GREEN MARKETING PRACTISES BY KENYA PETROLEUM REFINERIES: A STUDY OF THE PERCEPTION OF THE MANAGEMENT OF OIL MARKETING COMPANIES IN KENYA

BY

KALAMA, ERIC



A Management Research Project submitted in partial fulfillment of the requirements for the award of a degree in Masters of Business Administration (MBA), University Of Nairobi, School of Business

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DECLARATION

This management project is my	original	work	and has	not	been	presented	for
a degree in any other University	r						

Signed: _	Herman	Date: _	10-11-2007
	ERIC KALAMA		

This Management Project has been submitted for examination with my approval as University Supervisor.

D61/P/7983/2004

Signed: Mamboh Date: 10-11 - 2007

MS. MARGARET OMBOK
SCHOOL OF BUSINESS
DEPARTMENT OF BUSINESS ADMINISTRATION
UNIVERSITY OF NAIROBI

DEDICATION

Dedicated to the protection of the environment for the present and future generation

AKNOWLEDGMENT

I owe my gratitude to all those people who contributed tremendous inputs towards my completion of this Research Project.

Special thanks go to my supervisor, Ms Margaret Ombok, for her material and moral support. She guided me through my work from the beginning up to the end of the project.

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Lastly to God for his love that endures forever.

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ABBREVIATIONS

AGO	Automotive Gas Oil
AMA	American Marketing Association
AWEA	American Wind Energy Association
BP	British Petroleum
CoV	Coefficient of Variation
DPK	Dual Purpose Kerosene
ЕІ	Earthwatch Institute
ENN	Environmental News Network
EMCA	Environmental Management and
	Coordination Act
EPA	Environmental Protection Agency
ESA	Environmental Society of America
ETK	Environmental Trust of Kenya
GOK	Government of Kenya
IDO	Industrial Diesel Oil
IUCN	International Union for Conservation
	of Nature and Natural Resources
KPRL	Kenya Petroleum Refineries Limited
LPG	Liquefied Petroleum Gas
MOGAS	Motor Gasoline
NEMA	National Environmental
	Management Authority
OMC	Oil Marketing Companies
OECD	Organization for Economic Co-
	operation and Development
RON	Research Octane Number
SCM	Supply Coordination Meeting
WBCSD	World Business Council for
•	Sustainable Development
WCED	World Committee for Economic
	Development

ABSTRACT

Environmental concerns are increasingly continuing to dictate the way businesses are managed. The issue has been given impetus by parliament and activists who have pressed for tougher legislation towards the protection of the environment. Companies are now being pressurised to preserve the environment. The objective of this study was to study the perception of the management of Oil Marketing Companies towards green marketing practices by the Kenya Petroleum Refineries.

A descriptive study was conducted among the oil marketing companies in Kenya. Data was collected from the managers of the 32 Oil Marketing Companies. One respondent each in the position of Supplies and Planning Manager was targeted. A semi-structured questionnaire was used to collect the data. The questionnaires were e-mailed to the respondents, and follow up done through telephone calls and personal visits.

Only 19 questionnaires that had been sent to the respondents were returned. This presented a response rate of 59.38%. Data was analysed using frequencies, percentages, mean scores, standard deviations and coefficients of variations. Findings revealed that the majority of the targeted companies were between 10 and 20 years, with the majority ownership being wholly locally owned. There was no firm that was jointly owned. In addition, the products price settings and corporate activities of the company were perceived to a medium extent while the rest of the dimensions were considered to a large extent. The variation of the responses towards price settings was significant as the standard deviation was above one. In general, the Kenya Petroleum Refineries was perceived to be practising green marketing by the management of the oil marketing companies. This shows that the business had been reshaped to take advantages of the developments towards the environment.

A major challenge facing the company was on corporate social responsibility. Respondents perceived the company as not doing enough to give back to the society what it got from it. It is therefore imperative for the management to reconsider its attitude towards the society. In addition to that, pricing was also an issue as organizations felt exploited when processing at the refinery. The refinery should therefore consider

lowering the processing fee so that the Oil Marketing Companies can process more crude oil at the firm.

The study was limited to the marketing companies that had signed a processing agreement with the refinery. However, there are other companies in the industry that do have a refining contract with the company. A similar study should be done to determine whether all the Oil Marketing Companies in Kenya practice green marketing.

CHAPTER ONE

INTRODUCTION

1.1 Background

The worlds' economic growth and development has been the most significant and difficult problem that marketing, and human economic activity in general, have been facing over the last few decades (WCED, 1987; Ottman, 1993; OECD, 1998; Diamond, 2005). Modern production methods and marketing systems have brought unparalleled material comforts to most people. However, this level of material wealth has come at a high price as increasingly the earth's natural resources are seen to be under enormous stress. Hence, the world's environmental problems like energy and water shortages, water and air pollution, cropland losses, desertification, and biodiversity losses, have increasingly become severe, and have become obstacles to the sustainable development of nations. The world's biodiversity (rivers, lakes, and seas) have also experienced serious environmental degradation, and the deficiency of water resources has seriously hampered the economic development of many governments (Fang and Kiang, 2006), resulting to a rise of environmental consciousness to many people in the world (Attenborough, 1984).

In recent decades, environmental concerns have begun to reshape the landscape in which companies conduct their businesses (Menon, Chowdhury, Jankovich, 1999). The consumer and the environment are now as decisive a criterion for success of any company as sales turnover, costs and profits (Hart, 1997). The demands and influences of the environmental movement are evident in the shilling value size of the environmentally conscious customers, and companies have now recognized that incorporating environmental and social concerns into business plans and processes is good for lasting commercial success. Moreover, the growing regulatory concerns over the environmental impact on corporate practices have begun to influence corporate strategies (Stuart, 1997). An example of an environmental concern that has occupied the minds of people in recent years is the release of carbon dioxide gases to the environment that leads to global warming. This then creates floods, drought and famine in several parts of the world. Present claims indicate that humanity has caused the world's climate to increase by 1.1 degrees Fahrenheit during the last century. However, in order to avoid a major



catastrophe, we must cut our emissions by 2030 at a possible cost of \$1 trillion, (Burges, 2007).

1.1.1 The Concept of Perception

Steuart (1978) defines perception as a process of information extraction by which people select, organize and interpret sensory stimulation into meaningful and coherent picture of the world. However, Schiffman and Kanuk (2004) summarize it as that which helps people makes sense out of the world around them. Forgus and Melamedon (1976) have based their perceptions description on cognitive structures, which are the processes that determine how humans interpret their surroundings on a 'higher' level through information processing than those of animals, which perceive the world in terms of stimulus-response actions.

Perception is made up of learning, memory and thinking. Severin and Tankard (1997), Scott and Brydon (1997) and Rice (1993) identified internal and external factors like background and repetition that could intensify one's perception and are what draws attention to a subject. Different individuals exposed to the same stimuli under the same apparent conditions recognize, select, organize and interprets them depending on each persons own needs, values, and expectations (Schiffman and Kanuk, 2004).

As people move about in the world, they create a model of how the world works. They sense the objective world, but their sensations map to percepts. As people acquire new information, their percepts shift, thus solidifying the idea that perception is a matter of belief (Forgus and Melamedon, 1976).

As all the Oil Marketing Companies are exposed to similar conditions at the Kenya Petroleum Refineries, the perception of the management the oil companies towards 'green marketing' practices at the refinery would be very much appreciated.

1.1.2 The Concept of Green Marketing

Pride and Ferrel (1991) define green marketing in simpler terms as the specific development, pricing, promotion and distribution of products that do not harm the environment. However, green marketing is a relatively new concept in the world.

Marketing that has an environmental concern started in the 1960's with the publication of Rachel Carson's book, 'Silent Spring' in 1962. The book drew attention to the impact of which environmental pollution was having upon plant and animal life. During this period, there was no subject called environmental marketing yet. In 1969, Dawson proposed the 'Human Concept' as an alternative to the Marketing Concept to take care of the increasing human progress and future businesses. On the other hand, Rothe and Benson (1974) suggested the 'The intelligent consumption concept,' as an attractive alternative to the marketing concept.

During the first workshop on ecological marketing in the United States of America, Henion and Kinner (1976) proposed the Ecological Marketing Concept. They said that it consists of all marketing activities that have influences to create environmental problems and which can be part of solving the complexities of the environmental problems. In 1988, Kotler proposed the Societal Marketing concept that encourages collective needs of society as well as individual's desires and which in the long run meet organizations interest (Bragd, 1998). In the 1980's, the 'Green Marketing' concept later emerged for the promotion of environmentally safe or beneficial products.

Divergent aspects of green marketing include ecologically safer products, recyclable and biodegradable packaging, energy-efficient operations, and better pollution controls. The increased environmental awareness demands practical and theoretical implications for several other disciplines as well. Apart from marketing, several disciplines have tried to conceptualize environmental awareness such as psychology, politics, sociology and business administration.

There are self initiated projects as well as Non Governmental Organizations that were formed for environmental purpose. For example, there is The Environmental Trust of Kenya that was formed in 1997, with the purpose of empowering local communities on environmental issues. The organization also organizes clean up activities along the Kenyan Coast. Many companies have realized the importance of the environment and have clearly been captured in their strategic plans. Chandaria Industries has a Strategic Business Unit that converts waste paper into a reusable product. In 1996, a World Bank

Study called for a five-year global phase out of leaded gasoline, and in 2001, Shell Kenya Limited was the first company to sell unleaded gasoline (Omoding, 2006).

