

# 2 *Neither International nor Standard*

## *The Limits of ISO 14001 as an Instrument of Global Corporate Environmental Management*

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ISO 14001 is a new draft international standard for environmental management systems. It was conceived in response to important government, multilateral and industry initiatives, but it did not try to develop in an integrated fashion with these initiatives. Instead, ISO created a parallel industry initiative, and is now actively in the process of positioning this standard as a definitive 'green seal' of environmentally-sound business operations. At the same time, pre-existing governmental initiatives are being stereotyped as overly bureaucratic and burdensome, and presenting inconsistent 'standards' that hamper industry's capacity to be competitive.

ISO 14001 needs to be better understood by the public and industry, and especially by public authorities, so that it can be evaluated in the coming months as it is marketed to non-participating industry (particularly small and medium-sized businesses), to governments (including those in the developing world and Eastern Europe) and non-governmental organisations. This article presents four key questions from a public policy perspective, committed to environmental protection and to democratic international decision-making.

Like all complex rhetorical questions, each has a short and long answer. These are provided here. This article is not a complete nor a detailed presentation or analysis of the ISO 14000 series of standards, of which ISO 14001 is the only specification standard. Rather, it presents key public interest questions about ISO 14001 that relate to the ISO 14000 series as a whole.<sup>1</sup>

This new initiative needs to be understood in the light of the confluence of three histories.

### ***The History of ISO, and the Context of ISO 14001***

ISO, the International Organisation for Standardisation, was established in Geneva in 1946 for the principal purpose of standardising industrial and consumer products moving across national borders: to ensure that pipes were of the same thickness, widgets made in standard sizes, telecommunications technology used the same band widths, etc. Its mission was to facilitate the exchange of goods and services, and to foster mutual co-operation in important areas of human endeavour, namely scientific, technological and economic pursuits.

Technical standardisation decisions are internal to industry, and ISO became the international standardisation-setting body, working consensually with national standardisation bodies, engineers from government departments and industry and consumer representatives-particularly with transnational corporations, for whom this issue is crucial.

In the 1980s, ISO departed from this technology and engineering mandate by working on a 'soft' management issue: quality management systems. The ISO 9000 series was the result: a standard that underpins a certification process that designates a company as having implemented a quality management system.<sup>2</sup> With the ISO 14000 series, ISO has once again moved into the area of organisational management, this time to establish the basis for an international certification process for environmental management systems, either at organisational or at site level. There is a difference, however, between the consequences of the ISO 14000 series and that of the ISO 9000 series. Introducing a policy of 'zero defects' and imposing this on suppliers may reduce the time and cost to produce a product, but ISO 9000 addresses business efficiency, not public policy. With the 14000 series, ISO leaves the industry-client realm and enters into a field of significant public interest: the environmental performance of companies.

With this initiative, a key section of industry has opted to avoid various multi-stakeholder initiatives and to work within ISO to develop a basically 'private-sector' definition of an international environmental management system. In so doing, they potentially undercut significant industry, government and NGO initiatives that were progressively raising the level of international corporate management.<sup>3</sup> For this reason, it is crucial that the mandate of the ISO 14000 series is carefully understood and its claims to technical competence are not casually extended.

In the full text of ISO 14001, the language is both precise and confusing. In reading the text, it is important to note that apparently non-technical terms were the subject of intense debate. Several major issues of linguistics and definition were crucial. The first is the emphasis on measuring environmental *conformance* (to an internal set of standards), not environmental *performance*. Related issues are the agreements to drop most references to corporate environmental

'impact' in favour of the term environmental 'aspects'; to select 'certifier' over 'verifier' as the designation of an ISO 14001 auditor, and to replace the commitment to 'pollution prevention' (which has legal consequences, at least in the US) with commitment to the 'prevention of pollution' (which has no legal consequences and includes end-of-pipe solutions).

