard was prepared by Project Committee ISO/PC 283, Occupational health and safety management systems of International Organization for Standardization (ISO)
- The American Society of Safety Engineers (ASSP) serves as the U.S. Technical Advisory Group (TAG) to ISO PC 283
- U.S. TAGs review standards and documents and then forward positions to the American National Standards Institute (ANSI) for voting at the international level with the ISO
- Very beneficial for purposes of international trade because in continents like Europe, there's an acknowledgement that ISO 45001 is sort of the **gold standard** when it comes to trade. You know who your business partner is with respect to **how they value safety**
- It shows your customers and the public that you value employee safety. That in itself improves your **public perception**, and thereby increases your business opportunities
- It's similar to being a member of the Occupational Safety and Health Administration's (OSHA's) **Voluntary Protection Program**

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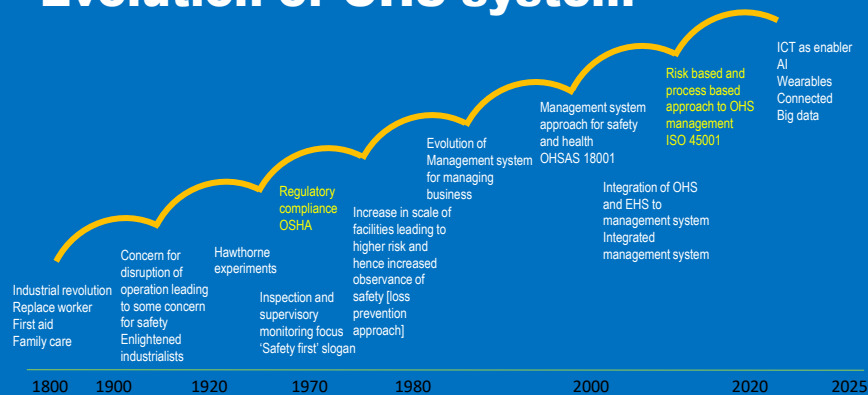
Culture Maturity Model, HSE UK



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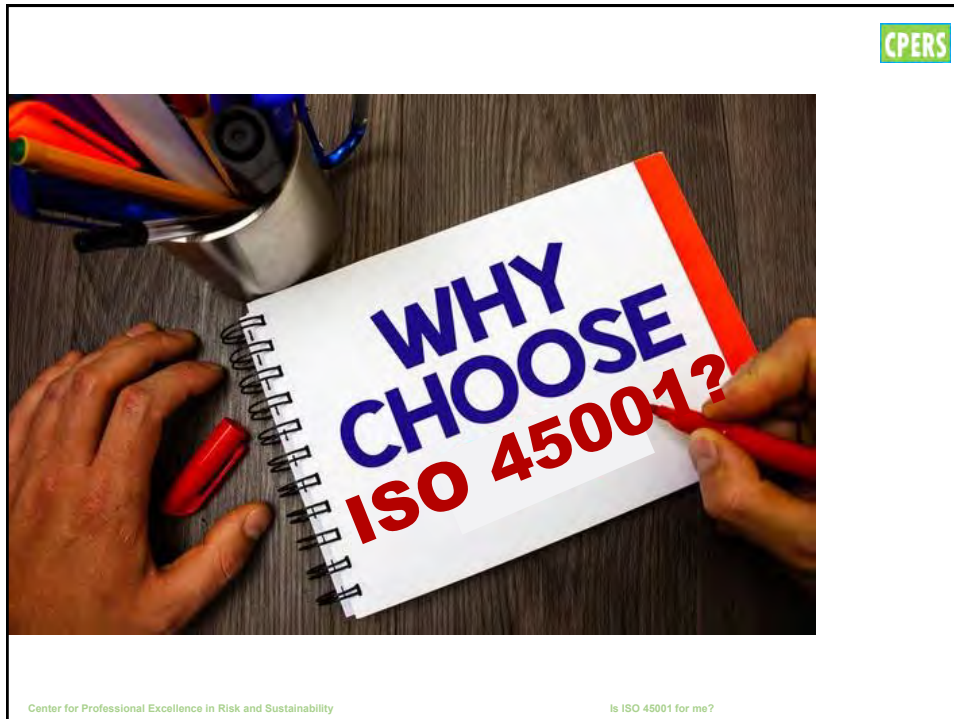
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Evolution of OHS system