1.1.3 The Oil Marketing Companies

The liberation of the petroleum sector started in 1994 and it lead to the registration of many oil companies, in addition to the existing multinationals. However, only the supply of petroleum products remained under the control of the government. Through the publication of a legal notice number 31 of 18th April 2006, which states that 'any person engaged in the importation of refined petroleum products for use in Kenya, other than LPG, Bitumen and Low Sulphur Fuel Oil, shall refine such minimum quantity of crude oil as the minister may from time to time, prescribe, at the KPRL' (GoK, 2006), it became mandatory for oil companies to refine crude oil at the KPRL. However, once the condition is met, the balance can be obtained through imports, which are mainly LPG, DPK, AGO, and Mogas.

Increased legislature and pressure from lobbyists have created awareness towards the environment. In Kenya, the parliament passed a legislation to form a body that would be a watchdog of the government towards the environment (Petroleum Insight, 2006). This is now forcing many firms to change their strategies so as to accommodate these new developments, and the Oil Marketing Companies are no exception

Currently, there are 42 Oil Marketing Companies in Kenya that refine their crude oil at KPRL and at the same time import finished petroleum products to meet the balance for their local market (KPRL Hydrocarbon Entitlement Statement For April 2007). These companies would therefore be naturally concerned with the products from the refinery if they were produced under green marketing practices.

1.1.4 Kenya Petroleum Refineries Limited

Before 1954, there were no refineries in Africa. All the petroleum products were brought to the continent as imports. In Kenya, the importation of finished petroleum products was through the Port of Mombasa. However, it was through Shell and BP Companies that saw the potential of building a refinery at Mombasa. With a consolidated 50% shares each, the two companies started to build the refinery in 1959 after approval from the then

colonial government. In 1963 and 1974, two complexes, Complex one and two were commissioned respectively. ESSO and Caltex (now Chevron), become shareholders in 1964 and it was not until 1971 when the government acquired 50% of the shares of the company. In 1998 however, ESSO Petroleum Company wound up its operations in Africa and the company sold its shareholding at the refinery to the remaining three companies namely Shell/BP and Caltex (Petroleum Insight, 2006).

The KPRL receives crude oil on behalf of OMC's. The oil is then refined to get a wide range of finished products that include LPG, Tops, Mogas, DPK, AGO, IDO, Fuel Oil, and Bitumen. Mogas from the refinery has an octane rating of 91 RON minimum while AGO has a Sulphur specifications of 1% weight as maximum (KPRL Processing Data Book). Even though the global trend is to have AGO with sulphur of 0.005% weight as maximum, a number of European Countries have achieved this feat (SCM, April 2007). Juts like the OMC's, KPRL is facing pressure to meet these new European-type specifications that need large investments (Simbeck, 2004: Daily Nation, 24th March 2006). Since Kenya is a signatory to the Dakar Declaration that recommended the phasing out of leaded Gasoline, by 2005, the company started producing unleaded gasoline from 1st December of the same year.

As a company, KPRL has implemented a number of activities that have enabled it to be a green company. After the commissioning of the second complex in 1974, there was an outcry from the local community that complained of being affected by gases emanating from the refinery. As a result, the management of that time decided to experiment by planting coconut trees on an unutilized peace of the refinery land. The trees are now mature and healthy. The company also converts waste heat from furnaces that distil the oil to generate steam that is used for various processes in the plant, thus saving on energy. At the same time, when a product does not meet the required specifications, it cannot be released to the customer until it is reprocessed to get on grade material. The refinery also treats its effluent water before it is release to the municipal sewer system, and closely monitors oil in effluent water going into sea.

1.2 Statement of the problem

According to Petroleum Insight (2006), Kenya Petroleum Refineries plays a very important role in the country. It refines crude oil on behalf of 42 Oil Marketing Companies in the country, thus satisfying 70% of the local fuel market, with the rest being imports. Of these oil marketing companies, only 32 have been active for the last six months.

The Kenya Petroleum Refinery is 48 years old and uses old technology in its refining activities. For example, its attempt to curb air pollution consists of higher smokestacks that allow the air pollutants to be diluted by the atmosphere, thus spreading the pollution down wind instead of using new technology that filters out particles from the smokestack emissions. For the control of sulphur oxides emissions that may lead to acidic rains to be formed, low sulphur crude oils may be used, but are very expensive. Moreover, the source of these low sulphur crudes is in West Africa and some parts of Europe, thus making freight charges to be very high. The crude oil that is refined at the company, mainly sourced from the Arabian Gulf, has high sulphur levels. However, the refinery lacks scrubbers that can be used to remove these sulphur oxides after combustion. In addition, the refinery lacks a de-sulphuriser unit that reduces sulphur levels in the petroleum products. This then makes the refinery to produce Automotive Gas Oil with Sulphur content of 1% weight maximum, which is against international requirements and Kenyan regulation.

Recent developments in the oil industry in the world have affected the way to manage the environment and its natural resources. For example, civil unrest in Nigeria has seen expatriates in the Niger Delta being kidnapped as a result of unfair treaties its former rulers had signed with the multinationals that had the aim of enriching some few individuals instead of the whole country; the sectarian violence in Iraq that came about as a result of the so called war on terror waged by the United States of America and its allies; pressure from civil societies in many countries that has seen parliaments enacting very tough legislation on the environment; and a new entrant to the scene, a speculator, whose role is to speculate for profit has made crude prices to fluctuate very often. This has brought new challenges that include historic high crude oil and natural gas prices that has been seen in recent months, crude oil supplies continuing to get lower in quantity,

increased demand for more and cleaner transportation fuels, emergence of markets that are forcing the move towards green refineries, and the increased ultra clean transportation fuel yields (Simbeck, 2004; Petroleum Insight, 2006; NEMA).

In Kenya, several studies on green marketing have been carried out in recent years. Kiongera (2003) carried out one on green marketing practices in the cement industry, Obuya (2003) on determining the extent to which manufacturing firms in Nairobi practice green marketing, Kenyatta (2004) on eco-marketing in the service industry, while Ayeke (2003) researched on social responsibility among polythene manufacturing firms. While the findings of these studies cannot be ignored, the researchers were either too broad in nature, for example, Ayeke focused on social responsibility, while those on green and eco marketing focused on the selected manufacturing and service industries with no emphasize to the oil industry. Their results may not apply to the oil industry.

This research sought to answer the question: 'How is the Kenya Petroleum Refineries being perceived by the management of the Oil Marketing Companies in Kenya towards green marketing practices?'

1.3 Objectives of the study

The objective of this study was to determine the perception of the management of Oil Marketing Companies towards green marketing practices by Kenya Petroleum Refineries Limited

1.4 Importance of the study

The results of the study may be of use to the following:-

- i. The results would enable the present and future management teams of Kenya Petroleum refineries formulate and entrench good environmental policies in the company. This would go a long way in making the company to be viewed as a good corporate citizen.
- ii. The Government, its agencies and policy makers may use the results for formulating good national policies for the country that are relevant and sensitive to the petroleum industry. As the clamor of searching for oil in Kenya intensifies, there are high hopes that the country has oil reserves that would eventually necessitate the building up of

more refineries. Therefore, it would be a good idea for the government to enact proper laws for the regulation of the petroleum industry when such a time comes.

- iii. As more and more consumers' are getting more informed, companies are increasingly becoming green enterprises. It would be prudent for the firms to know what best green marketing practices their fellow competitors adopt so that they too can emulate and increase their turnover.
- iv. Researchers and Academicians may use the results as a source of reference in their academic pursuits. The future of green marketing studies will add to managerial and public policy fields of inquiry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Environmental issues have influenced all human activities the world over. As the society is now becoming more conscious of its environment, the manner in which ecological problems are attacked has a vital effect on the institutions of marketing, and businesses are now being modified with the aim of addressing the society's new concerns (Walley, Custance, and Parsons, 2000). In 2003, Banerjee et al. showed that corporate environmentalism is related to public concern, regulatory forces, competitive advantage and top management commitment, with the type of the industry moderating some of these relationships.

In recent times, worldwide evidence indicates that people are increasingly becoming concerned about the environment and are gradually changing their behaviour accordingly (Walley, Custance, and Parsons, 2000). The world is seeing a growing market for sustainable and socially responsible products and services. The types of businesses that exist, the products they produce and their approaches to marketing are changing (Ottman, 1993). People generally want to do the right thing, so the challenge and opportunity for the green marketer is to make it easy for people to do so, so as to reap the rewards of healthy profits and improved shareholder value, as well as help make the world a better place in the future (Ginsberg and Bloom, 2004; Klassen and McLaughlin, 1996; Leonida, 2006; Russo and Foutt, 1997).

2.2 Green Marketing

The American Wind Energy Association argues that green is difficult to define. This is because people have become more concerned with the quality of life (Frain, 1986). The vehicle-sharing concept that helps reduce carbon dioxide gas emission and hence global warming, show how 'complex' green marketing has become. Ottman (1993) argued that though environmental appeals were growing in number, the concept was now confusing, thus becoming harder to create effective environmental marketing efforts.

