Does ISO14001 Limit Our Sustainability Mindset?

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Abstract
The ISO 14001 environmental management systems standard provides a platform from which to launch an environmental or sustainability program but it can place limits on our thinking, and subsequently what organisations can achieve. Business and industry largely see the standard as the end result, and not the minimum requirement, thus rarely challenging themselves to go beyond the compliance mentality ingrained by the standard.

This paper explores the way in which the standard itself can lead to a compliance mentality and perpetuate a culture of limited environmental thinking. The way we interpret and apply the standard plays a key role in placing limitations on our thinking, but it is the focus on 'significant' environmental aspects/risks within the standard, and a lack of engagement with internal and external stakeholders, which confines an organisation to mediocrity. We will consider the most sustainable of organisations around the world and how they have redefined their definition of 'environment' to achieve stunning results. By adopting a broader concept and embracing the three pillars of sustainability – environment, social/community and market/financial as part of our thinking, we can change our mindset and open up a world of business possibilities.

Key Words
Environmental management systems, risk, compliance, stakeholder.

Introduction
ISO 14001:2004 Environmental management systems: Requirements with guidance for use is the current international standard for environmental management systems (EMS)[1]. It provides guidance for developing and maintaining a management system framework which can be used to achieve a desired level of environmental performance. Adoption of the standard is voluntary[2], it contains no operational performance requirements other than a minimum of compliance with legal and other requirements, and requires no external performance evaluation unless the organisation seeks independent third party certification of its system. Does any of this limit our thinking though?

The ISO 14001 Platform
The International Organisation for Standardisation (ISO) is the organisation responsible for the development of the majority of international standards, including ISO 14001. It is a network of the national standards institutes consisting of 163 countries[3], one member per country. By its very nature, the standard must provide common ground for a variety of industries across the world, from the largest multi-national chemical manufacturing company to the smallest cafe, school or church.

The International Organisation for Standardisation uses the prefix "ISO" for itself and the standards it develops because ISO is derived from the Greek *isos*, meaning "equal". The standards simply provide an equal basis from which to start. They are the lowest common denominator for any organisation in any country wishing to implement an EMS. The ISO Survey 2008 (ISO, 2009) shows that at least 188,815 ISO 14001:2004 certificates had been issued in 155 countries, a 22% increase over 2007 figures. As at December 2008, there were 1125 certificates issued in Australia.

[1] For the purposes of this paper, the standard will be referred to as 'ISO 14001'.
[2] In a few cases, compliance with the standard has been added as a condition of environmental operating licenses, as is the case with the Australian Nuclear Science and Technology (ANSTO) Nuclear Research Reactor in Lucas Heights NSW.
[3] As at September 2010.

The Environmental Policy

Clause 3.8 of ISO 14001 defines the EMS as "part of an organisation's management system used to develop and implement its environmental policy and manage its environmental aspects". Organisations with a certified EMS have independent verification that their system meets the standard but, like all organisations who align their systems with the standard, they do not have to raise the bar too far. It is the organisation itself who defines the height of the bar through the commitments in the environmental policy. One of the key policy commitments, 'continual improvement', should push organisations to challenge themselves however many organisations misinterpret this commitment and continually improve systems and operational processes in small increments without ever really improving environmental performance as was intended by the standard.

Continual improvement is defined in clause 3.2 of the standard as a "recurring process of enhancing the [EMS] in order to achieve improvements in overall environmental performance consistent with the organization's environmental policy". This definition relies on the organisation's interpretation and application of the other two commitments in the policy, prevention of pollution and compliance with legal and other requirements. Prevention of pollution is defined in clause 3.17 of the standard as the "use of processes, practices, techniques... 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". An organisation can select to avoid, reduce or merely control pollution. The commitment to compliance with legal and other requirements reiterates the focus on controlling impacts to maintain compliance rather than avoiding or reducing them to go beyond compliance. As our fundamental environmental goals, these policy commitments can limit the management mindset, perpetuating the view that control and compliance is the aim. If we expand our definition of environment to encompass sustainability and look beyond traditional interpretations of the standard, we can achieve much more.

It is only recently that senior management is starting to embrace the other two pillars of sustainability and consider social/community and financial/market concerns as part of their environmental or sustainability strategy. As a driver for change, environment is a slow and lumbering one. Opinions are divided, the impacts are generally felt over generations and specific regulatory requirements are applied to high risk organisations only. If this is compared to occupational health and safety for example, where everyone agrees on the need for allocating resources to addressing the issue, the impacts are often immediate and there are specific and rigorous regulatory provisions which apply to all organisations, and it is easy to find drivers for moving beyond compliance. To achieve environmental change, we must look to the other two pillars of sustainability as the main drivers for change and challenge our traditional view of what an ISO 14001 aligned EMS can achieve.