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15 benefits of ISO 45001

1. Improve employee safety
2. Demonstrate commitment to safety
3. Boost stakeholder confidence
4. Increase productivity and **return on investment** (ROI)
5. **Lower insurance costs** - reduce downtime, overall costs of incidents at the workplace and the number of insurance premiums claimed
6. Global **recognition** - certification to demonstrate that management system complies with the international standard
7. Help in building trust and brand integrity
8. Validate the capability of organization and provide assurance in proposing **profitmaking partnerships**
9. Engage employees in safety - participation from workers
10. Enhance leadership/ management involvement & accountability
11. Improve hazard identification and risk assessment
12. Reduce risk and identify opportunities
13. Stand out as an industry leader
14. Gain a competitive advantage
15. Shift from reactive to proactive

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Review of the Outcome of Safety Management Systems (SMS)

- During the past two decades, there have been numerous empirical evaluations of SMSs, most of them with the same conclusions
- One of the several studies undertaken – 2011 by Australian Transport Safety Board -
 - Difficult to measure objective safety improvements in industries and the relative recency of the application of SMS
 - Analyzed objective metrics such as safety performance, employee behaviors, and accidents
 - **Found that organizations with a certified SMS had significantly lower accident rates**
- It was commonly found that organizations that provide an **appropriate investment and commitment to a safety management system should receive a positive return on safety**


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**“I INTEND TO MAKE
ALCOA THE SAFEST
COMPANY IN AMERICA.
I INTEND TO GO FOR
ZERO INJURIES”**

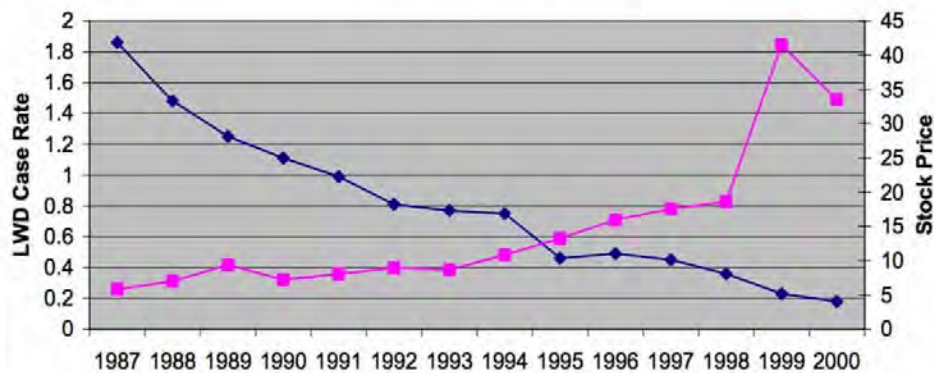
-Paul O'Neill to shareholders
in 1987.




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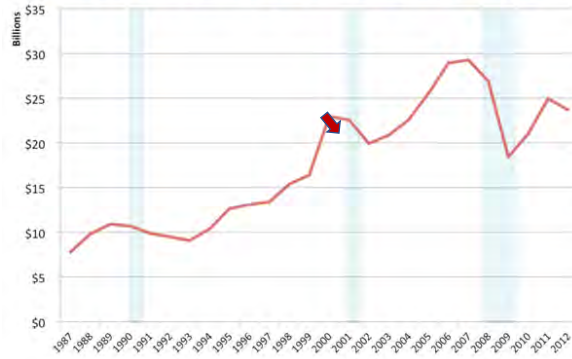
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ALCOA Workplace Safety



ALCOA Revenue quintupled

ALCOA Revenue (in Billions) 1987-2012



How Paul made this happen?