When AMA had its first workshop in 'Ecological Marketing' in 1975, where by it was an attempt to bring together academicians, practitioners and public policy makers to examine marketing's impact on the natural environment, the marketing association defined ecological or green marketing as the study of the positive and negative aspects of marketing activities on pollution, energy depletion and non energy resource depletion (Henion, and Kinner, 1976b). The definition shows that Green Marketing is a subset of Marketing and it looks at both positive and negative sides of marketing in the entire marketing field but with a narrow view of the environment. Charter (1992) expands the definition of green marketing and describes it more philosophically as a holistic and responsible strategic management process, which identifies and fulfils stakeholders' needs, for a reasonable reward, that does not adversely affect human or environmental well-being.

It was Polonsky (1994a) who gave a more comprehensive definition to this complex matter by defining it as consisting of all marketing activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occur with minimum detrimental impact on the natural environment. Polonskys' definition is more encompassing, and incorporates much of the traditional components of the marketing definition with much emphasize on the natural environment. Attenborough (1984) adds that an organization 'should be continuously mindful in all its activities of environment damage, physical and cultural pollution and of the demands it makes upon finite natural recourses'. He argues that ecological considerations should be extended to its products ingredients, design and packaging as well as to its plants and processes. The organization should seek to minimize waste in all aspects of its operations.

In 1958, Galbraith proposed the Stakeholders theory which states 'the objectives of the organization should not stem from the organization exclusively, but from the claims upon it of its various stakeholders-employees, suppliers, shareholders, distributors, consumers, the general public, central and local government-all parties who have a stake in its well being and are affected by its operations.' He proposed a reasonable balance that was constituted of all their claims upon the organization. In addition, Stanton (1981) argues

that executives should realize that they can not exist in isolation in the society and that a healthy business system can not exist within a sick society.

Ottman (2002), while contributing to the Green Marketing Corner said that investment in environmentally preferable products and technologies could lead to a potential source of innovation and competitive advantage. This has been seen in the fact that green products and technologies have improved over the years such that they are now more superior to their conventional counterparts. While focusing on managerial interpretations of environmental issues, Sharma (2000) examined the link between managerial interpretations of environmental issues and corporate choice of environmental strategy among ninety nine firms in the Canadian oil and gas industry. He found out that there were different managerial interpretations of environmental issues which influence the choice of environmental strategy.

Research by Global Market Insight in 2006 in USA indicate that people categorize polluting companies as socially irresponsible and this helps them make purchasing decisions accordingly. From the research, it emerged out that 48% of Americans purchased products because it was labelled environmentally safe or biodegradable, whereas 42% of the American population said that they were willing to spend more on products branded as organic or environmental friendly. From Gordon's research in 2004, it was found out that 30% of people claim to be concerned about the environment and ethical integrity of products and services they purchase and yet only 3% translate this attitude to behaviour. On the other hand, Dibbs and Simeken (1990) in their study reported that 23% of American shoppers made purchases based on environmental attributes of the products concerned.

Powerful Environmentalist Movements that have international outlook have emerged over the years. Some of them have been transformed into political groupings in their countries of origin and have successfully lobbied for legislations for laws to be passed in parliament for the protection of the environment. These political groupings include The Green Party of Germany, and the Ecological Party of Britain. Other organizations are Animal Rights Campaigners, Friend of the Earth and Green Peace Movement (Frain, 1986). This has resulted to organizations to change their attitude towards the

environment. A study by Langerak et al in 1998 on one hundred and thirty eight Dutch manufacturing firms in Europe indicate that environmental regulation is still the most important reason for marketers to adapt to an environmentally friendly approach in their marketing strategy. Firms that voluntary practice green marketing are given the ability to exploit green opportunities and improve performance.

In recent years, companies have come to realize that if they operate within the context of the environment, they enjoy reduction in waste disposal and handling costs. However, because of problems in environmental sustainability, Stuart (1997) developed a four-grid model that could help marketers gauge their progress on the task (See figure 1).

Figure 1. The environmental Sustainability Grid

	Figure 1. The environmental Sustainability Grid				
	New environmental technology Is the environmental performance of our product limited by our existing technology base?	Sustainability vision Does our corporate vision direct us towards the solution of social and environmental problems?			
Tomorrow	Is there a potential to realize major improvements through new technology?	Does our vision guide the development of new technologies, markets, products and processes?			
Today	Pollution prevention Where are the most significant waste and emission streams from our current operations?	Product stewardship What are the applications for product design and development if we assume responsibility for a products entire life cycle?			
	Can we lower costs and risks by eliminating waste at the source or by using it as a useful input?	Can we add value or lower costs while simultaneously reducing the impact of our products?			
	Internal	External			

Source: Stuart, H. 'Beyond Greening: Strategies for a sustainable world'. Harvard Business Review, Jan-Feb 1997, pp 66-76.

The most basic level is pollution prevention. That means eliminating or minimizing waste before it is created, by developing ecological safer products, recyclable, biodegradable packages, better pollution controls and more energy efficient operations. The next level is

for the companies to practice product stewardship. This is by thinking ahead in the design stage to create products that are easier to recycle, recover and reuse. The third level is to involve the companies to look into the future and plan for new environmental technologies, whereas for the fourth level is for the companies to develop sustainability vision which serves as a guide to the future. For companies to succeed in environmental sustainability, they must work in all the four areas (Stuart, 1997).

2.3 Green Marketing Mix

This is the decision making process for defining the actual tactics a company utilizes. Optimizing the marketing mix is the primary responsibility of marketing. By offering the product with the right combination of the marketing mix variables, marketers can improve their results and marketing effectiveness. Making small changes in the marketing mix is typically considered a tactical change, while large changes can be considered strategic. The function of the marketing mix is to help develop a package that will not only satisfy the needs of the customers within the target markets, but simultaneously to maximize the performance of the organization.

In 1948, Culliton said that a marketing decision should be a result of something similar to a recipe. Borden (1964) later coined the term 'Marketing-Mix,' although he started to use the word in his teaching in the late 1940's. His ingredients included product planning, pricing, branding, distribution channels, personal selling, advertising, promotions, packaging, display, servicing, physical handling, and fact finding and analysis. McCarthy (1960) proposed a four variable classification to the mix from the original 12 that are today. The leap forward in thinking at the time was that it put the customer at the forefront of the company thinking. It was not until 1989 when Bradley become the first one to coin the term Green Marketing Mix (Bradley, 1989). Everyone has their own favourite marketing mix. Whereas some people have four, others have eight divisions depending on whether services are taken into consideration or not (Kotler and Keller, 2005).

2.3.1 Product

The product defines the characteristics of a company's product or service that meets the needs of its customers. Although this typically refers to a physical product, the concept

has been expanded to include services offered by a service organization (Barlon, 2006). The specification of the product is one of the variables that a marketer has at his or her control. Entrepreneurs wanting to exploit emerging green markets will either identify customers' environmental needs or develop products with the aim of addressing these needs or develop environmentally responsible products that have less impact to the environment than competitors (EPA, 2007). For example, the product can include certain colors, certain scents, or certain features. Lastly, in the broadest sense when a consumer purchases a product, it also includes the post-sales relationship with the particular company that can include customer service and or any warranty (Bradley, 1989).

Focusing on green products can provide more leverage in corporate green communications' efforts than the traditional emphasis on filtering the smoke stacks because products and their marketing are highly visible to the general public. By focusing on the production of green products, this signals corporate social responsibility, innovation, and competitiveness. These in turn ignite the enthusiasm and commitment of the public, media, employees, investors, and other stakeholders (Ottman, 1993).

Products and their usage are central to how people express their concern for the environment. This can lead to buying products from companies perceived as having good environmental track record. A tremendous opportunity exists for businesses to use green products and their marketing messages to educate consumers, and thus establish themselves as environmental leaders rather than defensive polluters. By focusing on the product, a company has to make decisions on the brand name, functionality, styling, quality, safety, packaging, repairs and support, warranty, accessories and services. This then leads to having products that are of the highest standard, environmentally safe, easy to use, produced with environmentally friendly processes with little or no damage to the environment. In order to encourage a green market, information should be readily available for comparison purposes between different stakeholders on the basis of the environment and costs. Proper labelling, branding and packaging should be used (Ottman, 1993).

The increasingly wide variety of products on the market that support green marketing and are good for the company in making profits include products made from recycled goods,

products that can be recycled or reused, efficient products which save water, energy or gasoline, save money and reduce environmental impact, products with environmentally responsible packaging, products with green labels, as long as they offer substantiation, organic products, and certified products, which meet or exceed environmentally responsible criteria. Whatever the product or service, it is vital to ensure that products meet or exceed the quality expectations of customers and is thoroughly tested (EPA, 2007).

2.3.2 Price

The price is the amount paid for a product. It is a critical element of the marketing mix. Most customers will only be prepared to pay a premium if there is a perception of additional product value. This value may be improved performance, function, design, visual appeal or taste. Environmental benefits are usually an added bonus to both the companies and customers but will often be the deciding factor between products of equal value and quality. Environmentally responsible products, however, are often less expensive when product life cycle costs are taken into consideration, for example, fuel-efficient vehicles, water-efficient printing and non-hazardous products (EPA, 2007).

