

ISO 14001 : 2004

What Do Investors Need to Know?

ASrIA Brief 003

By Sophie le Clue, May 2005

Summary

An increasing number of organizations worldwide are implementing environmental management systems which have been developed in accordance with the requirements of the international environmental management standard ISO 14001. At the end of 2003, 66,000 organizations globally were ISO 14001 certified¹ representing 113 economies in a wide range of industries. Inevitably investors are increasingly analyzing organizations which have attained ISO 14001 certification. For Asian investors, this trend is particularly significant because Asian companies have played a prominent role in the growth of ISO certifications. In addition, ISO certifications feature prominently in listing documents and other market disclosures as an indication of a company's environmental compliance.

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This report provides a brief summary of ISO14001 with a particular focus on Asian related issues. It provides a valuable summary of points that investors should be aware of as well as introducing terminology that is likely to be encountered. In particular the report notes that from the investor's perspective it is important to realize that whilst such certification signifies an organization's success in putting in place processes and procedures to manage its environmental performance to the satisfaction of a third party, ISO 14001 is intended to be flexible, is thus open to interpretation and is therefore not the end point but in fact best used as the starting point for further analysis.

¹ <http://www.iso.org/iso/en/iso9000-14000/pdf/survey2003.pdf>

ISO 14000 in Brief

ISO 14001:2004² **Environmental management systems – Requirements with guidance for use** (referred to as ISO14001) is just one member of the ISO 14000 series of environmental management standards (see attachment 1). These standards which have been progressively published by the International Organisation for Standardisation (ISO) since 1996, provide guidance in addressing specific environmental performance criteria in a range of areas:-

- Developing and implementing environmental management systems
- Environmental auditing
- Environmental assessment
- Environmental labels and declarations
- Environmental performance evaluation
- Life cycle assessment

ISO 14001 goes a step further and is the only standard of the series against which an organisation can be certified. Hence an organisation that successfully meets all the requirements of the standard can, following an independent third party audit by a certification body, attain ISO 14001 certification. Useful guidance on how to comply with ISO 14001 is provided in the accompanying standard ISO 14004 : 2004 Environmental management systems - General guidelines on principles, systems and support techniques.

ISO 14001 is the only standard of the ISO 14000 series against which an organisation can be certified

In order to maintain the certification, periodic surveillance audits also undertaken by a certification body are required. Depending on the requirements of the certification body, these audits should be conducted 6 months or annually or any frequency in between. For most organisations 6 monthly audits are likely to be the norm. This period may increase as the certification body's confidence in the organisation's performance increases. In addition, a full renewal audit is required every 3 years before the certification expires.

² ISO 14001 was first published in 1996 and was revised at the end of 2004.

What does ISO 14001 certification mean?

In the words of ISO, certification refers to *the issuing of written assurance (the certificate) by an independent, external body that has audited an organization's management system and verified that it conforms to the requirements specified in the specific ISO standard.*

ISO 14001 require that an organisation has in place an effective environmental that identifies, manages and controls an its environmental aspects

Practically speaking, ISO 14001 requires that for a clearly defined scope of activities, an organisation has in place an effective environmental management system (EMS) that identifies, manages and controls its organisation's environmental aspects.³ The system must address organizational structure and responsibilities, planning, practices and procedures as well as processes and resources. To achieve this it must:

- implement an environmental policy which meets ISO 14001 requirements
- have in place procedures to:
 - ▶ identify and control its significant environmental aspects i.e. those aspects deemed to have a significant impact on the environment. It is up to the organisation to determine an evaluation procedure. Typically all environmental aspects under legal control will be judged as significant, for example in most Asian countries this is likely to include (but not be limited to) aspects involving wastewater discharges, air and noise emissions. All other aspects not under legal control will then be subject to the evaluation procedure, e.g. in most Asian countries this would likely include aspects involving waste generation and resource use.
 - ▶ identify applicable legal requirements and manage compliance. This may include national and international legal requirements, state/provincial/departmental as well as local governmental requirements;
 - ▶ ensure sufficient training;

³ ISO defines an environmental aspect as an 'element of an organization's activities, products or services that can interact with the environment' and notes that a significant environmental aspect can 'have an environmental impact' - such that the relationship is one of cause and effect.

