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Environmental Ethical Commitment (EEC): The interactions between business, environment and environmental ethics

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Abstract

Traditionally, businesses that regard the natural world as "free" and "unlimited" have abandoned environmental considerations. Environmental considerations also act not only as the source of raw materials and energy to meet human needs but also act as the repository for human-generated waste. Because of this, business functions and their intrusion into ecosystems have frequently had unfavourable effects. Business produces dangerous products and causes pollutions that may result in many kinds of dangers. Therefore, it is the purpose of this study to review the interactions between business, the natural environment and environment ethics.

1. Introduction

Today, business corporations have broader responsibilities to society besides providing profits to their shareholders. The broader responsibilities are due to the demand of a bigger population that corporations have to serve. Saha and Darnton (2005) developed a long list of these broader responsibilities. According to them, the broader responsibilities of business corporations may include producing not only products but safe products, providing high-quality reliable services and applying ethical business practices. The responsibilities also include paying contribution to society, involvement in social investment, exercising welfare and rights, considering health and safety, offering employment, offering working conditions and

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practices, conducting fair trade, responsibility in marketing and communication, involvement in stakeholder affairs and disclosing information, codes and conducts. Above all, the social responsibilities of a corporation are to produce goods and services, make a profit for its shareholders, respond to the market and operate along with the competitors. Asking businesses to do more than those responsibilities stated above is unfair to them (Hoffman, 1991). Nonetheless, the broader responsibilities stated by Saha and Darnton (2005) do not include the responsibility towards the natural environment. The business corporations, according to them, do not have the responsibility to protect the natural environment.

Bansal and Roth (2000) argue that corporations will have an association with initiatives and benefits by having motivations towards the ecology. Corporations would benefit from higher profits, gain process intensification, gain a larger market share, enjoy lower cost and differentiation, gain higher share price, rent-earning resources and capabilities. They also emphasize that with legitimation, corporations would gain long-term sustainability, survival, operation license, fines and penalties avoidance, lessen risk, and employees satisfaction. Corporations would also benefit from feel-good factors, employee morale, and individual satisfaction by engaging in social responsibility. According to Bansal and Roth (2000), all these benefits would be enjoyed by corporations if they are motivated to respond to the ecology. Although the benefits seem to be abstract and immeasurable, the anticipated benefits can act as a trigger for corporations to commit ethically. Besides the broader responsibilities of the corporations, Hoffman (1991) includes ethical responsibilities. Corporations have the ethical responsibility to become an increasingly active partner in dealing with social concerns. Hoffman (1991) agrees that business corporations are urged to think creatively to find solutions and not to create problems in order to achieve environmental success, as it has become an aspect of the search for total quality.

Hoffman (1991) included ethical responsibilities in total social responsibilities, that ranked the most difficult responsibilities to comprehend. Other factors are discretionary responsibilities, legal responsibilities, and economic responsibilities. It is difficult and ethically hard for corporations to carry these responsibilities as well as to be motivated towards ecology.

1.1. Health risk

The interaction between business activities and the natural environment had brought tremendous risk to the environment, people's health, and the economy. An example is the release of chlorofluorocarbons (CFCs) for food preservation. It is not really going to harm us but constitutes risks for future generations as it depletes the ozone layer. Synthetic insecticides are not only cause illness to human but also cause destruction to crops and will eventually affect birds and mammals gradually. The health risks include the risk of impairment, contraction of diseases, and other health implications that are not only harmful to present population but also to future generations. In the worst case, humans chance of death will increase by one in a million if they breathe New York's polluted air for two days (Wilson, 1990). In terms of food consumption, it is very hard to avoid consumption of food that contains potentially dangerous additives or pesticide residues as the way to realise their presence is limited.