The price that businesses charge should reflect the most reasonable one (AWEA, 1996). There is also a need for a company to decide on a pricing strategy. Examples of pricing decisions to be made include pricing strategy (either skim or penetration strategy), suggested retail price, volume discounts and wholesale pricing, cash and early payment discounts, seasonal pricing, bundling, price flexibility, and price discrimination. Companies practicing Green Marketing have to charge a fair price for their products and consumers should not be made to pay a premium for environmental practices that are already required by the law (EPA, 2007).

2.3.3 Place

Place represents the location where a product can be purchased. It can include physical as well as virtual stores. Some of the revolutions in marketing have come about by changing this marketing variable. Product distribution should be of the acceptable channels, and clearly and properly placed at environmentally safe place where there is no contamination whatsoever. For green businesses to be established and become competitively priced,

companies have to ensure that their distributors are concerned of the environment and ascertain that they establish a green distribution strategy (EPA, 2007).

The choice of where and when to make a product available will have significant impact on the customers a company attracts. Very few customers will go out of their way to buy green products merely for the sake of it. Marketers looking to successfully introduce new green products should, in most cases, position them broadly in the market place so that they are not just appealing to a small green niche market, but the location must also be consistent with the image the company wants to project rather than being dominated or compromised by the image of the venue. The location must differentiate the company from its competitors. This can be achieved by in-store promotions and visually appealing displays or by use of recycled materials that emphasize the environmental and other benefits (EPA, 2007).

Some examples of distribution decisions include distribution channels, market coverage (inclusive, selective, or exclusive distribution), specific channel members, inventory management, warehousing, distribution centers, order processing, transportation, and reverse logistics.

2.3.4 Promotion

Promotion represents all of the communications that a marketer may insert into the marketplace. This can include television, radio, and print advertising as well as coupons, direct mail, billboards, and online advertising. One of the less well-defined areas in promotion is the role of a human sales force. For example, are the messages the sales person provides to a consumer a component of the promotional mix, or is it part of the product? This is because consumers may rather purchase the product only when sold through the support of a known salesperson. In this case, therefore, the service, perceived or real can be defined as a feature of the product (Simintiras, Schlegelmilch, and Diamantopoulos, 1993).

In the context of the green marketing mix, promotion represents the various aspects of marketing communication. That is, the communication of information about the product with the goal of generating a positive customer response. Marketing communication

decisions include promotional strategy (push, or pull), advertising, sales promotions, public relations & publicity, personal selling and sales force. This includes all the weapons in the marketing armory (EPA, 2007).

Smart green marketers will be able to reinforce environmental credibility by using sustainable marketing and communications tools and practices. For example, many companies in the financial industry are providing electronic statements by email, emarketing is rapidly replacing more traditional marketing methods, and printed materials can be produced using recycled materials and efficient processes, such as waterless printing. Retailers, for example, are recognizing the value of alliances with other companies, environmental groups and research organizations when promoting their environmental commitment. To reduce the use of plastic bags and promote their green commitment, some retailers sell environmentally shopping bags to customers, for example Nakumatt.

The key to successful green marketing is credibility. Companies should never overstate environmental claims or establish unrealistic expectations. Instead, they should communicate simply and through sources that people trust and promote their green credentials and achievements through publicizing stories of their firms and employees of their success stories on green initiatives and entering environmental awards programs with the aim of profiling environmental credentials to customers and stakeholders (EPA, 2007). Companies should focus on the green aspect of the promotion. For example, there should be no misleading, or deceptive means of attracting consumers and the sales force should be environmentally conscious. The correct information regarding the companies and products should also be readily provided so that customers may avoid making wrong choices (Bradley, 1989).

2.3.5 Physical Evidence

The American Wind Energy Association warns companies not to think that making the world a better place is enough to sell a product (AWEA, 1996). What customers want to see is care, actions matched by claims, assurance, feeling, and above all, the physical evidence of a product. The physical evidence is the material part of a service. Strictly speaking, there are no physical attributes to a service, so a consumer tends to rely on

material cues. There are many examples of physical evidence, including some of the following: packaging, internet /web pages, brochures, furnishings, uniforms, business cards, the building itself (such as prestigious offices or scenic headquarters), and even mailboxes. Green marketers should give evidence to environmental attributes of products' on them being biodegradable, recyclable, safer to use, disposable (Ottman, 1993).

Some organizations depend heavily upon physical evidence as a means of marketing communication. Examples of these include tourist attractions and resorts (like the world famous Maasai Mara Game reserve), parcel and mail services (like Group 4 Securicor company), and large banks and insurance companies (like the Kenya Commercial Bank headquarters and Kenindia buildings in Nairobi).

2.3.6 Process Management

Process is another element of the extended green marketing mix (Stanton, 1981). It is the continuous effort to re-examine the processes on a company's product manufacturing lines to reduce the environmental burden imposed in such areas as materials input and chemical and energy use thus cutting down on costs and improving on quality (Nagata and Okuda, 2005). Companies should develop environmental management concepts such as green management, green products, green factories, green solutions, and green earth. This is to enable them have an established environmental policy that would help them follow the trends in environmental activities of the world on a global scale and set guidelines for the achievement of sustainable development through the promotion of environmental management systems, environmental technologies, eco-friendly products and solutions, the green process, and volunteer activities. From the above, the firms can set goals for environmental load reduction at manufacturing bases and implemented zero-emission of waste, reductions in chemical releases, and energy-saving measures (Nagata and Okuda, 2005).

Process management should be in direct connection with the manufacturing processes and conform to government regulations on controlling the volumes of chemical inputs and building a society oriented toward resource recycling (Nagata and Okuda, 2005). Green process activities are implemented by establishing target and planned values and

thereafter, evaluation items determined according to the manufacturing process structure. Companies should be able to track the processes used in the production of goods and services until the consumer is satisfied. There must be feed back processes to determine customer satisfaction

2.3.7 People

People of the right skills, attitude, and knowledge should be employed by companies for them to have competitive edge over other companies. In addition, firms should never use sick personnel or personnel without product or service know how. This is because the people are the most important element of companies and any success or failures of firms depend on them. As services tend to be produced and consumed at the same time, aspects of the customer experience are altered to meet the 'individual needs' of the person consuming it. Most of us can think of a situation where the personal services offered by individuals has made or tainted a tour, vacation or restaurant meal. Companies should know that, people buy from people what they like, so the attitude, skills and appearance of all staff need to be first class. Some ways in which people add value to an experience, as part of the marketing mix include training, personal selling and customer service (EPA, 2007).

2.4 Challenges in the practice of Green Marketing

In the early days of the modern environmental movement, ecological issues were easy to understand. A company spilled waste into a river and one could see it and smell it. On the process the impact was local, immediate, and often acute. Today's biggest environmental problems (climate, species extinction, depleting fisheries), are quite the opposite. They are hidden, global, long-term, and chronic. Many environmental challenges involve multiple steps: droughts cause species to migrate, causing a food-chain reaction resulting in the death of a forest (Jacoby, 1973). Such cause-and-effect relationships are tough to understand, even for the knowledgeable. With the growing concerns of these environmental problems, businesses have now focused on them and have implemented a series of initiatives to ameliorate them (Fang and Kiang, September 2006). Minimizing these adverse environmental impacts is a great challenge to many and requires the

concerted efforts of decision makers, academics, non-governmental organizations, and the public worldwide.

In adopting green marketing policies, firms may encounter many challenges such as disconnect between consumers' attitudes and actual behaviors, and their unwillingness to pay premiums for green products. This may be partially rooted in consumers' skepticism of environmental claims (Prakash, 2002). Ottman and Terry (1998) have argued that innovative environmental managers and product designers have faced the challenge of making considerable progress toward reducing the environmental impacts of products. As businesses are now driven by regulations, new technologies and consumer pressure, product designers have focused on particular eco-aspects of products such as increasing the amounts of recycled or recyclable materials, reducing in-use consumption of energy, reducing material intensity of products, and the impact of product take-back schemes. However, there are only a few strategic tools for marketers of green products, and even these have evolved in an ad hoc manner.

As the demand for greener products exists, the opportunities to capitalize on that demand are many. Much of the demand will continue to be driven by regulations as producer responsibility, product take-back and recycling schemes evolve. As recent history has shown, the more innovative companies will reap benefits, and those with radical rethinking products and processes will be the leaders of the future. More importantly, businesses face the credibility challenge by having a good environmental track record and by paying attention to details such as the use of recycled materials. Leaders therefore should take risks by advancing breakthrough environmental technology or by encouraging their companies to be the first in the industry to sign voluntary environmental codes to enhance the corporate image and thus gain the consumer trust. Another challenge facing the green marketing firm is being proactive (Ottman and Terry, 1998).

Kotler (2004) identifies other factors as regulations and policies varying from one country to another thus making it difficult for regional and global monitoring. Of recent years, these laws are now in the increase giving a very big challenge to green marketers to keep pace with their enactment. Related to this are those environmental factors that

vary from region to region that motivate consumers in different ways (Kotler and Gay, 2004).

2.5 Summary of Literature Review

Green marketing covers more than a firm's marketing claims. While firms must bear much of the responsibility for environmental degradation, ultimately it is consumers who demand goods and thus create environmental problems. It is the uncaring consumers who choose to disposes off their waste in an inappropriate fashion. While firms can have a great impact on the natural environment, the responsibility should not be theirs alone.

