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# **ISO 14001:2015 and ISO 50001** **The Best of Both Worlds:**

Integrating your environmental  
and energy management systems

**Whitepaper**



# Introduction

From the perspective of sustainability, the environment and energy are interconnected. Though a traditional environmental management system may not address energy consumption, how most organizations use energy continues to have an impact on the environment. And, of course, there's the more broadly accepted train of thought where the by-products of energy use have a more obvious impact on the environment.

Depending on the goals, ambitions and finances of an organization there will likely be those that continue to focus on one area over the other. However, as the landscape of our world continues to

change, there are significant arguments for integrating an organization's management systems. Engaging ISO 14001 and ISO 50001 together is a great way to realize the benefits of an

integrated approach. Integration will be further facilitated when the new version of ISO 50001 is published in a few years, but there are very good reasons to act now.

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## Containing risk

An obvious connection between energy and environmental management systems is the creation of greenhouse gases through the combustion of fossil fuels. Whether it's through the introduction of renewable energies or the reduction of use through efficiency programs, many organizations are working to decrease their consumption and emissions.

But, until 100% of organizations have reduced their emissions to zero, it makes sense to consider energy availability to achieve the greatest possible benefit of risk-based thinking (Clause 6, ISO 14001:2015). The volatile nature of energy supply suggests that a pointed focus on reducing consumption would, in turn, improve an organization's resilience by reducing energy demands.

At the organization level, energy is no longer just about reducing costs or environmental impact, it's also about:

- business continuity
- resilience
- achieving of overall strategic business objectives
- ability to deliver stakeholder value.

Although energy doesn't play a significant role in environmental management when other areas of the business have a greater impact, excluding the risks associated with energy supply and pricing may be a short-term gain that results in avoidable long-term pain.



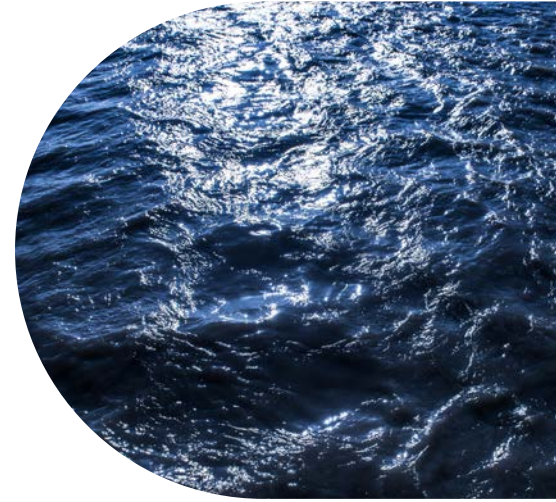
# Context is everything

Clause 4 of the new ISO 14001 standard expects organizations to consider the context of the organization. This means assessing the needs and expectations of interested parties. These include customers, neighbours, shareholders, suppliers and more – essentially anyone who could be affected by, or effect, the operations of your organization. Likewise any external issues (including environmental conditions) that could have an impact on the organisation also need to be determined. Tied in with risk management, it's obvious that reliable and sustainable access to

energy supports the ability to deliver products and services to market, supporting customer loyalty and, therefore, overall profitability.

As climate change continues to disturb weather patterns, awareness about carbon footprints is growing. One out of every two customers prefers to buy from organizations that have made a commitment to making a positive social and environmental impact\*. If energy is included in the context of your organization as you integrate the two systems, the organization will benefit not just because of a reduced footprint, it can also enjoy increasing

brand preference from consumers or preferred supplier status in the business-to-business sales model.



## Cost savings

It may seem odd to suggest that implementing two standards can save money. Planning, implementing and certifying require both human and financial resources. Integrating the implementation of ISO 14001 and

ISO 50001 won't create a 'two-for-one' proposition, but there are financial reasons to consider the idea. By working on both systems together there will be some economies of scale.

