



DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS

**ROUNDTABLE ON CORPORATE RESPONSIBILITY:
Encouraging the positive contribution of business to environment through the
OECD Guidelines for Multinational Enterprises**

DRAFT SUMMARY OF BACKGROUND REPORT

June 2004

This report is a first draft of a summary of the Background Report prepared for the Roundtable on Corporate Responsibility on 16 June 2004. The views expressed are those of the authors and are not necessarily shared by OECD or its member countries. Comments are welcome and should be addressed to daf.contact@oecd.org).

This is a work in progress which should not be quoted.

Sound environmental management is an important part of sustainable development, and is increasingly being seen as both a business responsibility and a business opportunity. Multinational enterprises have a role to play in both respects. The OECD Guidelines for Multinational Enterprises therefore recommend that managers of enterprises should give appropriate attention to environmental issues within their business strategies and day-to-day operations. The environment section of the Guidelines encourages multinational enterprises to raise their environmental performance through improved internal environmental management and better contingency planning for environmental impacts.

Corporate responsibility and the environment: the business case and the challenges

Most enterprises find it in their own best interest to minimise those aspects of their activity that may have negative impacts on the environment. In addition to their own ethical considerations company owners also have to consider the interests of stakeholders. In many countries there is a societal expectation that companies take steps to safeguard the environment over and above legal compliance. While corporate responsibility admittedly costs both time and money, enterprise studies have consistently found that environmental enhancement goes hand in hand with above-average growth and earnings. Some of the concrete benefits that enterprises have obtained are:

- *Improved business performance.* The adoption of environmental management tools (like any management tools) supports better overall business management, including improvements in operational efficiency and productivity. The channels include waste minimisation and pollution prevention; a reduction in the number of accidents and reduced costs of clean-up; and reduced liability. In technologically advanced enterprises improved business performance also has a long-term dimension. Environmental efforts are often coupled with search for new technologies, which may increase profitably via “front runner” benefits.
- *Gaining market access.* Some companies have chosen to implement environmental tools (especially those verified by a certified third party), in order to enhance their access to a particular market where enterprises are expected to operate according to certain environmental standards. In addition, a growing number of large MNEs require their suppliers to have a certified EMS.
- *Signalling and communicating with stakeholders.* The implementation of environmental tools helps produce “reputational benefits” by communicating to customers, clients, investors and civil society a commitment to good practices. It can also be used to improve enterprise relationships with government regulators, providing assurance that a company is making a serious effort to meet compliance or to go beyond-compliance commitments.

However, to reap these benefits enterprises need to overcome a number of initial obstacles, ranging from direct costs to organisational problems. Some of the most frequent challenges to be overcome are:

- *Perception of environmental tools as a cost centre, rather than a revenue-enhancer.* Companies need to convince managers and employees that environmental costs are internal, rather than external, to the company and that therefore environmental efforts are considered as a net benefit rather than a net cost.
- *Management and employee inertia, inexperience and company culture.* The implementation of environmental tools is an innovation in business management, and, like all innovations, it can be slowed down by organisational inertia and inexperience. A positive company “learning culture”

can be of major help: some companies are more adaptable and more able to innovate than others. The structure of management responsibilities can also play a role – not least the degree to which the responsibility for the environmental efforts is integrated with other core enterprise objectives.

- *Isolation of environmental departments from the rest of the company.* Implementing cross-cutting environmental tools often requires overcoming the traditional compartmentalisation of the management structure. Environmental management practices are rarely successful unless corporate environmental managers are in a position to influence key other departments of an enterprise.

One way for enterprises to enhance their environmental performance is to implement the OECD Guidelines for Multinational Enterprises. The Guidelines' Environment Chapter consists of eight recommendations, which are spelled out in the following sections.

A company implementing these recommendations will need to translate them into concrete managerial approaches. In doing so they may choose to implement some of a growing number of off-the-shelf environmental management tools, reporting and information codes and sectoral guidelines and recommendations, or they may choose to develop tailored approaches designed to suit the specific needs of their activities. The remainder of this report summarises some of the most prominent such tools and highlights examples of concrete enterprise experiences. It has eight short subsections, each of which focuses on corporate approaches supporting one of the Guidelines Environment Chapter's eight recommendations.

1. Environmental management systems

[Enterprises should]