A 1994 study in Australia found out that consumers laid too much responsibility on industry and government for taking care of the environment thus leading to their damaging of the environment (EPA-NSW, 1994). However, what consumers want and are willing to pay for is a cleaner environment, possibly through higher priced goods, modified individual lifestyles, or even governmental intervention. Until this occurs it will be difficult for firms alone to lead the green marketing revolution. The industrial buyer also has the ability to pressure suppliers to modify their activities. Thus an environmental committed organization may not only produce goods that have reduced their detrimental impact on the environment, they may also be able to pressure their suppliers to behave in a more environmentally "responsible" fashion. Finally, consumers and industrial buyers have also the ability to pressurize organizations to integrate the environment into their corporate culture and thus ensure all firms minimize the detrimental environmental impact of their activities (Polonsky, 2001).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This was a descriptive study intended to establish the perception of Oil Marketing Companies in Kenya towards the adoption of green marketing by the Kenya Petroleum Refineries. According to Boyd, Westfall and Stasch (2004), descriptive studies are supposed to describe the who, what, where, when, and how of a phenomenon. This was the concern of the proposed study.

3.2 The Population

The population of interest in this study consisted of all the OMC's that had signed processing agreement with KPRL. The choice of the companies was because they refine at KPRL and sell their products directly to the final consumer. Therefore, their management was in a better position to understand the green marketing practices of the refinery. According to the KPRL Hydrocarbon Entitlement Statement for April 2007, there were 42 oil companies that process crude oil at KPRL (Appendix 2). Of these, only 32 companies had been active for the last six months. Due to the small size, a census study was conducted.

3.3 Data Collection

Primary data was collected using a questionnaire subdivided into two parts. Part 1 consisted of open-ended questions aimed at obtaining general information on the firm. Part 2 consisted of Likert type of questions for obtaining data on the perception of the management of oil marketing companies towards green marketing practices by Kenya Petroleum Refineries in product, pricing, distribution, promotion, process management, and sales force.

The respondents were persons working in the trading, supplies and planning departments of the oil marketing companies. Only one person per organization, preferably the Trading Managers, Supplies and Planning Managers or Supplies Analysts were required to complete the questionnaire. The questionnaires were sent via e-mails and personal visits. For those OMC's in Nairobi, the questionnaires were e-mailed to them and follow up done by phone. For companies in Mombasa, the questionnaires were delivered in person

and picked up later. Follow up by personal visits was conducted. Only nineteen (19) out of the thirty two (32) questionnaires that were sent out were completed. This represented a response rate of 59.38% and it was considered suitable for the purpose of the study.

3.4 Operational Definitions of the variables

The green marketing practises tested included product, price, promotion, distribution, process management and sales force. These were operationalised in Appendix I. A Likert scale was used to determine the perception of the management of the oil marketing companies towards green marketing practises by the Kenya Petroleum Refineries.

3.5 Data Analysis

Descriptive statistics were used to analyse data that was indicative of the green marketing practises by the Kenya Petroleum Refineries from the perception of the management of the Oil Marketing Companies. Part one of the questionnaires was analysed using frequency tables and percentages. Part two of the questionnaires was analysed using mean scores, standard deviations and coefficients of variation.

CHAPTER FOUR

DATA ANALYSIS

4.1 Introduction

In this chapter, data on the extent to which the Kenya Petroleum Refineries is perceived by the management of Oil Marketing Companies as to be practicing green marketing is analysed. Data on the demographic profiles of the companies has been analysed using frequencies and percentages. Data on the extent to which the Kenya Petroleum Refineries practices green marketing has been analysed using mean scores, standard deviations and coefficients of variation. From the 32 questionnaires that were sent out to the respondents, only 19 were returned. This gave a response rate of 59.38%. This compares well with studies done previously such as the one by Obuya (2003) which had 60%.

4.2 Demographic Characteristics of the Respondents

The demographic characteristics of the respondents that were tested include age and ownership of the firms. The findings are presented in this section.

4.2.1 Number of years in existence

Table 1: Age of Firms

Years of operation	Frequency	Percentage	
Under 10 years	9	31.58%	
10-20 years	6	47.37%	
Above 20 years	4	21.05%	
Total	19	100%	

Source: Response Data

The findings on Table 1 show that 21.05% of the companies have been in existence in the country for more than 20 years, 31.58% have been in existence for less than 10 years while 47.37% have been in existence for between 10-20 years. This implies that majority of the Oil Marketing Companies have been in existence for between 10 and 20 years.

4.2.2 Ownership

The purpose of this section is to know the ownership structure of the Oil Marketing Companies doing business in the country. This may have implications on their practise of green marketing. The findings are presented in Table 2.

Table 2: Ownership of the Firms

Ownership	Frequency	Percentage
Wholly locally owned	13	68.42%
Jointly owned	0	00.00%
Wholly foreign owned	6	31.58%
Total	19	100%

Source: Response Data

From the table, it is shown that 68.42% of the firms are wholly locally owned while 31.58% are wholly foreign owned. No firm is jointly owned by both foreigners and locals. The findings imply that majority of the firms are wholly locally owned.

4.3 The extent to which the Management of Oil Marketing Companies perceive the Kenya Petroleum Refineries as practising Green Marketing

The Green Marketing practices that are tested in this section include product, price, promotion, distribution, process management and sales force. A five point likert scale was used to measure the extent to which the management of the Oil Marketing Companies perceive the Kenya Petroleum Refineries as practicing Green Marketing.

Data was analysed using mean scores, standard deviations and coefficients of variation. A mean score of less that two point five (1≤S.E<2.5) indicate that the management of the oil marketing companies perceive the refinery as practicing Green Marketing to a small extent. A mean score of between two point five and three point five (2.5<M.E<3.5) is perceived to a medium extent and above three point five (3.5<L.E≤5) to a large extent. Standard deviation was used to measure the extent to which there were variations in responses. A standard deviation of less than one indicate that there is no significant variation in the responses while a standard deviation of more than one indicate that there

is a significant variation in the responses. Coefficients of variation were used to measure the variability of the responses. A value of less than 50% indicate that the variations in responses are not significant while a value of greater than 50% indicate that there are significant variations.

4.3.1 Product

The product characteristics that are tested include quality, safety, conformance, reliability and Recycling.

4.3.1.1 Quality

In this section, findings on respondents' perception on the quality of products are presented in Table 3.

Table 3: Quality

Quality Dimensions	Mean	Standard Deviation	CoV (%)
Specification of products	4.32	0.58	13.43
Storage of products	4.05	0.97	23.95
Addition of additives	3.47	1.43	41.21
Overall Mean/SD	3.95	0.99	26.20

Source: Response Data

The findings show that the refinery is perceived by the respondents to be practicing green marketing on product storage and specification to a large extent (mean scores are 4.05 and 4.32 respectively). Responses on the addition of variables shows to a medium extent (mean score is 3.47). This is a good indication to the company's reputation on its products' meeting the required local and international specifications. In addition, there is a significant variation of the respondents in the addition of additives to the petroleum products for meeting the required specifications (standard deviation is 1.43). However, the level of variations of the respondents' perception is not significant when the coefficients of variation of the quality dimensions are considered, as they are all less than 50%.

4.3.1.2 Safety

One of the concerns of green marketing practitioners is safety of products, the environment and the place. Findings on safety are presented in Table 4.

Table 4: Safety

Safety Dimensions	Mean	Standard Deviation	CoV (%)
Product Handling	4.16	0.76	18.27
Suffering of the environment	3.42	1.26	36.84
Suffering of animals and humans	3.58	0.96	26.82
Wastes generation	3.63	0.83	22.87
Comparison to imports	2.72	1.07	39.34
Management commitment	4.05	0.85	20.99
Release of toxics	3.26	1.19	36.50
Waste management	4.11	0.94	22.87
Containment and disposal	4.21	0.71	16.86
Emergency response	4.68	0.48	10.21
Regular checks	4.53	0.70	15.45
Investigations into incidences	4.47	0.70	15.66
Provision of protective gears	4.53	0.61	13.47
Audits for continuous improvement	3.53	0.96	27.20
Training on handling	4.63	0.50	10.80
Information to staff	4.47	0.70	15.66
Overall Mean/SD	4.00	0.83	21.86

Source: Response Data

From Table 4, the responses show that the refinery is perceived to be releasing toxics to a medium extent (the mean scores is 3.26). At the same time, the findings show that the toxics released lead to the suffering of the environment to a medium extent (its mean score is 3.42). When the refinery products are compared to imports, the responses reveal that the safety of the firms products are to a medium extent as the mean score is 2.72. Normally, AGO imports have a sulphur percentage content of 0.5% maximum against 1% from the refinery, whereas Mogas imports octane rating is 93 against 91 from the

refinery (Petroleum Insight, 2006). The other dimensions show that the respondents perceive the refinery to a large extent as their mean scores are above 3.5. The level of variations of the respondents' perception is significant only in the suffering of the environment, comparison to imports and on the release of toxics to the atmosphere as the standard deviations are above one. In all these cases however, the coefficients of variations show that there are no significant variations of the respondents.

4.3.1.3 Conformance

Products from any given companies must conform to some known local or international standards and at the same time be sold within the recognised laws of a country. In this section, findings of the product conformance are presented.

