

**GREEN MARKETING PRACTICES IN CEMENT
INDUSTRY IN KENYA¹**

UNIVERSITY OF NAIROBI
JOHN KABETE LIBRARY

BY

FREDRICK NJEHU KIONGERA

D61/P/8547/98

SUPERVISOR: DR. R. M. MUSYOKA

**A RESEARCH PROJECT PRESENTED IN
PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR MASTERS OF BUSINESS
ADMINISTRATION (MBA) DEGREE OF
UNIVERSITY OF NAIROBI, FACULTY OF
COMMERCE**

OCTOBER 2003

DECLARATION

I declare that this is my original work and has not been submitted to any other University or College for academic credit.

Candidate:



Fredrick Njehu Kiongera

D/61/P/8547/98

10/11/03
.....

Date

This project has been submitted for examination with my approval.

University Supervisor:.....



DR. R. M. Musyoka

10/11/2003
.....

Date

ACKNOWLEDGEMENT

I Fredrick Njehu Kiongera would first and foremost thank the ALMIGHTY GOD who has enabled me reach that far. “TO YOU OOH LORD may all the glory and honour return”.

I would also like to convey great vote of thanks to my supervisor Dr. R. M Musyoka for the great guidance and counsel during the process of undertaking this research project.

Much appreciation goes to the cement industries in Kenya especially to the East Africa Portland Cement & Athi River Mining for their great compliance and willingness to disclose the required information willfully and confidently. I would be making a great mistake if I forgot the Ministry of Environment & Natural resources as well as National Environmental Management Authority (NEMA).

I would also like to thank my Uncle Joseph who encouraged me to enroll for the course “thankyou very much for your aspirations and advice”. To my brother Patrick “thankyou very much for the financial assistance that you diligently assisted me with”. Other thanks goes to the Ministry of education (University Department) and friends Ndun’gu and the entire teaching staff at the University of Nairobi.

Since it would be difficult to mention you all accept these unreserved thanks and may ALMIGHTY GOD bless you all for the different roles you played in this arena.

TABLE OF CONTENTS

Declaration.....	i
Acknowledgement.....	ii
Dedication	iii
Abstract.....	iv
1.0 Introduction.....	1
1.1 Background.....	1
1.2 Statement of the problem.....	8
1.3 Objectives of the study.....	10
1.4 Importance of the study.....	10
2.0 Literature Review.....	13
2.1 Definition.....	13
2.2 Green marketing concept.....	14
2.3 Corporate environmentalism.....	17
2.4 Green marketing: long term or short term.....	23
2.5 Consumers response to green marketing.....	24
2.6 The future of green marketing.....	25
2.7 Environmental constituencies.....	28
2.8 Internal constituencies.....	30
2.9 External constituencies.....	30
2.10 Environmental costs of consumption	37
2.11 Environmental costs of production.....	37
2.12 Green marketing practices.....	38
2.13 Cement sector.....	44
2.14 Conceptual framework.....	47
3.0 Research Methodology.....	49
3.1 Research design.....	49
3.2 Population of the study.....	49
3.3 Data collection.....	50
3.4 Data analysis, processing and presentation.....	50

4.0	Data analysis.....	53
5.0	Summary , Recommendations and Conclusion.....	66
5.1	Summary.....	67
5.2	Recommendations.....	68
5.3	Conclusions.....	71
6.0	Reference	73
7.0	Appendix 1.....	79

DEDICATION

This project is dedicated to my late dear mother Margaret Mukuhi Njehu, and to my dearest grand parents Beatrice Njambi Njehu and Peter Njehu Kiongera. May you all rest in peace till we meet again in that sweet home where there will be no more cry or sorrow.

ABSTRACT

Environmental issues are becoming increasingly important in organization theory and practice. Green marketing is emerging as a process of addressing environmental issues facing business firms. In this paper I examine green marketing practices and challenges faced by Cement industries while turning green. The paper seeks to identify factors that lead Kenyan firms in the cement industry adopt “Green marketing”. It also tries to find out Green marketing practices adopted by Kenyan Firms in the Cement Industries and the challenges faced by firms in the Industry while turning green. A descriptive study was adopted for this exploratory study which covered the whole population in the cement industry.

The paper goes further in describing how key organizational members interpret the relationship between their firm and the biophysical environment. It looks at how companies can reduce waste at source and eliminate pollutants entirely in manufacturing processes rather than filter or capture them downstream.

The findings of the paper shows that the cement industries turn green due to both legal and company requirements. Some of the legal requirements include reclamation of the excavated land, control of noise and air pollution. Due to stringent environment laws, companies have come up with strategies aimed at monitoring and evaluating the environmental hazards caused during the production process. As such green marketing actions have been institutionalized into the company’s values and policies. Among the actions include compostability and recyclability, coming up with environmentally friendly products, which are ozone free.

CHAPTER ONE

1.0 INTRODUCTION.

1.1 Background.

The theme is “not more but better”. We seek, value, quality, and safety in the products we buy. Concerning air and water pollution, holes in the ozone layer, acid rain, solid waste disposal and the destruction of rain forests and other natural resources, consumers have become more aware and are increasingly willing to put their money on environmentally sensitive products (Stanton 1994).

It seems logical for marketers when faced with a population professing increased environmental concern to respond by trying to identify ‘green consumers’ and finding out what academic researchers and market research agencies have put motivates purchases of environmentally marketed products. This requires a great deal of effort into attempting to define and understand the relationship between people’s environmental concern and their purchasing behaviour. Many factors have been proposed as influences on green consumer behaviour such as changing consumer values, demographic factors, knowledge of environmental problems and alternative products, perceived personal relevance and the ability of the individual to make an effective contribution (Rynnel 1997).

The realization that consumers do like "green" messages so long as they're substantial - provides the basis for future "green" marketing strategies. At the same time the challenge for businesses lies in incorporating

environmentally friendly attitudes into their corporate policies rather than seeking to promote on the basis of "green" products alone. As Johri and Sahasakmontri point out "many companies now see environmental orientation as a long-term issue rather than a way to gain in the short term".

Environmentalism is enjoying resurgence in today's society and the 1990's can be arguably called the decade of the environment. The previous surge in public interest in the environment began in the 1970's, a decade that saw the enactment of important legislation such as the Clean Air Act in 1970, and the Clean Water Act in 1977). Public and media attention waned in the 1980's; however environmental problems such as ozone depletion, global warming and rainforest destruction were high priority items on the public agenda. The Rio Earth summit of 1992 was a defining event in the business-environment relationship and corporate environmentalism (Cairncross 1992), the same applies to Kyoto Protocol of 1997 to 98).

Environmental responsibility is now seen as an important measure of business effectiveness. Firms with good records on the environment are seen as well managed and committed to the long term. Just as consumers have switched to individual "green" actions rather than "green" purchasing behavior, firms should look to changing their corporate stance to embrace sustainability to reflect good management and a long-term outlook.

Researchers in such diverse disciplines as economics, sociology education and psychology have studied environmental issues since the 1970s. Interest in the environment appears to be reviving in recent years among marketing scholars. Many international marketing conferences in the last four years

have included special session papers on environmental issues, and several marketing journals have brought out special issues on the topic. In 1991 the AMA developed an environmental policy statement that urged all marketers to integrate environmental concerns in the business decision-making process. This was meant to improve the accuracy of environmental claims for products and services as well as reducing environmental impact of their products, and work with industry, government and the public to find out meaningful solutions to environmental problems (Marketing News 1991)

This growing trend appears to reflect changes in the external environment of marketing systems as a result of increased regulatory forces and public environmental concern which have the potential to influence marketing actions at both micro and macro levels. Governmental monitoring and control of the ecological impact of business activity is a process that is designed to minimise the negative consequences of environmental damage. This macro-level action attempt to address societal concerns about environmental issues and has strategic implications for business firms that are manifested at the micro-level (Roberts 1996).

Environmental issues are becoming increasingly important in organization theory and practice. For example Bamburi Company strives to meet the International Environmental Standards, the Company have launched several projects to monitor and reduce environmental pollution resulting from the manufacturing process. For instance, the Company spent \$4Million on the state of the art kiln cooler dust collector, which was installed in July 2000. The most famous example of land reclamation effort is Haller park (formerly known as the Bamburi Nature trail) a popular nature for recreation sites for

tourist. Haller Park and other projects of its kind demonstrate the potential and benefits of the co-existence of industry with nature. Furthermore, Bamburi cement Company recently signed a partnership agreement with Worldwild life fund (WWF) to combat diminishing biological diversity and forest cover around the World. Over 2.5 Million trees have been planted around the factory and in the quarries. These not only create a beautiful environment but also help absorb carbon dioxide from the atmosphere (Bamburi environmental Report 2000).

Corporate environmentalism is the process by which business firms integrate environmental concerns into their decision-making process. It is emerging as a process of addressing environmental issues facing business firms. Multinationals bear a considerable moral and economic responsibility for their past, present and future actions. Larger firms such as IBM and 3M State that being green is good business and that they, as corporate citizens have a wider responsibility to the communities within which they operate. In response a number of companies are starting to invest in environment and industry initiatives. Bamburi Company launched a pilot recycling programme for paper and printer ink cartridge, the papers are sent to Baobab farm which upgrades the recycled papers, subsequently using them for production of calendars, cards, and gift boxes. Future plan for use of waste paper includes production of egg trays. In addition the Company carries out environmental impact assessment for any new development such as Nairobi grinding plant, pozzolana plant and new Vipingo quarry (Bamburi environmental report 2000). British Airways completed a major environmental review that indicated that they produced 1% of the UK's

carbon dioxide emissions and hence they are major contributors to global warming (Lee 1994).

The green marketing of products and services is an important development in the context of emerging economies in the World. By adopting resource conserving and environmentally friendly strategies in all the stages of the value chain the firms can satisfy the growing environmental concerns of humanity. In the West, business firms face social and legal pressures to adopt environmentally friendly business strategies. Many corporations responded to these pressures and adopted environmentally friendly strategies. For example, Earth Care in the UK built strong competitive advantage and grew very fast since it started its operations. Similarly Ciba Geigy, now part of Novartis, has improved its corporate performance by adopting resource and environment conservation programs (Smith 1993). Locally Kenol-Kobil in Kenya introduced unleaded petrol with less gas emissions (Daily Nation 24th June 2001).

Major corporations, both foreign subsidiaries and local companies, are investing in pollution-control equipment and environment-friendly technologies. E.g. Bata Shoe Company introduced strong control gas emission measures to reduce air pollution. Several companies have launched advertising campaigns to project environmentally conscious corporate images and promote products that are less harmful to the environment. At the village level, Buddhist monks, local grassroots NGOs and people's organizations are involved in mobilizing people in conservation efforts. As per the Seventh National Plan, there is an effort to incorporate environmental education at all levels of the education system (Nair 1993).

The media are also playing a significant role in creating awareness and educating people about the benefits of environmental conservation to the society. E.g. Kiswahili program broadcasted by KBC “Tuhifadhi Mazingira Yetu” (Let’s Conserve our Environment). A number of musicians and popular songwriters emphasize environmental messages in their work E.g. Kenyan Prisons choir “Mumonyoko wa udongo” (Soil erosion). They are considered one of the most effective environmental communicators in the Kenyan context. In addition, many projects and campaigns have been initiated to create public environmental awareness both locally (Green belt movement) and internationally (United Nation Environmental Programme).

Strategy is fundamental in the planning process since strategic decisions influence the way organisations respond to their environment. Schendel & Hofer (1979) defines strategy in terms of its function in the organization. They assert that “the purpose of strategy is to provide directional cues to the organization that permit it to achieve its objectives while responding to the opportunities and threats in the environment.”

Different writers and practitioners have defined the term marketing in different ways. American marketing association defines marketing as the process of planning and executing the conception, pricing, promotion and distributing of ideas, goods, and services to create exchanges that satisfies individual and organisation goals. This broad definition takes into account all parties involved in the marketing efforts, members of the organization that produces goods or services, resellers of the goods or services and customers or clients. To others such as Kotler “marketing involves the satisfaction of human needs and wants through exchange processes. On the

other hand, according to Stanton marketing comprises “ a system of business activities designed to plan, promote and distribute want-satisfying products and services to present and potential consumer segment”. The fact that many definitions exist suggests that the process of marketing is so encompassing that no one definition will suffice (professor Kibera and Waruingi 1998).

Development of Cement Industry.

Cement can vaguely be defined as any compound that can be used to bind two materials together. The first recorded use of cement was by Egyptians who used to build pyramids about 5000 years ago. It was made from lime and gypsum, in later periods of civilisation, volcanic materials were ground with lime & sand to produce cement. During rise of Roman Empire this technology spread throughout Europe (Tasek 1982).

In December 1755 in Plymouth, England a wooden lighthouse was razed to ground. The job of rebuilding it was given to John Smeaton, in an effort to construct a fire resistance building he discovered that siliceous limestone produced superior cement. He thus used limestone and volcanic lime to build new famous “eddystone light house”. In 1818 Louis Vicat discovered that burnt clay when mixed with lime resulted to cement, this were the first steps in the manufacture of Portland cement (Tasek 1982).