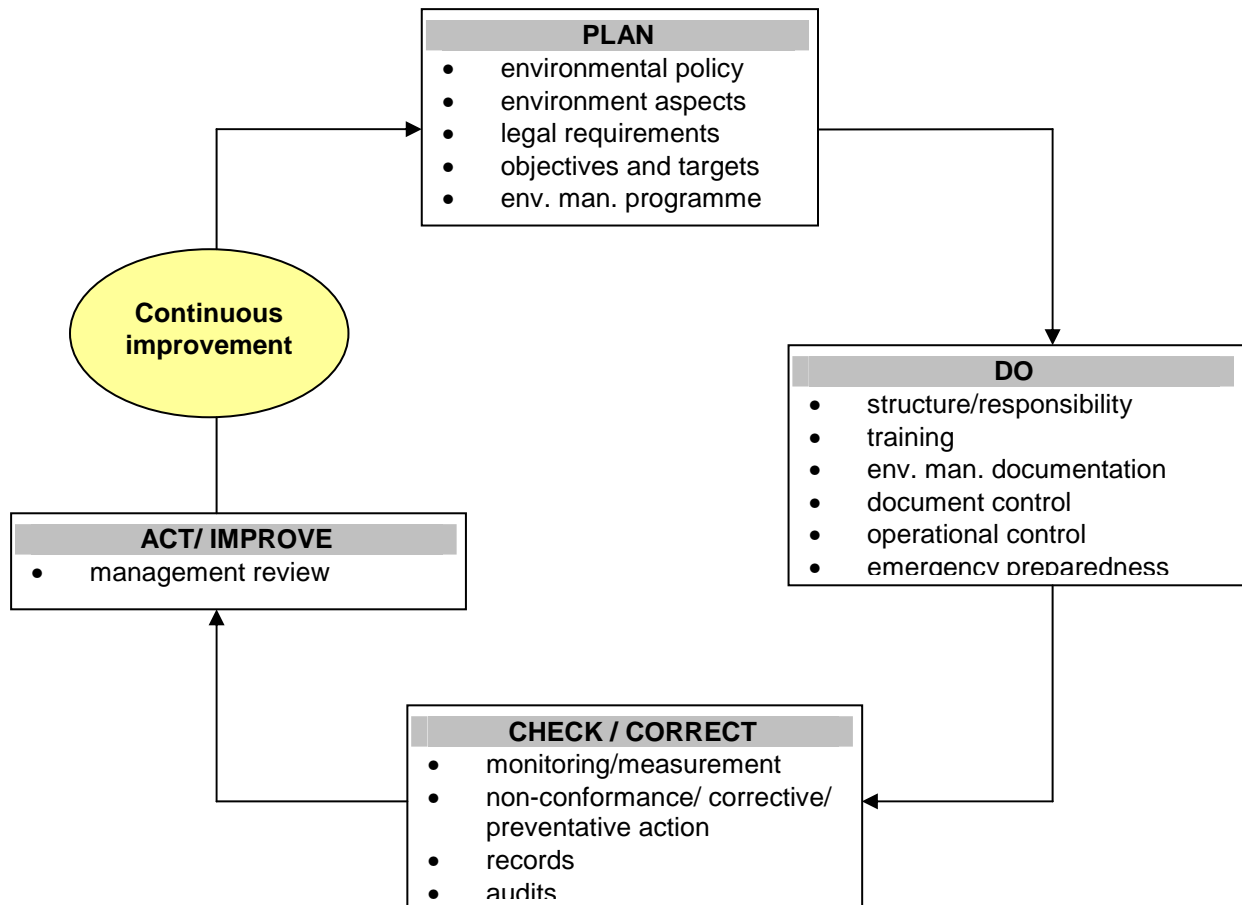
Establish and maintain a system of environmental management appropriate to the enterprise, including:

- a) Collection and evaluation of adequate and timely information regarding the environmental, health, and safety impacts of their activities;*
- b) Establishment of measurable objectives and, where appropriate, targets for improved environmental performance, including periodically reviewing the continuing relevance of these objectives; and*
- c) Regular monitoring and verification of progress toward environmental, health, and safety objectives or targets.*

The aim of an environmental management system (EMS) is, broadly, to help an organisation achieve its environmental goals through consistent control of its operations, just as internal accounting controls provide intrinsic assurances that financial management systems are functioning well. Whatever the specific goals, the assumption behind the implementation of an EMS is that better environmental management will improve overall business performance.

An EMS is not based on the adoption of uniform substantive standards or benchmarks. Rather, each organisation tailors the starting point, design and content of its EMS to serve its own aspirations, business goals, capacities, and experience. There is, however, a growing consensus that an EMS should normally encompass five key elements, often referred to as "Plan-Do-Check-Act" (Figure 1): undertake an initial *environmental review*; define an *environmental policy*; develop an *environmental action plan* and define *environmental responsibilities*; develop internal information and *training* courses; *audit* the environmental management system and conduct an *environmental management review*.

Figure 1. The EMS Method: Plan-Do-Check-Improve



Source: UNEP, Department of Trade, Industry and Economics, Production and Consumption Branch.

Tools and approaches

Companies have a plethora of operationally distinct types of EMS to choose from. In practice most EMSs have been classified according to two broad categories, namely “externally certified” and “performance driven” EMSs. The former are designed *inter alia* with a view to complying with the requirements for certification. The latter are tailored to fit the specific operational requirements of the implementing company, typically with the specific purpose of giving this company a competitive edge. Finally, sector-specific EMSs are also emerging as a way to further drive performance gains by developing templates designed to address specific industry environmental impacts.

- ***Externally certified EMS***

- ***ISO 14001.*** Developed under the auspices of the International Organisation for Standardisation (ISO) the 14001 standard is the main international standard for the design and content of an EMS. It is part of the ISO 14000 “family”, a set of generic tools for developing, implementing, maintaining and evaluating environmental policies and objectives. The family contains standards for environmental management systems, environmental

auditing, environmental performance, evaluation, environmental labelling and life cycle assessment.