Based on Foon and Kong (1998), the haze that has effects on human beings comprises carbon monoxide, hydrocarbons (both caused by vehicles), sulphur dioxide (caused by power plants and industrial fuel), nitrogen dioxide (caused by vehicles and power plants), and the main pollutant in the current Trans boundary haze (caused by the industrial processes). Among health problems, carbon monoxide could weaken heart contractions; sulphur dioxide could cause bronchitis; nitrogen dioxide could aggravate asthma; ozone could cause chest pain, sore throat, and coughing, particulates could damage lung tissue; while lead could destroy the brain and nervous system.

1.2. The ecological risk

Ecological risk is another risk in consideration to environmental issues. According to Ives (2000), more than 50 percent of the world's land surface has been transformed and used in supplying freshwater for human use. Humans have used non-renewable energy by engaging in land deforestation activities. This produces enormous waste that results in water supply contamination and will worsen human activity. In order to increase food supply, the human use of crop growth agents such as nitrogen and phosphorus fertilizer that will eventually result in Lake Eutrophication and and also use wood and coal that will cause deforestation and climate change. Wood and coal are cheap and readily available sources to create energy for consumer and industrial use.

The use of synthetic insecticides to curb crop destruction affects animals severely, especially birds and mammals, which will result in their extinction. Cheap energy often requires wood and coal, notwithstanding that humans are actually reducing forest area. Thus, it results in global climate change that can cause global warming and dangerous acid rain. The use of nitrogen and phosphorous fertilizers to increase food supply had killed many lakes. In Ives's article (2000), a scientist from Commonwealth Scientific and Industrial Research Organization (CSIRO) estimated that all these activities decreased oxygen and increased carbon dioxide in the atmosphere to an estimate of 70 percent since more than 200 years ago. In addition, Ives (2000) emphasized that a combination of carbon dioxide and other gases in the air will create a greenhouse effect that leads to global warming and climate change.

Surrounding issues are burning rivers, dying lakes, oil fouled oceans, radioactivity in food, lead and mercury in water (Hoffman, 1991), ozone depletion, acid rain, declining biodiversity, toxic waste (Shrivastava, 1995), air and water pollution, toxic emissions, chemical spills and industrial accidents. The environmental issues also include global warming, mass destruction of the rain forest, species extinction, and clean water. Other issues in environmental concern are serious adverse effects on agriculture, plant and marine life (Foon and Kong, 1998), water rights, waste export, power generation and exchange, scarce clean air and water, and pesticide use.

The species extinction is estimated to affect a quarter of the world's mammalian species, three quarters of the world's birds, and at least 50 thousand species go extinct each year and the rapid climate change will accelerate this extinction rate more severely. There has also been widespread damage to the world fisheries of about 50 per cent depletion during the last 50 years which has resulted in 18 of the world's major fisheries already reaching or exceeding their maximum sustainable yield levels (Hart, 1997).

1.3. The economic risk

Besides health and ecological risks, the interaction of business and the environment incurs economic risk. The environmental disasters have caused many risks to businesses economically. Shut downs in economic activities, massive financial losses, flight cancellations (Foon and Kong, 1998), high medical costs, workers'-productivity lost (due to illness), and damage to building structures and materials are some of the examples. Companies might also face monetary settlement, pressure group activities, negative press, industry reputation downturn, and stringent legislation.

In order to seek lower cost for hazardous waste disposal, Exxon caused injuries to people and industry. They had to pay monetary settlement and endured negative press for two years (Hamilton and Berken, 2005). Union Carbide in Bhopal, India, faced the reputation downturn of the entire chemical industry, lost an estimation of one million dollars or 28 percent in market capitalization, and experienced cumulative abnormal returns for 50 days, following the Bhopal chemical leak (Blacconiere and Patten, 1994).

2. The interactions between business between business activities and the natural environment

Manufacturing activities have contributed to the decline of the natural environment and, in turn, can lead to the destruction of the Earth. Humans are said to "commit biocide" (Ives, 2000) when the planet is being "beaten and poisoned to death" (Rowe, 1990). It is because, compared to people, the planet is considered to be relatively unimportant. In addition, according to an estimation, within the next few generations the planet will become a "superheated pressure cooker" (Skillman, 1998) due to the risks faced, which will bring major chaos to the human race. Therefore, integrating of environmental ethical considerations and commitment towards the natural environment into everyday business operations, as well as giving them equal weight as other business considerations, is a critical move.