Cement production process

Cement is a hydraulic binder and is defined as a finely ground inorganic material which when mixed with water forms a paste which hardens by means of hydration reaction process. Ordinary Portland cement is a

compound of lime, silica, alumina, iron, sulphur trioxide and magnesium. Sulphur trioxide is added at the grinding stage to retard the setting time of the finished cement. When cement raw materials containing proper proportion of essential oxides are ground to suitable fineness and then burnt to incipient fusion in a kiln, chemical combustion takes place resulting to a product called clinker. This clinker when ground to suitable fineness together with small quantities of gypsum results to Portland cements (Tasek 1982).

1.2 Statement of the problem.

The last few decades have seen increased awareness about environmental issues by governments, policy makers, advocacy groups, business firms and the public all over the world. More than a century of industrial development has come at a price: global warming, ozone depletion, air and water pollution, soil erosion, and deforestation are widely recognized as global environmental problems demanding immediate solutions. Government environmental policies and regulation, industry environmental management practices, and pro-environmental consumer behaviors are some methods that can help alleviate these problems (Ottman 1993).

Many Industries in Kenya are facing a wide range of environmental problems and issues e.g. KEL Industries in Thika producing sulphuric acid lacked better emission controls, which resulted to emission of acid fumes leading to acidic rain. The aftermath was corrosion of iron sheets and health problems related to respiratory and skin diseases (Kiambu District Environmental Committee 1992). As such Industries and individual producers have begun to seek solutions based on new means of production,

the development of alternative materials and resources and the minimisation of waste and pollution. Public awareness of these issues has risen markedly in the last few years and Government and regulatory bodies have responded and will continue to respond with new and more stringent controls on the causes of environmental damage.

Businesses are becoming more responsible in dealing with environmental issues. Their approaches have been labeled “green” marketing. These marketing practices include the development and production of products with biodegradable packages, use of recycled materials, design and marketing of products that are environmentally safe to produce and use as well as reducing air pollution. E.g. Bamburi Cement Industry in Kenya has responded positively to the environment by rehabilitating the degraded land through the establishment of forestation programmes, wildlife and fisheries sanctuaries and environment education centers (National Environment Management Authority –NEMA- report 2001)

With increasing consumer awareness about the environment, it has been revealed that consumers will buy not just the product, but also the company’s response to environmental issues. The 1991 Touche Ross survey indicated that just under half of the companies surveyed had adapted products to meet customer demand, and of these, 70% had altered existing products and just over half had introduced new products. Customers may be more likely to switch brands if a company performs environmentally irresponsible. A survey of US consumers in June 1990 showed that 70% of consumers had switched brands over environmental concerns on at least one occasion (Fineman 1996).

From the above it is reasonable to argue that companies will look to develop green marketing practices based on environmental matters, and this will mean that understanding competitors' green performance will be increasingly important. Therefore the problem that has been identified is that despite Company's' effort to provide best products to the customers with no adherence to environmental concern, might deter company's performance and image. Therefore the study seeks to:

Determine the marketing practices and challenges faced by cement industries in Kenya while turning "green"

1.3 Objectives of the study.

1. To identify factors that lead Kenyan firms in the cement industry adopt "Green marketing".
2. To identify Green marketing practices adopted by Kenyan Firms in the Cement Industries.
3. To find out challenges faced by Kenyan firms in the cement Industry while turning green.

1.4 Importance of the study

The study will be important to all the stakeholders in the business community. A stakeholder can be defined as a person or a group that can influence the commercial existence, viability and the direction of the firm. Companies will need to accept that their overall performance is dependent on a number of stakeholders, with each of these groups being interdependent and interconnected.

Investors

Greening process is likely to have significant implications for resource allocations and may mean that companies will need to evaluate core values and mission statements closely. The directors as stewards of the company are likely to be increasingly questioned about corporate social and environmental performance by a wide range of different stakeholders. Organisations will need to have board level responsibility for environmental matters, with the chief executive openly stating the company's commitment to environmental matters through a policy statement, quantified objectives as a well-structured policy.

Senior management

Senior management will need to be aware of their areas environmental performance and impact. Certain key areas may start to have environmental responsibility and performance criteria build into job description.

Employees

Employees will become more interested in the Company's corporate environmental performance and image. If the company is taking positive environmental steps, then this may lead to greater commitment and motivation, and conversely if the company is acting irresponsibly, problems with morale or recruitment may develop. There may also be a growth in Eco-consciousness groups that act as internal pressure groups with the aim of influencing management to "green up".

Customers:

Customers will increasingly buy not just the product, but also the Company's response to environmental issues. Customers may be more likely to switch brands if a company performs environmentally irresponsibly.

Community:

Company's local community is likely to supply both past, existing prospective employees, customers, investors and suppliers and as such is an important stakeholder. Local authorities are also likely to be interested in the environmental performance of the firm. E.g. if the firm wishes to expand or set up new facilities, Environmental Impact Assessments (EAI) may be required.

CHAPTER TWO

2.0 LITERATURE REVIEW.

2.1 Definition of Green Marketing

“Green marketing is a holistic and responsible strategic management process that identifies, anticipates, satisfies and fulfils stakeholder needs for a reasonable reward, that does not adversely affect human or natural environmental well-being”. It is a philosophy for business recognising that the enterprise has a responsibility to each stakeholder, each with its own set of needs and concerns (Haines & Murphy 1989).

Traditionally, marketing theory has largely ignored the influence of the biophysical environment in the formulation of strategy. Conventional approaches to environmentalism have focused on ‘green marketing’ i.e. the implementation of marketing programmes directed at the environmentally conscious market segment (Henion 1976). This view has been criticised as being unnecessarily restrictive, and researchers have recommended that environmental marketing programme should emerge from broader issues arising from the relationship of a firm and its stakeholders. Corporate environmentalism is organization-wide, legitimate and important to the biophysical environment in the formulation of organization strategy (Coddington 1993). This definition comprises the two themes of corporate environmentalism that are found in the literature: the stakeholder concept and the strategy formulation concept.

Marketing has a crucial role to play in the development and implementation of corporate environmentalism. Marketing's role becomes even more comprehensive if we employ a broader perspective of marketing's contribution to the strategic planning process of the firm (Day 1992; Varadarajan 1992). One of the problems associated with examining the relationship between a business firm and the biophysical environment is the complexity of issues that arise. Every business firm can be said to have a negative impact on the natural environment, some more than others. It can be argued that there is no such thing as a 'green company'. (Michael J. Etzel; Bruce Walker 1997).

Frankel notes that year 1993 was a year of steady progress in the Worlds of corporate environmentalism and green business. He notes that environmental responsibility is being institutionalised in product development and research and development e.g. Mobil Corporation spends over \$1.3 billion and employs over 700 people simply to deal with environmental issues that relate to the firm all over the world. In different vein the Sun company of Philadelphia the twelfth largest oil company in US became the first fortune 500 company to endorse the Valdez principles, a code of environmental conduct devised after the 1989 Alaskan oil spill (Frankel 1997).

2.2 Green Marketing Concept.

There is a growing body of knowledge on green marketing focusing mainly on four issues. These issues are: first, relevance of green marketing; second, impact of green marketing on firms' competitiveness and performance; third,

attributes considered by consumers while buying green products; and fourth, improving effectiveness of green marketing.

Public awareness of environmental issues is now almost universal. A national survey conducted by the Roper Organisation in 1992 found that 20% of North Americans constituted the 'True-Blue Green segment' (Roper 1992). This segment reflects the highest level of concern for the environment in terms of consumers' attitudes and behaviour. Interestingly, this greenest segment almost doubled from 11% in 1990 (Roper 1990), despite rising public concerns about economic recession, unemployment and healthcare. In recent years, this segment has shrunk to 10% (Speer 1997), as has the overall proportion of consumers who say they 'care about the environment' (63% in 1996, down from 72% in 1990). While the environment may not be the top-priority issue it was in the early 1990's people started to care about it. The apparent apathy is due to consumer perceptions that products and services are 'greener' than they were in the past (Speer 1997). Several recent surveys indicate that the state of the environment continues to remain a high-priority issue in many countries all over the world (Bonner 1997; Shanoff 1996).

In the context of Asian countries, it is said that during the 1990s corporations faced increasing environmental challenges as a result of pressure coming from drivers of change, such as regulators, stockholders, industry groups, competitors, voluntary charters and codes and incidents leading to environmental degradation and resource depletion. The increasing influences of communities on companies, the sky-rocketing cost of complying with environmental regulations, and changing consumer attitudes

are forcing companies in Asia to become environmentally conscious (Nair, 1993). A high concern for environmental issues has been observed in triad countries. The governments' policies, consumer preferences and strategies of companies are being reshaped to be more Eco-friendly (Simon, 1992). However, in the UK it is revealed that the importance of environmental concerns as a marketing issue has gone down because the customers are able to see through the "green hypocrisy". Many companies now view environmental orientation as a long-term issue rather than a way to gain in the short term (Bond, 1993). There is a suggestion that the recent decline in the performance of The Body Shop in the UK is because the environmental campaigning may be out of tune with the mood of the consumers (Lee and Barrett, 1996).

It has been observed that properly designed environmental standards can trigger innovations that actually lower the total cost of a product or improve its value making companies more competitive. These innovations allow companies to use raw material, energy and labor more productively and thus offset the costs of improving environmental impact (Porter and Linde, 1995). Case research in the UK and Germany has also indicated that business strategies taking into account environmental concerns can lead to building of the competitive advantage (Pujari and Wright, 1996). However, there are doubts about the long-term sustainability of a firm's competitiveness built purely on the basis of a green marketing framework. UK consumers tended to doubt the marketer's green claims and based their purchase decisions on their environmental consciousness as well as other product and company attributes (Schlegelmilch et al., 1996).

Another study carried out simultaneously amongst US and Dutch customers on purchase preferences in case of milk, deodorant and washing machines also revealed that environmental considerations were not any more important than common attributes such as size and price (Sriram and Forman, 1993). Poll findings also show that a majority of US consumers are environmentally conscious but their concerns are not brought out in their purchase decisions (Roberts, 1996).

Several frameworks and approaches have been suggested for improving the impact of green marketing strategies. It is suggested that companies should build formal and informal alliances with environmental groups to improve the credibility and give a strategic direction to their green marketing programs (Mendleson and Polonsky, 1995).

2.3 Corporate Environmentalism and the Business Firm

Attempts to incorporate the biophysical environment into organization theory have resulted in two main areas of research. One area uses an interdisciplinary approach and discusses the paradigmatic implications of including the dynamics of the biophysical environment into traditional economic and management paradigms. Researchers argue that including the biophysical environment will help overcome the anthropocentric bias in organization theory and discuss the emergence of alternate paradigms such as the 'ecocentric paradigm' (Purser et al., 1995), and the 'sustaincentric paradigm' (Gladwin et al., 1995; Starik and Rands, 1995). Several assumptions underlying these paradigms contradict those in the neoclassical economic paradigm. For example, the ecocentric paradigm acknowledges that there are limits to growth and carrying capacity and is skeptical about

the role of technology in solving environmental problems (Gladwin et al., 1995). Whereas a stark interpretation of the neoclassical paradigm reveals an assumption of limitless growth and considers technology an external factor in the economic system that can solve all environmental problems (Jacobs, 1994).

In a summary of the different environmental approaches prevalent in disciplines like sociology anthropology and economics, Egri and Pinfield (1996) distinguish between radical environmentalism and reform environmentalism, both of which are positioned as being opposed to the dominant social paradigm of limitless growth and infinite natural resources. While both reform and radical positions are problematic and contradictory, contemporary theorizing on the business environment relationship is informed by the reform environmentalist perspective since the radical (ecocentric) view is constructed as being too 'utopian and abstract' (Egri and Pinfield, 1996).

The dominant theme underlying the reformist view is that organizations are accountable to all their stakeholders and that corporate environmentalism arises from recognition of stakeholder interests. Stakeholders are defined as all those groups that can affect, or are affected by organizations (Freeman, 1984). This assumption implies that apart from employees and customers, organizations should also consider the needs of other stakeholders such as regulatory agencies, the local community, and environmental agencies (Bowie, 1991). Recognizing 'green' stakeholders (regulatory agencies, environmental agencies, environmentally conscious consumers) could significantly influence an organization's level of corporate environmentalism

(Fineman, 1996). However, employing stakeholder theory to understand corporate environmentalism has limitations: critics have pointed out that the definition of stakeholders is too broad to be of any practical use to organizations and that all stakeholders need not be relevant to organizations (Sternberg, 1997). At best, stakeholder theory is normative. It provides a moral and ethical framework for organizational decision-making, which has limited implications for corporate strategy since few organizations recognize green stakeholders solely on environmental considerations (Fineman and Clarke, 1996). From a radical environmentalist perspective, reducing ecological problems to those that are articulated by business is inappropriate given the holistic assumptions of the ecocentric paradigm.