- ISO 14001 requires that an organisation put in place and implement a series of practices and procedures that, when taken together, result in an environmental management system. The major requirements for an EMS to be certified under ISO 14001 include: issuing a *policy statement*; putting in place an *information system*; defining *objectives and targets*; designing *implementation and monitoring programmes*; undertaking *corrective action*; and performing *periodic reviews* of the EMS.
 - **EMAS.** The European Union’s Eco-Management and Audit Scheme (EMAS) is a management tool for companies and other organisations operating in the European Union and the European Economic Area. EMAS provides an opportunity for companies to receive an external “seal of approval” associated with EMAS registration. To receive EMAS registration a company must comply with six requirements: conduct an *environment review* of its activities; establish an *environmental management system*; carry out an *environmental audit*; provide an *environmental performance statement*; *verify* most of the above with an accredited EMAS verifier; and *make publicly available* the environmental review, EMS, audit procedure and environmental performance statement.
 - The environmental management systems required by EMAS to fulfil the second requirement are no different from ISO 14001. However, two EMAS requirements – the provision of an environmental performance statement and making information publicly available – are not reflected in ISO 14001.
- **Performance-based EMS**
 - **External Value EMS.** A tailored EMS is ideally integrated with core business practices, including strategic planning and investment, financial management, product development and marketing with the full support of senior management. Performance-based EMSs are not an antithesis to ISO based systems; ISO 14001 in many cases acts as the foundation for a performance-driven EMS.
 - Attempts at standardisation of tailored systems are ongoing. In the United States, the Multi-State Working Group on Environmental Performance (MSWG) is developing guidelines for a performance-based “*External Value EMS*”. The aim of the External Value EMS is to increase stakeholder assurance that the implementation of an EMS delivers the hoped-for performance gains. It emphasises and provides guidance on three key components: achievement and maintenance of legal compliance with environmental, health and safety regulations; involvement of external stakeholders; and transparency of external communications.
 - **Sector-specific environmental management**
 - **Responsible Care.** One of the best-known sector-specific EMS is the Responsible Care initiative of the global chemical industry. Responsible Care is implemented in 47 countries by the members of the International Council of Chemical Associations (ICCA). The Guiding Principles of Responsible Care include “continuous progress toward the vision of no accidents, injuries or harm to the environment” and to “publicly report our global health, safety and environmental performance.” In the originating vision, members of Responsible Care were guided by six Codes of Conduct and 106 management practices covering

Community Awareness and Response; Distribution; Employee Health and Safety; Pollution Prevention; Process Safety; and Product Stewardship.

- In an attempt to move beyond the Codes to a performance-based EMS, the American Chemistry Council developed *Responsible Care 14001*, a Responsible Care Management System (RCMS). Rather than being a Code of Conduct, the RCMS is based on: benchmarked best practices of leading private sector companies; initiatives developed through the Global Environmental Management Initiative, ISO, and other bodies; and requirements of national regulatory authorities.
- ***Financial sector initiatives.*** An early activity in this area was UNEP's *Financial Institutions Initiative*. The Initiative engages a broad range of financial institutions in a constructive dialogue about the link between economic development, environmental protection, and sustainable development. The Initiative promotes the integration of environmental considerations into all aspects of the financial sector's operations and services. A secondary objective is to foster private sector investment in environmentally sound technologies and services.
- In June 2003, ten leading banks from seven countries adopted the "*Equator Principles*", a voluntary set of guidelines developed by these banks for managing social and environmental issues related to the financing of development projects. The principles apply to project financing in all industry sectors, including mining, oil and gas, and forestry.

2. Public information and stakeholder consultation

[*Enterprises should*]

Taking into account concerns about cost, business confidentiality, and the protection of intellectual property rights:

- a) *Provide the public and employees with adequate and timely information on the potential environmental, health and safety impacts of the activities of the enterprise, which could include reporting on progress in improving environmental performance; and*
- b) *Engage in adequate and timely communication and consultation with the communities directly affected by the environmental, health and safety policies of the enterprises and by their implementation.*

Information about the activities of enterprises and associated environmental impacts is an important vehicle for building confidence with the public. This vehicle is most effective when information is provided in a transparent manner and when it encourages active consultation with stakeholders so as to promote a climate of long-term trust and understanding of environmental issues of mutual interest.

Information strategies

One of the most fundamental questions facing corporate decision-makers is whether to disseminate information regarding their enterprise's environmental performance as an entity, or inform about the environmental impact of individual products and activities. Examples of the two are listed below.

Toward enterprise standards for public information?

So far no standard for how much and what kind of information and enterprise should choose to disseminate has won common acceptance. Recent initiatives aimed at establishing such standards are described below.

- **ISO 14063.** ISO's 14063 standard resides in the 14000 family. Recognising that companies' motivation and preferred directions may differ more in the case of communication than in management systems, the environmental communications guidance standard does not prescribe the manner in which an organisation communicates its environmental information. It offers guidance on what should be considered in developing an environmental communication program and provides sources of information on how each consideration has been addressed by others.
- **Global Reporting Initiative.** The *Global Reporting Initiative* (GRI) has as its mission "to develop and disseminate globally applicable Sustainability Reporting Guidelines." GRI has since embraced a "triple bottom line" approach incorporating environment as well as social and economic reporting. The 2002 Sustainability Reporting Guidelines constitute an information reporting framework, providing both overarching reporting principles and specific content requirements to guide companies and other organisations in preparing publicly available sustainability reports. A GRI-consistent report includes five core components: *vision and strategy* of the reporting organisation; *profile* of the reporting organisation (e.g. structure and operations); a description of *governance structure and management systems*; *the GRI content index* (a table identifying where the information required by the Guidelines is located); and *performance indicators* – measures of the effect of the reporting organisation divided into integrated, economic, environmental, and social performance indicators.
- **AA1000.** The UK professional group AccountAbility recently released the *AA1000 Assurance Standard* which provides guidelines for the verification of published company reports, including (but not limited to) environmental or sustainability reporting. AA1000 provides a framework intended to guide good practice not only for company reports but for environmental communication more broadly. The Standard is based on a commitment to the practice of 'inclusivity' by which is meant an organisation's (i) commitment to *identify and understand* its social, environmental and economic performance and impact, and the associated views of its stakeholders; (ii) commitment to *consider and coherently respond* (whether negatively or positively) to the aspirations and needs of its stakeholders in its policies and practices; and (iii) commitment to *provide an account* to its stakeholders for its decision actions and impacts.

Product information: Ecolabels

Environmental labelling, or ecolabelling allows companies to communicate their environmental commitments directly to consumers. As all public information tools, ecolabelling programs must be credible. This has two direct implications. On the one hand, labels need to be based on meaningful and scientifically sound criteria. On the other hand, misleading claims from enterprises undermining consumer trust must be avoided. To build trust, environmental criteria for certification must be robust and verification and monitoring must be reliable and consistent.

