



# Environmental Ethical Commitment (EEC): Factors that affect Malaysian business corporations

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## Abstract

This study is about environmental ethical commitment (EEC) factors that affect Malaysian manufacturing companies. The independent variables were the ecological concern, the regulations, perceived behavioral control which consists of self-efficacy, ethical climate, financial aspect, stakeholder pressure and stakeholder information and also the personal moral obligations. From regression analysis, only three factors namely the regulation, financial aspect and stakeholder information were able to explain the EEC in Malaysia. Finally, environmental ethical consideration would be beneficial to companies as it offers advantages and having claimed to save the industry as well as the world.

**Keywords:** Environmental ethical commitment, ethics, natural environment

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## **1.0 Introduction**

Environmental concerns were detected in the 1940s and have evolved since then. In the 1940s the general concerns related to the limited natural resources, inadequate food production and depletion of non-renewable resources. In the 1960s the general concerns of the people related to the by-products of production and consumption and centred around the issues of air and water pollution, waste disposal and chemical contamination. It was in the 1980s that global environment change was experienced with the problems of climate change, acid rain, ozone depletion, biodiversity, deforestation, water management and globalization, which persist until the present day (Impak, 2009).

The focus of this study is about business ethics and its natural environment. It is how the corporations (manufacturing companies in Malaysia) manage their environmental ethical commitment to the natural environment. It is about environmental ethics. According to Kauffman (2001) ethical managers have to evaluate the strengths and weaknesses of a decision regarding its impact on the environment because “ethics” is a discipline that deals with good and bad, thereby implying a moral duty or obligation. The manufacturing operations with regards to the environment, as emphasized in this study, create a variety of possibilities for adverse effects on humans and other living things, both directly and indirectly. Therefore, the purpose of this study is to discuss and empirically test several propositions regarding the environmental ethical commitment of the manufacturing companies in Malaysia.

## **2.0 Literature Review**

Malaysia has never reported an equivalent major environmental disaster but the environmental issue is equally appalling. The new industrial revolution has burdened Malaysia with high environmental pollution (Habtemicheal, 1996). According to Wah (1982), environmental problems are experienced everywhere in Malaysia, which includes city dwellers, villagers and the communities deep in the forest due to industrialization and modernization. Wah (1982) further explains that industrialization affects shop floor workers in the cities most severely. Annually there are three to four hundred reported deaths out of the 200,000 Malaysian industrial workers at the workplace, and another 13,000 are disabled. This is due to the fact that industrialization has caused “sinister killers” that consist of poisonous chemicals, gases, dust, excessive heat, noise and vibrations that are slow and sometimes unrecognizable. The number of occupational health problems will increase through the rapid industrialization and urbanization as Malaysia experiences more common environmental problems, such as in 1997 and 1998, when Malaysia experienced the worst haze episode and a major water crisis, respectively (Lubis, 1998).

## **The Manufacturing Implications**

As we explore the concept of environmental ethics, it is evidenced that industrial activity, particularly manufacturing operations, has huge implications on the natural environment (Shrivastava, 1995). Although industrial development has brought immeasurable wealth and

prosperity to the human nation for the past 200 years (Shrivastava, 1995), Klassen (2000) argues that all manufacturing activities have ramifications for the rate and level of environmental degradation. The interactions of manufacturing activities and the natural environment create enormous unfavorable issues. All these activities have widespread consequences for corporations and communities as they are normally technical and complex (Shrivastava, 1995). Besides manufacturing activities, basic activities such as continuous consumption, marketing, manufacturing, processing, discarding and polluting have the same potential harm (Saha and Darnton, 2005).

This interrelated ecosystem contaminates soil, ground or surfaces used by humans, wildlife and livestock, it contaminates the air by toxic or irritating combustion products, it disturbs ocean ecosystems due to oil spills, ocean dumping and ocean mining, it disturbs climate due to a rising concentration of chemical pollutants in the atmosphere (Ayres, 1996). All stages of materials processing such as extraction, physical separation and refining, recombination, macro-forming, fabrication and construction, use and disposal (Ayres, 1992) produce waste and lead to pollution problems, and, according to Ayres, as in the *Encyclopedia of Materials Science and Engineering* (Bever, 1986) all these materials normally return to the environment in a different form from their extraction.

### **The Scenario of the Manufacturing Industry**

The twenty-first century witnessed advancement in technology, especially in the communication, manufacturing and service industries (Ahmad and Sadeq, 2001). Chiang and Tseng (2005) argue that the manufacturing industries and its strategy have been triggered by intensified competition in the global arena. The strategy should be sufficient and in accordance with its coordinated objectives and strategic plan that lead to the long-term survival of the corporations (Tseng and Chiu, 2004), together with the environmental protection that suggests guidance for future operations (Ward et al., 1996).

