MANAGING CORPORATE ENVIRONMENTAL PERFORMANCE: A MULTINATIONAL PERSPECTIVE

by

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Managing Corporate Environmental Performance: a Multinational Perspective

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Managing Corporate Environmental Performance: a Multinational Perspective

Abstract
In the environmental arena, multinational companies are faced with important strategic decisions that will set a direction for their corporate environmental performance. As part of their environmental strategy, they must decide whether they will adopt a global company standard or otherwise adapt their standard to meet local requirements. These are important issues that will affect the company's long term financial health. Managers deciding upon a strategy need an appropriate framework to evaluate and weight the long term impacts of their decisions. The article highlights some of the strategic issues surrounding environmental management for multinational companies and proposes key elements for implementing an environmental strategy worldwide. The ISO 14001 standard is also presented as a framework for improved corporate environmental management in a multinational perspective.

Key words
Corporate environmental performance; environmental standards; global environmental standards; multinational environmental strategy.
Managing Corporate Environmental Performance: a Multinational Perspective

Introduction

As companies have been increasing their expansion around the world and becoming more multinational or global, they have been confronting additional unanticipated organizational difficulties. Though management increasingly proposes that companies should “think global but act local”, implementing such a system is fraught with difficulties. Companies want to think globally and develop corporate strategies that are consistent throughout the countries and business units through which they operate. Concurrently, they want to act locally and have a local presence to attract and maintain business and adapt corporate practices to country cultures and competitive conditions. This is not an easy task under any circumstances. In the environmental arena, with the rising cost associated with environmental liabilities and the increased complexity and uncertainty of environmental issues, it poses particular difficulties. These organizations must struggle with the balance between one worldwide corporate environmental standard for management systems and performance on the one hand, and widely different local government regulations on the other.

Wherever government regulations or industry standards are of particular importance, companies must establish policies and practices that meet local standards, meet international standards of various community organizations, and also minimize corporate costs. These issues of whether to establish worldwide corporate standards or local standards have been of significant concern in areas such as labor practices and environmental management and exist in many industries. For example company codes of conduct are widely and rapidly being established in the apparel industry (Cottrill, 1996). But, what are the proper standards? Should children be hired in countries where their parents encourage
this employment to provide needed money for basic human needs? What is the proper wage rate to pay in underdeveloped countries where average wages are just a small fraction of North American and European wages? Issues like this have caused significant dismay to Nike, Guess, and many other widely recognizable names.

Even if companies develop clear codes of conduct and do enforce these codes among their factories worldwide, how can they enforce them on suppliers who produce their products? Often these companies only represent a small fraction of any particular supplier’s business and providing adequate incentives to change common country practices is difficult. But, staying off of the front pages of major newspapers, eluding the television news magazines, and avoiding consumer boycotts are important to the financial health of these companies in addition to maintaining employee morale and resisting other negative market impacts. The question is how to balance these competing pressures. Many companies would like to develop global standards, but country cultures and competitive pressures often make that difficult. The problems related to the environment are similar. Increasingly, corporate planners are integrating environmental issues into their decision-making process, especially with regard to supplier selection and evaluation (Dobilas and Macpherson, 1996).

Making the decision as to whether to develop global environmental standards or whether local standards are more appropriate is a complex task. But organizations need to address these issues within a proper framework. This article describes some of the strategic issues surrounding environmental management for multinational companies (MNCs). It highlights the specific nature and challenges of these organizations and the trade-offs associated with different environmental strategies. Its purpose is to provide guidance to managers as they choose, design and implement their environmental strategy. Further, with the rapidly increasing costs associated with corporate
environmental impacts, there has been a growing interest among the business community in the development and implementation of sound, proactive environmental strategies. Leading organizations have learned over time, that only by systematizing and integrating environmental protection into overall management practices can they achieve affordable, consistent compliance with internal and external requirements. Thus, a strong Environmental Management System (EMS) is essential to drive improved performance and to help companies systematically identify and appropriately manage their environmental obligations and risk. The International Standards Organization has introduced a set of standards that aid companies in developing and implementing such an EMS: the ISO 14000 series. Given the positive worldwide reaction, organizations are increasingly examining the ISO 14001 standard as a possible model for their EMS. The ISO 14000 framework may provide a single standard system that can be implemented and recognized throughout the world. As they address environmental issues, multinational companies should examine the ISO standard as a possible component of their environmental strategy. This article presents the ISO standard as a possible framework for implementing environmental management from a multinational perspective.

