Eco-Enterprise Strategy: Standing for Sustainability

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ABSTRACT. Enterprise strategy provides an accepted theoretical framework for integrating the moral responsibilities of organizations into their strategy formulation and implementation processes. We argue that, when extended to the ecological level of analysis, enterprise strategy provides a sound theoretical framework for ethically and strategically accounting for the ultimate stakeholder, planet Earth. Within the framework of enterprise strategy, a value system based on sustainability can provide a sound ethical basis for developing ecologically sensitive strategic management systems which allow organizations to satisfy the demands of the myriad green stakeholders that represent the planet in the immediate business arena. This provides a new "flavor" of enterprise strategy in which organizations "stand for sustainability." We call this new flavor "eco-enterprise strategy."

Enterprise strategy is a framework for exploring and understanding "what the organization stands for" by focusing on the underlying ethical roots of the firm's strategic choices. Enterprise strategy allows for analyses of the relationships between a firm's long-term issues and its key stakeholders in light of its core values and ethical systems (Freeman, 1984; Freeman and Gilbert, 1988). Enterprise strategy has been proposed as a meaningful framework for integrating ecological concerns into the strategic processes of organizations. From the recognition that the Earth is a legitimate stakeholder can emerge a strategic management system designed to efficiently and effectively serve the interests of the planet and its green representatives in the immediate business arena (Stead and Stead, 1994, 1996).

In this paper we will extend this idea by developing a model for a new "flavor" of enterprise strategy (Freeman and Gilbert, 1988), which we call "eco-enterprise strategy." We will begin our model development by examining the concept of enterprise strategy in some depth, paying particular attention to the three components of enterprise strategy formulation – values analysis, issues analysis, and stakeholder analysis. Next, using these three components as a base, we will examine the network of eco-sensitive values, the system of ecological issues, and the plethora of ecologically concerned stakeholders that underlie eco-enterprise strategy. We will conclude by examining in some depth the nature of the sustainable strategic management systems that can emerge in firms that adopt an eco-enterprise strategy.

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Enterprise strategy

Ansoff (1979) demonstrates that the strategic problems facing organizations during the last quarter of the 20th century are far more numerous, turbulent, and interconnected than

Journal of Business Ethics **24**: 313–329, 2000.

those of the 1950s and 1960s. He clearly points to the increasing social, political, and ethical demands that organizations face as they approach the turn of the century. Schendel and Hofer (1979) say that these increasing societal demands mean that a new, over-arching level of strategy, which they call "enterprise strategy," is needed in order to explicitly articulate the firm's relationship with society. As an over-arching strategy, enterprise strategy serves as a guide for corporate strategy, allowing firms to base their economic and industry sector decisions on their responsibilities to the larger society (Hosmer, 1994; Shendel and Hofer, 1979).

It is widely acknowledged that the roots of enterprise strategy lie within the confines of stakeholder theory and stakeholder management. Donaldson and Preston (1995) say that stakeholder theory has three aspects: (1) descriptive – useful in explaining specific organizational characteristics and behaviors; (2) instrumental – valuable in helping organizations to achieve their objectives; and (3) normative – providing a framework for finding the moral and philosophical foundations of the organization. Of these, they say that the "ultimate justification for stakeholder theory is to be found in its normative base" (Donaldson and Preston, 1995, pp. 87–88). Clarkson (1995, p. 112) agrees, saying, "The moment corporations and their managers define and accept responsibility and obligations to primary stakeholders, . . . they have entered the domain of moral principles and ethical performance, whether they know it or not." Jones (1995, p. 432) says that stakeholder theory makes it clear that "behavior that is trusting, trustworthy, and cooperative, not opportunistic, will give the firm a competitive advantage," and Carroll (1995, p. 56) says that the practice of stakeholder management is "imbued with ethical implications."

It is this moral dimension of stakeholder theory that is the primary focus of enterprise strategy. Freeman (1984) and Hosmer (1994) argue that the early scholars in the field of strategic management (they cite Andrews, 1965; Ansoff, 1965; Barnard, 1938; Chandler, 1962; and Simon, 1948) are clear in their admonitions that strategic management has a strong moral and ethical component. According to Hosmer (1994), this component has been all but ignored in the strategic management literature except by Freeman (1984) and Freeman and Gilbert (1988) in their development of enterprise strategy.

Edward Freeman has been most responsible for expanding and refining the concept of enterprise strategy (Freeman, 1984; Freeman and Gilbert, 1988; Hosmer, 1994). As mentioned in the introduction, Freeman (1984, p. 90) proposes that enterprise strategy allows firms to address their most fundamental ethical question, "What do we stand for?" He says that setting corporate direction at this level entails "understanding the role of a particular firm as a whole, and its relationships to other social institutions" (Freeman, 1984, p. 91). In both Freeman (1984) and Freeman and Gilbert (1988), a strong case is made that the true strength of enterprise strategy is its potential to provide a framework in which a firm's ethical component can be incorporated into its strategic management processes. Freeman (1984) notes that his framework for enterprise strategy specifically addresses the value-systems of managers and stakeholders in concrete terms; it focuses attention on "what we should do" (Freeman, 1984, p. 90). Freeman and Gilbert (1988) develop in some depth the idea that enterprise strategy makes ethical reasoning an explicit part of strategic decision-making processes.

Freeman (1984) proposes an analytical framework for formulating enterprise strategy. This framework includes three interacting components: (1) values analysis, (2) stakeholder analysis, and (3) issues analysis. Values analysis is a key component of enterprise strategy formulation because values are at the core of a firm's ethical system, making explicit knowledge of them crucial in uncovering the firm's ethical underpinnings. Freeman (1984) and Milbrath (1989) distinguish between core values (or intrinsic values), which are values pursued on their own merit because they represent ideals which are good in and of themselves, and instrumental values, which provide the means for achieving the ideals expressed by core values. Milbrath (1989) says that democracy is an example of a core value, and that the right to vote, the right of free speech, the right of assembly, and so forth

are some of the instrumental values through which the ideals of democracy are implemented.

Another analytical component of enterprise strategy formulation is societal issues analysis, the understanding of the social context of the organization. Freeman (1984) says that an adequate issues analysis requires that firms identify the central differences between the major issues facing society today and the major issues that will likely be important over the next decade. Freeman (1984, p. 99) says, "The analysis of social issues can be combined with stakeholder analysis to look at the impact of current and future social issues on the stakeholders of the firm."