One prominent standardised approach in the area is the **ISO 14020** series, which addresses a range of different approaches to voluntary environmental labels and declarations, including self-declared environmental claims, ecolabels (seals of approval) and quantified environmental information about products and services. In this context, ISO has defined three types of labelling: *Type I* is a voluntary multiple-criteria-based third party programme that awards a licence which authorises the use of

environmental labels; *Type II* covers environmental claims made, without independent third-party certification, by manufacturers, importers, distributors, retailers or anyone else likely to benefit from such a claim; *Type III* (at this point in time not formally an ISO standard) identifies elements and issues for consideration when making declarations of product information based on Life Cycle Inventory data.

Stakeholder consultation

Effective consultation with stakeholders implies an expectation that company managers not only divulge and receive information, but that they stand ready to act upon the information they receive. The techniques by which companies can consult with and engage their stakeholders are legion. They can be broadly clustered into two groups namely the ones where enterprises limit themselves to soliciting the inputs of stakeholders and those which include an ongoing interactive process. Most companies having engaged in stakeholder consultations seem to agree that success of the processes hinges on the setting out of clearly defined goals, and on a careful and inclusive procedure for selecting the participants. Stakeholder dialogue needs to be active.

Efforts at developing commonly agreed standards for stakeholder engagement are still in their infancy – even more so than is the case for information policies. However, one of the information standards reviewed above also proposes guidelines for stakeholder engagement: the *AA1000*. The guidelines apply a three pronged approach. They: (i) define the aims of stakeholder engagement in the context of AA1000; (ii) describe a number of methods of stakeholder engagement; and (iii) describe techniques and provide advice to support the good practice of the methods defined above.

Finally, one way in which companies have consulted with and responded to stakeholders is via partnerships with civil society and/or governments. In the past, companies partnered with NGOs and other civil society groups primarily as sponsors. In the past decade, a new form of “strategic partnership” has emerged which involve internal, core company operations.

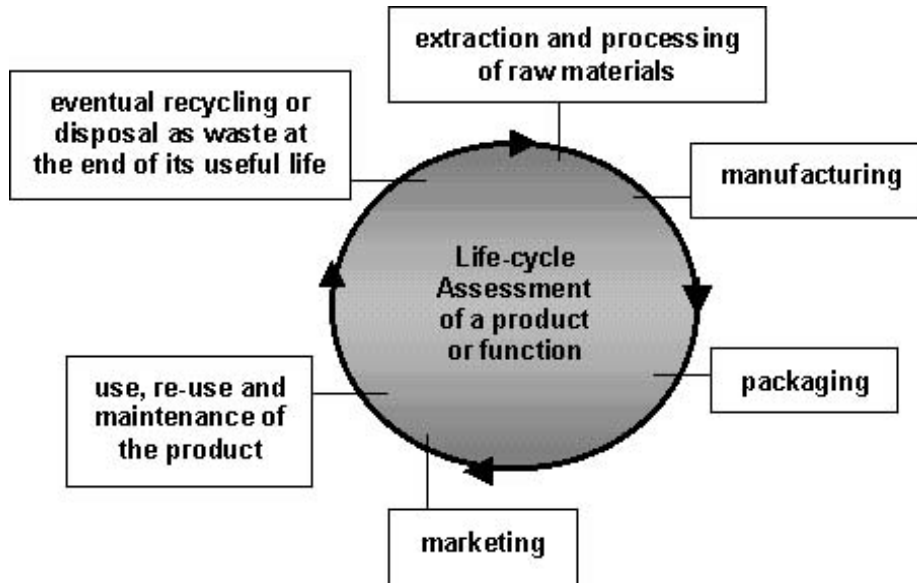
3. Life cycle assessment

[*Enterprises should*]

Assess, and address in decision-making, the foreseeable environmental, health, and safety- related impacts associated with the processes, goods and services of the enterprise over their full life cycle. Where these proposed activities may have significant environmental, health, or safety impacts, and where they are subject to a decision of a competent authority, prepare an appropriate environmental impact assessment.

Environmental life cycle assessment is a tool for systematic evaluation of the environmental aspects of a product or service through all stages of its life cycle. A product's life cycle starts when raw materials are extracted from the earth, followed by manufacturing, transport and use, and ends with waste management including recycling and final disposal. There are emissions and consumption of resources at every stage of the life cycle. Life cycle assessment (LCA) starts with life cycle thinking—an understanding that the environmental impacts from the entire life cycle of products and services need to be addressed (Figure 2).

Figure 2. Components of Life Cycle Thinking



Tools and approaches

There are many ways to implement an LCA, depending on the needs, aspirations, and capacities of the company or organisation undertaking it. One of the key operational decisions has to do with the scope of the assessment (i.e. what environmental impacts will be examined). Another has to do with the interpretation of the assessment (i.e., which environmental impacts will be prioritised for action). Based thereupon, companies will wish to develop concrete corporate strategies, some elements of which could be:

- *Benchmarks.* Alternative materials, products, processes and activities would be compared within the company; resource use and pollution would be compared with other companies in the same sector.
- *Suppliers.* Suppliers consistent with company strategies need to be identified and/or trained.
- *Research and development.* LCA can be used to determine research priorities.
- *Training.* Staff responsible for reducing environmental burdens associated the company's products, processes and activities would have to be trained.