**Strategic Environmental Issues for Multinational Corporations**

MNCs are faced with important organizational strategic decisions. They must set a direction towards one of two basic strategies: multilocal or global (Johansson and Yip, 1994). Through a multilocal strategy MNCs aim to exploit local competitive advantages for increased corporate revenues and profits. Competitive advantages result from exploiting market differences both in terms of availability of inputs and consumer preferences. Products offered in each country are tailored to local needs and preferences. Pursuing a multilocal strategy often means that all or most of the value chain is reproduced in every country (Yip, 1989).
MNCs focusing on a global integration strategy will seek to gain competitive advantages such as scale economies from increased production volume and scope economies from sharing assets and costs across products, markets and businesses. Thus, these companies will likely offer the same product or use the same brand name across different countries. The corporate value chain is broken up globally so each activity is conducted in the country that offers the least cost for a particular factor.

These strategies are at opposing ends of a continuum. Multinational companies are usually not deciding on a choice between complete standardization or complete customization but rather on degrees of standardization (Jain, 1989). Further, organizations increasingly wish to reap the benefits associated with both strategies as they try to think global while being responsive to local needs. Companies may also choose to pursue different types of strategies for different products or subsidiaries.

In terms of their environmental strategy, MNCs are faced with a similar fundamental decision: Should they implement a global integrative environmental standard or adapt their environmental standard locally? If subsidiaries or facilities are operating in countries with lax environmental regulations, whose standards should prevail? Many companies, including IBM and Allied Signal, have committed themselves to global company standards. For example, Hewlett-Packard redesigned packaging for its office-machine to meet stringent German requirements and used it to set the standard for the packaging of its products worldwide. But, there may be financial risks in developing an unnecessarily constraining environmental policy in response to standardized criteria when it is not really required (Rondinelli and Vastag, 1996).
Recently we were addressing the worldwide senior managers of a broadly diversified, European based company with operations in over one-hundred countries and annual environmental expenditures in the hundreds of millions of U.S. dollars per year. In presenting the dilemma of adopting global versus local environmental standards, the reaction was vehement from many country managers. A few argued that the global standards were important on moral grounds, that minimal environmental standards should be consistent across the corporation, that environmental regulations would continue to increase, and that being proactive would prove to be less costly in the long term. But, many of the country managers argued that for competitive reasons, they must be able to establish company environmental standards at the lowest legal limit in the countries in which they operate or competitors will continually be able to undercut and underprice them on competitive bids.

Many multinational companies anticipate that environmental standards will eventually become standardized worldwide. This expectation may be among the reasons that multinational corporations usually go beyond compliance with local environmental regulations if these are below home standards and the best available technology. These multinationals are betting that raising environmental standards for factories in developing countries will be good for business as well as the environment. But as Leslie Carothers (Vice-President of Environment, Health, and Safety at United Technologies Corporation) observes: “How does UTC, or any other company, explain to its non-domestic factory and business managers why they should spend time and money to achieve environmental protection beyond what their country demands?” (Carothers, 1997) Her answers include the concern for increasing global sensitivity to environmental issues which has caused and will continue to cause an increase in environmental regulations worldwide. In addition, community pressure and environmental enforcement may be levied first at some of the major multinational companies with high visibility. Finally, current and future reputation is important for
companies trying to act locally and sell to local governments and major local companies. Proactive environmental strategies often bring local praise and are helpful in mitigating legal, regulatory, and community concerns.

Deciding upon a corporate environmental strategy is a complex undertaking and many factors must be considered as companies are deciding upon the appropriate environmental strategy for their organization. These are important issues that will affect the company's long term financial health. Managers deciding upon a strategy need an appropriate framework to evaluate and weight the long term impacts of their decisions. A possible framework that can be used as a tool to identify and organize relevant factors underlying the decision-making process is proposed below (see Figure 1). It displays both external and internal factors that may drive decisions towards global environmental standards or local environmental standards as managers evaluate alternative corporate environmental strategies. These conducive factors to both strategies are presented in Table 1 and Table 2. The framework also presents some of the factors managers need to consider as they implement their corporate environmental strategy regardless of whether they adopt global integrative environmental standards or local adaptive ones.
Source: Adapted from Yip, 1989

Figure 1 Framework to Evaluate Alternative Corporate Environmental Strategies

Internal Factors

- Corporate culture

The corporate culture that headquarters wants to preserve or create is an important factor as companies are developing a corporate environmental strategy. Proper alignment must exist between the promoted corporate culture and the chosen corporate environmental strategy. The type of relationship between headquarters and its subsidiaries is different whether MNCs will adopt a global environmental standard or local ones. As headquarters may wish to preserve or develop a high level of autonomy for its subsidiaries and respect their understanding of local factors surrounding environmental issues, it may decide to also grant autonomy where environmental initiatives are concerned.
and let its subsidiaries decide locally on their environmental standards. Further, when an MNC chooses a global environmental standard it will be imposing a standard on its business units that may well be difficult to justify from a short-term economic perspective and it may need to consider this in the evaluation of business unit performance.