The second area of research on organizations and the biophysical environment examines the strategic implications of environmental issues for organizations. This area explores the emergence of environmental management strategies such as pollution prevention, energy conservation, and recycling. It focuses on the competitive advantage that can result by integrating environmental issues into company strategy (Banerjee, 1998; Cairncross, 1992; Jennings and Zandbergen, 1995; Porter and van der Linde, 1995; Shrivastava, 1995; Zeffane et al., 1995). A theoretical approach that is receiving increasing attention is the natural resource based view of the firm (Hart, 1995; Sharma and Vredenburg, 1998). In the resource-based view of the firm, a firm develops specific capabilities depending upon its available resources, and leverages these capabilities to achieve competitive advantage (Barney and Zajac, 1994). These capabilities are firm-specific and evolve as a response to changes in the external environment, particularly during times of rapid change and complexity (Wernerfelt, 1984). Hart (1995) argues that

allocating resources to developing environmental strategies can provide a source of competitive advantage by creating competitively valuable organizational capabilities. These and other arguments linking corporate environmentalism and competitive behaviour are theoretical for the most part and empirical evidence remains limited. What evidence there is suggests that comprehensive environmental strategies are developed at higher levels of strategy and most high-profile 'environmental leaders' have appointed managers at senior levels to develop environmental strategies (Banerjee, 1999).

In outlining the strategy process, Schendel and Hofer (1979) describe four levels of strategy with enterprise strategy at the top, followed by corporate, business and functional strategy. These levels are hierarchical in the sense that the definition and scope of each strategic level constrains the one below. Enterprise strategy examines the role a firm plays in society and describes the fundamental mission of the firm. Few business firms show evidence that they have integrated environmental concerns at this level (Maxwell et al., 1997)

At the next level, corporate strategy determines the kinds of businesses a firm should enter to meet its enterprise strategy goals. Product-market decisions, technology development decisions, and business portfolio decisions are made at this level. Strategies at the corporate level would involve developing green products and green markets, cleaner technologies, and integrating green business portfolios (Ibid, 1979).

Business strategy involves allocating organizational resources to achieve competitive advantage and also integrates the different business functions. Cost advantages gained from environmental improvements and the use of recycled material, for example, could be a viable environmental business strategy (Ibid 1979)

Schendel and Hofer (1979), continue to say that functional strategy involves planning operating procedures in the different functions, such as marketing or research and development. Gaining competitive advantage through environmental strategies is the focus of business strategies whereas a functional strategy is essentially one of compliance. Thus, environmental strategies can be integrated at different levels.

Corporate environmentalism has the potential to change existing ways of thinking in organizations and organizational members are important agents of change in this process. In several firms senior managers have helped develop and implement environmental management strategies (Starik and Rands, 1995). Thus, understanding how managers interpret environmental issues facing their firm is an important step in attempting to understand the development of pro-environmental organization behaviour as it is the attitudes and behaviours of managers that shape corporate behaviour (Hoffman, 1993; Smith, 1993).

In the West "green" marketing has become a staple of corporate positioning. At the same time firms have exploited environmentally-friendly messages for short-term marketing gains. The result of the "exploitation" has been a growing cynicism among the public about environmental claims. The

sponsorship efforts of Shell UK and BP illustrate how firms seen, in the round, as polluters are using the environment and environmental campaigns to mollify public opinion about their extractive and polluting activities. (Maxwell 1997)

In developing countries the picture is very different. Many emerging economies - and especially those in East Asia - have criticised the attitudes of Western countries towards environmental issues. At the recent Kyoto Earth Summit, developing countries complained that the West (and particularly Europe) was using "green" issues to place anti-competitive constraints on emerging economies. Again the desirable aim of international environmental action seemed lost among concerns about free trade and protectionism.

Despite these concern the rate at which developing countries such as Thailand adopt environmentally-friendly attitudes to economic growth and protection exceeds the same process in the West. From the emergence of environmentalism in the 1960s, the West has taken 30 years to get to the current position - a situation that many still see as inadequate to cope with international environmental problems such as global warming. The fact that Johri and Sahasakmontri can write about "green" marketing in Thailand suggests that, already, the Thai people are aware of environmental challenges and willing to respond to popular appeals based on "green" issues.

Johri and Sahasakmontri's work shows the extent to which "green" issues are a long-term matter for firms and the changes in consumer attitudes towards the environment.

2.4 "Green" marketing: long term or short term consideration

In recent years some firms have exploited popular concerns about environmental issues. Positioning a product, brand or company as "environmentally-friendly" provided a means of differentiation in many markets. And, for crowded, mature markets, the "green" message provided a new way to compete without losing premium pricing advantages. Johri and Sahasakmontri note that the initial dominance of marketing in the "greening" of business has now ended. Not only have consumers become inured to "green" messages, but also many no longer trust the commitment of the businesses promoting themselves as environmentally responsible. Today the corporate focus has shifted towards purchasing policies, corporate public relations and waste minimization. If there are marketing benefits they come from real actions taken by firms to reduce their environmental impact. (Johri and Sahasakmontri 1979)

The success of Body Shop International has encouraged other, competitive organizations to adopt similar marketing tactics. In some cases these tactics are just that - there is little or no action to reposition the whole firm. At the same time other businesses (and Oriental Princess provides a good example) have adopted the same "green" positioning. The question for cosmetics firms is whether to compete head-to-head with the Body Shop or to sustain a "non-green" positioning regardless of the actual policies of the firm. There is no reason why a firm shouldn't sell natural cosmetics without taking the

"environmental campaigning" position typified by The Body Shop. The demand for natural products doesn't necessarily mean that the firm should take an active stance against animal testing or the destruction of the rain forests. Nor should such a "traditional" positioning mean that a firm has to have purchasing or manufacturing systems unfriendly to the environment (Johri and Sahasakmontri 1979)

2.5 Do consumers respond to "Green" Marketing appeals

Most consumers in the West - and many among the middle class in developing countries - express concerns about environmental issues. Many of these consumers have taken personal steps to reduce their personal impact on the environment (recycling, reuse, etc.). However, consumers now see responding to environmental challenges as a matter that is beyond individual action and choices requiring national and international government actions (Barney, 1994)

Many consumers will not pay a price or time premium for the sake of environmental responsibility despite a positive attitude to environmental issues. A firm cannot expect to succeed purely as a result of a "green" positioning. Most consumers in the western countries say that, to protect the environment they are willing to pay as much as 20% more for products. According to a 22-country study conducted for the 1992 Earth Summit held in Rio de Janeiro, the majority of citizens in 16 of the countries would pay higher prices to support company's environmental protection efforts. In US, 65% of the respondents would accept higher prices for "green" (i.e. environmentally friendly) products (Charter, 1993).

In the cosmetics market, The Body Shop has secured such an "ownership" of the "green" positioning that other firms taking the same stance run the risk of being seen as copy-cat in adopting the same approach. Oriental Princess has succeeded in copying this strategy but the addition of a proud "Made in Thailand" positioning provides a different position and additional rationale for patronage (Charter, 1993).

2.6 The Future of "Green" Marketing

As Johri and Sahasakmontri point out many companies now see environmental orientation as a long-term issue rather than a way to gain in the short term". The realization that consumers do like "green" messages - so long as they're substantial - provides the basis for future "green" marketing strategies. At the same time the challenge for businesses lies in incorporating environmentally-friendly attitudes into their corporate policies rather than seeking to promote on the basis of "green" products alone. Environmental responsibility is now seen as an important measure of business effectiveness. Firms with good records on the environment are seen as well-managed and committed to the long term. Just as consumers have switched to individual "green" actions rather than "green" purchasing behaviour, firms should look to changing their corporate stance to embrace sustainability to reflect good management and a long-term outlook. (Charter, 1993)

While the 'greenness' of firms must be established by assessing their actual 'downstream' environmental impact, corporate environmentalism as defined above can highlight the degree of environmental issues into a firms 'upstream' strategic planning process. Environmental issues can be integrated at different levels of strategy depending on the characteristics of

the firm, and the industry, regulatory forces and public concern (Newman and Breeden 1992).

Combining 'quality' and 'environmental' concerns can also lead to significant cost advantages for companies, and many firms have made waste reduction a part of their corporate quality efforts. Firms such as Xerox, Procter & Gamble, IBM, Dupont, Digital Equipment Corporation, AT & T have reduced pollution and lowered costs in diverse industries (Smith 1991). However, aligning environmental strategies is by no means an easy task. A survey of 220 senior executives conducted by Booz, Allen & Hamilton indicated that a vast majority of managers thought that environmental issues were 'extremely important' to their firm (Newman and Breeden 1992). However, only 7% of those surveyed claimed to understand fully the environmental problems faced by their company. The survey found that most companies restrict their environmental activities to the manufacturing process and do not address environmental issues at the strategic level where competitive advantage can be created. The survey also found out that companies that effectively managed environmental issues, as indicated by integration of environmental concerns throughout the organisation, received support from the highest levels of management, and publicly demonstrated their environmental efforts (Newman and Breeden 1992).

Day and Wensley (1983) argue that there is a need to include the relationships of the marketing function of the firm with both internal and external forces. Traditional paradigms of marketing strategy view marketing planning as a lower level activity arising from a corporate strategic plan (Greenly 1989; Walker and Reukert 1987). The dominant subject in the

discipline of marketing is marketing management, which deals with the design of the marketing mix. Marketing strategy on the other hand focuses on competitive advantage and as some authors claim, should be viewed as a part of corporate or business strategy (Wind and Robertson 1983). Proponents of the marketing strategy perspective argue that current research within the marketing discipline is limited in its scope and that the present paradigm is restrictive and does not emphasise innovation and adaptability. Areas that are of crucial importance to the survival of the firm (Anderson 1982; Day and Wensley 1983).)

The potential influence of corporate environmentalism is multidisciplinary and multifunctional, accounting, purchasing and production methods can all be influenced by a firm's commitment to environmental protection. If as Anderson (1982) maintains, the objective of marketing is to maintain long-term customer support through customer satisfaction, effective corporate strategies for firm survival and growth should employ a marketing perspective (Wind and Robertson 1983).

Firms concentrate their strategic efforts in a limited part of the market where they can maintain their distinctive competitive advantages (Henderson 1983). Long-term competitive strategy can arise from the emergence of strategic segments for environmental goods and services as well as the greening of existing products and services. Strategic segmentation is a broader concept than market or product positioning and involves a deeper understanding of the firm and its total environment. E.g. a strategic segment could emerge when high levels of concern for environmental degradation in a market are matched with availability of recycled raw materials or the

development of technologies that minimise impact on natural environment. These new market conditions can influence a firm's strategies. (Banerjee, 1998)

The changing needs of the marketplace are a source of structural fluctuations in any given industry. Recognition of structural fluctuations may force firms to find new ways of innovating in order to survive in the marketplace. This can lead to changes in strategic decisions for these firms. Spurred by structural fluctuations such as increasing legislation and public concern, firms can choose to adopt corporate environmentalism as a strategy for surviving in the marketplace. The energy industry is a good example of the structural fluctuations and strategic changes that firms make. In some states in the US, regulators offer incentives to utilities for investing in energy conservation. Most utilities have realised that energy conservation is profitable, leading to the somewhat incongruous scenario where a firm spends money on advertising that urges their customers to use less of their product. The market for energy, traditionally based on increasing consumption, is now changing to an energy saving market, where utility companies follow an energy conservation strategy by attracting more consumers without the necessary increase in production capacity (Porter, 1995).

2.7 Environmental Constituencies

The emergence of corporate environmentalism has been linked to increasing governmental regulation, rising levels of public concern, increasing levels of environmental liability and risk, and the need for competitive advantage through cost savings or niche-marketing (Banerjee, 1998; Owen, 1993;

Porter and van der Linde, 1995;). While managerial perceptions of these factors could be interpreted as post-hoc rationalizations, they also represent perceptions of changes in the external environment of firms and the need to respond to these changes for continual survival and growth (Shrivastava, 1993).

Changing societal norms on environmental issues are well-documented (Banerjee, 1994; Buchholz, 1993; Dunlap, 1991; Hawken, 1993; Schmidheiny, 1992). Increasing public concern for environmental degradation often resulted in increasing environmental legislation as well as higher consumer expectations of corporate environmentalism. Societal and government institutions are important external constituencies that could influence company strategies. These actors compose a firm's 'organizational field' (Scott, 1995) and constitute the basis of institutional theory, which examines the interaction of forces outside a firm's boundary (DiMaggio and Powell, 1983). These institutional forces also act as agents of change for corporations as they strive to meet changing stakeholder expectations. In a longitudinal analysis of the chemical industry for the period 1962-93, Hoffman (1999) demonstrated how institutional pressures stemming from environmental problems were reflected by changes in industry environmental strategies moving from reactive to proactive. Hoffman (1999) describes how corporate environmentalism became a 'normative institutional pillar, ethically appropriate, and a matter of social obligation ... representing a more self-directed set of motivations'

2.8 Internal Constituencies

Senior managers' perceptions of environmental issues can influence the level of corporate environmentalism. The role of top management in developing and implementing environmental strategies has been discussed in numerous studies of corporate environmentalism (Banerjee, 1998; Catusus et al., 1997; Hoffman, 1993; Maxwell et al., 1997; Rasanen et al., 1995; Rondinelli and Vastag, 1996; Starik and Rands, 1995; Taylor and Welford, 1993).