In putting LCA strategies into practice companies have at their disposal a small number of existing tools and best practices. Some of the best known of these are:

- **ISO 14040.** The ISO has developed an international standard for LCA as part of its 14000 Environmental Management series. ISO 14040 outlines and provides guidance for a four-step LCA process:
 - *Goal and scope definition.* The product or service to be assessed is defined, a functional basis for comparison is chosen and the required level of detail is defined.
 - *Inventory of extractions and emissions.* The energy sources and raw materials used, the emissions of pollutants and different types of land use are quantified for each process, then combined in the process flow chart and related to the functional basis

- *Impact assessment.* The effects of the resource use and emissions are grouped and quantified into a limited number of impact categories which may then be weighted for importance.
- *Interpretation.* The results are presented and the need and opportunities to reduce the impact of the product or service on the environment are systematically evaluated.
- ***Life Cycle Initiative.*** UNEP and the Society for Environmental Toxicology and Chemistry (SETAC) are collaborating in the Life Cycle Initiative (LCI) – a standardised approach to global “best practice” for LCA. LCI aims to build on the ISO 14040 standards, the objective being to develop and disseminate practical tools for evaluating the opportunities, risks, and trade-offs associated with products and services over their entire life cycle.

Specific aims of LCI include the exchange of information on the conditions for successful application of LCA and life cycle thinking, as well as about the interface between LCA and other tools. Most important, in light of the obstacles identified above, the LCI aims to provide guidance on the use of LCA data and methods.

- ***Design for Environment.*** Design for Environment (DfE) is the systematic integration of environmental considerations into product and process design. DfE is an umbrella term for a variety of engineering and other techniques. DfE utilises a LCA as the information base from which to develop cost-effective design innovations which reduce resource use, pollution, and/or waste. The overarching objective of DfE is to design products and services that minimise environmental impact throughout the product life cycle. In the DfE process, designers may look at the source, composition, and toxicity of raw materials; the energy and resources required to manufacture the product; and how the product can be recycled or reused at the end of its life. Balanced with other product considerations — such as quality, price, producibility, and functionality— eco-designed (or DfE) products are then sold as environmentally and economically viable alternatives to traditional products. The *ISO 14062* standard describes concepts and current practices relating to the integration of environmental aspects into product design and development.

4. Exercising precaution

[Enterprises should]:

Consistent with the scientific and technical understanding of the risks, where there are threats of serious damage to the environment, taking also into account human health and safety, not use the lack of full scientific certainty as a reason for postponing cost-effective measures to prevent or minimise such damage.

Governments and enterprises have begun to change the way in which they look at environmental risk. It is increasingly perceived that it is not enough to repair environmental damage, but rather that environmental damage, especially when it is irreversible, should be prevented. While governments are ultimately responsible for the health and welfare of their citizens and the environment, they have increasingly acted to assign a larger burden of liability for specific acts of harm to the private sector. This is in part an outgrowth of perception that private gains should not be accomplished at the cost of public interest, and in part a recognition that government cannot compensate for specific acts of harm.

The basic premise of the OECD Guidelines for Multinational Enterprises is that enterprises should act as soon as possible, and in a proactive way, to avoid, for instance, serious or irreversible environmental damages resulting from their activities. The use of precaution can be described as anticipating

environmental harm by taking measures, as appropriate, to avoid it, or by choosing the least environmentally harmful activity. This notion of precaution is based upon the assumption that in certain cases, scientific certainty, to the extent it is obtainable with regard to environmental issues, may be achieved too late to provide effective responses to environmental threats.

For enterprises, precaution is in part a function of how they operate in an everyday setting, and in part how they implement national regulatory requirements. Enterprises may need to exercise precaution in situations where two factors concur: the existence of a *risk*; i.e. where potentially hazardous effects deriving from an action, product or process have been identified, and *lack of scientific certainty* on the effects of such action, product or process on human health and the environment, or on the extent of the potential damage.

Tools and approaches

Risk analysis plays an important role in the decision-making process, particularly, in situations of scientific uncertainty, and is an integral part of many companies' business. There is as yet no single internationally agreed operational standard for *environmental* risk analysis, although many international agreements and processes are based on it. Risk analysis can be defined as a process consisting of three components: risk assessment, risk management and risk communication.

Risk assessment. Environmental risk assessment consists in identifying and evaluating each step of a trajectory – from the origins of a hazard to its final consequences for a given system. It is an essential element for deciding whether and how risk needs to be avoided, reduced or accepted. Before a risk can be assessed it must be characterised. Risk characterisation consists of the qualitative and, wherever possible, quantitative determination, including attendant uncertainties, of the probability of occurrence of known and potential adverse effects of an agent, product, process or situation under defined exposure conditions. Among the main tools for risk assessment are *environmental impact assessment; life-cycle assessment (LCA), and research and peer review.*

Risk management. Risk management is a process that organises options to deal with a risk. Experts see the risk management process primarily as an effort to provide an integrated approach to solving health and environmental problems, ensure that the risk management and economic decisions rely on the best scientific evidence and are made in the context of management alternatives, focus on collaboration, communication and negotiation among relevant stakeholders, produce decisions more likely to be successful than those made without early stakeholder involvement, and accommodate critical information that may emerge at any time. A variety of tools exist for risk management. These include *environmental management systems, environmental audits and environmental standards.*

Risk communication. One important concern for companies undertaking risk analysis is how that process will be publicly perceived. Practice shows that inadequate risk communication can have severe impacts on the sales of a product and even cause its retrieval from the market. Risk communication tools range from *hands-on work in relevant communities to corporate sustainability reporting, and include annual reports and labelling.*