Management Commitment

One of the limitations self-imposed by organisations in the early stages of any EMS is the view that compliance with ISO 14001 should be the aim and is in itself an end result. This view can be compounded by management, environmental and systems officers, consultants, industry associations and government bodies who do not fully understand the purpose and intent of the standard. For organisations with independent third party certification of their EMS, the certificate on the wall is often an indication to management that they have reached their end goal, but there is no recognition beyond this. We have already established that the standard is the lowest common denominator so why would an organisation set itself the goal of mediocrity?

Let's start at the end of the standard and examine the management review process (clause 4.6). The standard requires top management to periodically review the EMS to ensure its continuing suitability, adequacy and effectiveness. ISO 14001 prescribes minimum inputs for the review, but each of these inputs are lagging indicators, not leading indicators. Inputs such as results of audits, nonconformances and complaints indicate past performance but do not provide management with a clear picture of how the organisation is positioned to manage environmental risks into the future. Because the standard only requires management to look backwards and does not require leading indicators such as budget allocation or number of personnel who have been trained in sustainability issues to be reported, reviews become a exercise in nonconformance reporting rather than an examination of adequacy, suitability and effectiveness as required by the standard. These types of management reviews rarely result in meaningful organisational, system or operational changes.

Changes and improvements should be implemented through the setting of environmental objectives and targets (clause 4.3.3), however management rarely become involved for any sustained period in key environmental improvement mechanisms. A lack of management understanding of the importance of environmental risks to the organisation, and the goal of compliance with ISO 14001, often result in resources being allocated for development and implementation of an EMS but not for the ongoing maintenance and improvement. In many cases a lack of management commitment after achieving compliance with the standard prevents environmental targets being integrated in broader strategic business plans in the long term. The segregation, in a strategic business plans, of environmental protection from mainstream management concerns only further entrenches an organisational culture where environmental protection is resourced to maintain compliance but not to look for opportunities beyond this.

The Limits of 'Significance'

This attitude towards environmental protection is also brought about by the focus on 'significant' (high level) environmental aspects/risks within the standard. ISO 14001 is a common benchmark. It focuses on management and control of significant risks in order to create a level playing field and be as inclusive as possible. Indeed, s.4.4.6 Operational Control in the ISO 14001 standard requires documented operating procedures to control activities with a potential to cause significant impacts only. For many organisations, traditional risk assessment methodologies are used to assess and prioritise environmental risk, and to determine significant aspects/risks but this process can limit our approach. At the centre of the process is a risk matrix which uses likelihood and environmental consequence descriptor tables to aid participants in determining the level of risk. Looking at potential environmental consequences however, does not account for broader sustainability impacts of our operations.

As an example, let's look at a 500L oil spill which makes its way into a stormwater drain in an urban area. The environmental consequences of the resulting water pollution may be considered low to moderate, but when considered in light of more mainstream business concerns such as customer, shareholder and community reaction, loss of reputation and potential regulatory action and clean-up costs, the consequences are considered to be higher. Placing a monetary value on intangible impacts such as these can make it difficult for an organisation to assess broader sustainability risks with any confidence (Robins F., 2006), but the risk level assigned will generally be higher for two main reasons. Firstly, the compounding of different potential consequences raises the perceived level of consequence and therefore risk. The second is that traditional social/community and market/financial concerns have a higher perceived value to the business and potential impacts on these values are assigned higher consequence levels. Looking beyond environmental concerns, we can more effectively align our environmental risks with our sustainability goals and "green message", meaning focus and resources can be applied in other areas of sustainability.

The concept of significance can limit our thinking and therefore our opportunities in many key performance areas. We will look at supply chain management and resource consumption of environmental risks which, if properly managed, can provide real business value.

Supply Chain Management

Organisations with complex supply chain processes and detailed product and service procurement responsibilities often have robust systems for supplier engagement and contract administration, but in many cases environmental and broader sustainability issues are not given serious consideration. A significance-focused EMS reinforces this by limiting management of contractors/suppliers to the few which have a potential to cause significant impacts on site only. Working with suppliers to establish mutually beneficial relationships can greatly improve your process efficiency and bottom line as well as provide you with business and marketing opportunities. Suppliers provide the inputs and remove the outputs. Increasingly, external suppliers are being used to control processes too. It makes sense to use their expertise to deliver the organisation a better result. Look beyond the supply of goods to the goods being supplied to identify business drives for change, taking advantage of opportunities such as:

- increased productivity (e.g. changes to process inputs which result in better quality outputs);
- reduced operating costs (e.g. less waste with suppliers taking back packaging); and
- marketing advantages associated with sustainability performance (e.g. sourcing recycled content for use in your products).