Anecdotal evidence and several case studies indicate that corporate environmentalism can deliver competitive advantage (Banerjee, 1998; Lee and Green, 1994; Taylor and Welford, 1993). Sustainable competitive advantage can be obtained by having lower costs than competitors or by offering differentiated products in the market. Shrivastava (1995) describes how corporate environmentalism can provide competitive advantage through 'ecologically sustainable least-cost strategy, ecologically sustainable differentiation strategy and ecologically sustainable niche strategy'. The business press is replete with numerous examples describing how environmental strategies have led to significant cost savings in several firms (3M, AT&T, Carrier, DuPont, IBM, to name a few). Cost savings were achieved by using cheaper recycled raw materials, or via energy savings and process improvements (Naj, 1990; Smith, 1991).

2.9 External Constituencies

External constituencies consist of regulators and the public. Over half of the \$100 billion the US spends each year on environmental protection is borne by industry (Piasecki, 1995). Rising costs of environmental compliance can

provide the necessary impetus for corporate environmentalism. In several industries, environmental strategies focus on pollution prevention rather than end-of-the-pipe controls that are becoming increasingly expensive to implement (Buchholz, 1993; George, 1994). Legislation can also require substantial changes in product or package design, or process design as in the case described earlier, where a firm had to develop a new process in order to comply with EPA regulations. Environmental legislation covering packaging content (McCrea, 1993), product formulation (Ottman, 1993) and distribution channels (Green Market Alert, 1993) have influenced business strategies.

Environmental liability and risk is another important factor influencing corporate environmentalism: investors often rank environmental liabilities as the first kind of information they require for making investment decisions (Mastrandonas and Strife, 1992). Companies are liable not only for any present damage to the environment but also all future damage and by law; all potentially significant environmental risks must be disclosed (Rubenstein, 1992).

Apart from recognizing the importance of maintaining a green corporate image, companies have also responded to customer environmental concerns about specific products. McDonald's changed their packaging for several products after years of complaints from customers (Simon, 1992). In industrial markets, customer needs for environmentally friendly raw materials and consumables have influenced suppliers' manufacturing and procurement processes (Business and the Environment, 1993). The following quote illustrates an example of customer environmental concern:

“Our approach was till that time pretty much one of compliance with federal, state and local laws. We had a pretty strong environmental programme in our manufacturing plant. Then one day I got a panic call from marketing saying our major customer had just returned our last consignment. The reason: excessive packaging. Apparently they had told us this sometime ago but we didn't pay much attention, made the appropriate noises. Didn't come up again for a while and then bang, a returned consignment. Got a lot of people worried here and that forced us to look at environmental things beyond manufacturing. We now have an ongoing packaging development programme where we have redesigned virtually all our packaging. We're working with customers, the EPA, and local environmental groups on how to further improve our packaging”. (Technical Director)

Research has shown that governments often enact environmental legislation as a result of pressure from the public and environmental organizations (Dunlap, 1991; Hoffman, 1999; Shanoff, 1996). Legislation, in turn, has the potential to influence corporate environmental strategies (Earle, 1993; McCrea, 1993; Reinhardt, 1999).

Thus, environmental orientation appeared to reflect managerial perceptions of the importance of environmental issues facing their firm and the firm's responsiveness to external stakeholders. This aspect of environmental responsiveness is also consistent with findings from other studies where the development of a capability for stakeholder integration was found to be a central theme of a proactive environmental strategy (Sharma and Vredenburg, 1998).

Negotiating the labyrinths of stakeholder theory in all its complexity raises several questions and contradictions. At one level, the reformist view argues that stakeholders must be consulted, and the consultative process is the area that needs attention (Egri and Pinfield, 1996). At another level, identifying appropriate stakeholders and prioritizing their needs tends to be driven by corporate needs and as noted by some critics, does not provide a means to reformist change (Banerjee, 2000; Thomas, 1999).

Corporate strategies on stakeholder engagement and integration with respect to environmental issues focus on marketing sustainability in order to create the markets of the future (Elkington and Fennell, 1998). For example, Unilever's statement on sustainability espouses 'engaging with others to build effective partnerships to deliver real solutions to the challenge of sustainability' (Fowler and Heap, 1998, p. 80). Corporate environmentalism encompasses more than environmental mission statements. Environmental concerns need to be translated into strategy if meaningful corporate greening is to occur (Coddington, 1993; Zeffane et al., 1995).

Critics may point out that these 'feel good' statements about the environment are largely a public relations exercise. A more realistic picture of the way in which environmental issues impact an organization may emerge if specific strategies and actions are examined along with perceived reasons for pursuing such strategies and the expected benefits to the firm. Such an approach could reduce, but not eliminate, social desirability bias since it focuses attention to specific corporate actions and strategies rather than on corporate values, vision and mission. Thus, the question that arises is how does an environmental orientation translate into strategy? How do managers

operationalize this concept in their day-to-day activities? Claims of social responsibility could well be mere exercises in public relations. What is more important is how managers translate these claims into company actions and strategies (Bennington and Gray 1993).

Product innovation and new product development are important outcomes of a higher-level environmental strategy and environmentally-driven product initiatives have been reported in a number of industries (Banerjee, 1998; Florida, 1996; Gouldson, 1993; Lee and Green, 1994; Maxwell et al., 1997; Roome, 1993; Taylor and Welford, 1993).

Environmental improvements such as superior waste management use of cheaper recycled raw materials, and pollution prevention, which limits the costs of compliance with environmental regulations. Thus, these firms employed what Shrivastava (1995) calls 'ecologically sustainable least-cost strategy' and 'ecologically sustainable niche strategy' to achieve competitive advantage.

The most common mechanism of integrating environmental issues at higher levels of strategic decision-making was Total Quality Environmental Management. TQEM aims at optimizing the environmental performance of an organization (GEMI, 1992). In TQEM the conventional notion of quality is expanded to include environmental quality and is a process that examines all environmental costs involved in every stage of manufacturing, distribution, consumption, and disposal of products. Previous research has shown that many environmental improvements were also quality improvements through TQM (Florida, 1996; Roome, 1992; Shrivastava, 1995; Wolters et al., 1997). Managers seem to be comfortable using TQEM

to determine environmental impacts because it results in a quality improvement in the process or product and often delivers a measurable economic benefit to the organization (Banerjee, 1998):

Environmental strategy remains internally focused and is evaluated by its financial benefit to the firm rather than an external strategic focus on sustainable development (Catusus et al., 1997; Hart, 1997).

In a trenchant critique of current 'green' literature, Newton and Harte (1997) argue that most research in this area is 'buttressed by evangelical rhetoric and is reliant on the assumption that organizations will voluntarily become greener'. Newton and Harte question the efficacy of 'green evangelism' and call for a critical approach to corporate environmentalism. Critics of both radical and reform environmentalist perspectives are skeptical about notions of 'green capitalism', 'natural capitalism' or 'green consumerism' (Egri and Pinfield, 1996), arguing that the fundamental assumptions of environmentalism and economic development are contradictory and cannot be resolved through green sleight-of hand theorizing.

Internal and external constituencies appear to have some association with environmental strategies. Newton and Harte (1997) suggest that voluntarism is not the way towards organizational greening and the role of external constituencies like regulatory agencies and environmental organizations warrant further attention. Legislation can also encourage environmental innovation in firms, resulting in gains in productivity and competitive advantage (Porter and van der Linde, 1995). The challenge for both industry and policy makers who wish to promote greening is to determine incentives

that can raise environmental strategies to higher levels of strategic decision-making.

The dissemination of environmental information within organizations is crucial in implementing environmental strategies. Environmental issues are complex and interconnected and require cross-functional communication (Westley and Vredenburg, 1996). Understanding the process of environmental decision-making, building shared environmental values among organizational members and the organizational dynamics involved is another area for future research. Organizational innovation, environmental entrepreneurship, and resource productivity are some promising avenues that can be used to study this process.

Corporate environmentalism must go beyond rhetoric and relabelling. As Catusus et al. (1997) have reported, many firms continue to 'greenwash' rather than engage in strategic environmental planning: cost reductions are justified by relabelling them 'environmental', and regular investments classified as environmental investments. , 'Greenness' of a company refers to the extent of inclusion of environmental considerations in the strategic planning process of a firm and is not intended to distinguish 'good' from 'bad' companies. The green bandwagon effect is still pervasive among corporations and there is a need to distinguish genuine environmental improvements from green washing claims. Disclosure of environmental activities is one way to achieve this.

2.10 Environmental Costs of Consumption

Many trade products caused environmental problems during use and also generate waste at the end of their lifespan. Governments have the right to regulate these impacts as long as they do not discriminate against imported products. Measures include fuel efficiency standards for cars, mandatory energy labelling for domestic appliances and take-back requirements for packaging. Nevertheless, these measures can still be problematic for foreign producers, particularly if there is inadequate information or transition times for adjustment (Walley 1994).

2.11 Environmental Costs of Production:

The life cycle impacts of products are also an increasing concern, with growing consumer demand for goods and services that minimise environmental impacts at the production stage as well as during use. Under WTO rules, governments are barred from specifying environmental standards for the production and process methods used to make imported products. Recent WTO cases have confirmed this legal principle against extra-territorial environmental regulation, ruling, for example, that a US ban on shrimps caught in countries that had not installed turtle-excluding devices to their fishing boats was illegal. In the marketplace, however, corporations and consumers are free to integrate social and environmental standards into their purchasing decisions, and this is starting to have profound implications for trade, particularly in the environmentally-sensitive sectors of agriculture, forestry and textiles (Taylor 1993)

2.12 Green marketing practices

Eco-labelling: There is now an array of eco-labelling schemes across the world, from Canada to China. The bulk of these are in Europe, the most significant being the German Blue Angel programme, the Nordic Swan scheme and the European Union's Eco-label initiative (see table 1). But eco-labels are being re-evaluated, partly because of the often weak performance of eco-labels. For example, the OECD's Environment Directorate has concluded that "overall, eco-labelling has only been moderately successful with the individual consumer". More attention is now being given to raising overall public awareness, targeting corporate supply chain management and public procurement and using other policy tools, notably economic instruments to stimulate changes in consumer behaviour. The international trade impacts of eco-labelling have also become a major bone of contention, with many developing countries raising concerns that eco-labels can be *de facto* trade barriers, particularly where criteria relate to the production process for the good concerned. (Welford 1993)



- Table 1

- **Impact of Eco-Labelling**

- The Blue Angel: Launched in 1977, the German Blue Angel Environment Label (Umweltzeichen) scheme was the world's first eco-label initiative. Its coverage has grown from 45 labelled products in 1979 to 3250 in 1989 to 4500 products in 79 product categories in 1997. The scheme covers a wide array of products from recycled paper, low-pollutant paints, computers, copiers, printers to low emission chain saws: it only excludes food and pharmaceuticals. The Blue Angel is generally regarded as a highly successful, although there appears to be a decline in the proportion of consumers paying

attention to the eco-label when doing their shopping from 79% in 1988, to 62% in 1993 to 51% in 1996, partly due to confusion caused by a proliferation of competing corporate labels. The Blue Angel is, however, playing a growing role in corporate purchasing and public procurement, and studies show that the Blue Angel is more important for professionals than private individuals. About 17% of Blue Angel licensees are foreign, more than in any other labelling scheme. But some complaints have been received from Brazil, Canada, Chile and the USA over the trade effects of recycled content criteria for paper products.

Producer Responsibility: Starting with packaging, a number of governments led by Germany and the Netherlands, are introducing 'take back' regulations to make producers responsible for dealing with the waste generated by their products at the end of the life cycle. The European Commission is now considering the introduction of extended producer responsibility into the European legal framework, with the aim of ensuring that consumers can hold producers legally responsible if the product does not meet its environmental requirements. A number of legal obstacles still need to be overcome. However these requirements also pose new challenges for exporters, particularly to ensure that their products and packaging are designed for easy recycling. (Newton 1997)

Environmental Agreements: A number of governments are negotiating environmental agreements with key industry sectors to achieve environmental improvements faster and at less cost than traditional regulation. Across the OECD countries, there are now over 250 negotiated agreements for controlling greenhouse gases alone. In Germany, for example, 19 industry

associations signed a climate protection agreement in 1996 with the government, committing themselves to reduce emissions of carbon dioxide by 20% from 1990 levels by 2005. The agreement covers 70% of final energy use in the industrial sector and 99% of electricity coming from public utilities. In return, the government has declared that it will suspend additional regulatory measures. The EU has now adopted a common strategy for introducing and managing these agreements (Newton 1997)

Economic Instruments: Ideally, sustainable goods and services should be cheaper than polluting products. A range of economic instruments are now being used on the demand side, such as car taxation adjusted to vehicle size or fuel consumption, preferential rates for unleaded fuel and reduced VAT for environmentally products. The removal of subsidies harmful to sustainable consumption is also essential. (Newton 1997)

Procurement Policies: Public authorities in local and central government can help to make markets for sustainable goods and services by integrating environmental criteria into their purchasing decisions: see Table 2 for British experience (Welford 1993).