This issue of language confusion is also seen around the translation of the acronym 'ISO' into English. The acronym of ISO is routinely translated into English incorrectly as the 'International Standards Organisation' instead of the 'International Organisation for Standardisation'. The mistranslation does not occur in official ISO materials or in technical journals, but it does occur in professional journals, expert NGO papers, and expert business materials? The difference is crucial. In the minds of environmentalists, environmental standards imply that a floor is being set for environmental protection. Standardisation has to do with harmonising arrangements and procedures. The confusion over the proper name for ISO raises the expectation that the organisation is about performance standards rather than standardisation.

This confusion of 'standards' and 'standardisation', and the replacement of 'impacts' with 'aspects', and 'performance' with 'conformance', has significant consequences. It has effectively allowed the ISO 14001 system to be promoted as the most systematic and comprehensive means to global corporate sustainable development management and global environmental protection? while actually reversing the trend of raising the level of national, international and corporate global environmental performance standards.

### ***The Context of the New International Trade Rules and the World Trade Organisation***

The new World Trade Organisation (WTO) came into existence in January 1995. The WTO Agreement on Technical Barriers to Trade (TBTs) has changed the context in which international standardisation and performance standard-setting activities are conducted. Whereas international standards-setting was previously conducted by intergovernmental bodies in public arenas and subject to a significant degree of public accountability, it is now possible for international standards to be set largely by private industry bodies with no accountability to public processes in their decision-making.

Under the new Agreement on TBTs, the WTO is charged with harmonising the rules of trade and creating a predictable, more uniform environment in which to carry out global trade activity. International performance standard-setting bodies that meet certain criteria will be able to develop environmental, health and safety (EHS) 'technical regulations'. These 'regulations' will be used by the WTO and its members as the basis for ascertaining whether national and local environment and health and safety standards are technical barriers to trade. National standards-setting organisations are urged to utilise guidelines issued by international bodies, although this procedure reduces the scope of national political review and, thus, citizen input. This process has occurred in the creation of the ISO 14001 standard. Further, the agreement states that, if an international standard is 'imminent', it has to be followed, even if it has no formal status at that point. Thus, the draft international standard status of ISO 14001 gives it the status of a *de facto* international trade standard.<sup>6</sup>

The WTO will have the power to enforce new performance standard-setting criteria under its dispute settlement process. Member countries may challenge standards that they consider barriers to trade. The new General Agreement on Tariffs and Trade (GATT) places the onus on the defending country, with its more stringent environmental, health or safety measure, to defend the legitimacy of the measure on the basis of its trade impact, technical and scientific evidence and climatic or geographic need. Countries that cannot justify the use of higher standards on these specific grounds are faced with the choice of changing their national standards in order to come into line with the international standard, facing the threat of financial sanctions, or cross-retaliation on other export products. There is no dispute mechanism to challenge the use of lower standards, provided that these meet WTO standard-setting criteria.<sup>7</sup>

### ***The Context of Corporate and Industry Sustainable Development Management Initiatives***

As all the stakeholders in this process know well, global corporate environmental performance standard-setting is immensely complex. Nevertheless, international industry has often shown a willingness to grapple with this issue and raise the level of environmental management at the same time. Several of the major national and international industry associations-including the Canadian Chemical Producers' Association, the International Chamber of Commerce, the Japanese Keizai Doyukai and the UNEP Advisory Committee on Banking and the Environment have made commitments to use home country standards as the basis for their operations abroad (see Fig. 1 ).<sup>8</sup>

Companies that are grappling with environmental management must address the very difficult question of what material benefits can come from sound environmental management under existing market conditions. Businesses tend to make environmental investments where there is a short-term bottom line reward, or where there is some other economic benefit: for example

**Canadian Chemical Producers Association: Responsible Care**

The codes encompass member country operations both inside and outside Canada.

**International Chamber of Commerce: Business Charter on Sustainable Development** To (... ,] apply the same criteria internationally.

**Group of International Banks:****Statement by Banks on Environment and Sustainable Development**

We will, in our domestic and international operations, endeavour to apply the same standards Of environmental risk assessment.

**Keidanren, Japan: Global Environmental Charter**

It is a requirement that a corporation's environmental policies regarding atmosphere, water quality, waste products, etc. meet the minimum standards of the host country.