- Competitive positioning

As they decide upon an environmental strategy, managers need to evaluate how it will affect their long-term competitive positioning. Competitive priorities such as cost and quality, can be endangered as a result of environmental pressures. Further, the pursuit of a particular priority may affect the type of environmental standard it will adopt. For example, in the case of cost leadership, cost-driven firms may be less likely to invest in new, cleaner technologies. Some will have already invested in highly specialized and expensive production equipment and may be unwilling to re-invest in newer technologies to raise local environmental standards to an unnecessary and constraining global corporate level. Companies pursuing a differentiation strategy may on the other hand wish to raise environmental standards to a global corporate level as environmental products can be perceived as products of higher quality (Epstein and Roy, 1997a). Raising local standards to a global environmental standard often results in both improved corporate environmental performance and improved worldwide image whereas meeting the lowest legal limit in a country may result in negative market reactions.

- Environmental performance of business units and facilities

The current levels of environmental performance of business units and facilities are relevant as MNCs decide on a corporate environmental strategy. One factor that affects corporate environmental performance is the age of manufacturing
facilities. Most multinational companies suggest that their new facilities, wherever located, use the latest technology in production and environmental controls and are designed to reduce the production of waste. Problems do remain at older facilities where replacement investments would be needed to raise the level of environmental performance. In those cases, MNCs often delay investments in new technology and adopt local environmental standards. The optimal timing of the adoption of any new technology is complex and in the specific case of environmental technologies, the level of uncertainty is often high.

The environmental performance is often related to the type of product or service offered. The environmental aspects and impacts of these products and services will affect the company's environmental risk which is the probability of causing environmental damage and the seriousness of that damage. Rondinelli and Vastag (1996) propose two types of environmental risks: endogenous environmental risks and exogenous environmental risks. The first type of risks relates to the internal operations of the company (materials, technologies, processes, etc.) whereas exogenous environmental risks are determined by the company's external world location. In the case of a high level of environmental risk, a global environmental standard may provide more control over environmental risks and corporate environmental performance than adopting local environmental standards.
Table 1: Determinants of Corporate Environmental Strategy - Internal Factors

<table>
<thead>
<tr>
<th>Internal factors</th>
<th>Conducive Factors for Alternative Strategy</th>
<th>Global Integrative Environmental Standard</th>
<th>Local Adaptive Environmental Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate culture</td>
<td>Low level of autonomy of subsidiaries</td>
<td>High level of autonomy of subsidiaries</td>
<td></td>
</tr>
<tr>
<td>Competitive positioning</td>
<td>Differentiation strategy</td>
<td>Cost strategy</td>
<td></td>
</tr>
<tr>
<td>Environmental performance</td>
<td>High environmental risks of operations; new facilities</td>
<td>Low environmental risks of operations; older facilities</td>
<td></td>
</tr>
</tbody>
</table>

External Factors

- Environmental regulations

Environmental regulations vary widely from one location to another. Local regulatory requirements include municipal, state or national environmental legislation. Establishing one global standard may be difficult when companies must face widely different regulations that often seem to be incompatible or unjustified. Further, as a result of different regulations, strategies may be difficult to implement globally. For example, the German Packaging Ordinance of 1993 requires companies to accept returned packaging from customers without charge. As a result, companies like Alpha Metals GmbH were forced to re-evaluate their packaging strategy in light of this new regulation (Weiss, 1997). Alpha Metals sold solder paste (which contains the toxic material lead) in a glass jar and evaluated options to deal with the increased cost associated with the Packaging Ordinance. Alpha Metals initially decided to clean and reuse the jars rather than dispose of them in expensive landfill. The firm then created a new container made from tin which could be used as raw material when it was returned thereby both being more environmentally friendly and reducing cost. Outside Germany, where the company is not obliged to take back the packaging.
from customers, Alpha Metals does not use the tin cans. To make it both
economically feasible and environmentally friendly, business units switching to
tin cans would have to first persuade customers to send back the containers. In
many countries, the cost of disposal is lower than the cost of shipping back the
tin containers to be recycled by the manufacturer. Thus, customers outside
Germany do not have an incentive to return the containers. Using the tin
containers would be more expensive and environmentally worse since they
contain lead. In Germany, the law requiring proper disposal of lead combined
with the law allowing firms to return packaging to the manufacturer provides the
incentives for customers to return packaging and for manufacturers to find cost
effective environmentally efficient solutions that reflect these laws. Companies
anticipating that environmental standards will eventually become standardized
worldwide may wish to go beyond compliance with local requirements and incur
additional short term costs to establish an environmental leadership in these
locations even though not currently required through policies such as product
take back.