Table 2

Green Procurement in the UK

In Britain, the Department for the Environment, Transport and the Regions has issued a Green Guide for Buyers to encourage government agencies to purchase environmentally preferable products at competitive prices, providing checklists for a range of goods and services. The Guide recommends the use of products from the EU eco-labelling scheme, certified timber products and using a supplier's adherence to an environmental management system as a useful indication of

performance. However, government authorities are not allowed to make compliance with ISO14001 a general requirement.

At the local level in the UK, Sutton council in London is setting an example and by the end of 1999, all suppliers will have to have an environment management system. At the European level, the European Commission is currently working on an interpretative document aiming at clarifying the possibilities for integrating environmental considerations into public procurement procedures.

Trade Preferences: As part of its common commercial policy, the EU has started to develop specific measures to encourage the trade in sustainable goods and services from developing countries. For example, as part of the Generalised System of Preferences (GSP) with Asian and Latin American countries, the EU has recently agreed a set of special incentives to reward compliance with international social and environmental standards. For the moment, the environmental incentive is focused on the timber trade. Exporting countries will need to show that they have implemented legislation incorporating the standards of the International Tropical Timber Organisation: in return, countries will receive a reduction in duty payments of between 15 and 35 per cent. Yet, according to Charles Bridge, Director of New Issues at the UK's Department for Trade and Industry, *"concrete achievements so far are modest. There is lots more to do"*

New Partnerships: Governments can also help to shape market trends by forming creative partnerships with the private sector and citizen organisations to promote more environmentally-responsible trade. In Germany, the Federal Environmental Ministry is supporting a Network of Eco- and Fair Trade Initiatives to increase the profile of sustainably

produced and socially sound products from developing countries, while in Britain, the Department for International Development has established the Ethical Trading Initiative, bringing together companies, non-governmental organisations and trade unions to work together to promote standards designed to improve the quality of life of workers throughout world-wide supply chains of companies importing into the UK. As Clare Short, Secretary of State for International Development says "*Much of the business community now accepts the need for codes of conduct, which guarantee minimum labour and environmental standards.*" The ETI has a tough job ahead of it however as each of the companies involved deal with between 2000 and 5000 suppliers, many of whom are agents and middlemen who in turn subcontract to around 5 million factories, farms and plantations in 50 countries

Looking across the range of policy tools, Danielle Smadja, Head of the international affairs unit at the EC's Environment Directorate notes that, "*many of these instruments are based on a life cycle approach, which is fully justified from an environmental point of view*". However, the relationship between the life cycle approach and trade rules raises many difficult legal and practical problems. For Smadja, these problems "*need to be addressed on a priority basis in order to improve legal certainty and safeguard the progressive reinforcement of environmental policies*".

But while new policies and incentives are critical for sustainable consumption and trade, much of the innovation has taken place in the marketplace, driven by new initiatives by citizen organisations and industry. A leading example is the Forest Stewardship Council.

Table 3

The	Forest	Stewardship	Council.
Established in the early 1990s by citizen groups concerned about the failure of government policy to regulate poor forest practice, the FSC has established principles and criteria for sustainable forest management, which are used to certify the performance of forest operators; successful companies can use the FSC logo on their products, provided that the chain of custody is certified. Right from the beginning, the FSC has worked to develop markets for certified timber. In the UK, the Worldwide Fund for Nature (WWF) has established a buyers' group for FSC certified products, which now has 85 members including major DIY stores, supermarkets and magazine and paper products manufacturers and retailers, which together account for 14% of the UK's consumption of forest products.			

Industry itself is promoting the use of environmental management systems (EMS) as one way of greening the supply chain, locally and internationally. The two main initiatives for certifying EMS are the EU's Eco-Management and Audit Scheme (EMAS) and the International Organisation for Standardization's ISO14001 system. Internationally, ISO14001 is more likely to become the benchmark, given its privileged status within the WTO framework. By the end of 1997, more than 4,000 certificates had been awarded worldwide, with Japan, the UK and Germany dominating so far; the uptake in Asia remains strong with growing numbers of companies in China, India, Malaysia and Thailand getting certified. Further growth is expected as companies start to use ISO14001 as part of their supply chain management, making it crucial for access to the global marketplace, according to its advocates. Leading companies such as IBM and Daimler-Benz are now asking their suppliers to seek certification.

But others view the current ISO14001 standard as "a missed opportunity to contribute to global sustainable industrial development". Developing countries have been poorly represented in the design of ISO14001 and are concerned at the extra costs it could bring, particularly for small and medium sized producers. Furthermore, the ISO scheme does not provide any guarantee of higher environmental performance, and marks a step backwards in terms of public participation and accountability by requiring no reporting of environmental performance. While ISO14001 certainly provides a starting point for boosting environmental responsibility in world trade, producers in developing countries and their clients in the industrialised world are likely to need an *ISO Plus* system, tailored to their particular needs, if real progress is to be made (Nick Robin 1997).

Voluntary Initiatives: Such initiatives offer opportunities for innovation, flexibility, efficiency and greater business buy-in. To gain full support by citizens' organisations, voluntary initiatives have to be accompanied by objective assessments of their environmental effectiveness. Labelling and certification schemes - such as the forest steward council (FSC) and ISO14001 (Nick Robin 1997).

2.13 Cement sector: Case of Athi River Mining Company

ARM was established in 1973 as a mineral extraction and processing Company. The capacity was doubled in 1974 and the capacity expansions continued through the next decade as a market leader in the Minerals market. In 1991 ARM diversified into the manufacture of chemicals with setting up of the sodium silicate plant and then diversified into the precipitated silica business with the installation of the plant in 1993.

In 1996, ARM diversified into the manufacture of cement and in 1999 the company installed a plant in Kaloleni for manufacture of Quick lime. In the same year it also went into making of specialized building products such as Rhino wallmaster and special adhesives and construction chemicals. In year 2002 ARM set up a fuel efficient regenerative type furnace for quality sodium silicate manufacturing.

The company is committed to conserving and protecting the environment and has an active environment protection policy to implement the same. ARM policy is based on its respect for nature and believes in maintaining a balance between needs of mankind and nature. In extracting and processing Minerals from the earth, ARM ensures that everything is done to: -

- Reduce noise by use of special blasting techniques, by sound proofing- noisy machinery, and by setting aside of the protected areas.
- Reduce dust through use of various filtering techniques.
- Restoring each mining site to natural state by tree planting, creating dams and ponds and involving the local community in conservation projects.

The European Community Standards set for industrial projects are applied to its plants at Athi River and Kaloleni. All the production operations are equipped with high efficiency dust collecting systems and exhaust gases are treated in special electrostatic precipitators to an efficiency of less than 100 mg/NM.

The Company has a quarry rehabilitation program, which provides for the back filling of the excavated areas with imported soil. Trees and plants are

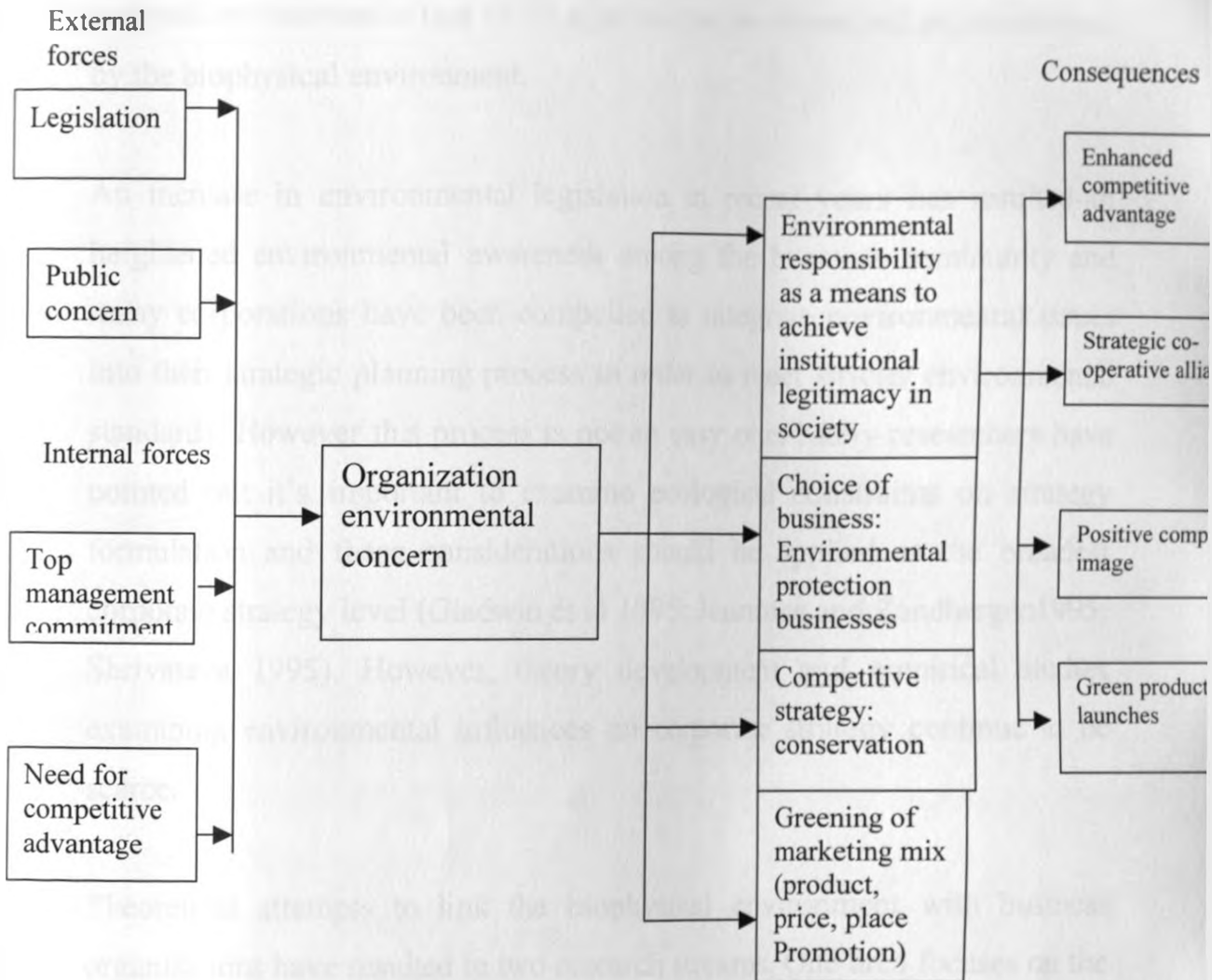
planted on the rehabilitated grounds with the objective of leaving each place better than it was before quarrying operation (T. Kumar 2003)



Environmental rehabilitation of the quarrying area involves a series of steps, including site assessment, planning, design, construction, and monitoring. The process aims to restore the natural environment and improve the quality of the land. The rehabilitation process involves several steps, including site assessment, planning, design, construction, and monitoring. The process aims to restore the natural environment and improve the quality of the land. The rehabilitation process involves several steps, including site assessment, planning, design, construction, and monitoring. The process aims to restore the natural environment and improve the quality of the land.

2.14 Conceptual Framework

Figure 1. Conceptual framework of Corporate Environmentalism.



Conceptualisation of the external environment of marketing has until recently ignored the biophysical environment. Environmental scanning is used widely in the literature as an important part of the strategic planning process (Zeithaml and Zeithaml 1984), but the biophysical environment plays virtually no role in the development strategy. The external environment as defined in environmental scanning has until now been

restricted to the social, political, cultural, technological, economic or legislative environments. What is often overlooked in the analysis of external environment is that all its aspects operate within and are constrained by the biophysical environment.

An increase in environmental legislation in recent years has resulted in heightened environmental awareness among the business community and many corporations have been compelled to integrate environmental issues into their strategic planning process in order to meet stricter environmental standards. However this process is not an easy one. Many researchers have pointed out it's important to examine ecological constraints on strategy formulation and these considerations should be applied at the broadest corporate strategy level (Gladwin et al 1995; Jennings and Zandbergen 1995; Shrivatava 1995). However, theory development and empirical studies examining environmental influences on corporate strategy continue to be scarce.