Table 5: Conformance

Conformance Dimensions	Mean	Standard Deviation	CoV (%)
Specification of products	4.32	0.58	13.43
Product Handling	4.16	0.76	18.27
Waste management	4.11	0.94	22.87
Recycling program	4.26	0.73	17.14
Containment and disposal	4.21	0.71	16.86
Audits for continuous improvement	3.53	0.96	27.20
Training on handling	4.63	0.50	10.80
Training on conservation of			
resources	4.05	0.78	19.26
Overall Mean/SD	4.16	0.75	18.23

Source: Response Data

Results from Table 5, show that products from the refinery are perceived by the respondents to be conforming to known standards and are at the same time manufactured under very good procedures. All of the tested dimensions discussed have mean scores of above 3.5 indicating that the refinery is being perceived by the management of the oil marketing companies as practicing Green Marketing to a large extent. In addition, the response on training on handling of petroleum products is very high (mean score of 4.63) as compared to auditing (mean score of 3.53). There are no significant variations of the respondents as both the standard deviations and coefficients of variation are bellow 1 and 50% respectively.

4.3.1.4 Reliability

The reliability of the product supply from one source to another is very critical in determining the turnover, and hence the profits a company is to expect. This then builds trust between companies, which is good for business. In this section, data on the extent of reliability of Kenya Petroleum Refineries' products is analysed.

Table 6: Reliability

Reliability Dimensions	Mean	Standard	CoV (%)
		Deviation	
Ease of availability	4.00	1.11	27.75
Location of the company	3.63	1.01	27.82
Schedule of deliveries	3.89	1.15	29.56
Quantities of deliveries	3.47	1.05	30.26
Place of delivery	4.37	0.68	15.56
Management commitment	4.05	0.85	20.99
Audits for continuous improvement	3.53	0.96	27.20
Training on handling	4.63	0.50	10.80
Courteousness, friendliness and			
politeness	4.32	0.82	18.98
Overall Mean/SD	3.99	0.90	23.21

Source: Response Data

From Table 6, the responses show that the quantities of the deliveries are perceived to a medium extent. The mean score is 3.47. This should be a wake up call to the management of the company to put in structures so as to improve on the amount of product deliveries. The rest of the other reliability dimensions are perceived to a large extent since their mean scores are above 3.5. On the other hand, there is a significant variation on the ease of availability of the products, location of the premises, management commitment and courteous, friendly and polite employees vary significantly (their standard deviations are above one). In addition, the coefficients of variations show that there are no significant variations of the respondents' perception.

4.3.1.5 Recycling

Green Marketing, among other activities, involves the recycling of products or byproducts generated during the manufacturing processes. This is very critical if a company has to be perceived to be practicing green marketing on aspects that include reduce, reuse, recycle and recover. Findings are presented in Table 7

Table 7: Recycling

Recycling Dimensions	Mean	Standard Deviation	CoV (%)
Ease of recyclability or reuse	3.63	1.26	34.71
Management commitment	4.05	0.85	20.99
Waste management	4.11	0.94	22.87
Recycling program	4.26	0.73	17.14
Containment and disposal	4.21	0.71	16.86
Training on conservation of			
resources	4.05	0.78	19.26
Overall Mean/SD	4.05	0.88	21.97

The responses show that all the recycling dimensions are perceived to a large extent (mean scores above 3.5). As this indicates that the refinery is practising green marketing to a large extent, the firm is perceived by the respondents to have put in place a recycling program and waste management system which has a very good containment and disposal mechanism. The responses also show that the firm is perceived to have trained its employees on conservation of resources to a large extent as its mean score is 4.05. There is a significant variation of the respondents' perception on the ease of recycling or reuse of the petroleum products as the standard deviation is above 1.26, with the rest of the dimensions not having significant variations on the respondents. Moreover, the coefficients of variation indicate that there are no significant variations of the respondents as all the recycling dimensions are less than 50%.

4.3.2 Price

In this section, data on price settings and invoicing is presented.

4.3.2.1 Price Settings

The pricing of goods and services from the manufactures would eventually determine their selling prices to the final consumer, and this has a direct effect on the profits that would be generated by any given company which then means that it would have a direct bearing on the respondents' perceptions towards green marketing practises. In this section, findings of price settings are presented in Table 8.

Table 8: Price Settings

Pricing Dimensions	Mean	Standard Deviation	CoV (%)
Addition of additives increases costs	3.47	1.43	41.21
Participation in worthy causes	2.05	1.03	50.24
Cost of production	3.11	0.99	31.83
Exploitation towards OMC's	3.16	0.96	30.38
Correct invoicing	4.16	0.69	16.59
Margins	3.05	1.03	33.77
Expensiveness of refining	3.74	1.45	38.77
Overall Mean/SD	3.25	1.08	34.68

Findings show that the respondents perceive the refinery to correctly invoice the Oil Marketing Companies to a large extent (the mean score is 4.16). At the same time, it is perceived to be expensive to refine at the refinery to a large extent (the mean score is 3.74) leading to margins to be perceived to a medium extent (mean score of 3.05). On the other hand, the perception of the respondents towards the refinery in participating in worthy causes and on the cost of production is to a medium extent, with mean score of 2.05 and 3.11 respectively). There is a significant variation on the respondents' perception in the addition of additives as they are perceived to be increasing costs. The same is in participating in worthy causes, margins and expensiveness of refining as the standard deviations are above 1. In addition, the coefficient of variation in the refinery participating in worthy causes is 50.24%, slightly above 50% signifying that there is a significant variation of the respondents.

4.3.2.2 Invoicing

Table 9: Invoicing

Invoicing Dimensions	Mean	Standard Deviation	CoV (%)
Addition of additives increases costs	3.47	1.43	41.21
High cost of production	3.11	0.99	31.83
Exploitation of the company	3.16	0.96	30.38
Correct invoicing	4.16	0.69	16.59
Feedback on issues	4.37	0.50	11.44
Helpful in solving issues	4.32	0.67	15.51
Overall Mean/SD	3.77	0.87	24.49

Source: Response Data

From Table 9, findings indicate that the refinery is perceived to be exploiting the oil marketing companies to a medium extent as the mean score is 3.16. In addition, the cost of production is perceived to a medium extent, as its mean score is 3.11, the same with the addition of additives, which has a mean score of 3.47. However, most respondents perceive the refinery to be invoicing them correctly and they receive feed back on issues dealing with invoicing whenever they are raised (mean of 4.16 and 4.37 respectively). In addition the firm is being helpful to the marketers in solving any arising issues to a large extent. However, there is a significant variation of the respondents' perception on the addition of additives as the standard deviation is 1.43 with no significant level of variation of the respondents when the coefficients of variation are considered.

4.3.3 Promotion

Promotion variables that were tested include corporate activities and location.

4.3.3.1 Corporate Activities

In today's world, most companies are considered to be citizens. They can be judged as either good or bad corporate citizens depending on whether they payback to the society what they owe to them or not. Findings of the corporate activities are presented in this section.

Table 10: Corporate Activities

Corporate Dimensions	Mean	Standard Deviation	CoV (%)
Participation in worthy causes	2.05	1.03	50.24
A good corporate citizen	2.95	1.27	43.05
Management commitment	4.05	0.85	20.99
Customer survey	2.32	1.29	55.60
Audits for continuous improvement	3.53	0.96	27.20
Training on handling	4.63	0.50	10.80
Overall Mean/SD	3.26	0.98	34.65

Source: Response Data

It is shown in Table 10 that the company is both perceived to participate in worthy causes and a good corporate citizen to a medium extent (the mean scores are 2.05 and 2.95 respectively). Also, the marketing companies perceive the refinery to carry out surveys to a medium extent (mean score of 2.32). However, the findings show that the perceptions on the management commitment, audits for continuous improvement and training on

handling are to a large extent. The level of variation of the respondents' perception on the refinery participating in worthy causes is significant. This is also shown in the firm in being a good corporate citizen and in customer survey (their standard deviations are 1.03, 1.27 and 1.29 respectively). On the other hand, the coefficients of variation in participating in worthy causes and customer surveys indicate that there are significant variations of the respondents (50.24% and 55.60% respectively).

4.3.3.2 Location

In any business, the strategic location is very important for the success of any given company. Findings on the location dimension are as shown in Table 11.

Table 11: Location

Location Dimensions	Mean	Standard Deviation	CoV (%)
Storage of product	4.05	0.97	23.95
Ease of availability	4.00	1.11	27.75
Location of the company	3.63	1.01	27.82
Containment and disposal	4.21	0.71	16.86
Overall Mean/SD	3.97	0.95	24.10

Source: Response Data

Responses show that the perception on storage, ease of availability, location of the company and containment and disposal are to a large extent (mean scores of 4.05, 4.00, 3.63 and 4.21 respectively). However, there is a significant variation of the respondents' perception in the ease of availability (standard deviation is 1.11) and location of the company (standard deviation is 1.01). In addition, the coefficients of variation indicate that there are no significant variations on the respondents.

4.3.4 Distribution

How well the distribution channels are managed until the products reach their final destination is important to any given company. Above all, time is of the essence. The distribution characteristics that were tested include timeliness. Findings are presented in this Table 12.