This leads to the final component of enterprise strategy, stakeholder analysis, which helps the firm to identify its various stakeholders and to understand the "stake" and "power" that each stakeholder has. Freeman (1984, p. 46) originally defined a stakeholder as "a person or group that affects and is affected by the achievement of the organization's objectives." He notes that the stake of a given stakeholder comes from ownership interests, market interests, and/or political interests. Stakeholder power is derived from a stakeholder's voting rights, economic influence, and/or political influence. The greater the power base, the greater the ability of a stakeholder "to use resources to make an event actually happen" (Freeman, 1984, p. 61).

Performing the values-x-issues-x-stakeholders analysis allows firms to choose the type of enterprise strategy they will pursue. Freeman (1984) and Freeman and Gilbert (1988) develop a typology of enterprise strategies which rests on the need for organizations to know whose interests they really serve. Freeman (1984, p. 101) says of the typology, "[It] involves tradeoffs about the relative importance of stakeholder concerns, values and social issues." Freeman and Gilbert (1988. p. 80) say that the typology reflects "the trump cards around here," that is, it reflects the stakeholders with the most perceived power in influencing the firm's strategic direction.

Freeman (1984) includes five types of enterprise strategy in his 1984 typology, and Freeman and Gilbert (1988) expand it to seven types, or "flavors," of enterprise strategy. Each of these types assumes different moral views and gives different answers to the question, "What do we stand for?" (Freeman, 1984, p. 101). In other words, these enterprise-strategy types identify to whom the corporation owes moral obligations and whose interests it believes it should serve. The seven types they identify include: (1) stockholder enterprise strategies, which seek to maximize the interests of stockholders; (2) managerial prerogative enterprise strategies, which seek to maximize the interests of senior management; (3) restricted stakeholder enterprise strategies, which seek to maximize the interests of a specific group of stakeholders; (4) unrestricted stakeholder enterprise strategies, which seek to maximize the interests of all stakeholders; (5) social harmony enterprise strategies, which seek a strong congruence of values between the firm and the community/society; (6) Rawlsian enterprise strategies, which accept inequalities among stakeholder groups only if these inequalities raise the level of the worst-off stakeholder group; and (7) personal projects enterprise strategies, which maximize the ability of organizational members to find fulfillment via creative expression through their own organizational projects. Research indicates that these types can differ in terms of their breadth, scope and financial outcomes (Judge and Fowler, 1994; Judge and Krishnan, 1994; Meznar, Chrisman and Carroll, 1990).

Eco-enterprise strategy

As has been well documented, the phenomenal economic growth during the Industrial Revolution has brought with it high ecological costs – environmental disasters, air and water pollution, degradation of cropland, war, economic and social injustice, human displacement and disease, and so forth. Awareness of these costs by business organizations has increased significantly over the past 25 years because of rising environmentalism, increased regulation, democratization, economic globalization, and so forth. Thus it is that managing in ecologically sensitive ways designed to bring the economic activities of the firm into concordance with the

greater ecosystem has emerged as a major strategic thrust in business organizations which will carry well into the 21st Century (Hart, 1995, 1997; Stead and Stead, 1996).

We contend that effectively managing in ecologically sensitive ways will mean developing an eighth flavor of enterprise strategy, which we call "eco-enterprise strategy." Eco-enterprise strategy is similar to Freeman and Gilbert's (1988) social harmony enterprise strategy in that it leads firms to focus their attention on developing congruence between their value systems and those of the greater society. However, the ethical foundations of eco-enterprise strategy go beyond the human community. This flavor of enterprise strategy reflects the moral view of Aldo Leopold's (1949) "land ethic." Leopold says that a land ethic brings all of the Earth's biotic pyramid into the sphere of human ethical consideration. Only when humans accept that the "land" has ethical rights will nature be elevated from mere property with economic value to an entity with aesthetic value, one to which the human community has an obligation. Thus, eco-enterprise strategy rests on the ethical foundation that all present human inhabitants of the Earth, the future generations of human beings, the other species which exist on the planet, and the biophysical systems which support life on Earth (the biosphere, hydrosphere, atmosphere, and geosphere) all deserve ethical consideration. Thus, eco-enterprise strategy represents the idea that the Earth is the "trump-card" stakeholder in the organization's strategic thinking.

Is eco-enterprise strategy a legitimate form of enterprise strategy which is conceptually consistent with the seven flavors discussed above? Although Freeman (1984) and Freeman and Gilbert (1988) do not include eco-enterprise strategy as one of their original seven flavors, Freeman (1994) states that there are many legitimate ethical keystones upon which firms can base their stakeholder relationships, implying that there can be many types of enterprise strategy. Further, Freeman (1994) (and many others, as will be discussed later) clearly acknowledges that "caring for the Earth" is a legitimate ethical stance upon which firms may base their stakeholder relationships. Thus, eco-enterprise strategy is no doubt a legitimate form of enterprise strategy which is conceptually consistent with the original seven flavors.

To be structurally consistent with Freeman's (1984) conceptualization of enterprise strategy, we will use the three analytical components of enterprise strategy formulation – values analysis, societal issues analysis, and stakeholder analysis – to develop our eco-enterprise strategy model. We will begin our discussion of eco-enterprise strategy by examining a value system which we believe can effectively serve as the moral foundation for integrating the "land ethic" into the moral consciousness of organizations. We will then present an analytical framework for understanding the ecological issues firms face, and we will follow this by presenting a map of ecologically sensitive organizational stakeholders that represent Mother Earth's interests in board rooms and in the marketplace. Finally, we will integrate our discussion of these three components into a comprehensive model of eco-enterprise strategy.