Theoretical attempts to link the biophysical environment with business organisations have resulted in two research streams. One area focuses on the theoretical and paradigmatic implications of integrating the environment into strategy. Researchers have called for the re-evaluation of existing neo-classical economic paradigms and have discussed the emergence of new paradigms such as the ecocentric paradigm and the sustainable development paradigm (Gladwin et al 1995; Purser et al 1995).

CHAPTER THREE

3.0 Research Methodology

3.1 Research Design

Research design is a detailed blueprint used to guide the implementation of research study towards realization of its objectives. The research framework used is descriptive. A descriptive study has been adopted for this exploratory study. It has the dimension of determining the degree of association or relationship between the marketing variables.

3.2 Population of the study

The population of interest consisted of the head of departments in the corporate planning, marketing, & production and environment departments of the Cement Companies in Kenya.

The firms in the industry included:

- Bamburi Cement Industry,
- East Africa Portland Cement,
- Athi River Mining Limited

This is a census type of study as the research covers the whole population in the cement industry.

3.3 Data collection.

The study used the survey method to conduct the research.

Data for this study was collected using structured questionnaires, which was personally administered by the researcher. The structure of the questions in the questionnaire was both open ended and close-ended. In open-ended questions the researcher didn't know the answers in advance and left the respondent with freedom to respond as she or he found it. In close-ended questions the researcher knew the answers in advance, but left the respondent with freedom to choose the correct answer. The questionnaire contained statements that reflected the research problem and comprise different questions to simplify the work of the respondents. An introductory letter briefly explaining the purpose of the study accompanied the questionnaire.

3.4 Data Analysis processing and presentation

Data for this study was analysed using descriptive statistics. These included use of frequencies, proportions and cross tabulations. Frequencies were used to find out the recurrence of use of the green marketing practices, the extent of use and the expected outcome and challenges faced by cement industries while turning green. Basic analysis was used in analysing the data. Tables and charts were used to enhance the quality of the findings.

Since the data that was initially collected was raw it had to undergo some production processes for suitable analysis and interpretation. This was achieved through a series of the following logical steps: -

Checking for completeness

This was meant to ensure that no sections or pages of the questionnaire went missing and that no answer to any question item is inadvertently omitted either in whole or in part.

Checking for data consistency

This served to uncover inconsistent or contradictory answers and rectified errors thereof.

Accuracy check

The editor carefully screened through the data to search for any inaccuracy.

Coding

This is a process of identifying and assigning a numeric or character symbol to previously edited data. The editor underwent the process through encircling the appropriate codes. This happened with the case of pre-coded questions.

In case of unstructured questions, post coding took place. The editor carefully studied the responses given and thereafter grouped them into homogeneous categories. After each category was assigned a code number the coding frame was formed.

Tabulating.

Editor counted the number of elements that fell into each coded category with the major aim of organizing the data by groups so as to present information in a quantifiable and readily understandable format. Both simple tabulation and cross tabulation were used.

Simple tabulation involved counting single variables and presenting empirical distribution of the number of elements that fell into each category. Cross tabulation was used to establish relationships between two or more elements, in this regard the number of cases that had joint characteristics were counted.

Charting

The editor used charts to offer graphical and visual picture of tabulated data to help put across important points to data users.

Bar charts.

Vertical bar charts were used to represent frequencies and percentage numbers. Length of the bar was proportional to the magnitude of the value it represented.

Pie charts

The editor used pie charts to exhibit the relationship of each individual component in relation to the whole. Pie charts were chosen because of their appropriateness in demonstrating the market share.

CHAPTER FOUR

4.0 DATA ANALYSIS

This section reports the simple question by question tabulations of the questionnaire on a percentage basis. The responses were weighted; hence the results are directly projectable to the entire population of the cement industry. All averages are based on those respondents who answered the particular questions being analysed with non-responses excluded.

Table 4
Age and Year of operation of the cement companies

Company	Year of incorporation	Age/years of operation	Percentage
Athi River	1972	31	20 %
Bamburi	1952	51	34 %
E.A. Portland	1933	70	46 %
Total		152	100 %

From the analysis carried out it is evident that East African Portland is the oldest Manufacturing Company in the cement industry. It is followed by Bamburi cement, which has been in the industry for the last 51 years. Athi River Mining is greenest in the industry since it has been in operation for the last 31 years since its inception.

Table 5
Company Ownership & type of Ownership

Company	Local	Foreign	Sole Proprietorship	Partner	Limited
Athi River	100%	0%	No	No	Yes
Bamburi	100%	0%	No	No	Yes
E.A.Portland	78%	22%	No	No	Yes

Athi river mining and Bamburi Cement companies are 100% owned locally, whereas E.A. Portland cement Company is 78% owned locally while 22% constitutes foreign ownership. All the three Companies are limited Companies. This means that any shareholder can be called upon to contribute to the assets of the company upon liquidation. All the three Companies are quoted in the Kenya 's stock market. Non of the company is owned solely or in partnership. This could be due to huge financial investment required while incorporating the company.

Table 6

Businesses the Cement Company Engage in

Activities	E.A Portland	Bamburi	Athi River
Cement Mining	Yes	Yes	Yes
Cement manufacture	Yes	Yes	Yes
Livestock rearing	Yes	No	No
Brick making	Yes	No	No
Chemical production	No	Yes	No
Fishery	No	Yes	No
Eco-tourism	Yes	Yes	No
Fertilizers Production	No	No	Yes

All the three companies have cement manufacturing as their core business. Due to economies of scale, and provided legal requirement the companies have diversified into other ventures such as Eco-tourism, which have resulted from rehabilitation of the excavated land. Bamburi 's haller park and adjacent Mamba village with thousands & thousands of crocodiles are good sites for tourist attraction.

Table 7**Products offered by the Cement companies**

Product	E.A Portland	Bamburi	Athi River
Cement	Yes	Yes	Yes
Chemicals	Yes	Yes	Yes
Adhesives	No	Yes	Yes
Milk	Yes	No	No
Beef	Yes	No	No
Vegetables	Yes	No	No
Rhino Wall master	No	No	Yes
Bricks	Yes	No	No
Fertilizers	No	No	Yes
Lime	No	No	Yes
Sodium silicate	No	No	Yes
Clinker	Yes	No	No
Chalks	No	No	Yes

All the three companies offer building materials such as cement and chemicals in the market. Others are offering farming inputs such as fertilizers, others are offering agricultural outputs such as vegetables, beef and milk to the market. ARM is also manufacturing chalks and wall masters. Both Bamburi and ARM are producing multipurpose adhesives. E. A Portland is also making bricks from some of the cement by products.

Table 8**Legal Requirements for the firm to be in the Cement industry**

Respondents	Athi river	Bamburi	E.A Portland	Total	% of
Land reclamation	3	3	4	10	100%
Health hazards Control	3	3	4	10	100%

Control of noise pollution	3	3	4	10	100%
Control of explosives	3	3	2	8	80%
Adequate compensation	2	2	1	5	50%
Good working conditions	2	2	1	5	50%
International Standards	1	0	1	2	20%
KBS standards	2	0	1	3	30%
E.A. Standards	0	0	1	1	10%
Total	19	16	19	54	
Percentage	35%	30%	35%	100%	

All the companies responded positively though they have not indicated the monetary value attached to the requirement. There are also requirement for companies to offer protection devices and adequate working space. All the respondents were in agreement about legal requirements and also specified others like observation of international standards, minimum wage requirements, and provision of good working conditions.

All the Companies agreed that they had 100% complied with the legal requirements laid down by the government (land reclamation control of health hazards & control of noise pollution.) 80% of the respondents control dangers, which might be caused by explosives. 50% provide good working condition and compensation of the employees, 20% comply with environmental international standards, and 30% comply with KBS standards. Only 20% of the respondents observe and comply with E.A. Standards.

Table 9
Company Minimum Requirements for the firm to
be in the cement industry

Requirement/Respondents	Athi River	Bamburi	Portland	Total	% of Tot
-------------------------	------------	---------	----------	-------	----------

Market Availability	2	3	3	8	80%
Adequate Technology	2	3	4	9	90%
Adequate Labor	2	3	4	9	90%
Adequate Infrastructure	2	3	4	9	90%
Stakeholders satisfaction	2	3	3	8	80%
Health requirement	1	2	2	5	50%
Minimum capital Base	1	0	0	1	10%
European Industrial Standards	1	0	0	1	10%
Total	17	23	28	68	
Percentage	25%	34%	41%	100	

Table 9 shows that 90% of the respondents agreed that for them to be in the cement industry they must be ready to invest in the environment assets. They must be financially stable and must have adequate technology. Constant innovation in cleaner technologies and products can enable firms to differentiate their products based on their environmental friendliness. This may allow the firm to command a price premium for their products and thus provide the competitive advantage. On top of that they must have adequate and sufficient labour. Adequate infrastructural base is a prerequisite for all the firms to be in this industry. 80% of respondents said that they have to maximize the stakeholders' satisfaction while 10 % said they should have a good capital base and must comply with European industrial standards.

Table 10

Awareness and Knowledge of green Marketing Concept

No. of respondents	Athi River	Bamburi	E.A Portland	Total	Percentage
Awareness	3	3	4	10	100%
Knowledge	3	3	4	10	100%
Adoption	3	3	4	10	100%
ISO certification	3	3	4	10	100%
Total	12	12	16	40	
Percentage	30%	30%	40%	100%	

All the Companies in cement industry are aware of green marketing as all of them have adopted and are practicing green marketing activities ranging from rehabilitation of excavated land, greening the Company values and coming up with environmental policies. Athi River Mining and Bamburi cement are 30% aware while E. A Portland is 40% aware of the green marketing concept.

Table 11

Preparation for ISO 14001 certification

Preparation for ISO 14001	No. Of respondents		
Activities	Athi River	Bamburi	
Other Certification	3	none	
Eco-tourism	none	1	
Environmental impact Assessment	none	none	2
KBS Training	none	none	1
Nature Trails	none	1	1
Eco-biodiversity	none	1	1
Fisheries	none	none	1

None of the companies is ISO 14001 Certified but all of them are aspiring to be certified. They are already addressing the environmental issues through different activities like

1. Planting of trees
2. Training through Kenya bureau of standards
3. Eco-biodiversity
4. Environmental impact assessment

4. Environmental impact assessment

Table 12

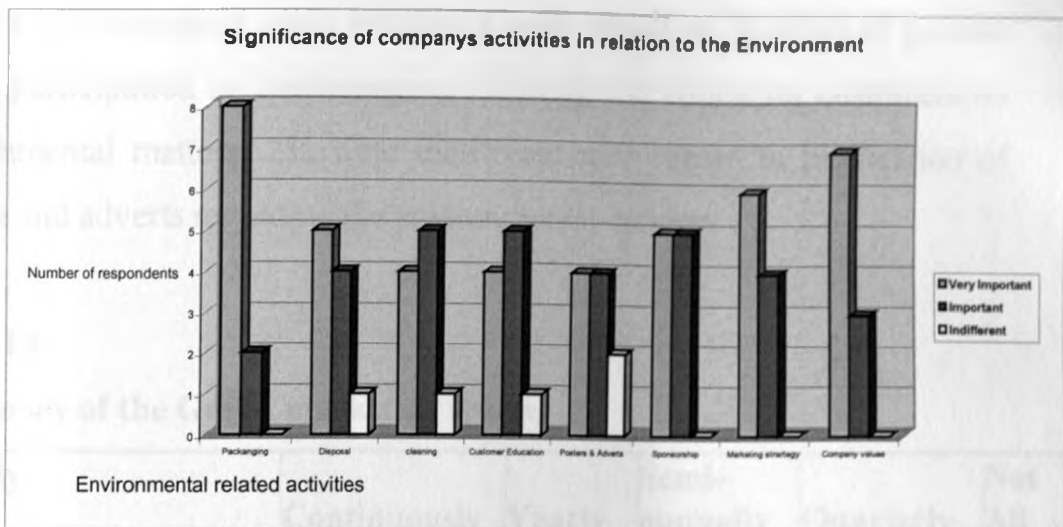
Overall Level of Importance attached to environmental/Greening issues

Activity	Very Important	Important	Indifferent	Total
Product packaging	8	2	0	10
Disposal of waste	5	4	1	10
Environmental cleaning	4	5	1	10
Customer Education	4	5	1	10
Posters & Adverts	4	4	2	10
Sponsorship of env activities	5	5	0	10
Marketing strategy	6	4	0	10
Greening company values	7	3	0	10
Total	43	32	5	80
Percentage	54%	40%	6%	100%

Table 12 shows that 54% of the respondents find the green marketing practices to be very important, 40% important and 6% are indifferent to the green marketing practices. Overall it appears that packaging of the products and greening the company values dominate the green marketing practices.

Table 13
Individual importance of the green marketing activities

Activity	Very Important
Product packaging	8 (80%)
Disposal of waste	5 (50%)
Environmental cleaning	4 (40%)
Customer Education	4 (40%)
Posters & Adverts	4 (40%)
Sponsorship of env activities	5 (50%)
Marketing strategy	6 (60%)
Greening Co. values	7 (70%)



The barchart above shows a visual diagramatical representation of the tabulated data.