- ▶ manage both internal communication and external communication with interested parties i.e. those parties concerned or affected by the organisations' environmental performance. Such parties may include NGOs, the regulatory authorities, shareholders;
 - ▶ anticipate and manage emergency situations which have potential environmental impacts;
 - ▶ monitor and measure key operational characteristics from an environmental perspective for example wastewater discharges, air emissions, provision of training;
 - ▶ address system non conformances;
 - ▶ audit the system periodically, typically this will be annually, but maybe more frequent depending on the results of previous audits and the environmental importance of the organisations operations, for example the implementation of procedures controlling the key significant environmental aspects; and
 - ▶ maintain and control sufficient records and documentation.
- appoint a specific environmental management representative;
 - define environmental roles, responsibilities and authorities; and
 - periodically review the effectiveness of the system (by top management⁴); typically these reviews will be annual.

An important element of the standard's requirements is the need to continually improve environmental performance through the establishment of objectives and targets.

Example of an Objective and Target

Objective: to minimise waste materials disposed of to landfill

Target: by [a specified date] increase recovery of both metals and paper for recycling by 30%.

ISO 14001 does not guarantee environmental performance

Investors should be aware that ISO 14001 is not an absolute standard. Rather, it indicates the existence of management controls, but not an absolute level of performance. Indeed ISO 14001 was developed to be applicable to all organizations, large or small, complex or simple.

⁴ Top management whilst not specifically defined in the standard usually consists of a person or group of people who direct and control an organization at the highest level.

Hence two organizations having very different levels of environmental performance can both be certified.

If a company does have a problem or is structurally high impact, the existence of an ISO 14001 certified EMS should speed up environmental risk analysis since all relevant information should be readily available. Comprehensive disclosure is however not a requirement of the standard.

As a consequence of all this, ISO 14001 certification does not guarantee that an organisation has a high level of environmental performance nor does it indicate that the organisation does not harbour any environmental risks.

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Investors should further bare in mind that ISO 14001 was designed to be flexible, to allow an organisation to develop a practical and realistic management system. With this flexibility comes the question of interpretation. Different certification bodies frequently have different interpretations and therefore different requirements. Consequently, some certification bodies are stricter than others. This is a particular concern in Asia where the business model of certifiers works against the uniform application of standards.

As a result, the more cynical investor may also factor in that the certification body is itself not a truly independent third party since it is contracted by the organisation wishing to be certified, and the more successful certifications under the certification bodies' belts, the more future business through on-going surveillance audits and new clients. Indeed some organisations may actively seek or favour those certification bodies that have a reputation for an 'easier ride'. In certain economies where corruption is pervasive, the road to certification may also be less demanding, implying that all requirements of the standard may not have been adequately fulfilled.

Although ISO 14001 certification does indicate that in theory environmental risks have been identified and are being managed, in practice there are a number of variables that the prudent investor should be aware of.

What the investor may consider when analysing an organisation that is ISO 14001 certified

- **The scope of the certification**

ISO 14001 certification is based on a scope of operations agreed between the certification body and the organisation

requiring certification. In general the key activities of the organisation should at a minimum be included in the scope. For example, consider the case of a complex industrial manufacturing plant; an ISO14001 scope limited to just the canteen facilities would not normally be accepted by an accredited certification body. Similarly interface issues should be addressed in the system, for example a common waste water treatment plant shared with another organisation(s).

There are however grey areas as to what constitutes an allowable scope. An actual example is the case of an architect's business where the office activities only are certified, although arguably the most environmental impacts are likely to occur e.g. design and construction of buildings, have been excluded. There may even be disagreement among the certification bodies over the acceptability of an EMS scope.

Certification bodies currently active in Asia include:

- Det Norske Veritas (DNV)
- Lloyds Register
- British Standards Institute
- BVQI
- TUV Rheinland
- SGS Yardsley
- Kema
- Hong Kong Quality Assurance Agency;

all of which have a range of accreditations depending on their experiences and countries in which they operate.

Since it is possible that specified activities can be omitted from a certification scope, investors should investigate whether any of the organisation's activities which pose a potential environmental risk have been omitted from the scope and therefore the system.