**Kelzal Deyukal, Japan Recommendations on' Measures to Apprehend Global Warming** Rather than abiding by the environmental standard of the local area, environmental management of the same high standards as in Japan should be pursued (including auditing by the headquarters).

Figure 1: *Examples of Industry Environmental Commitments to Use Home-Country Standards Abroad*

in marketing or public relations. At the same time, companies that are interested in this area are undertaking a range of exercises to address the larger question of what the relationship should be between industry and environment. For example, industry leaders have been experimenting with innovative ways to create global environmental performance standards without sacrificing local autonomy or corporate competitiveness.<sup>9</sup> The ISO 14000 series will reverse this trend, and will effectively discourage transnational corporate experimentation because it will grant an 'easy A' to companies with ISO 14001, even if they have low environmental performance standards.

■ **Question 1: Does ISO 14001 help implement Agenda 21 or any international environmental convention?**

**Short Answer**

No. It reverses the direction of global environmental performance standard-setting, whether public or private.

**Long Answer**

The international intergovernmental community has begun to build the initial elements of a system for global environmental management, integrating inputs from industry, governments and non-governmental organisations (NGOs). The degree of NGO involvement in the process of this international consensus-building exercise has been unprecedented and widely welcomed as indicative of a new spirit of democratic international decision-making. Although ISO 14001 claims Agenda 21 as its ideological parent<sup>10</sup> commitments in ISO 14001 are retrograde in comparison to Agenda 21.

The ISO 14000 series does not include any reference to the Montreal Protocol, the Basel Convention, the Convention on Climate Change, the Convention on Biological Diversity, the OECD Guidelines on Hazardous Technologies, or any other international environmental agreement. The only compliance aspects are to conform to applicable laws and legal regulations (see Fig. 2); and, although it cites Agenda 21 in its Appendix, the principles are not reproduced in the ISO 14000 series.

It should be noted that this standard does not establish absolute requirements for environmental performance beyond commitment, in the policy, to compliance with applicable legislation and regulations and to continual improvement.

Figure 2: *Draft ISO 14001: Introduction: Definition of Corporate Environmental Responsibilities*

The implications of this for global environmental management are significant. A trend in international environmental performance standard-setting has been to generalise from existing national and industrial best practice. For example, Agenda 21 recommended that transnational corporations 'report annually on routine emissions of toxic chemicals even in the absence of host country requirements', drawing on the model of the US Toxic Release Inventory. In addition, Agenda 21 contained recommendations to transnational corporations to 'introduce policies and commitments to adopt equivalent or not less stringent standards of operation as in the country of origin'; and to 'be encouraged to establish worldwide corporate policies on sustainable development'. Moreover, Agenda 21 recommends that firms adopt standards for public reporting, improved environmental performance and full-cost accounting (see Fig. 3). None of these recommendations

are cited in ISO 14001, even though many governments and leading international organisations are working towards full implementation of such programmes.

<p><b>Reporting</b></p> <ul style="list-style-type: none"> <li>● Report annually on their environmental record as well as on their use of energy and natural resources (Ch. 30.10[a])</li> <li>● Report annually on routine emissions of toxic chemicals to the environment, even in the absence of host-country requirements (Ch. 19.51[c])</li> </ul> <p><b>Sustainable Consumption Patterns</b></p> <ul style="list-style-type: none"> <li>● Play a major role in reducing impacts on resource use and the environment through more efficient production processes, preventative strategies, cleaner production technologies and procedures throughout the product lifecycle (Chs. 30.2 and 30.4)</li> </ul> <p><b>Full. Cost Accounting</b></p> <ul style="list-style-type: none"> <li>● Work towards the development and implementation of concepts and methodologies for the internalisation of environmental costs into accounting and pricing mechanisms (Ch. 30.9)</li> </ul>
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Figure 3: *Sample Agenda 21 Recommendations for the Conduct of Sustainable International Business [chapter references in brackets]*