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- He went beyond the norm of the day
- He went beyond just meeting the legal requirements
- He focused on a plan – a **management system**
- He converted management system into a habit
- He proved it can be done in the USA
- It was unheard of, a true game changer
- His legacy is still maintained, and replicated thousands of times, in all sort of businesses
- **You too can do it!**



Implementation cost components

1. Acquiring know-how
2. Purchasing of tools such as Documentation and Training Package [optional]
3. Cost of your employees - staff hours, documentation, training and awareness
4. **Cost of the OH&S controls**
5. Maintaining the system - auditing, performance monitoring, management review, investigations and improvement
6. Consultant cost [optional]
7. Certification cost – initial, surveillance, recertification

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Estimated cost

State of Existing OHS Management System

Employees	Inhouse/ Consultant	None/Basic	Good/Functioning
< 20	In-house	\$8,000	\$6,000
	Consultant	\$9,000	\$7,000
20 - 100	In-house	\$10,000	\$8,000
	Consultant	\$12,000	\$9,000
101 - 250	In-house	\$18,000	\$15,000
	Consultant	\$20,000	\$16,000
> 250	In-house	\$30,000	\$25,000
	Consultant	\$35,000	\$30,000

- If the organization is certified to, say, environmental standard ISO 14001, they are probably 50% down the road and their compliance costs would be considerably less
- For a large high hazard multi site manufacturing company with no prior certification experience the figure may be \$200,000 to \$250,000

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Return on Investment (ROI)

- **Implementing ISO 45001 standard is surprisingly low**
- A 30 – 90 % return is expected
- That means you may expect to recover all your investment in less than 13 months!
- **The weaker your current system, the more you get back**
- There are so many intangible benefits
- If you are not ready for ISO certification, you may still get help from some of the specific elements of the standard

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Intangible returns

1. Improved legal compliance
2. Improved OHS performance
3. Improved employee morale
4. Improved management system, its understanding
5. Improved prestige
6. Improved adherence to social responsibility

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Conclusion

1. ISO 45001 is the **GOLD STANDARD**, international, and what USA has partnered to develop
2. Cost of implementation is not high and return on investment is huge
3. Companies like ALCOA and thousands of other are live examples
4. Helps bring down the cost, improves quality and productivity
5. ISO 45001 standard makes it easy for companies small and big to change and improve organizational habits, making it safer and more profitable
6. **Act now, implement ISO 45001, it's for you**

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FAQ

1. **Is certification achieved per company, or per location, for multi-location companies?**
Generally, it's per location at a company. However, I do know that there are some certification groups that will consider a corporate certification by sampling a number of facilities and then certifying the corporate process.
2. **Does OSHA provide the some protection with a 45001 certification?**
Yes, to a great extent. OSHA's not bound by ISO 45001 certification. If you are ISO 45001 certified, it's a lot less likely that you will be cited by OSHA because you have a great safety program. However, you don't receive the same protections as a VPP.
3. **How do you think OSHA will view a facility that is ISO 45001 certified?**
They won't waive the program inspection but say, in the event of an incident, they sit down for a settlement conference or an informal conference.
4. **Do you think there would ever be a settlement agreement wherein OSHA would agree to lower penalties if an organization agreed to get ISO 45001 certification?**
Well, I should be thrilled to death. Most of the time if you're ISO 45001 certified or you're going to be, the penalties should be all vacated because that's a tremendous investment in your workplace safety program. But certainly, I think it helps. It doesn't hurt you for sure. And if you agreed to do that, then you would be in a very good position with respect to negotiating this settlement for citations.

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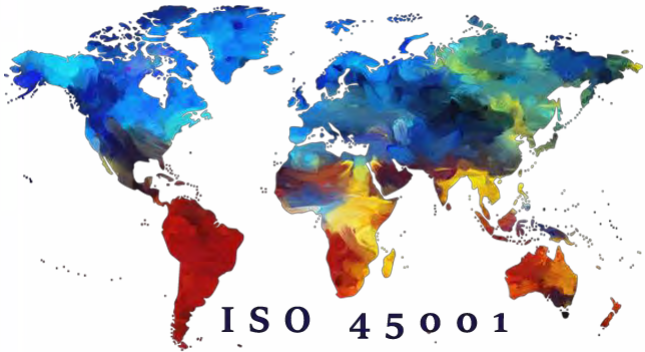



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Questions?

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65