3. Environmental ethics

The development of environmental ethics began with the publication of Leopold's Sound County Almanac in 1949 (Thompson, 1998). Aldo Leopold was the pioneer of American Wildlife Ecology and was the first ecologist to extend the ideas into environmental ethics. Later, Rachel Carson became the catalyst for the environmental movement after she released her book, Silent Spring, in 1963 (Brennan and Yeuk-Sze-Lo, 2000). Since then, environmental ethics has become a crucial issue. Modern Western perspectives on the management of organization in the natural environment have many influences, some of the best known of which are based on Starik and Marcus (2000) as shown in Table 1. They come from various fields, which include environmental conservation, natural science, environmental economics and environmental philosophies.

Table 1. The environmental ethics influencers

Field	Authors
Environmental Conservation	John Muir, John James Audubon and Aldo Leopold
Natural Science	Charles Darwin, Rachel Carson and Fritjof Capra
Environmental Economics	Thomas Malthus, Ronald Coase and Herman Daly
Environmental Philosophies	Henry David Thoreau, Arne Naess and E. F. Schumacher

Source: Starik and Marcus (2000)

3.1. Environmental ethics philosophy

Environmental ethics emerged as a new sub-discipline of philosophy in the early 1970s by posing a challenge to traditional anthropocentrism, a human centred way of thinking (Brennan and Yeuk-Sze-Lo, 2002; Partridge, 1980), in conjunction with the opposite theory of non-anthropocentrism. According to Thompson (1998), theoretically, anthropocentric places the human species at the center of the human moral universe. However, human beings are not the only moral agents in the world. They are only creatures with oral interests of "intrinsic" worth. In anthropocentrism, the rest of nature has no such interest and only has worth to the extent that it is instrumental in meeting the needs of the people. Anthropocentrism consists of two varieties, i.e., Egocentric and Homocentric while Non-anthropocentrism consists of Biocentrism and Ecocentric (Thompson, 1998).

In an extreme corner, egocentric perspectives regard man as the master or the justification of the natural community (Partridge, 1980). Normally, egocentric theories have relation with laissez faire

liberalism, capitalism, and free market. In addition, the theories pay scant attention to environmental concerns and see nature as an exploitable resource for human benefit (Thompson, 1998). The prominent contributors in egocentric theories are Thomas Hobbes, John Locke, Adam Smith, Thomas Malthus and Garret Hardin; while J. S. Mill, Jeremy Bentham, Barry Commoner and Murray Bookchin represent anthropocentric theories (Thompson, 1998).

Thompson (1998) argues that the Anthropocentric or Homocentric view perceives all moral claims in terms of humans and their interest (Hoffman, 1991). More commonly, anthropomorphic theories can be described as homocentric as they are grounded in notions of welfare and social justice. Both utilitarianism and Marxism are categorized as homocentric theories. If utilitarians come to regard the stewardship of the natural world as an important priority, it would only be because this, in turn, contributes to the greatest happiness to the greatest number of people (Thompson, 1998). This theory also put the "dignity of personhood" in front of nature (Partridge, 1980).

Biocentric environmental ethics comprises all things that are alive or a vital part of an ecosystem (Hoffman, 1991). Biocentric environmental ethics includes plant and animals, i.e. it extended its concern beyond the boundaries of moral significance. Some philosophers advocate the principle of biocentric egalitarianism (Bio-egalitarianism) according to which human lives is not just parts of nature; they are an equal part of nature (Thompson, 1998).

Non-anthropocentrism/Ecocentric started from a radically different position. They base their ethics on the view that all living things, and in some theories, even non-living things like rocks or mountains, have intrinsic moral value and humans, therefore, owe a duty to them (Thompson, 1998).