The past several years have seen increased commitments to sustainable development from international development banks such as the World Bank and the European Bank for Reconstruction and Development. After Agenda 21 was adopted by national governments, the World Bank, in its own words, underwent a 'greening' of its policies and operations. Not only has the Bank tried to integrate environmental concerns across its whole portfolio of activities, it has also expanded the definition of environmental management to include its social dimensions, cultural and social costs and benefits.<sup>11</sup> In the words of one US international environmental attorney, environmental initiatives among the multilateral banks are having the result of shaping the environmental policies of foreign countries as well as the environmental performance of companies contracting with these banks' overseas projects.<sup>12</sup>

ISO proponents have argued that registration should be a demonstration of environmental commitment and proof that they are delivering on the promises of the industry, environmental initiatives such as Agenda 21, the ICC Business Charter on Sustainable Development and the chemical industry's Responsible Care Programme.<sup>13</sup> They assert that ISO 14001 will provide demonstrable proof that the company is environmentally sound, and advocate that certification in itself should therefore reduce compliance and liability costs (see Fig. 4).

Demonstration of successful implementation of the standard Can be Used by an organisation to assure interested parties that an appropriate environmental management System is in place.

Figure 4: *Draft ISO 14001: Introduction*

The lower horizons of ISO 14001 might be acceptable if the ISO discussions remained within the historical bounds of ISO--to standardise technical and engineering procedures within industry. ISO proponents did not want to reference any international engineering standards or any intergovernmental standards. Yet they are moving to have ISO 14001 replace parts of many major international and national proposals for environmental management systems.

While the ISO 14000 series is seeking credibility as the international environmental standard, it fails to advance the goals and legal principles set over the last ten years through international agreements and conventions. ISO 14001 is trying to claim an intellectual and political legitimacy from the international community while it fails to include mandatory requirements for any external references to sound engineering or to sound public policy decisions from the international community, in the required environmental policy (as does the EU's Eco-Management and Audit Scheme [EMAS] requirement).

■ **Question 2: Can ISO 14001 become an international trade standard without operative participation from governments or NGOs?**

**Short Answer**

Yes.

**Long Answer**

ISO is a body that has typically produced technical standards for industry. Drafting and decision-making have therefore been largely undertaken by the trade and industry sectors. However, in leaving the area of technical standards -setting and entering the area of setting standards for global environmental management, ISO enters an area that is of substantial

public interest. Moreover, under the new international trade rules, ISO is for the first time legally empowered to create international trade standards that will be used to judge the appropriateness of publicly-set national and local environment, health and safety standards. In other words, in principle, ISO 14001 could become an international standard without having actively integrated public comment. In practice, the process has belatedly invited delegates from governments and citizens' groups, but has used this invitation, and the limited participation that ensued, to claim an openness while ignoring their substantive input.

**Decision-Making in ISO: Governments, NGOs, small and medium-sized enterprises, and developing countries play a negligible role in the ISO 14000 series drafting and decision-making.**

The public and governments may be invited to have observer status at ISO committee meetings, but decision-making in ISO is mostly by trade associations and industry representatives. Other participants, while they may be invited and are recorded as 'participants' in a 'consensual' decision-making process, do not have voting rights. This leads to the incorrect impression that delegates who attended specific meetings in order to lobby for certain elements in the standards are recorded as participants in a 'consensual' decision-making process. NGOs were not integrated into early ISO 14000 series discussions. Since then, a handful of environmental groups are liaising with TC207 or participating as observers in ISO meetings. In consequence, ISO drafting reached its final stages without active input from NGOs.

An industry magazine commented:

Industry, which has dominated work on drafting the standard, now faces the task of selling ISO 14001 to regulators, environmentalists and other stake-holders in environmental management. Environmentalists and some national environment ministries have found drafts to date insufficiently ambitious.<sup>14</sup>

This highlights a crucial difference in decision-making processes in democratic as compared to closed private-sector systems. In a democratic system, if a citizens' group disagrees with a political decision, it can lose the technical debate but then take its policy position to the political process or the legal system. In an ISO debate, a decision, once taken, cannot be appealed. This effectively minimises pressure from the public or from public bodies. While this was not relevant within the historical engineering mandate of ISO, it has become crucial with the move of ISO into the policy arena. Moreover, because of the new international trade rules under the WTO, this special-interest decision-making process can result in the formation of a new international trade standard.