Investors should also carefully examine the details of any disclosure relating to the ISO 14001 scope, for example a holding company that simply states in its Risk Factors Section of its prospectus that '*we have obtained the environmental management system certification ISO 14001*', without any reference to the details of scope can be misleading. If the holding company is itself certified under a corporate certificate, then its subsidiaries will be required to implement environmental management systems (albeit not necessarily certified) and such a statement would infer that⁵. In this case, the investor should determine whether this is actually the situation, since no further information has been disclosed.

- **Accreditation of certification bodies**

Since the integrity of the ISO 14001 certification process rests upon the performance of certification bodies, the qualification of these bodies and ultimately their credibility is a key concern. Consequently an internationally recognised system has been established whereby certification bodies can attain formal recognition by an accreditation body, that it is

⁵ In such a case the certification body will audit the subsidiaries, often on a sample basis.

competent to carry out ISO 14001 certification in specified business sectors. The accreditation process is itself a function of the International Accreditation Forum (IAF)⁶, such that recognised national bodies (which are members of IAF⁷), can accredit local certification bodies. The certification bodies are themselves subject to annual audits by the accreditation bodies, although the representative offices of the certification bodies do not always appear to be included in this process.

Areas typically covered by the aspects include:

- air emissions;
- noise emissions;
- waste water discharges;
- waste generation, storage and disposal including chemical wastes;
- hazardous materials handling and storage including spillage and leakage;
- resource use including energy, raw materials, natural resources etc.;
- land use change and land contamination;
- ecological impacts

This internationally recognised accreditation system provides some assurance as to the impartiality, independence, experience, competence and reputation of the certification body. For a certification body to be accredited, one of the many requirements is demonstrable competence to audit the activity/areas within the certification scope. Accredited ISO 14001 certificates are therefore perceived in the marketplace as having increased credibility.

Investors undertaking due diligence work in relation to a certified company may wish to confirm whether or not the certification body is accredited. If the certification body does not have such accreditation, it makes sense to examine the relationship between the certification body and the organisation and also determine whether an accreditation is pending⁸. Furthermore the expertise of the certification body in the area being audited. i.e. the industry sector, should be confirmed, particularly where the activities of the organisation are technical and/or complex from an environmental perspective.

⁶ ISO/IEC Guide 66:1999 sets out the criteria for accredited certification bodies

⁷ For example - Accreditation Body of Indonesia (Komite Akreditasi Nasional) (KAN), China National Accreditation Board for Certifiers (CNAB), Department of Standards Malaysia (DSM) the Hong Kong Accreditation Service (HKAS), the Japan Accreditation Board for Conformity Assessment (JAB), National Accreditation Board for Certification Bodies (NABCB) (India), Singapore Accreditation Council (SAC), Korea Accreditation System (KAS), National Accreditation Council of Thailand, The Office of (NAC), Pakistan National Accreditation Council (PNAC), Bureau of Product Standards Accreditation Scheme, (Philippines) (BAS), Taiwan Accreditation Foundation (TAF), United Kingdom Accreditation Service, (UKAS)

⁸ In order to be accredited for a specific business area, the certification body must demonstrate expertise in that area, consequently the body may certify an organization without accreditation to gain experience and then seek accreditation retrospectively.

The prudent investor may gain additional confidence and insights through checking certain elements of the EMS

- **Evidence of an effective ISO 14001 EMS**

Given the existence of variables as outlined above, whilst it is not intended that an investor reinvents the wheel as far as auditing the EMS is concerned⁹, the prudent investor may gain additional assurance and insights through checking certain elements of the EMS:

Environmental Management Representative: An ISO 14001 certified organisation must have a nominated environmental management representative responsible for the EMS. The nominated investor relations personnel dealing with investors may not be familiar with the EMS, whereas the management representative should be able to answer all questions relating to the system. The investor should therefore seek to meet with the representative if sufficient information is not available through the investor relations channel.

The Environmental Policy: A requisite component of an ISO 14001 EMS, the Environmental Policy should be publicly available and could usefully be requested and examined by potential investors. Both the content of the policy and enquiry as to how the organisation implements it can yield useful information. For example the policy should reflect key environmental management commitments based on the significant aspects and be widely distributed to all those working for and on behalf of the organisation, including suppliers.