- Market factors

Market factors have always been an important force in the decision of whether to
adopt a global strategy or a multilocal one. Global media and electronic
information have increasingly created conditions for a global strategy as the
worldwide market has become homogenized in terms of customer needs and
preferences. Companies may now offer highly standardized products and
services to their global customers. But widely different environmental pressures
from political institutions, customers and community activists have created
difficulties for MNCs seeking economies of scale and scope through
standardized products and services. Meeting widely different environmental
pressures through a unique product may prove to be a complex undertaking. In
that case, MNCs may choose to adopt local environmental standards that are more responsive to local pressures.

Further, strategies pursued by competitors will likely affect the type of environmental standard chosen by companies. Competitive pressures from companies operating at the lowest environmental legal limit make it difficult to raise the environmental standards to a higher level. Long term benefits of overcompliance may not outweigh short term profitability goals. But many companies are choosing to adopt higher global standards and are creating pressures for others to do likewise. Further, though the short term costs of a global strategy might be higher, "overcompliance" might provide significant long term benefits including a better understanding and control over costs, improved capital investments decisions, increased revenues and an improved image.

- **Geographic factors**

Geographic conditions prevailing in a particular country may justify adapting environmental standards locally in light of these conditions. Some chemicals react differently in hot and cold climates. For example, the soil fungicide EDB is banned for use in the United States but in hot climates, that chemical becomes harmless (Donaldson, 1996). Exogenous environmental risks are determined by the company's external world location and the ecological characteristics (biodiversity, winds, topography) of the physical environment in which it operates. It also includes factors such as locational demographics, education, and infrastructures. Where these exogenous environmental risks are homogenous, a corporate global environmental standard is a logical choice. But where these factors vary widely from one location to another, local corporate environmental standards that reflect these differences may be more appropriate.
### Table 2: Determinants of Corporate Environmental Strategy - External Factors

<table>
<thead>
<tr>
<th>External Factors</th>
<th>Conducive Factors for Alternative Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Global Integrative Environmental Standard</strong></td>
</tr>
<tr>
<td>Environmental regulation</td>
<td>Homogeneous regulations; anticipated standardized environmental regulation worldwide</td>
</tr>
<tr>
<td>Market factors</td>
<td>Standardized markets; environmental pressures from the industry</td>
</tr>
<tr>
<td>Geographic factors</td>
<td>Homogeneous geographic factors</td>
</tr>
</tbody>
</table>

### Costs and Benefits of Alternative Corporate Environmental Strategies

As described in the previous section, deciding upon a corporate environmental strategy involves important choices that will impact many strategic aspects of the organization. Managers are faced with numerous trade-offs and should recognize both the long term and short term costs and benefits of alternative environmental strategies. Benefits of a global environmental standard may include better control of corporate environmental risks and performance and establishing a positive worldwide environmental image. Further, as environmental regulations continue to increase, proactive companies that are developing an important expertise in environmental management are likely to have lower long term costs.

Benefits of local environmental standards include more operational flexibility to cope with fast changing and widely different environmental regulations and social attitudes. Competitive issues are particularly important as some companies must compete with companies with lower environmental standards. Some of these trade-offs may be mitigated with the proper mechanisms. The
following section presents some elements that will improve the implementation and maintenance of an environmental strategy. These elements apply both to a global integrative and local adaptive corporate environmental strategy.

Enablers for the Implementation of both Local and Global Corporate Environmental Strategies

Multinational companies implementing an environmental strategy face an important challenge and several aspects of the implementation process are key to its success. It is only with a well-established organizational support system and strong commitment from top management that an effective environmental strategy can be developed and implemented. That system must include effective measures of environmental performance that are reported internally for comprehensive management decisions including individual and business unit performance evaluations. Further, proper learning mechanisms must be implemented to promote knowledge sharing and enhance capabilities for improved environmental performance. Managers need to focus on the following 4 elements as they design and implement their strategy: (1) Organizational structure, (2) top management support, (3) performance evaluation, and (4) learning mechanisms.

- **Organization of the EH&S activities**

Organizational structures and managerial processes of MNCs are highly complex. Numerous decisions must be made regarding the appropriate flow of tasks, technology, information, values and human resources (Ghoshal, 1987). The organizational structure of the EH&S function is critical to its success and entails organizing many activities and resources spread in many locations. Based on the value-chain developed by Michael Porter, Figure 2 displays some of the activities that could be affected by an increase in environmental
sensitivity. Organizations must consider whether key resources and activities should be centralized or decentralized and decide upon a level of central control versus business unit autonomy. These decisions must be appropriately aligned with the chosen corporate environmental strategy.