Sustainability-centered values network

As mentioned above, ethical systems are often portrayed as networks of values with a central core value supported by a set of instrumental values (Freeman, 1984; Milbrath, 1989). As depicted in Figure 1, we contend that sustainability represents an appropriate core value upon which to base eco-enterprise strategy, and we contend that instrumental values for wholeness, diversity, posterity, smallness, quality, community, dialogue, and human spiritual fulfillment provide

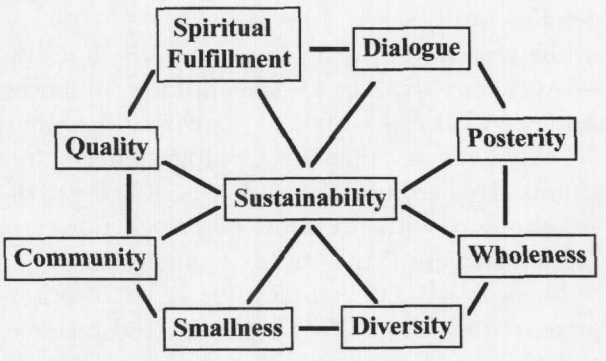

Figure 1. Sustainability-centered values network.

appropriate avenues for bringing the ideal of sustainability to fruition.

Effectively managing ecological issues requires finding a balance between economic success and ecological protection. The difficulty here is that balancing economic success and ecological protection represents what Schumacher (1977) refers to as a divergent problem. Divergent problems are fraught with seemingly unresolvable dichotomous issues. Thus, solving divergent problems means going beyond traditional linear logic; it means identifying a core value that transcends the dichotomies, allowing the polar arguments to exist in synergistic balance with one another (Schumacher, 1977). Therefore, at the heart of effectively managing ecological issues is identifying a core value that can transcend the means-versus-ends, humankind-versus-nature dichotomies that characterize most economy-ecology debates; a value that can point the way toward economically beneficial ways to manage ecological issues. We believe that sustainability is such a core value.

Sustainability seeks to ensure a high quality of life for current and future generations of humans and non-humans by creating a synergistic balance between economic prosperity, ecosystem viability, and social justice (Hardi and Zdan, 1997; Hodge, 1997; Gladwin, Kennelly and Krause, 1995; Milbrath, 1989; Stead and Stead, 1996; World Commission on Environment and Development, 1987). Conceptually, sustainability focuses on exploring what it will take to bring human development into balance with nature for posterity. As such, sustainability is a transdisciplinary concept that encompasses myriad biophysical and socioeconomic issues including resource depletion, pollution, waste generation and disposal, population growth, social justice, environmental justice, and gender equity (Daly and Cobb, 1994; Gladwin et al., 1995; Stead and Stead, 1996; WCED, 1987). As a core ethical value, sustainability is consistent with Leopold's (1949) "land ethic" in that it stresses that quality of life, aesthetic beauty, other species, natural cycles, and future generations all have intrinsic ethical value – they are good in and of themselves. It stresses humankind with nature rather than either humankind over nature or nature over humankind. Therefore, sustainability represents an appropriate core value upon which to rest the formulation of eco-enterprise strategy.

Whereas core values are central and essential, instrumental values are more personal. As many scholars have reminded us, there are certainly many instrumental values that can effectively support a core value for sustainability. With this admonition in mind, we present eight values which we believe can be instrumental in implementing a core value of sustainability.

Wholeness is about recognizing interconnections, interrelations, and long-term underlying systemic patterns. Valuing wholeness allows organizations to recognize the significant interconnections between themselves and their economic, social, technological, political, and natural environments, and it provides a strong foundation for the long-term, mutually causal thought processes so necessary in today's dynamically complex business environment (Morgan, 1986; Senge, 1990, Stead and Stead, 1996).

Diversity is critical in maintaining an ecosystem that supports life on the planet (Frederick, 1995; Lovelock, 1979, 1988; Wilson, 1992). Lovelock's (1988) "Daisyworld" model clearly demonstrates that as biodiversity increases, the planet's atmospheric, biospheric, hydrospheric, and geologic conditions become more favorable for humankind's survival. Frederick (1995) points out that diversity provides the necessary linkages for both ecological and cultural survival, saying that "Life depends upon diversity of life" (p. 141). Of course, in today's global economy, diversity is also critical to the success of business organizations. Not only can encouraging and effectively managing diversity help organizations avoid negative outcomes like increased turnover and legal problems, it can also help them improve their talent pools, and it can contribute significantly to improved competitiveness via better market understanding, higher quality problem solving, improved leadership, and more effective global relationships (Moore, 1996; Robinson and Dechant, 1997). Thus, diversity has proven to be instrumental in perpetuating the biophysical balance, cultural richness, and economic success necessary to sustain a high quality of human life on the planet.

Posterity is about stewardship, keeping things in trust for those who follow. Valuing posterity encourages the long-term thinking so important for both organizational survival and ecosystem survival. Posterity brings future generations of human beings into the organizational formula, and this, in turn, emphasizes the critical connection between the economic health of the firm and the ecological health of the planet. It demonstrates that economic issues, like good jobs and shareholder wealth, are intricately interwoven over the long term with ecological issues, like resource depletion, pollution, species loss, social justice and gender equity (Milbrath, 1989; Ornstein and Ehrlich, 1989; Stead and Stead, 1996).

Communities are cognitive networks of individuals, organizations and institutions that often share a common geography and always share common values and aspirations. From these common values and aspirations come the cultural mores and ethical systems that guide the actions of community members, including the actions taken by business organizations (Daly and Cobb, 1994; Etzioni, 1991). Organizations that stress a strong value for community can more clearly recognize the social, environmental and economic benefits of being a good corporate citizen. Further, when organizations don't value community, they are often blinded to many of their ethical responsibilities. Recent history is replete with examples of firms that have deserted communities in search of cheaper labor, leaving both economic hardship and ecological problems in their wakes. For example, when Unisys abandoned its profitable Bristol, Tennessee plant in favor of out-sourcing with a firm from Mexico, it laid off 1600 workers and left an illegal toxic waste dump on its property that was not discovered until chemicals began leaching into the water supply of surrounding residents.

E. F. Schumacher's *Small is Beautiful* (1973) focuses attention on the concept of smallness. Schumacher says, "Small-scale operations, no matter how numerous, are always less harmful to the natural environment . . ." (p. 36). A value for smallness concentrates organizational efforts on issues of economic scale. Focusing on economic scale brings to light resource reduction, materials reduction, energy efficiency, recyclability, reusability, and so forth (Daly, 1991). Note that all of these issues are rich in both economic and ecological implications. Further, a value for smallness also enhances the creative output of organizational members, which is a primary reason why small, autonomous work teams are becoming the foundations of modern organizational structures (Morgan, 1986; Peters and Waterman, 1982; Schumacher, 1973; Senge, 1990).