It is worth noting that the ISO process also tends to exclude the needs of small and medium-sized businesses because, in practice, they do not have the funds and specialist technical expertise to participate directly in the negotiation rounds.<sup>15</sup> The same point can be made for industry and governments from developing countries and countries in transition. Although ISO claims that the meetings have been broadly representative, in practice it is those who consistently attend meetings and take on the drafting work who actually decide the content of the ISO standard.

This means that the drafting committee is 'considerably less representative' than the technical committee membership, and made up principally of executives from large international corporations, national standards-setting associations and consulting firms.<sup>16</sup> TC207 itself solicited the participation of key developing countries only very late in the process, when the period of substantive review was largely over. Input from small and medium-sized businesses was also invited very late in the process. In the US these are participating on various technical advisory group working parties, and vote on issues before they are presented to ISO TC207.<sup>17</sup> Most of the key decisions regarding scope and content were already made, so their input will have only a minimal influence on the final product.

■ **Question 3: How will an ISO-14001-certified company demonstrate that it has a good environmental, health and safety performance?**

**Short Answer**

It cannot.

**Long Answer**

There are two interconnected elements to this answer. First, what is the implication for environmental, health and safety standards of ISO 14001 being a conformance, not a performance, standard? Secondly, what is the nature of environment, health and safety management in the ISO 14001 draft international standard?

**ISO 14001 is a specification standard for conformance, not performance, and environmental aspects, not environmental impacts. A sound ISO 14001 EMS will give a firm the capacity to measure and monitor the environmental 'aspects' of its operations.** In a speech at MIT, Joe Cascio (then Chairman of the US Technical Advisory Group on 14001) said that he did not care 'how much' waste an ISO-certified firm dumps into a river. What is important is that the company's EMS knows that it has happened.<sup>18</sup>

Environmental performance relates only to the measurable performance of the environmental management system (see

Fig. 5). The environmental management system can be internally defined and system performance

Measurable results of the environmental management system, relating to an organisation's control of the environmental aspects of its activities, products, or services, based on environmental policy, objectives and targets.

**Figure 5:** Draft ISO 14001, 3.9: *Environmental Processes*

results are confidential. The public and public authorities are being asked to depend on the corroboration of the certification bodies that ISO 14001 companies will:

1. Improve their environmental performance in accordance with their environmental policy
2. On discovery of an environmental problem, will correct and remedy the situation

However, one should remember Mr Cascio's anecdote about the waste in the river. Getting demonstrably and measurably better at the ISO 14001 standard does not necessarily improve the firm's environmental performance. Moreover, reference to environmental impact has been diluted and recast into commitments to 'examine environmental aspects'. Commitments to environmental performance are commitments simply to comply with 'applicable' regulations.

The nature of environmental, health and safety standards. There are no requirements for health and safety standards in the ISO 14000 series as it now stands. All work on health and safety was put aside in the ISO discussions. A meeting held in Spring 1996 decided that there was no need for an international guidance standard on environment, health and safety (see Fig. 6).

This standard is not intended to address, and does not include requirements for, aspects of occupational health and safety management; however, it does not seek to discourage an organisation from developing integration of such management systems elements. Nevertheless, the certification/registration process will only be applicable to the EMS aspects.

**Figure 6:** *Draft ISO 14001: Introduction, Standard on Health and Safety*

**The business argument for performance-oriented management systems.** Conformance rather than performance, the orientation to input rather than output measurement of ISO 14001, runs against current business theory. There is a business truism that 'if you don't know where you're going, any road will get you there.' Management textbooks emphasise how important it is for any business to select a mission and targets and the measurable steps to achieve them. This view stresses that it is crucial to aim for business effectiveness rather than process efficiency, and that management systems and organisational design ought to work from the desired *results* to identifying performance measures that can be managed and improved. Furthermore, this argument insists that becoming more effective will lead an organisation to become more efficient, but that the reverse is not true: becoming more efficient does not necessarily make an organisation more effective. Although ISO 14001 requires companies to state an environmental policy giving its environmental intentions and principles, it offers no mandate to incorporate sustainable development aims-or, for that matter, any other environmental limit values-into the policy.

