MICHIGAN ROSS

Working Paper

Integrating Environmental and Social Issues Into Corporate Practice

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Ross School of Business Working Paper
Working Paper No. 1359
March 2000
Environment, 42 (5)

This paper can be downloaded without charge from the
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The Rhetoric and Reality of the Sustainable Development Agenda: Institutions and the Evolution of Corporate Environmental Practice.

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Published as: Hoffman, A. (2000) "Integrating environmental and social issues into corporate practice," ***Environment***, 42 (5): 22-33.

For *Environment* magazine

Is corporate environmental practice at a crossroads? Is sustainable development the new business challenge? Today, many argue that the evolution in corporate environmental practice has run its course; that environmental strategy is generally accepted throughout industry and that the business environment has evolved to such an extent that corporations now need to attend to the triple bottom line of sustainable development: economic prosperity, environmental quality and social equity.[1] A recent article in the environment/business journal *Tomorrow* proclaims that "The year 1998 is somewhat of a watershed for environmental management. With several years' implementation under their belts, leading companies have more or less mastered the art of environmental auditing and internalized the logic of continuous improvement. Few now question the rationale of sound environmental performance or the consensus that a robust environmental management system (EMS) is a proxy for good management."[2] Nancy Bennett, Program Officer for the United Nations Environment Programme (UNEP)'s Industry and Environment office concurs, "Environmental management (EM) has come and is certainly not about to go, but the next big challenge is about integrating social issues into traditional EM tools."[3]

The concept of environmental management has clearly entered the reality of business practice. And equally clearly, the term sustainable development has entered the lexicon of corporate dialogue. But, integration of the former into business practice is far from complete and the integration of the latter is far from begun. This assessment is based on observations of the market institutions driving each. This paper will describe how environmental management is being driven by a constituency that holds strategic importance for the firm while the constituency holding claims to the social, economic and ecological goals of sustainable development remain on the periphery of corporate strategy. Where concerns for environmental issues have evolved beyond the realm of socially responsible business, concerns for the social aspirations of sustainable development agenda remain firmly entrenched in this domain. Whether the issue moves beyond this domain will depend on the market, economic, political and social institutions that require it. By looking at the contemporary business imperative for environmental protection, we can better understand the missing business imperative for sustainable development. This paper will consider each in turn.

The Business Imperative for Environmental Protection

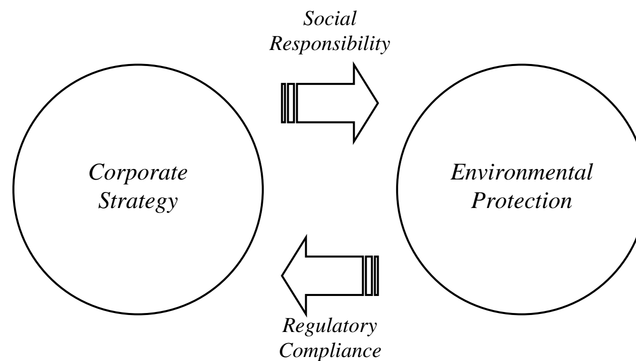
Why do corporations pay attention to issues such as environmental protection or sustainable development? The answer lies in who is driving that concern and as a result, what form it takes. Firms are not autonomous, able to develop and implement strategy in isolation from the influence of their external environment. In fact, without pressures from the external environment, there could be no strategy. The very form of corporate practice is heavily influenced, if not at times dictated, by the external environment. In the case of environmental protection, the constituency of that external environment, and hence the definition of corporate environmental practice has evolved steadily over the past four decades. What environmental protection meant twenty, ten or even five years ago is far different than what it means today. What was called ecology in the 1970's has evolved successively into environmental management, waste minimization, pollution prevention, product stewardship, total quality environmental management, eco-efficiency, industrial ecology and environmental strategy. And more importantly, these definitions are far

different than what corporate environmental practice will mean twenty, ten or even five years into the future.

Traditional Drivers of Environmental Management

The evolving conceptions of corporate environmental practice emerge from an expanding constituency defining both how to view environmental problems and what the appropriate solutions should be. Governments have historically been the most prominent constituent in this regard, able to establish laws which bind organizations to certain practices and procedures. But social activists also lie at the center of social change on the environment. From the 1960s until the 1980s, these two institutional forces have been the predominant drivers of corporate environmental practice, yielding the two traditional managerial views of corporate environmental practice shown in figure 1: regulatory compliance and social responsibility.