### Potential benefits

#### Financial

- Reduction in costs through the reduction in energy use and waste
- Faster implementation leading to earlier return on investment
- Energy management systems may earn organizations carbon credits they're able to trade for financial gain
- Controlling energy costs is akin to controlling the cost of any raw material; reducing or maintaining costs can keep your product or service pricing stable and/or increase profit margins

#### Human resource – time **IS** money, unless your colleagues work for free!

- Combined stakeholder meetings (internal teams and external parties)
- Reduction in data entry and documentation systems
- The time saved by co-managing the integrated system with a colleague allows each manager to focus on other strategic objectives within the organization
- Reduced training time for employees

# Compliance

Regulation of the reduction of emissions has a tumultuous past. Despite the excitement and targets that came out of the Conference of Parties in Paris 2015 (COP21) the path toward those targets has not been mapped out clearly. But as uncertain as the path may be, it is certain that businesses will be asked to make a significant contribution to reductions.

In order to validate the volume of your reductions, at the very least you'll need a baseline of your organization's energy consumption. Not only does ISO 50001 provide benchmarks to gauge practice, it also results in baselines to help you

measure how much progress has been made in reducing usage and emissions helping you meet potential requirements.

As various countries and/or municipalities begin to outline their plans for achieving targets, ISO 50001 certification may be a means of meeting compliance regulations. This is already true in the UK. Though not related to COP21, ESOS is the UK government's approach to implementing Article 8 of the European Union Energy Efficiency Directive. ESOS requires 'large enterprises' to introduce a programme of energy audits. In the UK, organizations

certified to ISO 50001 are automatically compliant. Given the internationality of ISO standards, ISO 50001 is a logical option for countries around the world to adopt as de facto compliance as they plan their reduction strategies.

Whether your organization is most concerned about environmental impact, cost control, compliance or risk, implementing an integrated management system will drive better results, better communication and, ultimately, a better world.

## Understanding ISO 14001 and ISO 50001

ISO 14001 Environmental Management	Similarities	ISO 50001 Energy Management
<p><b>Key considerations</b></p> <ul style="list-style-type: none"> <li>resource use</li> <li>waste management</li> <li>pollution</li> </ul>	<ul style="list-style-type: none"> <li>Approach: PDCA (Plan Do Check Act)</li> <li>Management involvement</li> <li>Legal and compliance requirements</li> <li>Objectives, targets and action plans</li> <li>Monitoring, measurement and analysis</li> <li>Nonconformity, correction, corrective action and preventive action</li> <li>Training and awareness</li> <li>Communication</li> <li>Document and record control</li> <li>Operational controls</li> </ul>	<p><b>Key considerations</b></p> <ul style="list-style-type: none"> <li>energy baseline</li> <li>energy performance indicators</li> <li>design</li> <li>product/equipment/service purchasing</li> </ul>
<p><b>Key benefits</b></p> <ul style="list-style-type: none"> <li>reduced operational costs</li> <li>compliance</li> <li>reduced environmental footprint</li> <li>competitive advantage</li> </ul>		<p><b>Key benefits</b></p> <ul style="list-style-type: none"> <li>reduced operational costs</li> <li>compliance</li> <li>reduced carbon footprint</li> <li>competitive advantage</li> </ul>

**Key Difference**

Although a lot of the activities associated with implementation are similar between the two standards, the introduction of the High Level Structure (HLS) in ISO 14001:2015 has changed some terminologies and processes. It is anticipated that the new revision of ISO 50001 expected in 2018 will also follow the HLS. To understand how the energy management standard may change, review our ISO 14001 mapping guide so see how the environmental management standard evolved through this adaptation.