Table 12: Timeliness

Timeliness Dimensions	Mean	Standard Deviation	CoV (%)
Storage of products	4.05	0.97	23.95
Ease of availability	4.00	1.11	27.75
Schedule of deliveries	3.89	1.15	29.56
Quantities of deliveries	3.47	1.05	30.26
Place of delivery	4.37	0.68	15.56
Overall Mean/SD	3.96	0.99	25.42

The responses on the dimensions that include storage, ease of availability, schedule of deliveries and place of delivery are all to a large extent (all the mean scores are above 3.5). However, responses on quantities are to a medium extent (mean score is 3.47). However, the place of delivery and storage of products show that the level of variation of the respondents' perception is not significant as the standard deviations are 0.68 and 0.97 respectively. In addition, there is no significant variation of the respondents on the timeliness dimension when the coefficients of variation are considered.

4.3.5 Process Management

In any organization, any activities done without the management support are likely to fail. For this to be avoided, the management has to give support to each and every department of the company. In this section, the aim was to find out how well the refinery processes were managed by the refinery. The process management characteristics that were tested include commitment, service delivery; quality audits, health, safety and environmental performance and expertise.

4.3.5.1 Commitment

Table 13: Commitment

Commitment Dimensions	Mean	Standard Deviation	CoV (%)
Schedule of deliveries	3.89	1.15	29.56
Regular checks	4.53	0.70	15.45
Investigations on incidences	4.47	0.70	15.66
Training on handling	4.63	0.50	10.80
Courteousness, friendliness and	•		
politeness	4.32	0.82	18.98
Overall Mean/SD	4.37	0.77	18.09

Source: Response Data

The findings show that the company is perceived to be practising green marketing in scheduled deliveries of the petroleum products, regular checks, incidence investigations, training on handling, and courteousness, friendliness and politeness of their employees to a large extent. Their mean scores are 3.89, 4.53, 4.47, 4.63 and 4.32 respectively. It is only on the schedule of deliveries that show that there is a significant variation of the respondents' perception as the standard deviation is above 1. In addition, there is no significant variation of the respondents when the coefficients of variation are considered.

4.3.5.2 Service Delivery

The findings of the service delivery are presented in this section.

Table 14: Service Delivery

Service Dimensions	Mean	Standard Deviation	CoV (%)
Ease of availability	4.00	1.11	27.75
Location of the company	3.63	1.01	27.82
Schedule of deliveries	3.89	1.15	29.56
Training on handling	4.63	0.50	10.80
Trustworthy, dependability and honesty	4.63	0.50	10.80
Courteousness, friendliness and politeness	4.32	0.82	18.98
Overall Mean/SD	4.18	0.85	20.95

Source: Response Data

From table 14, it is found out that the responses indicate the ease of availability, location of the company, scheduled deliveries, training on handling, trustworthy, dependability and honesty and courteousness, friendliness and politeness to a large extent 8mean scores above 3.5). However, there is a significant variation on the ease of availability of the products, location of the company and scheduled deliveries as the standard deviations are above 1. In contrast, the coefficients of variation are not significant.

4.3.5.3 Quality Audits

For the success of any given company, there must be occasional audits that need to be carried out in order to check for conformance and hence, the firms future direction to take. In this section, findings of the quality audits variables are presented in Table 15



Table 15: Quality Audits

Quality Audits Dimensions	Mean	Standard	CoV (%)
		Deviation	
Specification of products	4.32	0.58	13.43
Storage of products	4.05	0.97	23.95
Ease of Recyclability or reuse	3.63	1.26	34.71
Addition of additives increases costs	3.47	1.43	41.21
Management commitment	4.05	0.85	20.99
Release of toxics	3.26	1.19	36.50
Waste management	4.11	0.94	22.87
Containment and disposal	4.21	0.71	16.86
Regular checks	4.53	0.70	15.45
Investigations on incidences	4.47	0.70	15.66
Provision of protective gears	4.53	0.61	13.47
Audits for continuous improvement	3.53	0.96	27.20
Information to staff	4.47	0.70	15.66
Overall Mean/SD	4.05	0.89	22.92

The findings show that on the release of toxics, the refinery is perceived to a medium extent. The same is with the addition of additives to determine if they increased costs (mean scores are 3.26 and 3.47 respectively). The other dimensions are to a large extent. In addition, the level of variations of the respondents' perception is significant in the ease of recycling or reuse, addition of additives in determining if they increase costs and release of toxics during the refining process. In this case, the standard deviations are 1.26, 1.43 and 1.19 respectively. Moreover, there are no significant variations on the respondents' perception on all the relevant issues as their coefficients of variation are less than 50%.

4.3.5.4 Health, Safety and Environmental Performance

The health of the employees, their safety and the company's performance towards the environment are crucial factors to consider when a company lays down its foundation towards protecting the environment. For the given company this has an inclination towards affecting the perception of people in green marketing. The findings of the health, safety and environmental performance are presented in Table 16.

Table 16: Health, Safety and Environmental Audits

Health, Safety and	Mean	Standard	CoV (%)
Environmental Dimensions		Deviation	
Handling of products	4.16	0.76	18.27
Generation of wastes	3.53	0.84	23.80
Management commitment	4.05	0.85	20.99
Release of toxics	3.26	1.19	36.50
Waste management	4.11	0.94	22.87
Recycling program	4.26	0.73	17.14
Containment and disposal	4.21	0.71	16.86
Emergency response	4.68	0.48	10.21
Regular checks	4.53	0.70	15.45
Investigations on incidences	4.47	0.70	15.66
Provision of protective gears	4.53	0.61	13.47
Audits for continuous improvement	3.53	0.96	27.20
Overall Mean/SD	4.11	0.79	19.87

From Table 16 above, it is shown that respondents perceive the refinery on the release of toxics during the refining process to a medium extent (the mean score is 3.26). The other dimensions are perceived to a large extent (mean scores are above 3.5). The level of variation of the respondents' perception is only significant on the release of toxics as the standard deviation is 1.19. However, there is no significant variation of the respondents when the coefficients of variation are considered.

4.3.5.5 Expertise

Table 17: Expertise

Expertise Dimensions	Mean	Standard Deviation	CoV (%)
Management commitment	4.05	0.85	20.99
Containment and disposal	4.21	0.71	16.86
Emergency response	4.68	0.48	10.21
Investigations on incidences	4.47	0.70	15.66
Training on handling	4.63	0.50	10.80
Trustworthy, dependability and honesty	4.63	0.50	10.80
Training on conservation of			
resources	4.05	0.78	19.26
Helpful in solving issues	4.32	0.67	15.51
Relationship to job being done	3.05	1.08	35.41
Overall Mean/SD	4.23	0.70	17.28

Source: Response Data

The results in Table 17 show that the responses to the relationship to job being done are to a medium extent (the mean score is 3.05). The rest of the other dimensions are to a large extent. It is important to know that most of the respondents perceive the level of expertise the company has to a large extent. The level of variations of the respondents' perception on the relationship of the job being done is significant. Its standard deviation is 1.08. However, there is no significant variation when the coefficient of variation is taken into account.

4.3.6 Sales Force

In this section, the aim was to find out to what extent the sales force perform their duties to satisfy customers' demands and at the same time to know what drives the refining business. The Sales force characteristics that were tested include competence, credibility, courtesy, reliability, responsiveness, communication, training and motivation. The findings are presented in this section.

4.3.6.1 Competence

The findings of the competence characteristic are presented in Table 18.

Table 18: Competence

Competence Dimensions	Mean	Standard Deviation	CoV (%)
Management commitment	4.05	0.85	20.99
Emergency response	4.68	0.48	10.21
Investigations on incidences	4.47	0.70	15.66
Training on handling	4.63	0.50	10.80
Information to staff	4.47	0.70	15.66
Trustworthy, dependability and	4.63	0.50	10.80
honesty			
Feedback on issues	4.37	0.50	11.44
Helpful in solving issues	4.32	0.67	15.51
Relationship to job being done	3.05	1.08	35.41
Overall Mean/SD	4.30	0.66	16.28

Source: Response Data

From Table 18, it is shown that the respondents perceive the relationship of the sales force to the jobs they do is to a medium extent as the mean score is 3.05. The rest of the dimensions are perceived to a large extent (the mean score is above 3.5). This should be

used as a wake up call for the company in trying to make sure that its employees come to love their jobs in order to avoid loosing well trained and experienced personnel to competitors, something which is not desirable. However, it is only on the relationship of the sales force to their work that they do that shows that the level of variation of the respondents' perception is significant as its standard deviation is 1.08. The rest do not show any significant variations even after taking into account the coefficients of variation.

4.3.6.2 Credibility

The credibility of the employees means many things to many people. It could imply ones standing in the society, worthiness, trustfulness and even honesty. Employees need to be credible so that they could be trusted not only by their companies, but by other competitors too. In determining this characteristic, several factors were considered that include management commitment, training on handling, trustworthiness, dependability and honesty, helpful in solving issues, and relationship of the sales force on the jobs they do at the refinery. The findings are presented in Table 19.