Figure 1
The Institutional Drivers of *Environmental Management*



On the one hand, managers have viewed the relationship between corporate practice and the environment in terms of how environmentalism acts as a regulatory constraint imposed by the government, displayed by the arrow moving from right to left in figure 1.[4] Through this lens, environmentalism is lamented as a useful social endeavor but a decidedly unproductive intrusion into corporate affairs. It is a restriction on or deviation from the central corporate activities. This perspective leads one to focus on what companies "must" do to remain legal members of the community. In this way, managers will boil environmental management down to "regulatory compliance."

On the other hand, managers have viewed the relationship between corporate practice and the environment in terms of the impact of that practice on environmental ecosystems, displayed by the arrow moving from left to right in figure 1. In this format, activists protest the environmental damages of industrial activity and apply pressure on the firm to cease that activity. In the face of such pressures, one may focus on what corporations "should" do to offset these transgressions. In this way, environmental management becomes an issue of "social responsibility."

In both cases, corporations will be expected to do little to protect the environment unless the government forces them or activists shame them. Corporate practice is driven by the threat of either legal sanction (civil, administrative and criminal penalties) or

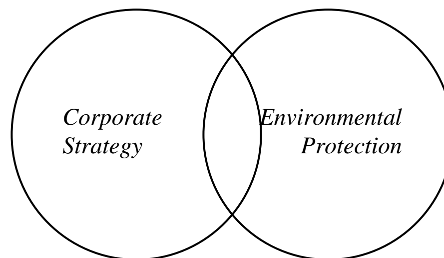
social sanction (protests, negative press, diminished reputation and image). The environmental issue is framed as fundamentally external to business interests. It becomes a threat or restraint to corporate affairs from sources separate from the key drivers of the market system. But, these views are now outdated. Corporate environmental practice is entering the realm of corporate strategy through a host of other institutional drivers.

Contemporary Drivers of Environmental Strategy

Since the early 1990s, the reality of environmentalism within the business context has become more complex than regulatory compliance or social responsibility reveal.[5] The reality is that the very form shown in figure 1 is incorrect. Environmental protection and economic competitiveness are becoming increasingly intertwined, as depicted in figure 2.[6] At the intersecting space between the two fields are constituents with concerns for both business and environmental issues. What was once driven primarily by pressures separate from core business objectives is now driven by interests that exist within the firm's economic, market, political, and social environments and share concerns at the core of business decision-making. These organizations are equating good environmental performance with good operational management, low financial risk, and a signal for future economic success. They are altering the environment in which business takes place and thus are influencing the norms of corporate practice. Through so complex a web of constituents more central to business concerns, environmentalism is becoming transformed from something external to the market system into something that is central to the core objectives of the firm. This triggers a more complex set of strategic responses than have been traditionally invoked. By looking to the expanding field of environmental pressures, we can see how the issue is being institutionally redefined and thus, how it is becoming a strategic concern. We will consider several of these sources here briefly.

Figure 2

The Institutional Drivers of *Environmental Strategy*



To begin, the environmental impact of a product is the sum of the impacts of each input and output from **suppliers and buyers** in the value-chain.[7] Companies become tied to one another. If one company introduces a toxic material into the process, all companies must now consider how it should be handled. Further, if a company towards the end of the value chain is receiving signals from end-users that the product is environmentally undesirable, they must impose restrictions on their suppliers in order to remove it. [8] Some companies, such as Dow, Levi Strauss, Nike and Proctor & Gamble, have set rigid standards on all contractors who provide materials which enter the product stream.[9] Levi Strauss &Co. offers generous timetables, loans and volume guarantees for contractors

who meet their requirements. In return, many contractors feel that meeting these requirements and having Levi Strauss as one of their clients was helpful in attracting new customers. The final link in the value chain, some **consumers** have been a difficult market segment to track. While most are unwilling to make the connection between environmental performance and their buying decisions, some have been noted to do so. According to a survey by SC Johnson & Sons and the Roper Organization, this class of "green" consumers made up at least 25 percent of the population in 1993 and was growing.[10]