During the 1980s, EH&S staffs, were often part of a central corporate staff and often reported to the general counsel. As professional EH&S staffs grew, it often was deemed necessary and desirable to push primary EH&S responsibility to the business units, and many companies reduced their central staff. Now many companies have recognized that a central staff along with EH&S personnel at the facilities are both necessary. Substantial advantages can be achieved at the business unit and facility level in product and process design, operational controls, and self-audits to control and reduce waste production and other environmental impacts (Epstein, 1996).
In the case of a global integrative environmental standard, a strong central EH&S staff is necessary to provide overall strategic planning, guidance, and coordination to the corporate environmental function and to the business units and facilities. For either global integrative and local adaptive environmental strategies, a central EH&S staff is critical to the internal audit function and to furnish overall direction for identifying, measuring, and reporting environmental impacts. It is essential for developing and applying consistent tools for costing, capital investments, and performance evaluation and for directing the environmental strategy integration throughout the organization. Examples of such tools include Life Cycle Analysis (LCA) and full environmental cost accounting.

• **Top management support**

In most companies, a major effort in identifying, measuring, and reporting environmental impacts does not begin until the CEO is committed to improved environmental management. Often, it is through an environmental mission statement or the development and articulation of a corporate environmental strategy that the CEO sets the tone at the top. It is then necessary to drive this commitment through the organization by implementing the various systems for product design, product costing, capital budgeting, information, and performance evaluation. This approach also provides consistency between the EH&S function and corporate goals and gives EH&S the internal credibility to promote the progress within divisions and facilities necessary for improved environmental management. Management support is particularly important when MNCs are implementing global environmental standards across their business units.

Many companies have established board-level committees to assume responsibility for corporate environmental performance. For example, Sun
Company’s executive level EH&S Committee chaired by the CEO meets regularly to review performance, policies, and strategies. In addition, the board of directors receives a monthly report on EH&S highlights. Rockwell has a board-level Environmental and Social Responsibility Committee composed of seven nonemployee directors. The executive vice president and deputy chairman has the lead responsibility for the company’s environmental programs. Reporting to him is the vice president of EH&S, who leads the team of EH&S professionals worldwide.

To ascertain ABB’s commitment to the environment, a corporate environmental affairs group was established in 1992 (Bangs and Williams, 1995). The environmental group includes an environmental advisory board which includes top level managers and corporate staff for environmental affairs. ABB’s Corporate Environmental Affairs team, based in Sweden, started working on a three-phase environmental management program in 1993 in preparation for EMS certification. Based on the reviews of the environmental aspects at 500 manufacturing facilities, ABB conducted EMS demonstration programs in various countries. The information obtained from the pilot programs was used to finalize ABB’s EMS.

- Performance evaluation

Numerous organizations develop environmental performance indexes to help them gauge the performance of strategic business units and company facilities. The development is sometimes prompted by external evaluators and sometimes part of a comprehensive performance evaluation system used to motivate improved environmental performance.

For MNCs implementing global integrative environmental standards, explicitly identifying corporate goals and setting specific targets will likely improve
corporate environmental performance and focus attention on areas of concern and priority. Environmental strategy is linked more powerfully to environmental performance through the development of performance measures. The environmental performance of corporations, business units, facilities, teams, managers, and all other employees must be measured and must be part of the way they are evaluated for success. In addition, incentives should be established to encourage excellence.

If environmental performance is truly important, evaluations and rewards should highlight that component for both global integrative and local adaptive environmental strategies. A company that sincerely wants to change its corporate culture through either type of strategies as well as establish and maintain a position of environmental leadership must make the environmental performance of individuals, facilities, and divisions an integral part of the performance evaluation. For example, BFI has developed an environmental multiplier that ties environmental performance directly to employee pay. Dow Chemical has developed an internal waste tax so that managers pay for waste disposal. Both systems have clear results in improving corporate environmental performance.

It is difficult to achieve maximum environmental performance and goals of sustainability or environmental excellence unless management sends a clear message that environmental performance is critical to the company. If employee performance is evaluated based on short term profit or revenue contributions, employees quickly recognize that trade-offs on the environment are acceptable and desired changes in corporate culture more difficult.

- Learning mechanisms
An important issue to consider while designing and implementing a corporate environmental strategy is organizational learning. The concept of learning organizations has achieved significant attention in recent years. The ability of an organization to "learn" faster than its competitors has become a new battleground for organizations as it holds the promise of sustainable competitive advantage (Senge, 1990). Organizations must develop new capabilities that will enable them to achieve competitive advantage from improved environmental performance and meet present and future challenges. The potential for learning that creates an appropriate environmental strategy is significant and should not be ignored by firms deciding upon a way to address environmental issues (Epstein and Roy, 1997b). Environmental programs designed only from a compliance perspective and that are reactive rather than proactive will not provide the same learning and capability building possibilities. Organizations must create and implement the proper learning mechanisms to ensure capability-building opportunities.