5. Emergency prevention, preparedness and response

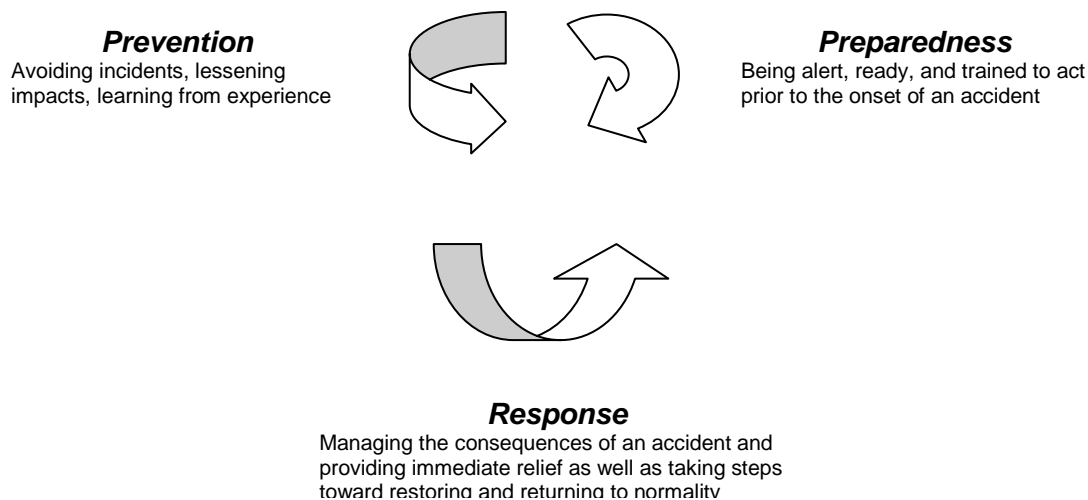
[Enterprises should]:

“Maintain contingency plans for preventing, mitigating, and controlling serious environmental and health damage from their operations, including accidents and emergencies; and mechanisms for immediate reporting to the competent authorities”.

Preventing, mitigating and controlling environmental and health damage related to a company’s operations is at the heart of sound environmental management. The OECD Guidelines for Multinational Enterprises address what is commonly considered as the three core components of emergency management:

- *Prevention.* The minimisation of the likelihood that an accident will occur.
- *Preparedness and mitigation.* The mitigation of the consequences of accidents through emergency planning, land-use planning, and risk communication.
- *Response.* Limiting adverse consequences to health, environment, and property in the event of an accident. The response includes actions needed to learn from the experiences of accidents and other unexpected events (follow-up) in order to reduce future incidents (prevention).

Figure 3. Emergency Management Cycle



Traditionally, most of the responsibility in the area of emergency response fell to experts in government and industry. In the past years, however, the role of communities has become a more prominent component in the emergency planning and response process. As the case for corporate transparency gains ground, corporate environmental, health, and safety reports are increasingly including information about community involvement in environmental and emergency management. The involvement of communities and other stakeholders in accident prevention and response is likely to increase in the future.

Tools and approaches

Standardised approaches

The *ISO 14001* standard specifies core requirements for establishing an environmental management system geared toward continuous improvement. Under the standard, enterprises have to establish and maintain procedures to identify potential for, and respond to accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated with them. The standard also requires that companies review and revise, where necessary, their emergency preparedness and response procedures, in particular following accidents or emergency situations, and periodically test such procedures where practicable. ISO 14001 also suggests that companies implement a procedure for receiving, documenting and responding to information and requests from interested parties, including communication with public authorities regarding emergency planning.

In case of an emergency or accident, workers are often the first exposed. One of the objectives of contingency plans is therefore to ensure worker's health and safety in such situations. Environmental Management systems such as ISO 14001 provide general guidance on measures to take in cases of emergency or accidents. These can compliment measures in OHS management tools, such as the *ILO Guidelines on occupational safety and health management systems ILO-OSH 2001* and *OHSAS 18001*.

Voluntary codes of conduct and other guidelines

The International Chamber of Commerce (ICC) has included emergency preparedness and response among the 16 core principles of its Business Charter on Sustainable Development. The CERES (Coalition for Environmentally Responsible Enterprises) Principles require signatories of the Charter to strive to minimise the risks to employees and communities in which they operate "through safe technologies, facilities, and operating procedures, and by being prepared for emergencies." Additionally, they are to inform in a timely manner anyone who may be affected by the conditions caused by [our] company that might endanger health, safety, or the environment and commit to not taking any action against employees for reporting dangerous incidents or conditions to management or to appropriate authorities.

Sector-specific codes and guidelines

Among sector specific guidelines are those established under the *OECD Guiding Principles for Chemical Accident, Prevention, Preparedness*. Other examples include *Responsible Care*, founded by the US chemicals industry, which offers several codes linked to emergency management, and the *Safety and Quality Assessment System*, a program of the European Chemical Industry Council aimed at safer transport of chemicals.

6. Continuous improvements in environmental performance

[Enterprises should]

Continually seek to improve corporate environmental performance, by encouraging, where appropriate, such activities as:

1. Adoption of technologies and operating procedures in all parts of the enterprise that reflect standards concerning environmental performance in the best performing part of the enterprise;
2. Development and provision of products or services that have no undue environmental impacts; are safe in their intended use; are efficient in their consumption of energy and natural resources; can be reused, recycled, or disposed of safely;
3. Promoting higher levels of awareness among customers of the environmental implications of using the products and services of the enterprise; and
4. Research on ways of improving the environmental performance of the enterprise over the longer term.

Multinational enterprises are engaged in a permanent and continuous process of adapting themselves to a changing socio-economic environment. This applies to all aspects of corporate activities, including enterprises' environmental management tools. For instance, in a departure from previous "end-of-pipe" approaches to limiting pollution, companies have been implementing more efficient, preventive environmental techniques affecting the different stages of their value chains. Improved brand and corporate reputation, risk reduction, improved access to finance, and value creation (i.e. development of "green products" for which a price premium can be obtained) are among the key considerations that motivate business in their efforts to improve environmental performance.