Anthropocentric reflects the concern about human beings as a subset of biocentric that comprises the concerns for both human and animal. Both anthropocentric and biocentric are subsets of ecocentric, which concern all parts of nature such as trees, land, water, animals, and people. Rowe (1990) has portrayed attitudes that should govern people's relationship with the environment. Attitude that slowly killing the world and, if continued, will finish the human race is Anthropocentrism that puts people first before all matters. The highest goal of anthropocentrism is a service only to the human community.

The saving attitude, the attitude in short supply is ecocentrism, which identifies the ecosphere as a center, a main point not only for ethics but also for arts and religion, at least in the latter, immanent aspects. However, ecocentrism is challenged by the cultural obstacles. The goals of traditional management are to achieve growth and shareholders wealth while ecocentric management aims for sustainability and quality of life as well as stakeholder welfare. Table 2 views the traditional versus ecocentric management in terms of goals, values, products, production systems, organizations, and environment and business functions.

According to Shrivastava (1995), in action of Ecocentric, management proliferates all aspects of organization mission, inputs through and outputs. Shrivastava argues that Ecocentric management seeks ecofriendly product designs, packaging, and material use. They also seek to renew natural resources systematically in order to minimize waste and pollution. Ecocentric management encourages the use of low energy and small amounts of resources as they have scaled appropriately provide meaningful work, decentralized participatory decision making, have low earning differentials among employees and non-hierarchical structures. Ecocentric management also establishes a harmonious relationship between the natural and social environment.

Table 2. Traditional versus ecocentric management

Business Functions:	
Traditional Management	Ecocentric Management
Marketing aims at increasing consumption	*Marketing* for consumer education
Finance aims at short-term profit maximization	*Finance* aims at long-term sustainable growth
Accounting focuses on conventional costs	*Accounting* focuses on environmental costs
Human resource management aims at increasing labour productivity	*Human resource management* to make work meaningful & the workplace safe/healthy

 Extracted from: Shrivastava (1995), p. 131.

Shrivastava (1995) also emphasizes that marketing in ecocentric management seeks to educate customers about responsible consumption, instead of promoting unrestricted consumption. The finance aims for long-term sustainable growth, instead of short-term profits, accounting seeks to incorporate the social and environmental costs of production instead of externalizing them while management in ecocentric management seeks to provide meaningful work and safe working conditions, instead of single-mindedly pursuing labor productivity. According to Shrivastava, in ecocentric companies, their mission and vision include a corporate commitment to 1) minimize the use of virgin materials and non-renewable forms of energy, 2) eliminate emissions, effluents and accidents, and 3) minimize the life cycle cost of products and services.

3.2. Environmental sustainability

It was predicted that the most important issues in the next century would be the issues related to the environment (Schmidheiny, 1992). Schmidheiny (1992) and his colleagues provided a vision of "sustainable development" at the 1992 Earth Summit in Rio de Janeiro. They saw that there is a linkage between environmental protection and economic growth. In 1997, the Kyoto Protocol – a codicil to the United Nations Framework Convention on Climate Change (UNFCCC) – was signed in Japan. The Kyoto Protocol commits most industrialized countries to reducing their emissions by six to eight per cent below 1990 levels by 2012.

Corporations would be able to obtain valuable information by capturing the environment as a commodity (Egri and Herman, 2000). Corporations would be able to identify environmental strategies, understand the decision process, understand organizational participants and also reintegrate humanity and ecology, both of which could advance long-term ecological or organizational sustainable development.

Parallel to the understanding of organizational participants, Hart (1997) argues that corporations must change the way the participants think, especially the customers, in order to create products and services preferred by them that are consistent with sustainability and enable the corporations not only to be known as marketers but also to be known as educators. In doing so, corporations must lower material and energy consumption, develop clean products and technology, reduce pollution burdens, build the skills of the poor, ensure sustainable use of nature's economy, replenish depleted resources and foster village-based business relationships.