For MNCs, learning simultaneously through their dispersed worldwide operations, it is an even greater challenge (Bartlett and Ghoshal, 1987). To meet specific and various customer demands emerging in new locations, business units have created and developed diverse capabilities. MNCs must develop mechanisms to access and transfer this new source of knowledge for increased organizational learning across the organization.

Large, decentralized organizations are especially challenged by the common lack of an information system that collects all compliance data and eases the transference of technologies for environmental compliance across company and geographic boundaries. Under local adaptive environmental standards, certain business units operating in locations with stringent environmental regulations or environmentally sensitive customers may have developed products, processes
or managerial systems which integrate these new environmental requirements. But companies only are now developing systems for accumulating compliance data and information about the costs and benefits of environmental programs.

To achieve the benefits available from transferring technologies within large, decentralized organizations, information systems must be developed that collect information in a standard for ease of comparability. United Technologies, for example, has developed a data management system to monitor environmental performance at its business units and collect data in a standardized format. The system helps identify potential environmental problems and establishes criteria for developing and monitoring corporate environmental standards. The data management system of United Technologies is a critical component for collecting information from the business units and for giving them information for the continuous monitoring of EH&S performance. It provides the information for senior managers to make adjustments and include incentives to improve performance.

Continuous improvements and company-wide benefits cannot be achieved without adequate internal communications. Though many companies have developed innovative methods for reducing waste and redesigning products and processes to reduce environmental impacts, many of these companies have not shared the cost saving discoveries throughout their industries or even their business units. Communication and the transfer of technology within multinational companies are critical to reducing the environmental impacts of company activities on both the community and the company. Thus, the desire autonomy that usually flows with a local adaptive environmental strategy must be supplemented with learning mechanisms to transfer successful techniques and technologies across business units and facilities.
To promote knowledge transfer within MNCs, some companies have made use of « champions ». GE Plastics Europe has experimented with such a program for environmental management (Ramus, 1997). Individuals were selected to promote the EH&S agenda at each plant. They are appointed for two years and report directly to their plant manager. The Champions receive special environmental, health and safety training at the beginning of their appointment and then on an as needed basis. The goal of the network is to provide knowledge and share ideas about successful initiatives at different locations. Some plants need special help in order to learn how to meet and exceed their EH&S goals. In response, the EH&S site offices make EH&S specialists available to plants as on-site consultants for up to six months.

Implementing an Environmental Strategy from a Multinational Perspective - The ISO 14001 Standard

As they deal with environmental issues, managers need a rigorous and systematic method to integrate these aspects into the organization's decision-making process. EMS will provide the organization with appropriate data and tools to design, implement, and improve its environmental programs and performance. Further, the appropriate EMS framework should enable firms to reap the potential benefits associated with a proactive environmental strategy and allow for both a global integrative or a local adaptive environmental strategy.

Since its adoption, much has been written about the ISO 14001 standard. It has received a worldwide positive reaction and managers must evaluate whether or not this EMS could be an appropriate tool as they address environmental issues and must satisfy the expectations of a broad range of stakeholders such as investors, environmental groups, customers, and regulators. Further, in a multinational perspective, the ISO 14000 framework may provide a single standard system that can be implemented across business units and facilities.
Though individual country differences can still be recognized, the environmental management system and the supporting tools can be consistent across countries. The standard has been designed to be applied by any organization in any country, regardless of the organization's size, process, economic situation, and regulatory requirements. Thus, it may support either a local adaptive strategy as well as a global integration one.

ISO 14000 is actually a series of standards that covers six subjects: environmental management systems, environmental auditing, environmental performance evaluation, environmental labeling, life cycle assessment, and environmental aspects in product standards. All of the standards offer supporting tools and techniques as well as guidance through the implementation and maintenance process of the EMS. They are important for improving corporate environmental performance and reducing corporate costs, but the only standard to which corporations can be certified is ISO 14001.

The ISO 14001 standard describes the basic elements of an effective environmental management system (Cascio, 1996; Epstein and Roy, 1998). These elements are part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing, and maintaining the environmental policy (see Figure 3).
Its first component is the environmental policy. The standard requires that the policy include a commitment to continual improvement, prevention of pollution, and compliance with relevant environmental legislation and regulations and other requirements. The policy must be realistic, achievable, and tailored to the environmental aspects of the products, services, and activities of the organization. A procedure to identify environmental aspects must be established.