■ **Question 4: How do governments, workers and the public get access to all the environmental information prepared by an ISO-14001-certified company**

**Short Answer**

They do not. It is company-confidential. Corporate disclosure is discretionary.

**Long Answer**

Under ISO 14001, environmental information is gathered for purposes of helping track and manage the corporate environmental management system, and is viewed as company-confidential (see Fig. 7).

The organisation shall consider processes for external communication on its significant environmental aspects and record its decision.

**Figure 7:** *Draft ISO 14001, Section 4.3.3: Communications*

This moves against all international environmental agreements and leading voluntary corporate environmental management initiatives which have been moving progressively towards greater disclosure of environmental information in line with public requirements for corporate environmental reporting. Agenda 21 established a public 'right to know', and made several specific reporting recommendations (see Fig. 3). Since then, the OECD has sponsored several workshops for governments, industry and non-governmental organisations, to implement national pollutant release and transfer registers, based on the US Toxic Release Inventory. These will create a public information vehicle that can be used to

benchmark corporate and governmental accountability for environmental performance, while stimulating and measuring the shift to cleaner production and products.<sup>19</sup>

Among international firms, levels of disclosure and reporting formats vary enormously, but leading industries and many international firms now routinely produce environmental reports.<sup>20</sup> At minimum, they indicate environmental investments, liabilities and expenditures. Increasingly, they include figures on performance and relative performance in reducing emissions and toxic emissions, decreasing waste, integrating lifecycle analyses into new projects, widening the circle of stakeholders to include local communities, and so on.

A core idea of the EU's EMAS, which does have a disclosure requirement, is that public pressure will motivate companies to improve environmental performance. However, in order for this to work, there needs to be disclosure of corporate environmental performance. Without external audit and public disclosure, self-monitoring is an oxymoron.<sup>21</sup>