Environmental Aspects: All of the organisation's environmental aspects including those which are significant from a management point of view should have been identified and documented. Since these aspects represent the key areas of environmental risk, this documentation should be requested and reviewed wherever possible.

Environmental Performance: Since certification to ISO 14001 alone does not guarantee a high level of environmental performance, a review of the organisation's objectives and targets could usefully indicate at what level the organisation is performing. For example, is the organisation still grappling with the basics such as reducing

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⁹ Depending on the nature of investment activity and considering the complexity and nature of risk (for example, high/low risk operations from an environmental perspective) an audit of the EMS maybe wise as part of the risk assessment.

office paper consumption or is it investing in a programme of sophisticated and forward thinking performance improvements, such as introducing in advanced pollution control technology or implementing a zero waste policy?

Reviewing an organisations legal compliance history would also be useful in identifying potential risk areas as well as performance. The ISO 14001 certified organisation should readily be able to provide information on all relevant environmental regulatory requirements as well as compliance issues including a record of any non compliances and any correspondence with the regulatory authorities.

Identification of Problems: ISO 14001 requires comprehensive documentation of the EMS. Typically this will include an environmental manual, documentation of aspects and legal requirements, objectives, targets and environmental management plans, operational procedures, internal audit reports and an array of records including for example non conformances, environmental licenses and permits etc. In addition the certification body will also have submitted certification and surveillance reports. Any of this documentation will be informative from the perspective of understanding organisational environmental risks.

As an example non conformance documents and audit reports will highlight weak performing areas including how the organisation has addressed them, although details of financial costs may not be evident. Such non conformances may include for example wastewater monitoring results in excess of company and/or legal requirements, insufficient influence over the supply chain, incorrect classification and hence disposal of chemical wastes, discharge of untreated effluents to storm water drains.

Some of the problems that may arise may also be country specific, for example an organisation with significant quantities of plastic waste in Hong Kong, may not be able to avoid disposal to landfill due to a local recycling infrastructure constrained by space, whereas an organisation operating in China will most likely be able to reduce waste disposal to a minimum due an active recycling industry.

The Supply Chain

The supply chain (including both contractors and suppliers) represents a risk area that is potentially significant particularly in Asia. However it is also an area which may not be addressed fully by an ISO 14001 certified organisation in terms of its risk management.

The supply chain is covered by 14001 as an area that the organisation should exert an influence over i.e. it isn't under direct control and is therefore not part of the system in the same way as the company's direct aspects. Consequently there is no specific requirement that suppliers behave in an environmentally responsible manner. The responsible company however will know its supply chain and will at a minimum have identified the potential risks from an environmental perspective. The more advanced company may impose codes of conduct on its suppliers and/or have built environmental performance criteria into its procurement policies.

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Disclosure on ISO 14001

Sources of company disclosure which may refer to ISO 14001 are generally limited to company prospectuses e.g. those prepared for listing purposes and corporate reports e.g. environmental performance reports, environmental health and safety reports, sustainability reports and to a lesser extent annual reports.

ASRIA undertook a brief review of the public offering documents of supply chain companies which listed on the Hong Kong Stock Exchange in 2004. The disclosures on ISO 14001 were limited and not sufficiently detailed in any of the documents reviewed to answer most of the question raised above.

Regarding corporate reports, the level of disclosure on ISO 14001 where relevant is usually quite extensive and will invariably shed light on many of the issues above. Issues relating to the details of certification such as the scope and accreditation of the certification bodies however are often omitted.

On the question of disclosure it is useful for investors to be aware that ISO 14001 and the Global Reporting Initiative (GRI)¹⁰ are not directly related. However if a company has an EMS in place reporting according to GRI will be relatively straightforward since much of the requisite data and information should be readily available as a result of implementing an effective EMS.

¹⁰ GRI is an internationally recognized framework for reporting on sustainability performance.