When MNCs choose local adaptive environmental standards they often allow their different business units or facilities to determine the level of environmental performance they wish to attain to respond to local requirements. At a minimum, they may choose to comply with relevant local regulations and other requirements. Given widely different regulations in different locations, such policies may translate very differently from one facility to another. Some substance, materials or processes may be banned in some locations and legal in others. In the case of global integrative environmental standards, business units
and facilities must comply with the corporate environmental standard. For business units operating in locations with lax environmental regulations it means overcompliance with local regulations.

The environmental policies should be based on the product's environmental aspects and impacts. These aspects and impacts may be identified through different techniques such as Life Cycle Analysis (LCA). The use of this technique is not a requirement for the ISO 14001 certification but is part of the ISO 14000 framework as a guideline document to provide relevant tools and techniques through the implementation and maintenance process of the EMS. LCA provides managers with a more complete picture of the environmental impacts linked to a particular product or process; beyond those evident in the manufacturing stage. "Life Cycle" refers to the scope of physical operations involved in producing, selling, using, and disposing of a product - from raw material extraction through final disposition. LCA is a technique involving comprehensive evaluation of the environmental impacts of a particular product, throughout its life cycle. These environmental impacts must then be reviewed in light of relevant legal or other requirements such as industry codes of practice. Managers who comprehend the full scope of a product's environmental consequences are then better equipped to make intelligent investment decisions in pollution prevention, rather than looking only at the end of the pipe for solutions (Epstein and Roy, 1997a). As a result, many companies have realized significant bottom-line benefits through the inclusion of life cycle principles in their decision-making process.

From a multinational perspective, the use of LCA across the entire organization as a way to identify environmental aspects and impacts provides corporate headquarters with constant information on its environmental impacts and performance. But for an LCA to be effective, the information format must be standardized so that the analysis produced locally is conducted according to a
single framework. For companies setting global integrative environmental standards, such information from local facilities is fundamental to decide upon a global standard and revised current standards in light of new information emerging from locations. Results from the LCA should be reviewed against the most stringent regulatory requirements across the organization and an environmental policy should be redefined in light of those findings. Companies setting local standards will compare LCA findings against local requirements. In both cases, an environmental policy, environmental objectives, targets and programs should be determined accordingly.

The entire EMS should be directed toward achieving the company's environmental policy. Objectives and target that translate the environmental policy and programs into measurable elements are designed to support these objectives and targets. In the case of the ISO 14001 standard, these programs must clearly define what will be done, and how and when it will be done. The manner in which facilities may choose to meet set objectives may differ widely from one facility to another, given firm-specific resources accessibility and advantages. Following the planning phase, actual environmental programs are introduced. The activities of this phase attempt to provide the organization with the proper capabilities and support mechanisms necessary to achieve its environmental programs, policies, objectives, and targets. The final two phases help the organization assess its situation in terms of the initial plan. The requirements found in the checking and corrective action and management review sections provide tools and procedures to ensure proper feedback and corrective capabilities to the EMS.

Four strategic enablers for improved corporate environmental performance were identified in the previous section: organizational structure, top management support, performance evaluation and learning mechanisms. In many respects, the ISO standard contributes to these enablers and may improve corporate
environmental performance for either a global integrative environmental strategy or a local adaptive one. The following section highlights some of these aspects and describes how the ISO standard contributes to improved environmental performance.

- **Organizational structure**

The ISO standard requires that roles, responsibility and authorities be clearly defined.

It requires that a specific management representative be appointed to ensure environmental management system requirements are established, implemented and maintained in accordance with the standard. The representative must also report on the performance of the environmental system to top management as a basis for improvement of the EMS. Management representatives may be used as champions and be identified as a possible link between business units. Top management should also ensure that appropriate resources are made available for the implementation and maintenance of the EMS. Thus, procedures to track benefits and costs are also necessary. These organizational requirements prompt managers to address these important issues in a systematic manner. MNCs implementing an environmental strategy across its business units should insure a certain level of coherence between the type of procedures used by its business units to track benefits and costs.

- **Top management support**

The ISO 14001 standard requires organizations to define an environmental policy which states its environmental values and commitments. The standard requires that the environmental policy be defined and supported by top management. Top management also has the responsibility to regularly review the EMS, to ensure its continuing suitability, adequacy and effectiveness.
• *Performance evaluation*

A common environmental language also facilitates performance evaluation. The ISO standard requires that objectives and targets be set and become a necessary part of performance evaluation. Through standardization, ISO 14001 also eases the environmental reporting process both internally and externally and facilitates performance evaluation. As previously discussed, environmental performance of business units, facilities and all employees should be measured if a company truly wants to commit to its environmental strategy.