The manufacturing industry has been recognized as a critical driver of environmental performance (Cairncross, 1992; Hart, 1995; Schmidheiny, 1992). This is because in running its activities, the manufacturing processes are actually scarring the globe, contaminating and threatening the environment, warming the planet, thinning the ozone layer, decimating the forests, decreasing the health of our water and air (Shaw and Barry, 1992) and also polluting the rivers quite severely (Harvey, 1994). The stated pollution issues were deemed to be the factor that precedes corporations' poor financial performance (Juhana, 1999). Manufacturing firms have played an active role in environmental sustainable development. Shrivastava (1995) stresses that corporations are the primary engines of economic development while Schmidheiny (1992) emphasizes that manufacturing companies have financial resources, technology knowledge and institutional capacity to implement ecological solutions.

Above all, there are many reasons for industrial activities to contain an ethical dimension. Trevino (1986) highlights that ethical problems do exist and emphasizes that managers do think about ethical dilemmas. This is because the manufacturing activities could jeopardize the health and welfare of the ecosystems and have significant ramifications on the environment (Flannery and May, 2000). It is the nature of corporations to have an

environmental impact and the corporations will also do their best to reduce these impacts (Saha and Darnton, 2005), as it is claimed to be the right thing to do (Bansal and Roth, 2000). The manufacturing industry can gain benefit by producing safe products to result in loyal customers, disease remission or eradication, employee pride and motivation, good reputation and better recruiting status while doing the wrong thing or producing an unsafe product can result in public scrutiny, negative press, legislation, regulation, litigation and could increase the cost of production (Harrison and Lewellyn, 2004).

### 3.0 Methodology

#### 3.1 Theoretical Framework

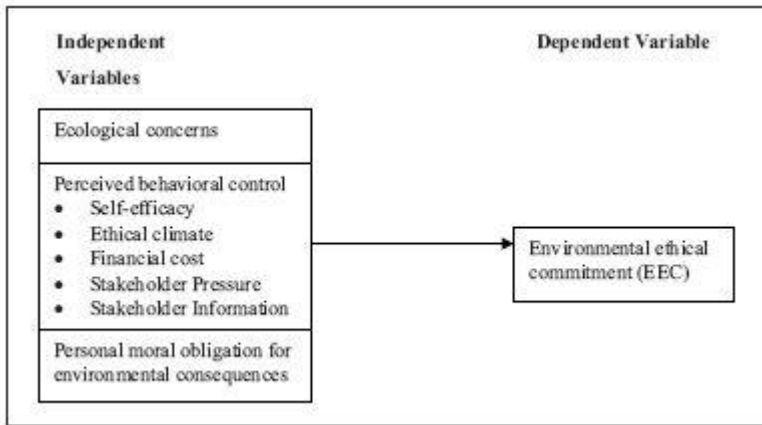


Figure 1: Theoretical Framework of the Study

#### 3.2 Sample

The appropriate unit of analysis to investigate the concept was the manufacturing companies in Malaysia. The population of interest in this study was the manufacturing corporations. This was because each industry had its own unique environmental issues and concerns. The operation of manufacturing industry was said to produce hazardous waste and if it is not taken into consideration it could jeopardize the health and welfare of living species and damage their habitats. The activities of manufacturing companies could affect people and animals and the environment would be considered to be undesirable by societal norms and rules (Flannery and May, 2000).

The population was defined as all the listed companies in the F>> Directory 2005, Malaysian Industries, 36<sup>th</sup> Edition. The population of respondents was gained from the FMM homepage, which comprised 2,154 manufacturing companies located throughout Malaysia, and with systematic sampling based on alphabetical order a total of 326 companies were selected as the sample. Every 5<sup>th</sup> company listed was selected as the sample. Finally

the questionnaires were sent to 326 selected manufacturing companies and, finally, usable questionnaires were received from 150 manufacturing companies in Malaysia.

## 4.0 Results

The data was tested using the linear regression analysis and the results are shown in tables below.