## ■ Notes

1. A longer version of this paper was commissioned by the European Environment Bureau (EEB) for a seminar, 'Free Trade and Environment: Co-operation between NGOs of EU and Third World Countries: An International Workshop', Brussels, Belgium, 26-28 October 1995. The EEB used it as the basis for their presentation to the Meeting of European Environmental Ministers in Sofia in October 1995. Assistance in producing this paper was provided by Manuela Soler and Peter Thimme.
2. The precedent of using quality management system standards as the basis for environmental management standards was established by the British BS 7750, which was modelled after the BS 5750 standard on quality management systems. See Caroline Hemenway and James Gildersleeve, *What is ISO 14000? Questions and Answers* (Fairfax, VA: CEEM Information Services, 1995), p. 5.
3. Even if some standard-setting bodies are quasi-governmental bodies, e.g. the French AFNOR or the German DIN, they have been represented at ISO meetings by firms and consultants. In addition, although NGOs have been brought into the process, this was done late in the day and to a very limited degree.
4. Examples from industry are: David Van Wie, Director of Environmental Services, Robert Gerber Inc., US: 'National and International Standards for Environmental Management Systems (EMS)' (presentation to the *International Caribbean Environmental Management Conference*, Port of Spain, Trinidad, 20-24 March 1995); ML Strategies, Inc., *Project 14000: ISO 14000: Key Questions and Answers* (Boston, MA: ML Strategies, Inc., June 1995); and *International Environmental Reporter: Current Reports*, 10 January 1996, p. 1.
5. 'Sustainable Development' section in 'Standards: Draft ISO Document Standards Approved; To Be Circulated then Possibly Adopted', in *International Environmental Reporter*, 12 July 1995, p. 527.
6. See 'Agreement on Technical Barriers to Trade: Technical Regulations and Standards: Preparation, Adoption and Application of Technical Regulations by Central Government Bodies', in *Final Act Embodying the Results of The Uruguay Round of Multilateral Trade Negotiations* (Version of 15 December 1993; MTN/Fa II AIA-6; Washington, DC: Office of the US Trade Representative, Executive Office of the President).
7. Provided a new international standard can claim that it has an adequate justification, such as environmental objectives, 'it shall be rebuttably presumed not to create an unnecessary obstacle to international trade.' See 'Agreement on Technical Barriers to Trade', p. 3.
8. See United Nations Conference on Trade and Development, *Self-Regulation of Environmental Management: An Analysis of Guidelines Set by World Industry Associations for their Member Firms* (Environment Series No. 5; UNCTAD/29; New York, NY: United Nations, 1994).
9. See United Nations Conference on Trade and Development, *Environmental Management in Transnational Corporations: Report on the Benchmark Corporate Environmental Survey* (Environment Series, No. 4; ST/CTC/149; New York, NY: United Nations, 1993).
10. In a presentation about ISO 14000 to the MIT Working Group on Business and the Environment, Boston, 25 June 1995, Joe Cascio, IBM Director of EH&S Standardisation, and Chairman of the US Technical Advisory Group (TAG) to ISO Technical Committee 207 on Environmental Management, and a leading US architect of ISO 14000, said that the UNCED was the catalyst for ISO 14000. This is reflected again in an internal ISO TC207 Committee Draft, *Guide to Environmental Management Principles, Systems and Supporting Techniques*, prepared by ISO / TC207 / SCI / WG2, 2 September 1994, p. 1.
11. See The World Bank, *Mainstreaming the Environment: The World Bank Group and the Environment since the Earth Summit: Summary* (Washington, DC: The World Bank, 1995).
12. David Hackett, a Chicago-based international environmental lawyer, speaking at Baker and McKenzie's Sixth Annual International Environmental Conference, 17 October 1995, cited in *International Environmental Reporter*, 1 November 1995, p. 826.
13. ISO TC207 Committee Draft, *Guide to Environmental Management Principles, Systems and Supporting Techniques*, prepared by ISO/TC207/SC1/WG2, 2 September 1994, cites all 27 principles of Agenda 21, and the whole text of the ICC Business Charter on Sustainable Development, in its Appendices, pp. 51-59.
14. *Environment Watch: Western Europe*, 17 February 1995, p. 8.
15. This occurs particularly in the US, where small and medium-sized companies do not have a strong lobby. This point was made by Mary McKiel, Director of the EPA Standards Network, of US small and medium-sized businesses. She said that this inherently undemocratic process could not produce a standard that was viable across industry. Cited in 'EPA Says No to Standards in Rules', in *International Environmental Systems Update*, Vol. 2 No. 6, pp. 5-6, Naomi Roht-Arriaza points out that, while the intention behind convening meetings all over the world may be to make

- meetings accessible to people living there, the financial and time costs of going to meetings in Australia, South Africa and France soon add up. See Naomi Roht-Arriaza, *Shifting the Point of Regulation: The International Standards Organisation and Global Lawmaking on Trade and the Environment* (San Francisco, CA: University of California, Hastings College of Law, 1995), pp. 45-46.
16. Roht-Arriaza, *op. cit.*, pp. 45-46. 'In the ISO debates, multinational companies, particularly American multinationals like IBM, Du Pont, Allied Signal, Merck, 3M, and ARCO have had a substantial input.' (Whitman Bassow, 'The Appeal of ISO and World Standards', in *Environmental Protection*, 1994, p. 12).
  17. See Hemenway and Glidersleeve, *op. cit.*, p. 20.
  18. United Nations Conference on Trade and Development, *Self-Regulation of Environmental Management*; see also 'International Environmental Management Standards: ISO 9000's Less Tractable Siblings', in *ASTM Standardization News*, April 1994.
  19. See Eric Howard, 'OECD: The Establishment of National Pollutant Release and Transfer Registers', in *RECIEL: Review of European Community and International Law*, Vol. 2 No. 2 (1995), pp. 195-96.
  20. A World Wildlife Fund (WWF) report found 130 companies in Europe and North America that produce environmental reports. See Irwin *et al.*, *A Benchmark for Reporting on Chemicals at Industrial Facilities* (Baltimore, MD: WWF, 1995).
  21. See Harris Gleckman, 'Transnational Corporations' Strategic Responses to Sustainable Development', in *Green Globe 1995* (Oxford, UK: Oxford University Press, 1995).