One important component of the supply chain is capital and **shareholders** have been active in connecting capital and environmental concerns since 1989 when the Council for Environmentally Responsible Economies (CERES) first enlisted the help of investors. Since 1990, shareholders have been filing environmental proxy resolutions in annual board meetings and seek the endorsement of its environmental principles.[11] More recently, the environmental community has begun to engage this constituency for more action. According to Julie Tanner, senior financial analyst at the National Wildlife Federation, "We have been training people all around the world about the role of financial institutions and where they can find points of leverage."[12] Even without such outside influence, some shareholders have taken it upon themselves to exert environmental pressures on the companies in whom they own stock. In 1999, investors pressured Occidental Petroleum Company into hiring an outside consultant to analyze the impact of drilling operations in an area of Columbia occupied by the U'wa Indians.[13] Also in 1999, the Maxxam Corporation had a change of heart over accepting a deal from the Federal government and the State of California to buy its holdings of the largest privately owned grove of ancient redwoods in the world after the stock price tumbled when the company initially rejected the deal.[14]

Beyond shareholders, broad-based **investors** are also an important source of capital. And like shareholders, they are beginning to make financial decisions based on studies suggesting a positive correlation between environmental and economic performance. The Alliance for Environmental Innovation reviewed 70 research studies and concluded that companies that outperform their peers environmentally also outperform them on the stock market by as much as 2 percentage points. ICF Kaiser found a similar correlation in a study of 300 of the largest public companies in the US.[15] In 1998, the New York Society of Security Analysts — the largest and most influential society of investment professionals in the world — launched *Uncovering Value*, a series of environmental seminars to examine how progressive corporate environmental practices contribute to a company's performance, profitability and growth.[16] And a 2000 report by Robert Repetto and Duncan Austin of the World Resources Institute showed that companies in the pulp and paper industry face environmental risks that are of material significance, varying from 3 percent to 10 percent of market value (positive or negative).[17] Using these correlations as a market signal, some stock funds are buying stocks of companies that represent "best of class" in basic industries like paper and steel. These companies, according to fund mangers, manage their environmental affairs responsibly relative to their industry competitors and will likely manage their overall operations more responsibly. This type of screening has, for some such as the Domini Social Index Fund and UBS Brinson, lead to greater returns.[18] The Storebrand Scudder Environmental Value Fund, for example, appreciated 51 percent in its first two years,

outperforming the Morgan Stanley Capital International World Index by more than eight percentage points.[19]

One final source of capital, **banks** are beginning to look at the environmental practices of loan applicants, equating poor environmental performance with high financial risk. On the most basic level, no bank today would underwrite the purchase of a brownfield site without a full environmental assessment. Going further, banks are becoming more aggressive in their environmental demands. The European Bank for Reconstruction and Development (EBRD), for example, has written into its establishing agreement that it will "promote in the full range of its activities environmentally sound and sustainable development."[20] In April 1995, the government of Brazil required all banks and credit institutions to grant loans only to projects that take environmental impacts into consideration. In 1992, the United Nations Environment Program (UNEP) coordinated a declaration of environmental commitment of the banking industry with signatories committing to incorporate environmental factors into their daily business practices.[21] In a survey of European banks, 15 participants said they offered discounted rates for environmentally responsible companies, shaving as much as 50 basis points from the rate and halving the fees.[22]

Insurance companies are beginning to see environmentally risky operations as being correlated with increased financial risk and are beginning to apply environmental criteria for minimizing that risk in their underwriting practices.[23] In November 1995, the industry developed a UNEP-supported Statement of Environmental Commitment with 78 official signatories making commitments to include the environment as one of the value-drivers in their under-writing decisions.[24] One of the more aggressive re-insurance companies, Swiss Re, has been increasingly vocal about its concerns over climate change and that "more extreme weather patterns could cause damage which not only pose a threat to individual citizens, families and enterprises but could also jeopardize whole cities and branches of the economy and — on a global scale — entire states and social systems. In brief: damage which had better not be risked because it can no longer be handled."[25] In 1998, weather related disasters such as fires, floods, storms and droughts caused approximately $89 billion in economic losses globally. This surpassed the previous record of $60 billion in 1996. [26] During the first three quarters of the year, the US insurance industry alone had weather related claims for more than $8 billion.[27] Increasing numbers of insurers are worrying that climate change could cause substantial losses in the years ahead.