Quality is a perception that emerges as people compare what something is with what they think it should be. As Robert Pirsig (1974) so entertainingly and poignantly makes clear, quality is that point where empiricism and aesthetics meet, and experiencing quality is a uniquely enlightening event. As an organizational value to support sustainability, quality is a broad concept that encompasses the quality of products and services, the quality of work, and the quality of life of employees, customers, and the community (Stead and Stead, 1996). Over the past two decades, quality more than any other value has defined the relationships between organizations and their stakeholders. The economic benefits of valuing quality are well documented, and quality has also been a dominant value in organizational efforts to improve ecological performance. Total quality environmental management (TQEM) has proven to be a very effective method of improving ecological performance in economically sound ways. The benefits of TQEM have been widely reported by organizations like 3M, AT&T, P&G and Dow Chemical, and the philosophies and tools of TQEM have been central to efforts like the Global Environmental Management Initiative and the Chemical Manufacturers Association's Responsible Care Program (Willig, 1994). Thus, quality has proven to be valuable in improving both the economic and ecological performance of organizations, making it an ideal instrumental value for achieving sustainability.

An organizational value for dialogue means valuing decision processes that encourage organizations to collectively "become observers of their own thinking" (Senge, 1990, p. 242). Via dialogue, organizations are capable of creating

interaction patterns that allow underlying assumptions to be openly surfaced and questioned. This allows them to learn at the generative level, where the underlying structural patterns that cause behavior can be identified and the ineffective patterns changed (Senge, 1990). Using dialogue as the basis for interaction with both internal and external stakeholders puts organizations in positions to realistically assess their perceptions concerning their employees, their community, and the planet on which they do business. Establishing dialogue with employees, customers, community groups, government agencies, and so forth, can help organizations to find market opportunities in the face of the current turbulence present in today's business environment, it can help organizations to account more effectively for needs of the society in which they operate, and it can help organizations to find economically feasible means for managing their relationship with the Earth. Thus, via dialogue organizations can establish the kinds of communication processes with their stakeholders which can be very instrumental in sustaining a healthy ecosystem-economic system balance.

An organizational value for spiritual fulfillment means focusing the organization's attention on "ultimate ends" like peacefulness, joy, happiness, enlightenment, and creative expression (Cobb, 1995; Daly, 1991; Moore, 1995; Quiring, 1995). Valuing spiritual fulfillment allows organizations to put both economic success and ecological protection in their proper perspectives as avenues toward the realization of a higher quality of life (Stead and Stead, 1996). Maslow (1962) has done as much as anyone to bring a value for spiritual fulfillment into the workplace, advocating the need for self-actualization through creative self-expression as the highest level human need and the greatest motivational challenge to managers. As an instrumental value for sustainability, spiritual fulfillment can provide the mental pathways that lead individuals and organizations beyond material consumption and wealth to a higher level of satisfaction and purpose. This is essential if humankind is to ever truly accept a critical tenet of sustainability: Finding joy in doing more with less.

It's important to recognize that these eight values form an interrelated network rather than a list of distinct items. Pursuing quality means thinking small; a sense of community cannot exist without a sense of wholeness; diversity encourages dialogue; dialogue is necessary to sustain community; the inter-species and intergenerational equity necessary for posterity cannot exist without diversity; seeking spiritual fulfillment means valuing quality over quantity, dialogue over conflict, diversity over bigotry, and wholeness over separateness; and so forth. These few simple examples illustrate that, while each of these instrumental values may individually be a fragile strand, when tied together they provide a sturdy web upon which to build a sustainable world.

The ecological issue system

Issues analysis in eco-enterprise strategy helps clarify the relationships between the ecological issues facing the Earth and the strategic issues facing the organization. It allows strategic managers to assess the impact of the firm's operations on the Earth's resources, species, biophysical processes, and socio-cultural systems. They can better assess how and to what degree the firm is contributing to the major ecological issues facing humankind, including environmental disaster, climate change, species loss, deforestation, wetland protection, waste management, human health problems, and reduced quality of life (Stead and Stead, 1996). It is important to note as we begin this discussion that the term, ecological, refers to the complex web of environmental, social, cultural, and economic factors related to sustaining a high quality of life on Earth. Thus, as was reflected above and will be reflected in the ensuing discussion, although ecological is often used as a synonym for the natural environment, it is actually a broader term that reflects all of the environmental, social, cultural, and economic interconnections necessary to maintain a healthy relationship between humankind and the planet.

Ehrlich and Ehrlich (1991) say that the potential ecological impact of humankind can best be assessed with the following formula: $E = P \times A$

× T (Ecological impact of humankind = Population growth × Affluence, as measured by growth in per capita GNP, × Technology, as measured by the ecological impact of producing each unit of GNP). Assuming that current estimates are correct and population will double and per capita GNP will rise 2.5 times by 2050, humankind will have to achieve a technology index of 0.2 if it wants to have the same ecological impact (E = 1) on the planet in 2050 as it is having currently (2 × 2.5 × 0.2 = 1). This means that maintaining (not improving) the current level of human ecological impact will require that the world's goods and services be produced and delivered in ways that are 80% more ecologically efficient in 2050 than they are now (Gladwin, 1993).