Attachment 1: The ISO 14000 Series of Environmental Management Standards

<u>ISO 14001:2004</u>	Environmental management systems -- Requirements with guidance for use
<u>ISO 14004:2004</u>	Environmental management systems -- General guidelines on principles, systems and support techniques
<u>ISO 14010:1996</u>	Guidelines for environmental auditing -- General principles
<u>ISO 14011: 1996</u>	Guidelines for environmental auditing --Audit procedures = Auditing of environmental management systems
<u>ISO 14012:1996</u>	Guidelines for environmental auditing -- Qualification criteria of environmental auditors
<u>ISO 14015:2001</u>	Environmental management -- Environmental assessment of sites and organizations (EASO)
<u>ISO 14020:2000</u>	Environmental labels and declarations -- General principles
<u>ISO 14021:1999</u>	Environmental labels and declarations -- Self-declared environmental claims (Type II environmental labeling)
<u>ISO 14024:1999</u>	Environmental labels and declarations -- Type I environmental labeling -- Principles and procedures
<u>ISO/TR 14025:2000</u>	Environmental labels and declarations -- Type III environmental declarations
<u>ISO 14031:1999</u>	Environmental management -- Environmental performance evaluation – Guidelines
<u>ISO/TR 14032:1999</u>	Environmental management -- Examples of environmental performance evaluation (EPE)
<u>ISO 14040:1997</u>	Environmental management -- Life cycle assessment -- Principles and framework
<u>ISO 14041:1998</u>	Environmental management -- Life cycle assessment -- Goal and scope definition and inventory analysis
<u>ISO 14042:2000</u>	Environmental management -- Life cycle assessment -- Life cycle impact assessment
<u>ISO 14043:2000</u>	Environmental management -- Life cycle assessment -- Life cycle interpretation
<u>ISO/TR 14047:2003</u>	Environmental management -- Life cycle impact assessment -- Examples of application of ISO 14042
<u>ISO/TS 14048:2002</u>	Environmental management – Life cycle assessment – Data documentation format
<u>ISO/TR 14049:2000</u>	Environmental management -- Life cycle assessment -- Examples of application of ISO 14041 to goal and scope definition and inventory analysis
<u>ISO 14050:2002</u>	Environmental management -- Vocabulary

<u>ISO/TR 14061:1998</u>	Information to assist forestry organizations in the use of Environmental Management System standards ISO 14001 and ISO 14004
<u>ISO/TR 14062:2002</u>	Environmental management -- Integrating environmental aspects into product design and development
<u>ISO 19011:2002</u>	Guidelines for quality and/or environmental management systems auditing

Note additional standards are currently under development including:

ISO/AWI Guide 64	Guide for the inclusion of environmental aspects in product standards
ISO/DIS 14063	Environmental management -- Environmental communication -- Guidelines and examples
ISO/DIS 14064-1	Greenhouse gases -- Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals
ISO/DIS 14064-2	Greenhouse gases -- Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements
ISO/DIS 14064-3	Greenhouse gases -- Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions
ISO/AWI 14065	Greenhouse gases -- Specification for bodies providing validation and verification assessments of greenhouse gas emissions

(AWI: Approved Work Item WD: Working Draft, DIS: Draft International Standard, TR: Technical Report)

Useful Information Sources

www.iso.org

www.iaf.nu

ISO/IEC Guide 66:1999_General requirements for bodies operating assessment and certification /registration of environmental management systems (EMS)

IAF Guidance Document – IAF Guidance on the Application of ISO/IEC Guide 66 – General Requirements for Bodies Operating Assessment and Certification/registration of Environmental Management Systems (EMS).



The Association for Sustainable & Responsible Investment in Asia

www.asria.org

ASrIA is a not for profit, membership association dedicated to promoting corporate responsibility and sustainable investment practice in the Asia Pacific region. As an association, ASrIA acts for and on behalf of its members. ASrIA's members include investment institutions managing over US\$2 trillion in assets, however membership is open to any organisations which have an interest in promoting sustainable investment practice.

ASrIA has taken a leadership role in promoting sustainable investment in Asia since our founding in 2001. In order to raise awareness about SRI, ASrIA has run conferences, seminars and workshops, and published wide-ranging research on SRI issues. ASrIA has also created a very wide network of people and organizations committed to developing SRI in Asia. ASrIA's website, www.asria.org, is the primary resource for SRI in Asia, attracting over 2,500 page views per day and over 5,000 subscribers to our regular [e-bulletin](#).