Table 13 shows that 80% of the respondents said that product packaging is a very important green marketing activity. Incorporating environmental concern into company values was ranked second with a score of 70% by all the respondents. Disposal of product waste was ranked third with a score of 50%. Participation in environmental cleaning, educating customers on environmental issues and production of posters and adverts reflecting company's environmental concern had a score of 40%.

20% of he respondents said that the product packaging is important, while 40% of the respondents rated disposal of product waste, production of adverts and greening the marketing strategy equally, with a score of 40% . 50% of the respondents said that participation in environmental cleaning, educating the customers on environmental matters and sponsoring of environmental activities are important.

1% of the respondents were indifferent with regard to disposal of product waste, participation in environmental cleaning and educating customers on environmental matters. 2% were indifferent with regard to publication of posters and adverts regarding the environmental concern.

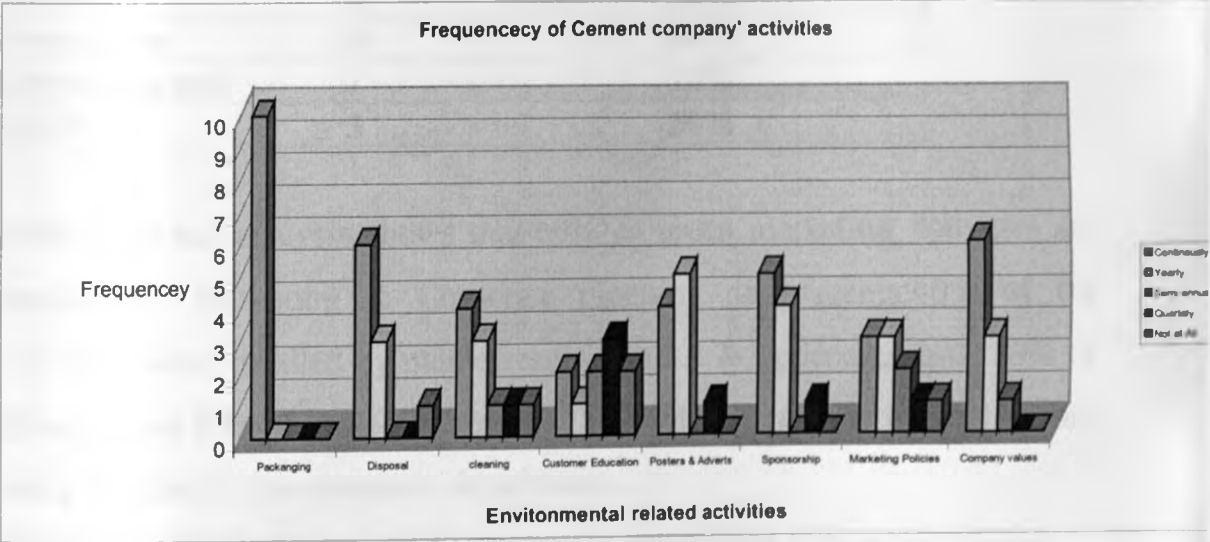
Table 14
Frequency of the Green marketing issues

Activity	Continuously	Yearly
Product packaging	10	0
Disposal of waste	6	3
Environmental cleaning	4	3
Customer Education	2	1
Posters & Adverts	4	5
Sponsorship of env activities	5	4
Marketing strategy	3	3
Greening company values	6	3
Total	40	22
Percentage	50%	28%

50% of the respondents do practice the green marketing activities continuously with 28% practicing yearly, 8% practicing semi-annually and 9% practicing the green marketing activities quarterly.

Table 15
Frequency of individual green marketing practices

Activity	Continuously	Yearly	Semi-annually	Quarterly	Not at All
Product packaging	10 (100%)	0	0	0	0
Disposal of waste	6 (60%)	3 (30%)	0	0	1 (10%)
Environmental cleaning	4 (40%)	3 (30%)	1 (10%)	1 (10%)	1 (10%)
Customer Education	2 (20%)	1 (10%)	2 (20%)	3	2 (20%)
Posters & Adverts	4 (40%)	5 (50%)	0	1 (10%)	0
Sponsorship of env activities	5 (50%)	4 (40%)	0	1 (10%)	0
Marketing strategy	3 (30%)	3 (30%)	2 (20%)	1 (10%)	1 (10%)
Greening company values	6 (60%)	3 (30%)	1 (10%)	0	0



The barchart above shows a visual diagramatical representation of the tabulated data.

Table 15 shows that 100% of the respondents said that product packaging is a continuous activity, while 60% of the respondents dispose off waste continuously. 40% of the respondents participate in environmental cleaning continuously.50% of the respondents sponsor environmental related

activities continuously. 30% of the respondents dispose off product waste annually. The same percentage participate in environmental cleaning and green the company values annually.20% of the respondents educate customers on environmental matters semi annually while 30% of the respondents educate customers on environmental matters quarterly.

Table 16

Departments Conducting Green Marketing Activities

Department	No. of Respondents	Percentage
Marketing	6	60%
Public relations	4	40%
R & D	4	40%
Corporate planning	6	60%
Finance	3	30%
Production	6	60%
Environmental	1	10%
HRM	3	30%

Cross sectional analysis shows that 60% of green marketing activities are handled by marketing & Corporate planning departments.40% of the activities being handled by public relation and R & D departments, 30% of the activities being handled by finance & HRM departments while 10% are being handled by Environment department.

The pie hart below shows a visual diagramatical representation of the tabulated data.

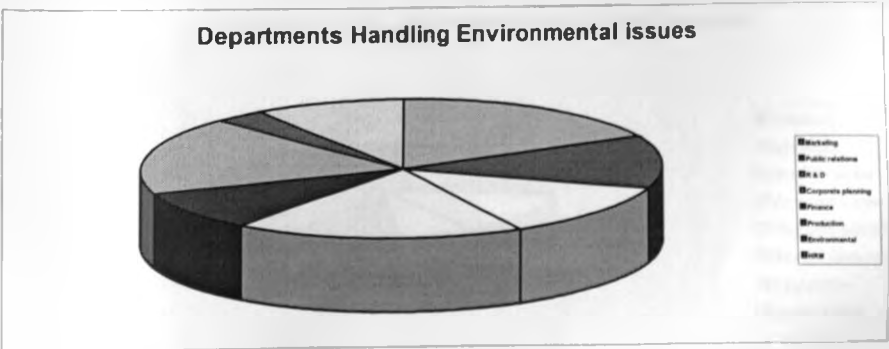


Table 17

Challenges that the cement companies are facing while turning green

Challenges	No. of respondents	
Financial	6	21%
Ignorance	2	7%
External forces	4	14%
Employees resistance	2	7%
Negative publicity	3	10%
Rivalry from competitors	6	21%
Legislative	5	17%
understaffing	1	3%
Total	29	100%

Table 17 shows that 21% of the respondents said that some of the challenges they face while turning green include huge financial investment with little returns as well as great rivalry from competitors. 17% said that they are hampered by strict legal legislative rules while 14% -10% said that external forces affect them as well negative publicity by the media. 7% said that there is ignorance from some departments whenever there are environmental activities. 3% said that the departments handling environmental activities are understaffed.

The pie-chart below shows a visual diagramatical representation of the tabulated data.

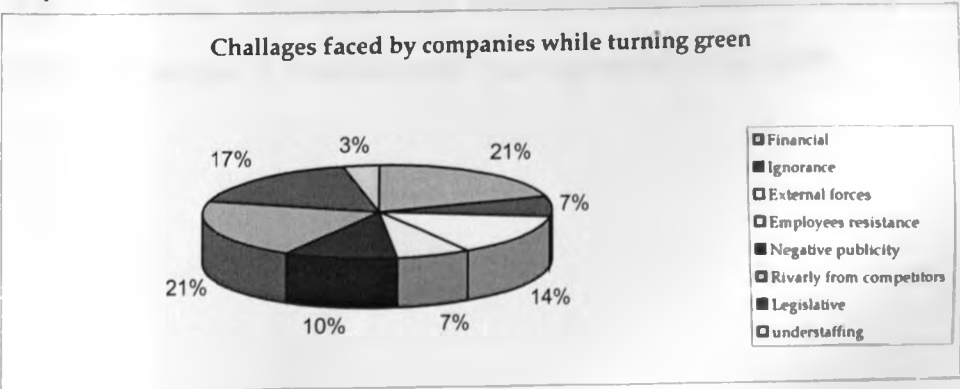


Table 18**Environmental Budgets**

Company	Greening Policy adoption	Budget (Kshs. Millions)	Percent %
Athi River	Yes	8	12%
Bamburi	Yes	35	54%
Portland	Yes	22	34%
Total		65	100%

All the Companies in the Cement industries have adopted green marketing practice. Bamburi cement has got the highest allocation of the environmental budget (54%) followed by E.A. Portland cement (34%). Athi river mining company has got the least allocation in the environmental budget.

From the above analysis it has been observed that properly designed environmental standards can trigger innovations that actually lower the total cost of a product or improve its value making companies more competitive. These innovations allow companies to use raw material, energy and labor more productively and thus offset the costs of improving environmental impact. There is a growing external pressure for Eco-friendly products and production methods since the World Trade Organization (WTO) started to impose several regulations for environmental protection and conservation within the scope of international trade agreement standards

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.0 INTRODUCTION

A summary is a product of the research findings, where the researcher gives what he has found out from his research. The tabled analysis and interpretations given in the preceding chapter attempt to illuminate into a better understanding of the study object.

The researcher gives his views concerning the research findings. He recommends some suggestions to the managers of the cement industries and to all other organizations who are stakeholders to the environment.

The conclusion marks the end of the studies confirming or disputing what the researcher set out to find.

5.1 SUMMARY

The researcher established that the following are some of the green marketing practices practiced by the cement industries in Kenya.

- Product packaging (eco-labeling) of the products.
- Proper disposal of product waste (recycling, reuse, and reduction).
- Educating the customers on environmental matters and concerns.
- Active participation in the environmental cleaning.
- Creating environmental awareness through production of posters and adverts reflecting environmental concern.
- Sponsorship of environmental conservation activities.
- Incorporating environmental activities into company's marketing strategy.
- Embedding environmental concern into company values and missions.

The researcher also found out that environmental problems associated with firm's business activities could provide the stimulus for changing existing organisational patterns of behaviour. One way in which top management can manifest its public commitment to environmental protection is by developing environmental mission or vision statements. With regard to challenges faced by the cement industries while turning green , it would be prudent to prevent environmental damage rather than clean it up as it would be cost effective in the long run.

Constant innovation in cleaner technologies and products can enable firms differentiate their products based on their environmental friendliness. This may allow the firm command a price premium for their products and thus the competitive advantage.

5.2 RECOMMENDATIONS

“SO your company has successfully launched an environmentally preferable product. Don’t stop now! The real challenge lies ahead: Using eco-innovation to reduce environmental pollution.

Many managers in the cement industry have shown interest in green marketing practices, as a means of meeting the company needs and leaving the customer and all the stakeholders satisfied. The major challenge they face is huge financial investment on greening the company values and practices with little return. In the long run this will not be the case because consumer are becoming aware day after day. In future customers will go for environmentally friendly products.

The following measures outlined below are aimed at ensuring that the green marketing practice is improved both locally and internationally: -

1. Companies should teach their consumers on how to consume and dispose of waste products responsibly. It’s all well and good to make your product recyclable Companies can communicate responsible consumption through labeling, for example, ("Please dispose of this properly") or educational programs.
2. Companies should green their company values and policies. Greening corporate culture saves money, reduces turnover, and keeps shareholders happy. Setting internal environmental standards can unleash the creative energy of employees and motivate them to work for a cause they believe in. this should be done through conducting internal environmental audit, developing corporate environmental

vision to guide business policy and sustainable innovation. Encouraging these values at the office will surely compel coworkers to integrate them into their personal and family life as well.

3. Companies should expand the realm of working in partnership. Constructive partnerships with groups such as consumers, regulators, environmental groups, the media, the scientific community and investors can yield many positive benefits - financial and social. Consider drafting industry-wide environmental standards with competitors. Sharing tangible and knowledge-based resources can be a way to benefit the communities in which companies operate and accelerate the progress of the firms in the industry. Communicating the benefits of green spreads the word and promotes environmental values among all stakeholders.
4. Develop the next evolution of the company's product. Eventually, a product's underlying concept becomes the limiting factor to improved environmental performance. In other words, existing products can only be "tweaked" so much before a "leap" to an entirely new or different technology will get them closer to "Zero" environmental impact. This is what eco-innovation is all about: addressing customer's needs in new and exciting ways that promote progressive social values and environmental sustainability. It is, of course, the most challenging - as well as potentially rewarding step a business can take. This kind of leap comes from a reevaluated product concept that can inspire groundbreaking cross-sector alliances and totally new marketing campaigns.