Historically, business organizations have focused most of their attention on developing technological solutions to the ecological issues they face, constantly searching for new methods to produce and sell more goods to more people with less energy, resources and wastes. There is no doubt that these efforts have been successful to a degree. Many technological advances have been made that have significantly improved humankind's lot with regard to environmental depletion and degradation (Cumberland, 1991; El Serafy, 1991; Goodland, Daly and El Serafy, 1992). But the question is, has technological advancement alone been sufficient to stabilize humankind's impact on the planet? Let's examine some data. From 1950 to 1995, world population rose 2.24 times and world per capita GNP rose 2.44 times (Brown, Flavin and Kane, 1996). Using the P × A × T formula, this means that maintaining the same human ecological impact during that time would have required a technological index of about 0.18 (2.24 × 2.44 × 0.18 = 1). Yet, resource extraction significantly increased from 1950 to 1995 (i.e., oil production rose 5.85 times, natural gas production rose 10.6 times, and coal production rose 2.39 times) and issues like air pollution got significantly worse (i.e., carbon emissions rose 3.7 times, sulfur emissions rose 2.3 times, and nitrogen emissions rose 3.93 times) (Brown, Flavin and Kane, 1996). Thus, although precise measures of technological efficiency are virtually impossible to derive, it certainly appears that humankind failed to achieve an 82% improvement in the ecological efficiency of its technology during that period. Thus, the age-old argument of many economists that resourceful, scientifically minded humans will always find new technologies to offset the ecological limits of economic growth has not held up under empirical scrutiny, and the prospects for technology being the ecological savior over the next 50 years is a risky proposition at best (Cumberland, 1991; El Serafy, 1991; Goodland, Daly and Serafy, 1992). As El Serafy (1991, p. 170) says, "Overoptimistic views about the power of technology have failed us over the population problem . . . and are bound . . . to fail us again in regard to the environment."

P × A × T analysis is a valuable tool for understanding the ecological impacts of organizations. The three factors – population, affluence and technology – provide a useful framework for understanding the ecological implications of a firm's strategic choices. Each adds a different ecological dimension to strategic issues facing organizations, such as what products to offer, how to produce these products, where to produce them, who to sell them to, how to deliver them, how to use them, and how to dispose of them when they no longer have economic value. These factors clearly imply that concern for the ecology of the planet and concern for the economic well-being of the firm are not necessarily incompatible. Efficiency is good for business and good for the natural environment; improved channels of distribution can reduce the resources used by the firm and the prices customers are charged for the products; affluent, well-educated people who live in free and equitable societies have lower birth rates and make better customers and employees than people who are poor and uneducated; and so forth. However, as indicated above, improved technology will not by itself lead to ecological balance. Stabilizing and improving humankind's impact on the planet will require going beyond simply doing things differently. It will require that organizations begin to think differently about over-consumption, gender equity, economic and social justice, and other moral issues that demand attention as

strategic managers analyze the ecological issues they face.

As will be discussed in more depth in the conclusions, according to Hart (1995, 1997) the implementation of corporate strategies related to ecological issues typically occurs in three phases – pollution prevention, product stewardship and sustainable development – each of which is progressively more inclusive in terms of Ehrlich and Ehrlich's (1991) three factors. Early efforts of firms, as would be expected, typically focus on finding technological solutions to environmental problems. However, contributing to the resolution of issues related to affluence and population, such as over-consumption, gender equity and social justice, requires taking a broader, more global strategic perspective. There is evidence this is beginning to occur, at least in some firms. For example, Monsanto has recently announced that it will shift its entire product line from unsustainable chemicals to sustainable bio-engineered products, and Merck has struck agreements with Central American countries which allow it to harvest drugs from rain forests in sustainable ways.

From this discussion, we present the framework for ecological issue analysis depicted in Figure 2. In the figure, population and affluence are both labeled with a plus sign (+) indicating that these factors are currently increasing, thus causing increased stress on the ecosystem. Technology is labeled with a minus sign (–) to indicate that technological advances have been successful in reducing the ecological stress of human activity. As discussed above, this framework allows strategic managers to categorize the ecological dimensions of the strategic choices they make and to understand the long-term dynamic complexities of their relationships with nature. It allows them to understand that they must continue to learn to do things in more ecologically efficient ways, but that they must also begin to question the moral relationships between themselves, nature and society. Given that this framework allows for the analysis of ecological issues facing a firm in light of the firm's ethical responsibilities to nature, it provides an excellent basis for the ecological issue analysis component of eco-enterprise strategy.

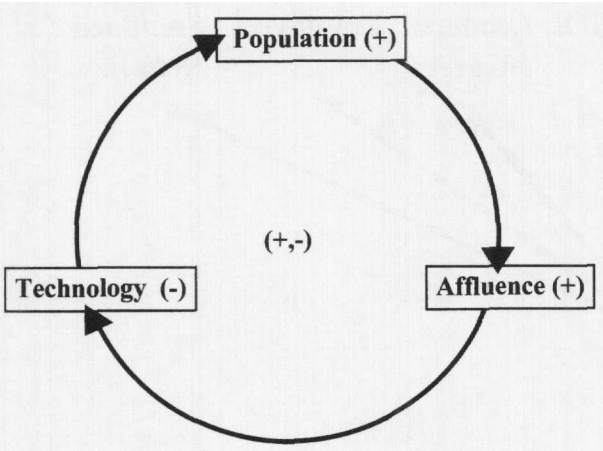

Figure 2. Ecological issue system.

The green stakeholder map

At the heart of eco-enterprise strategy is the belief that the planet is the "ultimate organizational stakeholder" (Stead and Stead, 1996). Given that the planet supports all life (including humankind), is the geographical location of all business activity, is the source of the resources and energy necessary to make the economic engine purr, is the sink into which the wastes of economic activity are poured, and is what humankind has been risking most in its 350 year experiment called the Industrial Revolution, considering it the central stakeholder seems logical (Post, 1991; Shrivastava, 1995a; Starik, 1994, 1995; Stead and Stead, 1996). Interestingly, some have argued otherwise (Frederick, 1995; Phillips and Reichart, 1997; Seligman, 1995). However, the arguments for considering the Earth as a stakeholder have been rather convincing. Starik (1994, p. 92) says that stemming the tide of ecological degradation associated with business activity requires expanding the stakeholder concept to include the "Earth's atmosphere, hydrosphere, lithosphere, and biosphere." As mentioned earlier, Freeman (1994) says that considering the Earth a stakeholder is a normatively legitimate position. Many point out that the planet may not sit down with the other board members, but it has many representatives willing to come to the table on its behalf. Legislators,

regulators, shareholders, consumers, lenders, insurers, employees, environmental groups, and industry standard setters all represent the Earth in the business arena. This array of green stakeholders provides a strong base of ecological influence in organizations, and satisfying their needs can certainly affect the short-term and long-term success of organizations. Their presence in the marketplace, seats of government, halls of justice, board rooms, and wash rooms makes the Earth a stakeholder with tremendous scope and breadth (Starik, 1994, 1995; Stead and Stead, 1996; Throop, Starik and Rands, 1993; Welford and Gouldson, 1993; Williams, Medhurst and Drew, 1993). This influence is represented by the green stakeholder map in Figure 3.