Trade associations are making environmental demands on their constituent members. Beginning in 1989 with the Chemical Manufacturer's Association (CMA) Responsible Care Program, similarly designed programs have flourished in other industries such as petroleum, printing, textiles, paper, lead, and automobiles.[28]

Finally, indirect pressures for corporate environmental practice are emerging from several fundamental social arenas. **Academic institutions** are teaching students about the environment in ways that are far different than that of previous generations.[29] Beginning with mandatory education in grades K-12,[30] students are continuing their environmental studies at the university level with environmental courses in schools of business, engineering, science, journalism, law and public policy.[31] Also, many of the world's **religious institutions** are changing their view of the morality of behavior towards the environment. The Presbyterian Church decided to place environmental

concerns directly into the church canon, thus making it a sin to "threaten death to the planet entrusted to our care."[32] The Roman Catholic Church equated environmental degradation with theft from future generations in its new catechism.[33] His All Holiness Bartholomew I, spiritual leader of the world's 300 million Orthodox Christians, equated specific ecological problems with sinful behavior.[34]

Changes in academic training and religious thought are at the core of individual beliefs on the environment. Further, they can be mobilized into direct political action. In 1996, evangelical groups rallied support for Endangered Species Act reauthorization, calling it "the Noah's ark of our day," while questioning Congress' apparent attempt to "sink it."[35] In 1998, the National Council of Churches and the National Religious Partnership for the Environment rallied to support the Kyoto Treaty on climate change, sending a letter to President Clinton pledging to work to get the treaty implemented because it is "an important move towards protecting God's children and God's creation."[36] In 1999, Commonwealth Energy Corp. and the North American Coalition on Religion and Ecology (NACRE) announced the formation of the "Greensmart Renewable Energy Project," encouraging the more than 30,000 religious organizations and other non-profit organizations in California to demonstrate their environmental commitment by switching to electricity generated by renewable energy sources.[37]

All of these pressures add up to a collectively different institutional environment than what corporate decision-makers faced in the past. Managers that remain fixed on regulatory or public opinion trends will find such measures an inaccurate reflection of the emerging pressures for environmental performance. While public support for the environment has been declining since a peak around 1992,[38] a comparable decline in environmental pressures on the corporation is not to be found. A 1998 survey of US companies by *Industry Week* found that 97.4 percent ranked environmental performance as one of their top ten priorities.[39] Institutional pressures from the firm's economic, market, political, and social environments for environmental protection are driving this priority. And by making this connection, we can see how the diverse implications it has for corporate strategy.

Corporate Strategy Redefined

Rather than denying or lamenting environmental concerns, managers are now finding that satisfying environmental concerns is tied to the specific economic concerns presented by each of these institutional linkages. They are realizing that as the pressures on the organization emerge from each distinct institutional realm, they become transformed into something of central importance to the firm. For example, insurance under-writing practices act as consulting recommendations. And as more insurance companies scrutinize how corporations handle their environmental affairs, they are influencing the definition of corporate practice. If companies choose not to adopt insurance recommendations, they will find their business costs raised through higher premiums. And indirectly, insurance companies possess large amounts of investment capital from premiums, which can be used to sway financial markets.[40] So, when environmental pressures are imposed on the corporation from insurance companies, environmentalism becomes translated into an issue of risk management and capital acquisition, two issues of central importance to corporate practice.

In the same way, when environmental pressures are imposed on the firm by buyers and suppliers, they become issues of resource acquisition, processing and sale. When imposed by banks, shareholders and investors, they become issues of capital acquisition and cost of capital. When consumers begin to consider environmental concerns in their purchasing decisions, the issue becomes translated into an issue of market demand. When competitors begin to use the environment as a strategic issue or challenge how others use it, the issue becomes translated into one of competitive strategy and market share growth. When trade associations see opportunities in presenting a united front on environmental affairs, the issue becomes one of industry reputation or external and government relations. In each of these ways, environmental pressures enter the realm of strategic decision-making by being tied to issues of central importance to the firm. Corporate environmental practice is becoming less and less an environmental issue. It is becoming more an issue of strategy, marketing, finance, human relations, operational efficiency and product development. It can no longer be thought of as a "necessary evil" or a "cost of doing business" but rather is becoming a part of the business environment. It becomes evident that the business manager need not even believe in the validity of certain environmental issues to take them seriously as a business concern. What matters is that key business constituents possess that concern and are translating it through core business channels.