There are various terms by several authors in order to define sustainable development. The term includes vision expressions, value change, moral development, social reorganization and transformational process. They have also come out with the components of sustainable development, operational principles and techniques of biophysical sustainable behavior. Environmental or ecological sustainability could enjoy the benefit of the ongoing challenge to ensure the prosperity of humankind, which deals with the

ability of more individuals, sufficient duration and related systems (Starik and Marcus, 2000) by adapting to the sustainable competitive strategies.

In order to represent sustainable sector (emerging sector), marketing opportunities were created from better consumer information and product labeling where corporations can recycle the waste and find its new uses in order to venture into new emerging economies such as in food industry, cosmetics industry, paper products industry, household products industry, and other upstream industries that could be adjusted to meet the environmental requirements.

In order to achieve sustainability of the biosphere, some alterations must be done by the corporations. Corporations must reduce the extraction of virgin ores of toxic heavy metals, change many industrial processes, and curb the use of toxic, mutagenic and carcinogenic metals. "Spiritually" the corporations are also urged to pledge and support the environmental guideline, namely, the "Business Charter for Sustainable Development".

The aim of any corporation pertaining to sustainable development is to achieve zero emission, zero pollution and zero waste, however, to achieve zero discharge or no pollution at all is impossible. If corporations understand the concept of ecological sustainability, they could achieve several benefits to ecological sustainability such as driving down the operating cost, competitive advantage, to become environmental leaders, maintain and enhance corporate image, reduce the long-term risk, benefits ecosystems and communities and achieve a firmer legal footing (Shrivastava, 1995).

However, there are several major challenges to sustainability. The process of achieving sustainability involves a tremendous amount of money (Hart, 1997) and leads to severe pollution, depletion and poverty. According to Hart (1997) developed economies face greenhouse gases, use of toxic materials, contaminated sites, scarcity of materials, insufficient reuse and recycling, urban and minority, and unemployment. Emerging economies experience industrial emissions, contaminated water, lack of sewage treatment, over exploitation, overuse of water for irrigation, migration to cities, lack of skilled workers and income inequality. Survival economies experience the worst scenarios including dung and wood burning, lack of sanitation, ecosystem destruction due to development, deforestation, overgrazing, soil loss, population growth, low status of women and dislocation. However, in order to counter this scenario, corporations could reduce their corporate footprint, avoid collision and meet basic needs in order to achieve success.

4. The benefits of environmental ethical commitment

Moving towards environmental sustainability could benefit corporations in many ways. Many research findings discuss those benefits. The benefits were presented in various approaches, detailed explanations, and broadly explained opportunities (Saha and Darnton, 2005; Starik and Marcus, 2000). They also came from business process that considers social, moral, and ethical factors. The benefits are interpreted into quality of life such as customer satisfaction, quality of work life, and environmental impact. They consist of achieving cost leadership and competitive advantage (Shrivastava, 1995; Saha and Darnton, 2005; Starik and Marcus, 2000), boosting profitability (Shrivastava, 1995), improving public relations (Shrivastava, 1995), and improving ecological and business performance (Shrivastava, 1995).

Other benefits include capturing the green market, achieving environmental leaders, improving image of the company, reducing long term risk, reducing health expenses, gaining firmer legal footing (Shrivastava, 1995), gaining stakeholder importance, avoiding environmental fines, improving raw materials utilization, rejuvenating employee's morale, improving public perception of the industry, increasing sales, gaining interest from investing institutions and gaining more business (Saha and Darnton, 2005). Companies were offered a wide range of opportunities while dealing with core and primary environmental products and services. These opportunities include a decrease in cost of waste

disposal, a gain in reputation in environmental responsibility, a reduce in operating cost, a venture in new environmental packaging, a gain in new marketing for existing and new green products, an increase in revenue from pollution control products, and finally, an ability to sell their pollution compliance capacity. Therefore, it can be concluded that environmental ethics has evolved into a platform that concerned with the rise of the earth and its creatures that portray what is needed to solve ecological crisis as often argued in the on-going debate.

Finally, Kamarul-Zaman (2012) emphasizes that corporations must understand, believe, plan, and acquire skills of EEC in order to achieve environmental excellence.

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