Tools and approaches

The OECD Guidelines for Multinational Enterprises address four categories of environmental improvements: (a) process-related improvements, (b) product-related improvements; (c) consumer awareness; and (d) research and development. A summary of available tools is presented below, most of which figure in different contexts in other parts of the present report:

Tools for process-related improvements:

- *Environmental management systems* are one, if not the main tool, to achieve process-related improvements. The commitment to continuous improvement of environmental performance is the main *raison d'être* of any mainstream EMS
- *Environmental metrics* is another important approach that is increasingly used by companies. Recently, this idea has been applied in the environmental domain: companies are unlikely to achieve environmental improvements if they lack the data about their performance in the first place. Companies also face the expectation from financial and non-financial stakeholders that they quantify their environmental performance – and inform the public. Useful tools for measuring environmental performance are indicators, benchmarking, and environmental management accounting (EMA). These tools are described in more detail in section 1.

Tools for product-and service-related improvements:

- Products:
 - *Life-cycle assessment* (see section 3)
 - *Design for the environment* (or Eco-Design; see section 3)
 - *Product stewardship* calls on those in the product life cycle – manufacturers, retailers, users, and disposers – to share responsibility for reducing the environmental impacts of products. Product stewardship usually requires manufacturer-centered action covered under “Extended Producer Responsibility” laws gaining prominence in several European countries, Canada, and Asia. In the United States, however, “*Extended Product Responsibility*” is the concept that is taking hold.
 - *Take-back schemes* are a concrete example of product stewardship. Companies can take products back for recycling or remanufacturing or establishing themselves as a market for secondary materials collected by others. Through take-back schemes companies assume responsibility for their products by implementing developing recollection, recycling, reusing, and remanufacturing programs. In other cases, companies may be in charge of safe disposal. Take-back schemes can bring economic benefits, since companies can save money through increases in efficiency and recovery of previously wasted materials.
- Services:
 - *ISO 14001* (see section 1)
 - *Collaborative partnerships*: Another tool for improving the environmental performance of services is through collaborative partnerships i.e., developing partnerships with other organisations such as environmental groups, the government and other companies. The United Parcel Service of America (UPS), for example, developed a partnership with the Alliance for Environmental Innovation in the United States that resulted in the creation of next-day-air-reusable envelopes.

Consumer awareness tools:

- *Product-information tools*: One tool used by companies to raise consumer awareness are *eco-labels* (see section 2 for a more detailed description of eco-labelling). There is evidence that if companies inform consumers about environmental performance, the latter may take this information into account. Otherwise, only a minority will seek this information. In order to increase the information available for consumers companies have used tools to inform potential buyers about the environmental attributes of the product through eco-labels.
- *Company-information tools*: Another tool for increasing awareness among potential consumers is to provide easy-to access and comparable information about the environmental conduct of the companies, e.g., through *public databases*. For example, Deloitte & Touche-Denmark together with the Danish Consumer Information Center (DCI) – an organisation that informs consumers about issues relating to products and services- as well as various partner enterprises, have developed an ethical database that provides consumers with electronic information not only about a company’s products and services but also about their actions on corporate responsibility – including environmental behaviour.

Research and development (R&D):

- *Greening facilities and processes*, is one kind of improvement that requires research and development. For instance, Seiko Epson from Japan, have developed the concept of compact manufacturing which allows the company to increase output without generating the need to build new facilities.
- *Development of new environmental management tools*: Another type of research activity for improving future environmental performance deals with *innovation in environmental management*. It addresses issues such as the tools a company will need to have in place in the near future to continuously improve its environmental performance; and missing elements from the present toolkit.

7. Environmental education and training

[*Enterprises should*]

Provide adequate education and training to employees in environmental health and safety matters, including the handling of hazardous materials and the prevention of environmental accidents, as well as more general environmental management areas, such as environmental impact assessment procedures, public relations and environmental technologies.

The expectation that enterprises will provide environmentally-related training relates to two general objectives, namely “environmental health and safety” and “environmental management systems”. These themes are in practice closely related, but enterprises may choose to approach them in different ways. First, in most OECD countries training employees to prevent and handle emergencies is a mandatory requirement. Under environmental and occupational health and safety regulations in most countries, employers must train their staff with the purpose of protecting their health and safety, as well as that of the local community. Second, training activities that relate to “more general environmental management areas” are mostly voluntary and focus on achieving both internal environmental goals and compliance with environmental legislation.

Tools and approaches

Training workers to prevent and handle emergencies is, as mentioned above, usually mandatory. Mandatory regulation in some cases specifies the *technical requirements* (e.g., safety issues) to be addressed in a training course but do not specify how to design or develop, let alone deliver or evaluate training. There are also cases where companies decide to provide environmental education and training on a voluntary basis. This is particularly relevant in the context of MNE operations in developing countries, where mandatory requirements may be less stringent.

Training also plays an important role in the implementation of environmental management systems, namely by raising staff awareness about conformance with EMS requirements, the environmental impacts of their activities, and their roles and responsibilities in the successful functioning of the EMS.

In order to comply with regulation or their voluntary commitments, companies can implement OHS management systems that are either tailor-made or follow off-the-shelf standards. Several standards specify the requirements for an occupational health and safety management system. Two that are commonly used are ILO-OSH 2001 and OHSAS 18001. These standards aim to assist companies in the implementation of occupational health and safety practices.

Another international standard, ISO 14004, offers guidance for companies that want to establish an EMS that conforms with the requirements of ISO 14001. ISO 14004 suggests areas of training that the company might provide such as raising awareness of the strategic importance of environmental management and, of environmental issues more generally, as well as skills enhancement, and training to achieve compliance with environmental regulation.

Elements of a training programme

The characteristics of training programs depend on the characteristics and goals of the EMS they may be part of. Training programmes typically have the following elements: (i) identification of employee training needs; (ii) development of a training plan to address defined needs; (iii) verification of conformance of training programme to regulatory or organisational requirements; (iv) training of target employee groups; (v) documentation of training received; and (vi) evaluation of training received.