## Next steps

Is your organization certified to ISO 14001 and thinking of integrating ISO 50001? Or is it certified to ISO 50001 and looking to achieve the benefits of integrating ISO 14001? Interested in building an integrated system based on both standards from the ground up? No matter which group you fall into, BSI can help. **If you're looking to learn more about one standard or both, our training programs are a great place to start. Visit [bsigroup.com/training](http://bsigroup.com/training)**

# ISO 14001:2015 at a glance

Recognized around the globe, ISO 14001 helps organizations reduce their environmental impact while growing their business – ultimately achieving sustainable success. As an internationally accepted standard, ISO 14001 outlines the most effective ways to put a successful environmental management system (EMS) in place.

The standard was developed to help organizations remain commercially

successful without overlooking their environmental responsibilities. Its high level framework allows businesses to meet increasingly demanding expectations from customers and other stakeholders, as well as regulatory requirements. With ISO 14001 in place, organizations can:

- Improve environmental performance and reduce waste
- Improve lifecycle management which

helps to identify product/service improvements

- Improves corporate responsibility to meet supply chain requirements
- Demonstrate compliance to expand business opportunities
- Confidently prepare for the changing business landscape

**For more in-depth information on ISO 14001, visit our website.**

# ISO 50001 at a glance

ISO 50001 helps organizations integrate energy management into their overall efforts to improve quality and environmental management. It helps organizations understand how they're using various types of energy and identify realistic ways of reducing consumption, emissions and costs.

Based on the management system model that is understood and implemented by organizations

worldwide, it can make a positive difference for organizations of all types in the very near future, while supporting longer term efforts for improved energy technologies. With ISO 50001 in place, organizations can:

- Identify and manage the risks surrounding future energy supply
- Measure and monitor energy use to identify performance improvement opportunities

- Improve overall performance to cut energy consumption and bills
- Reduce carbon emissions and meet government reduction targets
- Demonstrate environmental credentials to increase tender opportunities

**For more in-depth information on ISO 50001, visit our website.**

# What does an integrated management system (IMS) look like?

An IMS is typically characterized by the following:

- 1 An integrated documentation set, including work instructions to a good level of development
- 2 Management reviews that consider the overall business strategy and plan
- 3 An integrated approach to internal audits
- 4 An integrated approach to policy and objectives
- 5 An integrated approach to system management and planning
- 6 An integrated approach to improvement mechanisms (corrective and preventive action; measurement and continual improvement)
- 7 Integrated management support and responsibilities.

## Converge or merge

There are two ways to integrate two (or more) management systems. If you have a certified environmental management system in place, you can converge an energy management system by adding the necessary processes to cater for energy management requirements. Or you can merge systems which results in combining all documentation that supports the same process.

# Why BSI?



BSI has been at the forefront of ISO 14001 since the start. And it was originally based on BS 7750, the first environmental management system standard which was developed by BSI in 1992, the year of the first Earth Summit in Rio. And we've been part of its development ever since, evolving ISO 14001 to where it is today. That's why we're best placed to help you understand, implement and benefit from the standard.

At BSI we create excellence by driving the success of our clients through standards. We help organizations to embed resilience, helping them to grow sustainably, adapt to change, and prosper for the long term. We make excellence a habit.

For over a century our experts have been challenging mediocrity and complacency to help embed excellence into the way people and products work. With 80,000 clients in 182 countries, BSI is an organization whose standards inspire excellence across the globe.



## Our products and services

We provide a unique combination of complementary products and services, managed through our three business streams; Knowledge, Assurance and Compliance.

### Knowledge

The core of our business centres on the knowledge that we create and impart to our clients. In the standards arena we continue to build our reputation as an expert body, bringing together experts from industry to shape standards at local, regional and international levels. In fact, BSI originally created eight of the world's top 10 management system standards.

### Assurance

Independent assessment of the conformity of a process or product to a particular standard ensures that our clients perform to a high level of excellence. We train our clients in world-class implementation and auditing techniques to ensure they maximize the benefits of our standards.

### Compliance

To experience real, long-term benefits, our clients need to ensure ongoing compliance to a regulation, market need or standard so that it becomes an embedded habit. We provide consultancy services and differentiated management tools to facilitate this process.



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