Further, various pressures have caused companies to increase their environmental disclosures in corporate annual reports and the quantity and quality of disclosures in environmental reports. Corporate responses to increased stakeholder demands for information on corporate environmental performance vary widely. Some companies have issued environmental reports for various operating divisions or geographical areas, some for the entire corporation only, and some have included this discussion in corporate annual reports.

Though standardized external environmental reporting has yet to be established, numerous organizations have been working diligently to develop a format that would be acceptable to the producers of the reports and useful to the various users. Such organizations include the International Chamber of Commerce (ICC), the Coalition for Environmentally Responsible Economies (CERES), and Responsible Care Initiative. The development of standards for improved comparability is a much needed tool and the ISO standard may be part of the solution. CERES is currently working on harmonizing its reports with the ISO standard and has begun a project with other organizations called the Global Reporting Initiative.
Learning mechanisms

The ISO 14001 standard has the potential to create improvements in corporate management that extend beyond the management of corporate environmental impacts. It can create significant improvements in organizations through the opportunities for building capabilities in corporations that have value that extend to diverse functions and facilities. The implementation of the ISO 14001 standard should be perceived as a corporate initiative that may encourage cross-functional cooperation, enhance a company's ability for organizational learning, and create an important expertise in environmental management.

ISO 14001 requires that the process is effectively documented through written procedures and information tracking. Documentation control requirements promote easy access and availability of these procedures. For learning to have an impact on more than one individual, knowledge must be quickly and efficiently spread throughout the organization and easily shared. In many organizations, this is not common as procedures are typically not written, nor widely known. A particular skilled worker may possess information, but management information systems and environmental management systems often do not systematically distribute the information to decision makers. There is too often a lack of institutional memory and transfer of successful techniques and technologies across functions and businesses in decentralized organizations.

Finally, the standard requires both an EMS audit and a management review. The management review constitutes an important learning activity establishing procedures to access and transfer knowledge throughout the organization as well as adapt its behavior to this new information. Set environmental standards may be revised in light of such new information. There are numerous examples.
of companies that have discovered win-win opportunities through careful investigations of their operations and transferring and experimenting with technologies and techniques throughout their organizations. These management reviews constitute valuable information for headquarters as it must also revise its corporate environmental strategy. Reviewing its subsidiaries environmental performance and improvements may help discover and promote these win-win opportunities across its subsidiaries.

Leonard-Barton (1995) suggests that the following activities create and control the knowledge to build current and future capabilities: shared, creative problem solving; implementing and integrating new technologies and tools; formal and informal experimentation; and importing knowledge. All of these activities are made easier with a common language. In this case, a common environmental language is actually established through the ISO standard. Thus, facilities may exchange best practices and ideas concerning specific problem solving and transfer new technologies and techniques. Table 3 highlights some of the ISO standard's aspects which contribute to improved environmental performance.

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<th>Enablers</th>
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| **Organizational Structure** | • Definition of roles, responsibility and authorities  
• Appointment of management representative  
• Obligation to provide appropriate resources (financial, technological or human) for the implementation and maintenance of the EMS |
| **Top Management Support** | • Environmental policy  
• Management review |
| **Performance Evaluation** | • Establishment of measurable objectives and targets through planning requirements.  
• Standardized environmental reporting |
| **Learning Mechanisms** | • Documentation requirements  
• Management review  
• EMS audit |
Conclusion

Developing an EMS that can be implemented across all business units and facilities is an important challenge for multinational companies. MNCs can benefit from a single standard system such as the ISO 14001 standard and can implement the standard following either a global integrative or local adaptive environmental strategy.

The globalization of industry continues to increase. Concurrently, governmental regulations and community pressures for improved corporate environmental sensitivity and reduced environmental impacts has also increased. But these increases are not necessarily aligned. Companies are often globalizing into developing countries where current environmental regulations are lax. They are then faced with conflicting pressures. Many North American and Western European governments and consumers are pressuring companies to adopt stringent global environmental standards. Further, international declarations related to global warming and environmental degradation provide additional impetus to pressures for environmental improvements. Most companies anticipate generally increasing environmental regulations (both over time and across nations) and desire to anticipate global actions. On the other hand, companies are faced with severe competitive pressures that question whether global environmental standards are too costly for the operations in many countries. This paper has presented a framework to help managers understand advantages and disadvantages of the alternative global integrative and local adaptive environmental strategies. It also describes the impact on both the organization and environmental performance and the tools and management systems that are available for each. It shows how improving corporate environmental management systems can improve operations under either strategy and provides guidance for the choice of an environmental strategy.
References