Table 1: Regression Result for Environmental Ethical Commitment

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.207	.466		.443	.658
Ecological Concern	.124	.120	.100	1.031	.304
Regulation Aspect	.232	.116	.200	1.988	.049
Ethical Climate	.232	.116	.200	1.988	.049
Self Efficacy	-.078	.105	-.072	-.747	.457
Financial Aspect	.008	.132	.007	.064	.949
Personal Moral	.227	.111	.209	2.049	.042
Stakeholder Pressure	.227	.111	.209	2.049	.042
Stakeholder Info	-.005	.113	-.004	-.045	.964
	-.033	.087	-.028	-.382	.703
	.444	.148	.319	2.987	.003

Multiple regression analysis revealed that from eight independent variables only three independent variables were able to significantly explain the amount of variation of the environmental ethical commitment in Malaysia. The independent variables were regulation aspect, financial aspect and stakeholder information as they were significantly improved the ability to predict EEC. The result was expected as the study dealt with highly sensitive issue of environmental ethics and the concept was relatively new in the business literature as well as to the manufacturing industry in Malaysia. Nevertheless, the study surprisingly managed to reveal that thereof the proposed factors; the regulation aspect, financial aspect and stakeholder information were positively correlated and significantly substantiated. This indicated that regulation aspect, financial aspect and stakeholder information were the factors to influence Malaysian managers to be committed towards the environmental ethics concept.

## 5.0 Discussions

In many developing countries, environmental ethics is still a new phenomenon. Environmental ethics is still a new concept to manufacturing companies and to stakeholders it is just beginning to be developed (Yaacob et al., 2003). Many companies in developing countries characterized EEC as a side issue and not as the main corporate agenda (Austin,

1991). However, the awareness of environmental ethics among manufacturing companies in Malaysia is increasing (Yaacob et al., 2003). Although manufacturing companies seem to be sceptical about investing large amounts of money in EEC and are hesitant to accept this new concept of doing business, it was empirically proven that manufacturing industries in Malaysia did invest some amount of money in environmental efforts by having financial cost supported.

The result of this study on the regulation aspect as the subjective norms construct indicates that regulation was supported. In Malaysia, regulations play an important role in compelling the Malaysian manufacturing companies to commit ethically. This result is in line with research done by Flannery and May (2000), and Cordano and Frieze (2000). Manufacturing in Malaysia revealed that regulation is one of the factors that is responsible to urge them to value the environment. It was the regulations imposed by the Malaysian government that provide information and trigger manufacturing companies to be motivated and alert to improve environmental quality. The regulation aspect did educate them to act professionally in the manufacturing industry in order to avoid risk to the corporations. However, the manufacturing companies were only committed to the ethics of the natural environment because they want to avoid fines, criminal penalties, legal judgment and other legal costs.

The result for financial aspect was positive and significant. This was reversed in the study by Flannery and May (2000) and Christmann (2000), which revealed it to be negative and not supported. The reason behind this is simply because the cost of having an environmental plan is high (Barbakow, 1995); the companies tend to achieve excellence as they have in mind that this action could support the realization of the companies' environmental strategy (Henriques and Sadorsky, 1996). Manufacturing managers in Malaysia also believe that the increased cost of environmental effort will help the company to achieve a lower cost of operations, and, thus, reduce the environmental impact and increase their corporate image.

As a proposed variable to influence the EEC, stakeholders' information in Malaysia was supported to influence EEC. The inclusion of stakeholder aspect in the theoretical framework was the effort to highlight the importance of stakeholders' involvement in pressuring and providing information about the issues of the natural world. The result was significant to stakeholder information but not significant to stakeholder pressure.

## 6.0 Conclusion

Based on the result, it was not surprising to note that Malaysian manufacturing companies were environmental ethically committed by having regulation, financial aspect and stakeholder information factors supported. It was empirically convincing to claim that Malaysia as one of the developing countries concerned about the natural environment parallel with the development of her industrial base. The findings of this research provided valuable information about the concept of environmental ethics in Malaysia. The supported factors would encourage them to obey the regulations imposed by the government, to have financial capability to support environmental ethics effort, and also to value information from

the stakeholders. All this information will be of help to the manufacturing companies in developing their mission statement and management strategy in order to operate their business towards the best health of the natural environment.

As conclusion, EEC was not, however and easy concept, but considerable understanding believing, planning and skills were required to make EEC concept to be a factor of environmental excellence. The findings also had implications for foreign investors who are presently or potentially interested in developing countries such as Malaysia as their market. In fact, EEC also offered significant advantages for those wishing to export their product globally. Many countries in the world were focusing on "green product". By implementing the EEC concept in the manufacturing activities enabled Malaysian manufacturing industry to grab the opportunity to be a global player.