Regulators are the most infamous and influential of ecological stakeholders in business organizations. Their presence is often met with imagined doom by organizations who are convinced that the role of government regulation is to destroy their competitiveness with nitpicky, expensive regulatory requirements. Indeed, the alphabet soup of environmental regulations that exists from the local level to the international level can certainly be daunting, and complying can certainly be expensive. However, it is important to recognize that well structured environmental regulations can provide competitive advantages (Porter and van der Linde, 1995; Worrell and Gray, 1985), and it is also important to recognize that environmental regulations have had very positive ecological impacts over the past 25 years (Easterbrook, 1995).

Green consumers, consumers who want ecological and social responsibility built into the products they buy, are a complex, diverse group that vary in terms of motives, levels of ecological commitment, and so forth. Many will go to great lengths and pay significantly more money for ecologically sensitive products, while others will be ecologically sensitive in their buying patterns only when it is convenient and competitively priced for them to do so. Nonetheless, green consumers have significantly influenced new-product introductions, product design,

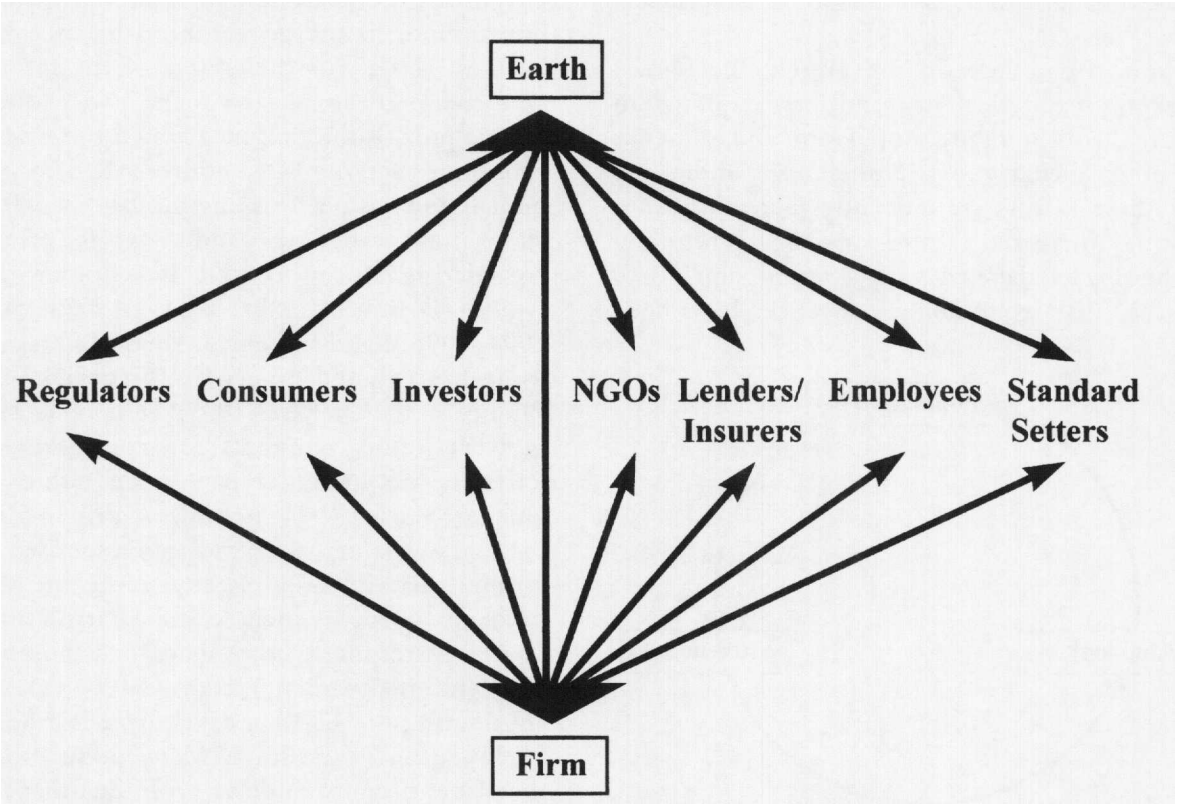

Figure 3. Green stakeholder map.

product packaging, advertising approaches, etc. (Coddington, 1993; Meffert and Kirchgeorg, 1995; Ottman, 1992).

Investors have taken two primary approaches to insuring that the investments they make are ecologically sound. They have focused their investments in firms that have good environmental and social records, and they have worked through proxy proposals to improve the environmental and social performance of the firms in which they have investments (Stead and Stead, 1996). Ethical investment mutual funds have grown tremendously in both dollar amount and scope, and their overall performance has been very good, even though there was a down period during the mid 1990s (Brill and Reder, 1992; White, 1995). Ecologically oriented proxy proposals have also grown in the past several years. Especially visible are the efforts of the Coalition for Environmentally Responsible Economies (CERES), which has managed successful proxy proposals in more than 60 large corporations, such as General Motors and Polaroid, to endorse the CERES Principles (originally known as the Valdez Principles) (Scott, 1995).

Environmental interest groups are another infamous environmental stakeholder. Whether it be Greenpeace's physical confrontation with Shell Oil of the U.K., or the Sierra Club Legal Defense Fund's court actions on behalf of the northern spotted owl, or the Environmental Defense Fund's negotiations with McDonald's concerning the packaging the firm used for its food, environmental interest groups have consistently put pressure on business organizations to be more ecologically responsible. While the strategies, ideologies, desired outcomes, and structures of these groups may differ, cooperative efforts between these groups and business organizations have emerged recently as a favored approach for dealing with environmental issues (Clair, Milliman and Mitroff, 1995; Turcotte, 1995).

Legal liability, financial liability, property damage and property loss are real threats from environmental damage. Five hundred million dollars are spent annually in the U.S. for environmental clean-up. It's no wonder that lenders and insurers are now requiring environmental audits before they are willing to extend credit or to insure property and projects. This is especially the case since the courts have ruled that current owners may be held responsible for environmental problems even though previous owners created them (Greeno, 1994; Kolluru, 1994; Wade, 1992).