Success factors for effective environmental training

The Global Environmental Management Initiative (GEMI) proposes three success factors for effective environmental training:

- Training must be designed for a *specific audience*. In general, the audience should be as homogenous as possible hence identifying their needs for each group is a central issue. The training should be tailored to match the audience's skills and background (i.e., education, job assignments, position levels, experience).
- Trainers must establish *clear objectives* prior to the start of the training that would allow them to have measurable results. Training objective usually need to be stated in terms of how the trainee's behaviour will be affected, along lines such as "what should the participants be able to accomplish at the end of the training?"
- Training should be tailored according to the *corporate culture* (which can also vary within the same company). Multinational enterprises also need to identify key cultural aspects of the country where the training is conducted.

Categories of potential trainees

The following core categories of potential trainees within the company are suggested:

1. *Environmental managers and specialists*. Employees that have a direct responsibility for on-site environmental management such as recycling, waste management, pollution prevention, compliance with environmental regulation, and EMS more generally.
2. *Directors and senior managers*. This group includes managing directors, financial officers, and marketing managers. While they do not play a direct role in implementing the EMS, some of them find that environmental issues impacts play a role in strategy (e.g., harming or enhancing reputation) and liability.
3. *General staff*. This group includes employees that are not in the categories above. They may or may not be aware of the company's environmental goals and programs.

Training activities can also be offered to business partners such as suppliers, sub-contractors, and contractors. Training can facilitate environmental improvement throughout the supply chain by helping suppliers gain knowledge and skills in the area of environmental management. Where it is not feasible for

a company to conduct the training *per se*, an alternative strategy could be to follow ISO 14001's recommendation that companies should "require that contractors working on its behalf are able to demonstrate that their employees have the requisite training".

8. Contributing to the development of environmental policy

[*Enterprises should*]

Contribute to the development of environmentally meaningful and economically efficient public policy, for example, by means of partnerships or initiatives that will enhance environmental awareness and protection.

Partnerships between different stakeholders have become an integral part of the policy-making process and contribute to developing sound public policy from both economic and environmental standpoints. The involvement of all stakeholders in policy discussions reduces the risk that some problems go unanticipated by regulators. By involving the business sector, policy makers and regulators are better able to design policies to reflect business realities. This may result in better compliance. Conversely, policy changes without consultations with enterprises may lead to unsatisfactory results insofar as companies may have little scope and incentive to go beyond minimum requirements. Finally, involving enterprises in policy discussions also allows policy makers to apprise themselves of new technologies, and the feasibility of the changes that may be needed to achieve compliance.

Considering the widespread ambit of environmental regulations and policies, business contribution in the latter is likely to impact on many other aspects of sound environmental management addressed by the Guidelines. Until a few decades ago, policy makers in many countries showed little interest in gauging industry positions. Newer trends have opened up this process and have moved governments to consider how best to integrate business and other stakeholders into the policy-making process. Most OECD Governments are Parties to the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Aarhus Convention), which provides for the establishment of public participation mechanisms in the preparation of plans and programmes relating to the environment. The 2002 World Summit on Sustainable Development (WSSD), identified a number of multi-actor, voluntary agreements, they would contribute towards achieving sustainable development. For these so-called "Type II Partnership Initiatives", like-minded governments, stakeholders, and inter-governmental organisations have agreed to tackle specific issues together.

Tools and approaches

References to partnerships in business codes of conduct: Enterprise codes of conduct may call for a partnership role with governments, as well as other stakeholders in civil society. There are an increasing number of enterprises that have listed this activity in their corporate environmental policy.

Participation in government consultation processes: Many governments offer an opportunity for the private sector to comment on legislative and regulatory proposals. Seizing on this, enterprises can provide constructive criticism so that new policy or legal measures will be practicable and cognizant of business realities. Governments have also designed public comment and political dialogue mechanisms to solicit feedback on comprehensive proposals.

National committees on sustainable development. These bodies are created or sanctioned by national governments, generally drawing together members of government, business and civil society to define sustainable development within a particular national context. Many of these Committees are also

responsible for implementing national commitments made at the 1992 Earth Summit in Rio de Janeiro, and at the 2002 WSSD in Johannesburg.

Self-regulation and market-based instruments: In addition to legislation and government regulation, governments have been using other instruments to improve the environmental performance of enterprises. Business and industry leaders have been actively engaged in changing the “rules of the game” for policy based on alternatives to the command and control method of regulation. These tools include *covenants*, agreed to by governments and businesses, under which the latter are given an opportunity to meet general government environmental objectives through a scheme devised by business.

Partnerships with government and local authorities: The WSSD Plan of Implementation recommends to “enhance partnerships between governmental and non-governmental actors, ... for the achievement of sustainable development at all levels” Some enterprises have taken the initiative to enter into partnerships with local authorities in the policy making sphere.

Cooperative approaches among enterprises: One method of establishing dialogue with governments is through *policy advocacy*. Other tools include *dialogue through industry associations*. Dialogue with industry associations sharing a common viewpoint can be more efficient for governments who may lack the resources to liaise with individual enterprises. Moreover, it lends more legitimacy to their concerns in the policy making process.

International processes: Enterprises that have operations in multiple jurisdictions, perceive the importance of attending international meetings since the results can impact regulatory systems in these jurisdictions. A number of international environmental treaty and policy development processes allow for participation of civil society representatives in meetings. In addition, independent organisations have been set up that facilitate government-business dialogue at the international level, e.g., the Business and Industry Advisory Committee to the OECD (BIAC), which has been specifically set up to engage in dialogue with OECD governments, and the International Chamber of Commerce (ICC).