The Continuing Evolution of Environmental Strategy

Has corporate environmental practice run its course within the business environment? No. This cannot be stated until all relevant constituents in the institutional environment incorporate environmental concerns into their rules, norms and beliefs. While some companies may, for example, view a robust environmental management system (EMS) as a proxy for good management, the important question is whether insurance companies, mutual fund managers, individual investors and bankers make this connection to its fullest extent. The entire institutional system must integrate environmental protection into its driving objectives, not just individual companies. In fact, it is fair to say that there may never be a static definition of a "green" company. There will only be notions of how companies are changing in response to an evolving market, economic, political and social environment. Just as we may now look back with amazement at the practices of past generations ("the solution to pollution is dilution," ocean dumping of radioactive wastes, inundating neighborhoods with DDT), future generations may look back with similar amazement at the practices we take for granted today. Is the separation of business practice and social equity one of those issues that will amaze future generations? Many are now looking to sustainable development as the emerging business concern. However, the institutional drivers of this issue are presently different than those driving environmental issues at the present time. Much must change for it to be considered a core business concern.

The Missing Business Imperative for Sustainable Development

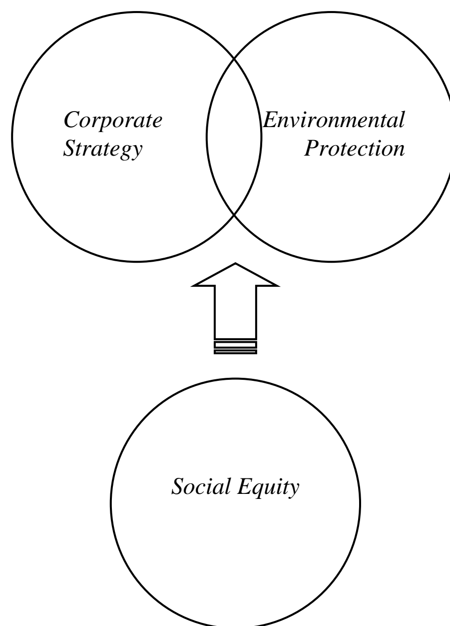
Is the issue of sustainable development the new business challenge? Has the third component of the triple bottom line, social equity, entered the sphere of the business system? Does it intersect with the issue of economic growth in the same way that environmental protection does, driven by core business institutions? Or does it remain

separate and distinct, driven by institutions on the periphery of corporate decision-making? On the one hand, proponents like Stuart Hart argue that "today many companies have accepted their responsibility to do no harm to the environment, products and production processes are becoming cleaner and where such change is under way. The environment is on the mend...But the distance we've traveled will seem small when, in 30 years, we look back at the 1990s. Beyond greening lies an enormous challenge and an enormous opportunity. The challenge is to develop a sustainable global economy: an economy that the planet is capable of supporting indefinitely."[41] And corporate executives can now be heard making proclamations about their responsibilities for sustainable development. Edgar Woolard, while Chairman of DuPont wrote, "Industry, as society's producer has a special role to play in creating sustainable development, and some of us in the industrial community are working on ways to make sustainability a characteristic of industrial programs."[42] Frank Popoff, while CEO of the Dow Chemical Company wrote, "If we view sustainable development as an opportunity for growth and not as prohibitive, industry can shape a new social and ethical framework for assessing our relationship with our environment and each other."[43] William C. Ford, Jr., present chairman of the board of the Ford Motor Company wrote "A good company delivers excellent products and services and strives to make the world a better place. Great companies understand that to fully meet the expectations of consumers, they address the concerns of society. That is the only way to ensure sustainable development and growth. It is also the best way to richly reward shareholders."[44]