Of all stakeholders, employees often bear the largest share of the burden of an organization's environmental problems. Environmental accidents and long-term exposure to pollution in industrial settings contribute significantly to the fact that workers in many industries have shorter than average life expectancies. Cancer is a particularly serious employee health problem. Industrial chemicals like asbestos, arsenic, vinyl chloride, chromium, nickel, and benzene have been found to cause cancers of the lungs, liver, urinary bladder, skin, hematopoietic and lymphatic systems (Cole and Goldman, 1975; Swanson, 1988). Historically, about 4% of the all cancer in the U.S. can be linked directly to exposure to chemicals in the workplace, and in another 16% to 34% of cancer cases, workplace chemical exposure has been a co-culprit (Bridbord, Decoufle and Fraumeni, 1978; Peto, 1985).

Recently, environmental-standards setters have begun to have a profound influence on the environmental performance of organizations. The CERES Principles mentioned above are, of course, environmental standards established via proxy proposals. Other environmental standards having a major influence on the environmental performance of business organizations include the European Community's Eco-Management and Audit Scheme, the Chemical Manufacturers Association's Responsible Care Program, the International Chamber of Commerce's Charter for Sustainable Development, the British Standards Institution's Standard 7750, and the International Standards Organization (ISO) 14000 standards (Cahill and Kane, 1994). The CMA's Responsible Care Program makes adherence to tough environmental standards a requirement for association membership, and many other industry associations are following suit by either recommending or requiring that their members meet environmental standards.

Standing for sustainability

Let's briefly revisit our previous discussion. An organization's enterprise strategy emerges from the interaction of three factors: the values that underpin the firm's ethical system; the societal issues that the firm faces; and the stakeholders that the firm serves. By identifying its system of core and instrumental values, determining the stakes and power bases of its stakeholders, and relating these to the critical issues that define its relationships with society, a firm can develop an in-depth understanding of its ethical foundations, answering the basic question posed by enterprise strategy – "What do we stand for?" The answer to this question articulates the over-arching ethical framework from which the firm's corporate level strategy emerges.

There is no question that ecological issues represent a difficult divergent societal problem that organizations must face in their efforts to relate effectively to the greater society. Organizations must find economically feasible ways to improve their ecological impacts on the planet, focusing significant attention on their contributions to the dilemmas posed by the interactions of population growth, affluence, and technology. Sustainability has the potential to transcend the dichotomous nature of this divergent problem by providing a framework within which organizations can work to balance economic success and ecological protection. As such, sustainability represents an appropriate core value for effectively and efficiently managing ecological issues in business organizations, and the ideals embodied in sustainability can be released via a set of supporting instrumental values like wholeness, diversity, posterity, community, smallness, quality, dialogue, and spiritual fulfillment. This allows organizations to recognize that the Earth is the ultimate stakeholder with significant power and breadth in the economic arena because of the cadre of regulators, consumers, investors, employees, lenders, insurers, environmental groups, and environmental-standards setters that represent it. With the Earth as the "trump-card" stakeholder, eco-enterprise strategy emerges in organizations that "stand for sustainability" (see Figure 4).

Conclusions: Toward sustainable strategic management

Within the over-arching ethical framework of eco-enterprise strategy, a corporate level strategy can emerge with sustainability at its core. We refer to this as sustainable strategic management (see Figure 4). Sustainable strategic management has been the subject of much research over the past several years. In general, sustainable strategic management focuses on the formulation and implementation of strategies designed to provide firms with competitive advantages by using ecological responsibility as a path to cost reduction and market differentiation. In doing so, organizations must go beyond the traditional economic value chain (Porter, 1985) and focus their strategic efforts on the entire ecological life cycle, including: reducing resource use, energy use, and pollution and wastes; making economic investments in developing parts of the world; and forming collaborative relationships with other organizations of various types in order to effectively manage common resources. Effectively implementing sustainable strategic management generally requires that organizations develop learning structures and fundamental change processes that will allow them to question and change the way they think about their relationships with the natural environment. Ultimately, sustainable strategic management processes should result in the evolution of organizations into "type III industrial ecosystems," which imitate mature natural systems via processes like total materials recycling, renewable energy sources, minimal waste generation, and ecological connections with other organizations and institutions (Hart, 1995, 1997; Kirchgeorg, 1994; Post and Altman, 1992, 1994; Shrivastava, 1992, 1995a; Starik and Rands, 1995; Stead and Stead, 1995, 1996; Throop et al., 1993).

Hart (1995, 1997) portrays sustainable strategic management as a three stage progression. In the first stage, pollution prevention strategies, the strategic focus of the firm is on reducing costs and improving efficiency by reducing pollution and wastes during the production process. Total quality environmental management (TQEM – mentioned earlier) largely fits into this category.