## References

- Ahmad, K. M. and Sadeq, A. (2001). *Ethics in business and management, Islamic and mainstream approaches*. Asean Academic Press Ltd.
- Austin, J. E. (1991). The boundaries of Business: The developing-Country Different. *Harvard Business Review*. 134-137.
- Ayres, R. (1992). *Toxic heavy metals: Materials cycle optimization*. **89**. 815- 820.
- Ayres, R. (1996). Materials and the environment. *INSEAD Working Paper* 96/50/EPS.
- Bansal, P. and Roth, K. J. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*. **43**. 717-736.
- Barbakow, J. C. (1995.) The ethics patrol. *Chief Executive Management*. 58-61.
- Bever, M. B. (1986). *Encyclopedia of Materials Science and Engineering*. Oxford England: Pergamon Press.
- Caincross, F. (1992). *Costing the Earth: The challenge for governments, the opportunities for business*. Boston: Harvard Business School Press.
- Chiang, J. and Tseng L. (2005). The impact of environmental characteristic on manufacturing strategy under cleaner production principles guidance. *The Journal of American Academy of Business, Cambridge*. **7**(1). 163- 168.
- Christmann, P. (2000). Effects of 'best practices' of environmental management on cost advantage: The role of complementary assets. *Academy of Management Journal*. **43**(4). 663-681.
- Cordano, M. and Frieze, I. H. (2000). Pollution reduction preferences of U.S. environmental managers: Applying Ajzen's theory of planned behavior. *Academy of Management Journal*. **43**(4). 637-641.
- Flannery, B. L. and May, D. R. (2000). Environmental ethical decision making in the US metal-finishing industry. *Academy of Management Journal*. **43**(4). 642-663.
- Habtemicheal, R. (1996). *Malaysian environmental pollution*. [www.csudh.edu/global\\_options/375students-p96/Malaysia/Envir.Pollution.html](http://www.csudh.edu/global_options/375students-p96/Malaysia/Envir.Pollution.html)

- Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review*. **20(4)**. 986-1014.
- Hart, S. L. and Ahuja, G. (1996). Does it pay to be green? An empirical examination of the relationship between pollution prevention and firm performance. *Business Strategy and the Environment*. **5(1)**. 30-37.
- Harrison, D. S. and Lewellyn, P. G. (2004). Russian management training programs: Do corporate responsibility topics have a place? *Management Accounting Quarterly*. **5(4)**. 25-36.
- Harvey, B. (1994). *Business Ethics, A European Approach*. Prentice Hall International (UK) Limited.
- Henriques, I. and Sadorsky, P. (1996). The determinants of an environmentally responsive firm: an empirical approach. *Journal of Environmental Economics and Management*. **30**. 381-395.
- Impak (2009). Quarterly DOE Update on Environment, Development & Sustainability, (1). A publication of the Department of Environment, Malaysia.
- Kauffman, G. G. (2001). The Ethical Dilemma of the Public Natural Resources Manager. *PA Times*. **24(7)**. 3-5.
- Klassen, R. D. (2000). Exploring the linkage between investment in manufacturing and environmental technologies. *International Journal of Operations & Production Management*. **20(2)**. 27-147.
- Lubis, A. (1998). *The A-Z of the Malaysian Environment*. Sahabat Alam Malaysia.
- Saha, M. & Darnton, G. (2005). Green companies of green companies: Are companies really green, or are they pretending to be?. *Business and Society Review*. **110(2)**. 117-157.
- Schmidheiny, S. (1992). *Changing course*. Cambridge, MA: MIT Press. Shaw, W. H. and Barry, V. (1992). *Moral issues in Business*. 5<sup>th</sup> ed. Wadsworth Publishing.
- Shrivastava, P. (1995). The role of corporations in achieving ecological Sustainability. *Academy of Management Review*. **20(4)**. 936-960.
- Trevino, L. K. (1986). Ethical decision making in organizations: A person- situation interactionist model. *Academy of Management Review*. **11**. 601-617.
- Tseng, M. L. and Chiu, S. F. (2004). The role of manufacturing strategies in the business performance of publicly listed electronic chip manufacturing firms in Taiwan. *Journal of PIIE*. **2(1)**.
- Wah, K. K. (1982). *Assault on the earth*. New internationalist 114, Progress and Pollution, <http://www.newint.org/issue114/progress.htm>.
- Ward, P. T., Bickford, J. and Leong, G. K. (1996). Configurations of manufacturing strategy business strategy environment and structure. *Journal of Management*. **22(4)**. 597-627.
- Yaacob, M. R., Hameed, R. S. and Nik Ismail, N. R. (2003). Perceptions of educated consumers on environmental friendly products in the east coast of Peninsular Malaysia. *Malaysian Journal of Consumers & Family Economics*. **6**. 42-49.