Resource Consumption
For many organisations, resource consumption does not represent a significant environmental risk; the environmental consequences are debatable, are not always immediate and don't often impact on short-term business outcomes. If the follow-on impacts such as increased costs and regulatory requirements are not considered, it is difficult to see how these would rank near the more immediate impacts such as fuel and chemical spills. The same can be said of climate change impacts which are inextricably linked to non-renewable fossil fuels: in many cases, an EMS aligned with ISO 14001 will not include electricity use as a significant environmental risk because the potential consequences for the organisation (i.e. climate change) are deemed low in the short term. Business impacts generally occur within a much shorter time frame than environmental impacts and lack of understanding of the second order (follow-on) impacts on the business contributes to the ease at which the management of resource consumption and other environmental risks are dismissed. Understanding broader stakeholder impacts and interests is essential to positioning a company to not only be ready for, but take advantage of, changes in the market place.

Lack of Engagement Means Missed Opportunities
Developing strategies and tools which encourage consultation and engagement with internal and external stakeholders as part of the EMS can assist in integrating stakeholder ideas and enthusiasm into sustainability initiatives. Engaging with internal stakeholders such as employees/shareholders, and external stakeholders such as customers/regulators can provide valuable insight into organisational drivers for environmental change. An ISO 14001 aligned EMS is required to have in place procedures for internal and external communication, so what opportunities are missed?

Engaging With Internal Stakeholders
The ISO 14001 standard requires communication of the policy (clause 4.2), roles and responsibilities (clause 4.4.1), and operating procedures (clause 4.4.6) but there is a difference between 'communication' and 'engagement'. An ISO 14001 based system does not require consultation and engagement, denying employees an opportunity for constructive input into environmental decision making. As a result, communication mechanisms utilised under the umbrella of an EMS are often one-way (e.g. company newsletters, corrective action forms and notification of new procedures or changes to legal requirements), and the opportunity to harvest the collective knowledge of experienced, qualified and motivated staff is lost. Even the AS 4801 standard (for safety management systems), written three years earlier than ISO 14001 in 2001 (and based on the ISO 14001 standard) includes a requirement for employee consultation.

Engaging With External Stakeholders
The ISO 14001 standard also requires procedures for receiving, documenting and responding to incoming external communications too (clause 4.4.3), but does not require the organisation to communicate externally on environmental matters itself (only to make a decision on whether it will). Even if a decision is made to communicate externally, this communication need only include a one-way exchange of information related to significant (high level) risks. As a result, the organisation 'talks' to external stakeholders about environmental issues, but rarely 'listens', missing the chance to identify business opportunities in promoting environmentally friendly products, reducing operating costs through process optimisation or improving service levels by responding to customer and market trends.

Walking the Talk
Let's look to the Dow Jones Sustainability Index (DJSI) for some examples of companies that have redefined 'environment' and the way it is viewed and managed, and achieved great results. The DJSI are a set of global indexes tracking the financial performance of the leading sustainability-driven companies worldwide since 1999 (DJSI, 2010). Supersector leaders such as Unilever (Food & Beverage sector) talk about environmental protection under the broader topic of sustainable development and communicate openly about their environmental and community impacts, having published its first pubic environmental report containing eco-efficiency indicators in 1996. Unilever has been DJSI sector leader for 11 years, and now prepares an annual Sustainability Report in accordance with the GRI G3 Sustainability Reporting Guidelines (GRI, 2010) which include its performance under all pillars of sustainability. Unilever's sustainability programs address consumer issues such as purchase of tea and palm oil (15% is now purchased from sustainable sources), and environmental issues such as greenhouse gas emissions (40% reduction in energy per tonne of production 1995–2009), waste generation (73% reduction 1995-2010) and water conservation (65% reduction 1995–2009). As part of its broader corporate sustainability initiatives however, Unilever invested €89m in

community investment programmes worldwide in 2009 and includes community nutrition programs under its sustainability umbrella (Unilever, 2010). Other sector leaders such as ANZ Banking Group have also implemented sustainability policy and programs, influenced by Equator Principles and other international finance sustainability guidelines. Since 2005 ANZ have steadily increased recycling rates while reducing energy consumption, paper use, water use and waste generation and increasing contribution to community programs worldwide (ANZ, 2010).

Conclusion: Adding Value to Your EMS Through Sustainability

The three pillars of sustainability offer organisations an opportunity to redefine their concept of environment, go beyond compliance and challenge traditional thinking to improve performance in key sustainability areas across the business. Many organisations have successfully redefined their definition of 'environment' and achieved stunning results. The development of ISO 26000 - Guidance on Social Responsibility (due for release in 2010) is recognition of the value of broader organisational thinking and focuses on addressing social responsibilities while respecting cultural, societal, environmental and legal differences, and economic development conditions (ISO, 2010). While it is not a management system standard, and contains no requirements which allow certification, it will be interesting to see whether this introduces a new era of environmental thinking and influences the future direction of ISO 14001 or even provides a 'next step' for organisations to strive for.

Three key learnings:

- Treat the ISO 14001 standard as a platform for improvement not an end goal.
- Redefine your organisation's definition of environment to include all three pillars of sustainability: environment, social/community and market/financial.
- Use drivers for change at management level which will get results.

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