Moving beyond rhetoric, several companies have taken action on establishing sustainability strategies. In 1998, Nike announced sweeping improvements in worldwide operations for its half million workers in 350 countries. The company set a minimum worker age of 18 and established a timetable for instituting US air quality standards at all its facilities. The company also created a new Corporate Responsibility Division with 75 employees and helped negotiate an agreement between labor rights groups and the apparel industry to allow independent groups to monitor factories for fair labor practices. Shell has also taken action on sustainability, developing a new management system with performance metrics to address its financial, environmental and social performance in an integrated and quantifiable manner. In 1998, the company published its first sustainability report, describing how the company's operations in 125 countries are "striving to live up to our responsibilities — financial, social and environmental" and offering the results of an auditor's report, verifying the assertions given in the report.[45]

But, the question remains as to whether there is a business imperative for the sustainability agenda. Is the business environment changing? Are the actions of companies like Nike and Shell indicative of new standards by which other companies will follow? In reality, the interests of sustainable development remain separate than those of business practice as depicted in figure 3.[46] The sphere of social equity has not intersected with that of corporate strategy as has environmental protection. The actions of a few forward thinking companies are not indicative of an industry trend. According to the World Business Council on Sustainable Development, while there are 34,000 multi-national companies worldwide, the "same few names come up again and again" when sustainability issues are discussed.[47] The issue has entered the rhetoric of modern business, but not the realm of core business issues driven by the business environment.

Figure 3
The Introduction of Social Equity into the Business Environment:
Sustainable Development



The drivers of sustainable development remain on the periphery of the business system, embodied by social activists, world governments and a few vocal corporate leaders. For example, as the world's markets become more global and corporations become more multi-national in nature, proponents within business, academia and government institutions abound. Only isolated critics of the social implications of that process are emerging. Some, such as Dani Rodrik[48] and George Soros,[49] point out that without a political, social, moral and ethical infrastructure for a global society, the global economy becomes based on rules determined by the values embedded in economic parameters. These values are often inconsistent with the social equity values embedded within the sustainability agenda. The 1999 riots in Seattle over the World Trade Organization talks are a manifestation of that inconsistency. Where these talks had previously been dominated by multi-national organizations and world governments whose interests are supported by beliefs in the preeminence of world trade, many constituents (including labor unions, farmers, environmentalists, and child welfare advocates) held different values and signaled their demand to be included.

But why do the spheres of the sustainability agenda remain disconnected? One problem is that companies remain unclear on the definition of sustainable development. Even those who support the concept disagree on its precise meaning. Thus, companies are falling back on known strategies to define it, relying primarily on environmental strategy as a guidepost for near term strategies. Eco-efficiency has thus far provided the guiding framework for most businesses on how to look at the longer term social pressures that will affect their market positioning and costs of doing business.[50] It represents what they already know and the adoption of the values underlying these concerns are not inconsistent with the values of the market economy. But at its core, the defining values of

sustainable development are more challenging than the existing institutional beliefs about eco-efficiency. In fact, if the values embedded within the sustainability agenda are fully accepted, the issue stands to challenge many underlying assumptions of the market economy and redefine the objectives of the firm in acting within it.

An important early step in creating a definition of sustainability is the development of measurable indicators. By defining what it can mean in concrete terms, we can better understand what it means for business practice. The United Nations Commission on Sustainable Development has proposed a set of indicators which are primarily meant as country-level social measures. But, if institutionalized they could act as a guide for the emergent definition of sustainable corporate practice. They include: income inequality; average life expectancy; level of crime; number of homeless; population growth rate; difference between male and female school enrollment rates; per capita consumption of fossil fuels for transportation; the ration of the average house price to the average income; living space (floor area) per person; environmentally adjusted net domestic product; energy consumption; the intensity of materials use; percentage of population with adequate excreta disposal facilities; share of renewable energy resources consumed; annual withdrawals of ground and surface water; the ration of debt service to export earnings; the maximum sustainable yield for fisheries; changes in land use; percent of arable land that is irrigated; energy use in agriculture; emissions of greenhouse gases; waste recycling and reuse; and access to information.[51]