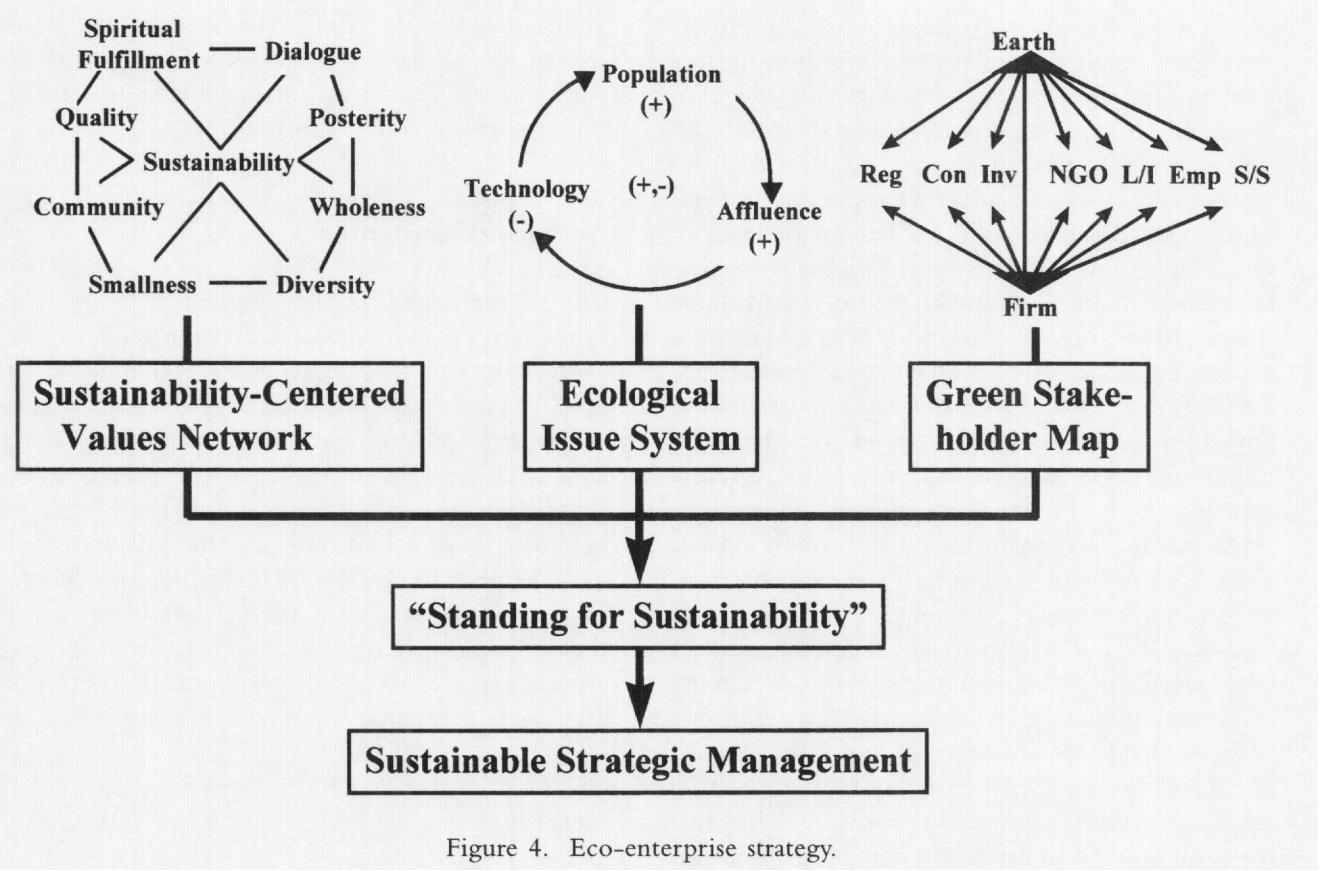

Figure 4. Eco-enterprise strategy.

The success of such strategies has been widely reported, especially in firms like 3M and Dow Chemical (Hart, 1995, 1997; Shrivastava, 1996). Since pollution prevention strategies focus strategic efforts primarily on improving production and delivery technologies in order to reduce costs via improved ecological efficiency, these strategies are designed to improve the T factor (technology) in the ecological issue system (see Figure 4).

Hart's (1995, 1997) second stage of sustainable strategic management is the progression to product stewardship strategies. In this stage, firms continue to focus on pollution prevention, but they go beyond this and focus on achieving competitive advantages all along the product lifecycle. Thus, both cost reduction and market differentiation are possible through product stewardship strategies as firms pay attention not only to reducing resources and wastes but also to producing more environmentally sensitive products that are more durable, less polluting, more recycable, more reusable, and so on. Design for environment (DFE) has emerged recently as a popular means for achieving product stewardship. According to Allenby (1994, p. 139), "The idea behind DFE is to ensure that all relevant and ascertainable environmental considerations and constraints are integrated into a firm's product design processes." Product stewardship also involves environmental marketing – developing products that balance performance, price, convenience and environmental responsibility, and effectively project this image to consumers (Ottman, 1992). According to Meffert and Kirchgeorg (1994, p. 2), environmental marketing is "an essential prerequisite for transforming the consumer society into a sustainable society." This means that product stewardship addresses not only the T but also the A (affluence) in the ecological issue system (see Figure 4) by directly focusing the strategic direction of the firm on what is consumed, how it is consumed, how much is consumed, etc.

According to Hart (1995, 1997), the third stage of the sustainable strategic management

progression involves sustainable-development strategies. These strategies involve pollution prevention and product stewardship, but they are designed to shift the firm's markets toward the developing nations of the world. Besides the obvious economic advantages of moving into the fastest growing economic markets in the world, sustainable-development strategies can provide developing nations with the kind of investments they need to improve education, health-care, civil rights, and economic opportunities (Hart, 1995, 1997; Shrivastava, 1995b). Further, sustainable development cannot be achieved only through individual organizational actions. Thus, sustainable-development strategies must include some elements of inter-organizational networks which attend to problems related to managing common resources (Hardin, 1968; King, 1995; Starik and Rands, 1995; Throop et al., 1993). It should be clear from the description that sustainable-development strategies focus the strategic direction of the firm squarely on both the A and the T of the ecological issue system. However, sustainable-development strategies go beyond this and focus attention on the P (population growth) of the ecological issue system as well (see Figure 4). By helping developing nations to address critical quality-of-life issues like education, economic opportunities and gender equity, sustainable-development strategies tie the economic success of firm directly to the critical factors of birth-rate reduction (Hart, 1995, 1997; Shrivastava, 1995b). Thus, it is at this stage that sustainable strategic management expands its focus beyond environmental protection to the plethora of complex ecological dimensions which comprise humankind's relationship with the Earth.

We believe that this progression brings us full circle. In this paper, we suggest that eco-enterprise strategy can form a solid ethical foundation upon which to base sustainable strategic management, and we suggest that sustainable strategic management can direct the strategic attentions of the firm toward all three factors of the ecological issue system. Therefore, via eco-enterprise strategy firms are afforded an opportunity to find a positive synergistic relationship between themselves, their community, and the greater ecosystem. Thus, we believe that eco-enterprise is a valid framework which provides a path by which firms can make a difference while they make a profit.

Acknowledgements

Our sincere thanks to Lee Preston of the University of Maryland, Bill Frederick of the University of Pittsburgh, and Nigel Roome of Tilburg University. We also thank the participants at the 1997 Ruffin Lectures in Business Ethics at the University of Virginia and at the 1997 Organizations and the Natural Environment Interest Group program of the Academy of Management in Boston, MA. Finally, our thanks to the *Journal of Business Ethics* referees. All of these people have made very thoughtful comments which contributed significantly to the quality of this paper.

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