5. Restoration of the environment. Most product redesign projects are being conducted with the aim of minimizing environmental impact. Consider developing entirely new products or services that are capable of actually restoring the social, environmental, and economic systems that sustain us.
6. The most common mechanism of integrating environmental issues at higher levels of strategic decision-making is Total Quality Environmental Management. TQEM aims at optimizing the environmental performance of an organization. In TQEM the conventional notion of quality is expanded to include environmental quality and is a process that examines all environmental costs involved in every stage of manufacturing, distribution, consumption, and disposal of products.
7. The greener marketing approach will be recognized as being increasingly integral to a movement towards TQEM. Companies will need to understand their environmental impact clearly, and have policies in place to ensure that they are driving change rather than reacting to pressures. Stakeholders, whether as customers, employees or investors, will increasingly expect the company's approaches to be reflected in greener products and processes. The challenge will mean that greener companies will need to be more open with greater dialogue and participation encouraged amongst all stakeholders, notably customers and employees.

5.3 CONCLUSIONS

A recurring theme that emerged from the interviews was the notion of responsibility towards the environment. Managers mentioned the importance of recognizing the impact their firm had on the environment and the need to minimize such impact. Environmentalism was framed as a corporate value, akin to corporate social responsibility and was said to be the 'right' thing to do. 'Respect', 'care', and 'concern' for the environment were other terms used to describe the firms' relationship to the environment. Managers talked about the need to be sensitive to environmental issues and the need to respond to external stakeholders, to be 'community-oriented' and good 'corporate citizens'.

Some respondents also talked about their personal concern for the environment and their efforts in communicating this concern throughout the organization:

Thus, environmental orientation appeared to reflect managerial perceptions of the importance of environmental issues facing their firm and the firm's responsiveness to external stakeholders.

Stakeholder identification and integration is by no means a simple task. While most respondents agreed that environmental stakeholders had a role to play in environmental protection, the actual interaction with business activity was more ambiguous. Most managers felt that environmental organizations were important agents in creating awareness of environmental issues among the general public and should be involved in environmental education.

Protecting the environment as a primary mission is an element of enterprise strategy and this was not observed in the census. Another reason for this finding could be that organizations tend to have a limited understanding of the nature and scope of enterprise strategy and hence its practice is confined.

The differences in environmental strategy focus also appeared to translate into a variety of environmental actions. Firms that integrated environmental concerns at the corporate strategy level also performed a wider range of actions. At the functional strategy level, activities were focused on waste reduction, recycling, packaging modifications, and pollution control. At the corporate strategy level there were a wider range of activities, including greater R&D investments in environmental areas, environmental audits and product evaluations, environmental benchmarking, total quality environmental management, and 'green' product development. Thus, respondents reported a range of environmental practices that appeared to reflect their level of integration of environmental issues into strategy.

The importance of the interface between financial services and the environment is increasing steadily, both in economic and in environmental terms. In particular, an increasingly important role is being played by green marketing practice as a unique opportunity to integrate environmental concerns into the core business of the manufacturing sector. In future customers will increasingly buy not just the product, but the company's response to environmental issues.

6.0 REFERENCE

- Bond C. (1993), "Green shoots". Promotions and Incentives, (UK).
- Banerjee, SB (1998). 'Corporate environmentalism: perspectives from organisational learning'.
- Banerjee, SB (1999), 'corporate environmentalism and the greening of marketing strategy: implications for marketing theory and practice'.
- Barney, J.B. and Zajac, E.J. (1994). 'Competitive organizational Behaviour: toward and organisationally based theory of competitive advantage'. Strategic Management Journal, 15.
- Boner, S. (1997). 'It's not easy being green: strategies and challenges'. Apparel industry magazine.
- Cairncross, F. (1992). Costing the Earth: The Challenge for Governments, The Opportunities for Business. Boston: Harvard Business School Press.
- Catusus, B., Lundgren, M. and Rynnel, H. (1997). 'Environmental manager's view in environmental work in a business context'. Business strategy and the Environment.
- Coddington, W. (1993). Environmental Marketing: Positive Strategies for Researching the Green Consumer. New York: McGraw Hill.
- Charter, M. and Polonsky, M.J. (Eds), Greener Marketing: A Global perspective to Greening Marketing Practice. 2nd Ed.
- Earle, R (1993). 'Developing an environmental marketing campaign: the FTC guidelines and beyond'. Paper presented as Professional Development Series: American Marketing Association (Boston Chapter).
- Egri, C.P. and Pinfield, L.T. (1996). 'Organizations and the Biosphere: ecologies and environments'. In Clegg, S.R. Hardy, C. and Nord W.R. (Eds), Handbook of Organization Studies. London: Sage.
- F Kibera & B Waruingi (1998) Fundamentals of Marketing. An African Perspective, Kenya literature Bureau.
- Fineman, S. and Clarke, K. (1996). 'Green stakeholders: industry interpretations and response' Journal of Management Studies.

- Freeman, R.E. (1984). Strategic Management: A Stakeholder Approach Marshfield: Pitman.
- GEMI (1992). Total Quality environmental Management: The Primer. Washington, DC: Global Environmental Management Initiative.
- Gladwin, T.N., Kennelly, J.J. and Krause, T. (1995). 'Shifting Paradigms for sustainable development: Implications for Management Theory and research'. Academy of Management Review.
- Greeno, J.L. and Robinson, N. (1992). 'Rethinking corporate Environmental Management'. Columbia Journal of World Business.
- Hart, S.L. (1997). 'Beyond greening: strategies for a sustainable World'. Harvard Business Review, 75, 1 January/February.
- Hoffman, A (1993). 'The importance of fit between individual values and organizational culture in the greening of industry'. Business Strategy and the Environment.
- Jennings, P.D. and Zandbergen, P.A. (1995). 'Ecologically sustainable Organizations: an institutional approach'. Academy of Management Review.
- Lee, B.W. and Green, K. (1994). 'Towards commercial and environmental Excellence: a green portfolio matrix'. Business Strategy and the Environment.
- Mastrandonas, A and Strife, P. (1992). 'Corporate environmental Communications: lessons from investors'. Columbia Journal of World Business.
- Maxwell, J. Frankel. and Marcus, A. (1997). 'Green Schemes: corporate environmental strategies and their implementation'. California Management Review.
- Mendleson, N. and Polonsky, M.J. (1995), "Using strategic alliances to Develop credible green marketing", Journal of Consumer Marketing, Vol. 12 No. 2.
- Nair, C (1993), "New environmental trends and the challenge to industry in Asia", TEI Quarterly Environment Journal, October-December.
- Naj, A.K. (1990). 'Some companies cut pollution by altering production Methods'. Wall Street Journal, 24 December, A1.
- Newton, T. and Harte, G. (1997). 'Green business: technician kitsch?' Journal of Management Studies.
- Nick Robin (1997) "Unlocking trade opportunity IED; London

- Ottman, J.A. (1993). Green Marketing Challenges and Opportunities for the New Marketing Age. Linconwood: NTC Business Books.
28. Purser, R. Park, C. and Montuori, A (1995), 'Limits to Anthropocentrism: toward an ecocentric organization paradigm?' Academy of Management Review.
- Porter, M.E. and Linder, C (1995), "Green and Competitive: ending the stalemate", Harvard Business Review, September-October.
- Pujari, D. and Wright, G (1996), "Developing environmentally conscious product strategies: a qualitative study selected companies in Germany and Britain", Marketing Intelligence and planning, Vol. 14 No.1.
- Roberts, J. A. (1996), "Green consumers in the 1990s: profile and implications for advertising", Journal of Business Research, Vol. 36. No. 3
- Rondinelli, D.A and Vastag, G. (1996). 'International environmental Standards and corporate policies: an integrative framework'. California Management Review.
- Rubenstein, D.B. (1992). 'Bridging the gap between Green Accounting and Black ink'. Organizational and society.
- Simon, F.L. (1992) "Marketing the gap between Green Accounting and Black ink". Organizations and society.
- Sriram, V. and Forman, A.M. (1993), "The relative importance of products' environmental attributes". International Marketing Review, Vol. 10 No.3.
- Shanoff, B.S. (1996). 'Environmental survey: support of state/local role' World Wastes.
- Sharma. S. and Vredenburg, H. (1998). 'Proactive corporate environmental Strategy and the development of competitively valuable organizational Capabilities'. Strategic Management Journal.
- Shrivastava, P. (1993). 'The Greening of business'. In Smith, D. (Ed.), Business and the Environment: Implications of the New Environmentalism. London: Paul Chapman Publishing.
- Smith, D. (1993). 'Business and the environment: towards a paradigm shift?' In Smith, D. (Ed.), Business and the Environment: Implications of the New Environmentalism: London: Paul Chapman Publishing.

- Sternberg, E. (1997). The defects of stakeholder theory'. Corporate Governance: An International Review.
- Taylor, G. and Welford, R. (1993). 'An integrated systems approach to Environmental management: a case study of IBM UK'. Business Strategy and the Environment.
- Walley, N. and Whitehead, B. (1994). 'It's not easy being green'. Harvard Business Review.
- Wesley, F. and Vredenburg. H. (1996). 'Sustainability and the Corporation: Criteria for aligning Economic Practice with Environmental Protection'. Journal of Management Inquiry.
- Wong, V., Turner, W. and Stoneman, P. (1996), "Marketing strategies and market prospects for environmentally-friendly consumer products", British Journal of Management, Vol. 7 No. 3.
- Zeffane, R., Polonsky, M.J. and Medley, P. (1995). 'Corporate Environmental Commitment: developing the operational concept'. Business Strategy and the Environment.

7.0 APPENDIX 1.

Please answer the following questions by giving the necessary details in spaces provided

1. Year the company was established.....
2. Company Ownership
 - Local []
 - Foreign []
 - Other (specify) []
3. Type of Ownership
 - Sole proprietorship []
 - Partnership []
 - Limited Company []
 - Other (specify) []
4. Is your company engaged in any other business? Yes [] No []
5. If yes, which are these other Businesses?
.....
.....
.....
6. Is this your core business? Yes [] No []
7. What types of products do you offer?
.....
.....
.....

8. Are there minimum requirements required when starting this kind of business?

Yes [] No []

If yes go to 8 (a) and 8 (b)

8 (a) What are the legal requirements? (Tick as appropriate)

Reclamation of the excavated land []

Control of health hazards posed by chemicals & dust particles []

Control of noise pollution []

Assess physical impacts posed by explosive dangers []

Others specify

.....
.....
.....
.....

8 (b) What are the Company requirements?

Place monetary value on environmental assets []

Financial provisions for medium / long-term environmental liabilities []

Market availability []

Adequate technology []

Adequate labour []

Adequate infrastructural facilities []

Stakeholder satisfaction []

Others specify

.....
.....
.....

PART II

9. Have you ever heard of “green” marketing concept?

Yes []

No []

10. If yes give a brief definition of your understanding of the term “green” marketing.

.....

.....

.....

.....

.....

11. Does your organization adopt “green” marketing as an organisational practice?

Yes [] No []

12. Is your company ISO 14001 certified?

Yes []

No []

If yes what led to the certification?

.....

.....

.....

.....

If no what are you currently doing to achieve the certification?.

.....

.....

.....

.....

13. Please indicate the level of importance that your company attaches to the following in relation to environment.

1 = Very important, 2= important, 3= Indifferent, 4= Least important, 5 = Not important at all.

	1	2	3	4	5
a. Product packaging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Disposal of products waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Educating the customers on environmental matters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Participate in environmental cleaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Produce posters and adverts reflecting Environmental concern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Sponsor of environment conservation activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g Environmental concern as part of marketing Strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Environmental concern as embedded in company values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Others specify					

14. How often do you do these things (Tick where applicable).

Please find the key below.

	C	Y	S	Q	N
a. Product packaging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Disposal of products waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Educating the customers on environmental matters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Participation in environmental cleaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Production of posters and adverts reflecting environmental concern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Sponsorship of environmental conservation activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Incorporate environmental concern in your marketing policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

h. Embed environmental concern in company values [] [] [] [] [] []

i. Others specify

Key

- Continuously [C]
- Yearly [Y]
- Semi-annually [S]
- Quarterly [Q]
- Not at all [N]

15. Do you have a Company’s policy on environmental green issues?

Yes [] No []

If yes please go to 15 (a)

15 (a). please state the company’s policy on environmental / green issues

.....

.....

.....

.....

16.Which department(s) handles the company’s environmental issues?

- Marketing []
- Public relations []
- R & D []
- Corporate planning []
- Finance []
- Production []

Others (specify).....

16. What are the challenges faced by your Company while turning green

(Please tick as appropriate)

Huge financial investment with little returns []

Negligence / ignorance by some departments []

External forces from the pressure groups []

Employees resistance []

Negative publicity by the medial []

Rivalry from competitors []

Strict legislative requirements []

Others specify

.....

.....

.....

.....

.....

Thank you very much for your time and your co-operation.