The values that underlie these metrics appear to be at heretical divergence from the presently accepted measures and objectives of economic growth and business strategy. And integrating the values underlying these notions into the market system may pose a serious challenge, significantly more daunting than the integration of environmental values over the past forty years. Where environmental problems are highly visible and clearly threatening to almost everyone, not just a small percentage of the population, the social equity components of sustainable development are less visible and inherently about distributing resources from those who presently have to those who are presently without. For example, one of the objectives of sustainability is the distribution of environmental costs and benefits fairly among people in all economic and cultural classes. This is underlain by the pragmatic concern that poverty resulting from inequitable resource distribution leads to the degradation of the ecosystem and could lead to destabilized economic and political regimes.[52] Corporate practices that seek to offset these concerns could be at serious odds with the individualistic, self-interested, profit seeking, resource utilizing beliefs that underlie the present capitalistic system; a system based on an uncritical belief in: (a) the necessity of increasing economic growth; (b) the perception of nature as a limitless sink; (c) the superiority of technological development for controlling natural systems; (d) the social and physical autonomy of the firm; and (e) the profit-motive as a singular objective of the firm.[53] Companies that choose to tackle these tough social equity issues today are examples of individual efforts at sustainable change and may be indicators of a potential shift in industry norms. But, they do not yet represent a broad scale shift in the institutions of business practice.

Conclusion

In the end, sustainable development will not become a genuine business concern until the institutional environment becomes a driver of the social equity issues inherent in

the sustainability agenda. This is the only way that the issue will move beyond the realm of "social responsibility" and become a genuine business challenge. As stated in a 1998 WBCSD discussion paper, "The key to the urgency of the response is the degree to which the issue is seen as a threat to, or an opportunity for, the business. The closer the issue is to the company's direct commercial interest, the more likely it is to be acted upon."[54] This will only happen as key business constituents such as insurance companies, suppliers, buyers, customers, competitors, banks, shareholders and investors begin to adopt sustainable criteria in their decision-making. It will emerge from changes in the institutional environment; changes that have yet to happen. The issue of social equity presently remains separate and distinct from core business interests, as shown in figure 3. It remains a new and emergent area, originating from business signals that lie outside the realm of standard business decision-making.

Will sustainable development follow the same trajectory as environmental protection, entering the business system through core business channels? The answer depends on two factors that were influential in driving environmental protection into the sphere of business practice: institutional entrepreneurs and critical events. The evolution of changes in corporate environmental practice in the United States were driven strongly by the actions of social activists and the government. Through collective action and political pressure, regulations were set to represent emergent values in regard to environmental protection. But, independent corporate environmental strategy did not fully materialize until core economic issues began to apply environmental pressures. While institutional entrepreneurs were influential in changing the institutional environment, another critical factor in this evolution process was the emergence of critical and transformative events.

For example, the first Earth Day in 1970 galvanized the environmental movement into a cohesive collective, causing some to label it the dawn of American Environmentalism[55] In 1978, the discovery of buried hazardous waste at Love Canal led to the enactment of Superfund which held corporations liable for past actions in a way that challenged basic acceptance of *ex post facto* in American law.[56] The Bhopal disaster in 1984 significantly altered both insurance underwriting practices and the availability of insurance coverage,[57] and the accepted beliefs about corporate disclosure and the community's right to know about hazardous activities taking place within the plant walls. And finally, the Exxon Valdez disaster in 1989 significantly altered accepted notions about the limits of corporate financial liability for an environmental disaster while simultaneously altering oil transport procedures throughout the oil industry. Each of these events precipitated a shift in our thinking about the nature of corporate impact on the natural environment.

The collective of this evolution process has been remarkable for its relatively short time span. In 1970, the notion that corporations should go beyond regulation to protect the environment was heretical in business channels, labeled as "pure and unadulterated socialism" by Milton Friedman.[58] Today it is becoming the dogma of corporate strategy, espoused by prominent academics in the business real such as Michael Porter.[59] An equally remarkable evolution process is what will be necessary if sustainable development is to reach the same levels of concern within the business world. The challenge of making this a reality now lies before sustainability activists and government bodies. Unfortunately, critical events that highlight breakdowns in the business and

social systems will be necessary to further their cause. Ultimately, sustainable change to business practice will not occur through changes in isolated corporate actions or individual beliefs. Not until a firm's motivations and practices related to capital acquisition, resource acquisition, processing and sale, consumer demand, competitive strategy and market share are tied to the social equity values of sustainable development will the issue become the next business challenge.

5538

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