Table 19: Credibility

Credibility Dimensions	Mean	Standard Deviation	CoV (%)
Management commitment	4.05	0.85	20.99
Training on handling	4.63	0.50	10.80
Trustworthy, dependability and			
honesty	4.63	0.50	10.80
Helpful in solving issues	4.32	0.67	15.51
Relationship to job being done	3.05	1.08	35.41
Overall Mean/SD	4.14	0.72	18.70

Source: Response Data

The responses show that the relationship of the sales force to the job being done is to a medium extent (mean score is 3.05). The other dimensions show to a large extent (mean score above 3.5). However, the level of variation of the respondents is significant in the relationship of the sales force on the jobs they do, as shown by the standard deviation of 1.08, with the rest having no significant variation even after the coefficients of variation are taken into consideration.

4.3.6.3 Courtesy

Several dimensions were tested that include management commitment, feedback, trustworthy, dependability, and honesty, feedback on issues, helpful in solving issues, courteousness, friendliness and politeness, relationship to the job being done and good communication. The findings are presented in Table 20

Table 20: Courtesy

Courtesy Dimensions	Mean	Standard Deviation	CoV (%)
Management commitment	4.05	0.85	20.99
Trustworthy, dependability and			
honesty	4.63	0.50	10.80
Feedback on issues	4.37	0.50	11.44
Helpful in solving issues	4.32	0.67	15.51
Courteousness, friendliness and			
politeness	4.32	0.82	18.98
Relationship to job being done	3.05	1.08	35.41
Good communication	3.89	0.94	24.16
Overall Mean/SD	4.09	0.77	19.61

Source: Response Data

Findings from the table show that the respondents' perception on the courtesy of the sales force with respect to the relationship of their work done at the company is to a medium extent, as the mean score is 3.05. The rest are to a large extent. In addition, the level of variation of the respondents on the relationship of the sales force is significant as the standard deviation is 1.08. The coefficients of variation show that the variation of the respondents' perception is not significant.

4.3.6.4 Reliability

In order for a company to be able to achieve its objectives, there is need to have a constant supply of products and services to the organization. This calls for commitments to and from suppliers and customers for the company to become reliable and trusted in the business world and hence avoid loss of good businesses. This section aims to find out how well the respondents perceive the reliability of the refineries sales force. The findings are presented in Table 21.

Table 21: Reliability

Reliability Dimensions	Mean	Standard Deviation	CoV (%)
Management commitment	4.05	0.85	20.99
Training on handling	4.63	0.50	10.80
Trustworthy, dependability and			
honesty	4.63	0.50	10.80
Feedback on issues	4.37	0.50	11.44
Helpful in solving issues	4.32	0.67	15.51
Courteousness, friendliness and			
politeness	4.32	0.82	18.98
Relationship to job being done	3.05	1.08	35.41
Good communication	3.89	0.94	24.16
Overall Mean/SD	4.16	0.73	18.51

Responses show that the relationship of the sales force to job being done is to a medium extent (mean score is 3.05). However, the rest of the dimensions are to a large extent (mean scores above 3.5). The level of variation of the respondents' perception on the relationship of the employees towards their tasks is significant as the standard deviation is above 1.0. However, the level of variation of the respondents towards the reliability characteristic when the coefficient of variation is considered is not significant.

4.3.6.5 Responsiveness

Table 22: Responsiveness

Responsiveness Dimensions	Mean	Standard Deviation	CoV (%)
Management commitment	4.05	0.85	20.99
Trustworthy, dependability and			
honesty	4.63	0.50	10.80
Feedback on issues	4.37	0.50	11.44
Helpful in solving issues	4.32	0.67	15.51
Courteousness, friendliness and			
politeness	4.32	0.82	18.98
Relationship to job being done	3.05	1.08	35.41
Good communication	3.89	0.94	24.16
Overall Mean/SD	4.09	0.77	19.61

Source: Response Data

The responses from Table 22 show that the majority of the respondents perceive refineries' sales force to be responsive in the various activities undertaken by the company to a large extent (mean scores are above 3.5). However, the perception of the respondents with respect to the responsiveness of the sales forces' relationship towards their tasks is to a medium extent (mean score of 3.05). The level of variation of the respondents on the relationship of the employees towards their tasks is significant as the standard deviation is above 1.0. As for the rest, the levels of variation are not significant, even after taking into consideration the coefficient of variation.

4.3.6.6 Communication

In this section, factors tested include management commitment, feedback on issues, relationships to job being done and helpful in solving issues. The findings are presented in Table 23.

Table 23

Communication Dimensions	Mean	Standard	CoV (%)
		Deviation	
Management commitment	4.05	0.85	20.99
Customer survey	2.32	1.29	55.60
Trustworthy, dependability and			
honesty	4.63	0.50	10.80
Feedback on issues	4.37	0.50	11.44
Helpful in solving issues	4.32	0.67	15.51
Courteousness, friendliness and			
politeness	4.32	0.82	18.98
Relationships to job being done	3.05	1.08	35.41
Good communication	3.89	0.94	24.16
Overall Mean/SD	3.87	0.83	24.11

Source: Response Data

The responses show that the perception on conducting of customer surveys by the sales force of the refinery and their relationship to the work that they performed on a daily basis is to a medium extent as shown by the mean scores of 2.32 and 3.05 respectively. The level of variations of the respondents' perception on the surveys and relationships of the employees towards their jobs varies to a significant extent, as their standard deviations are 1.29 and 1.08 respectively. As for the rest, the variations are not significant as their standard deviations are less than 1 even after considering the coefficients of variation.

4.3.6.7 Training

Factors that were tested in this section include training on the handling of products, and conservation of resources, information to staff, and trustworthiness, dependability, and honesty. The findings are presented in this section.

Table 24: Training

Training Dimensions	Mean	Standard Deviation	CoV (%)
Handling of products	4.16	0.76	18.27
Training on handling	4.63	0.50	10.80
Information to staff	4.68	0.48	10.26
Trustworthy, dependability and			
honesty	4.63	0.50	10.80
Training on conservation of			
resources	4.05	0.78	19.26
Overall Mean/SD	4.43	0.60	13.88

Source: Response Data

The perception of the respondents towards the refinery's training of its employees is to a large extent, as all the mean scores are above 3.5. In addition, the standard deviations and the coefficients of variation show that there are no significant variations of the respondents.

4.3.6.8 Motivation

Motivation factors that were tested include management commitment, trustworthiness, dependability and honesty, courteousness, friendliness and politeness and relationship of the employees to the work that they do. The findings are presented in Table 15

Table 25: Motivation

Motivation Dimensions	Mean	Standard Deviation	CoV (%)
Management commitment	4.05	0.85	20.99
Trustworthy, dependability and			
honesty	4.63	0.50	10.80
Courteousness, friendliness and			
politeness	4.32	0.82	18.98
Relationship to job being done	3.05	1.08	35.41
Overall Mean/SD	4.01	0.81	21.55

Source: Response Data

It is shown from Table 25 the respondents perceive the relationship of the sales employees towards the relationship to job being done to a medium extent (its mean score is 3.05). The rest of the dimensions are perceived to a large extent. The only aspect that has a significant level of variation is on the relationship of the sales force towards their jobs (the standard deviation is 1.08). The rest of the variations are not significant. Also, the coefficients of variation show that the level of variation of the respondents' perception is not significant.

4.4 Summary of the perception of the management of Oil Marketing Companies towards the adoption of Green Marketing practices by the Kenya Petroleum Refineries.

In this section, the averages for the mean, standard deviations and the coefficients of variation for each variable is compiled in order to give an overall perception of the characteristics of the Management of the Oil Marketing Companies towards the adoption of Green Marketing practises by the Kenya Petroleum Refineries. Findings which are represented in Table 26 show that the marketing mix variables of price and promotion are perceived by the respondents in the price settings and corporate activities to a medium extent. Their mean scores are 3.25 and 3.26 respectively. There are no significant variations on the responses of the respondents as the standard deviations and coefficients of variation are less than 1 and 50% respectively. On the other hand, products, distribution, process management and sales force are perceived by the respondents to a large extent.

In overall, the findings show that from the average mean score of the dimensions, the respondents perceive the refinery in practicing green marketing to a large extent (the average mean score is 4.04) and the level of variations of the respondents is not significant.

Table 26: Summary of the management's perception of the Kenya Petroleum Refineries practice of green marketing

Variables	Dimensions	Mean	Standard Deviation	CoV (%)
Product	Quality	3.95	0.99	26.20
	Safety	4.00	0.83	21.86
	Conformance	4.16	0.75	18.23
	Reliability	3.99	0.90	23.21
	Recyclability	4.05	0.88	21.97
Sub Mean/	SD	4.03	0.87	22.29
Price	Price setting	3.25	1.08	34.68
	Invoicing	3.77	0.87	24.49
Sub Mean/		3.51	0.98	29.59
Promotion	Corporate activities	3.26	0.98	34.65
	Location	3.97	0.95	24.10
Sub Mean/	SD	3.62	0.97	29.38
Distribution	Timeliness	3.96	0.99	25.42
Sub Mean/SD		3.96	0.99	25.42
Process	Commitment			
management		4.37	0.77	18.09
	Service delivery	4.18	0.85	20.95
	Quality audits	4.05	0.89	22.92
	Health, safety and environment			
	performance	4.11	0.79	19.87
	Expertise	4.23	0.70	17.28
Sub Mean/		4.19	0.80	19.82
Sales force	Competence	4.30	0.66	16.28
	Credibility	4.14	0.72	18.70
	Courtesy	4.09	0.77	19.61
	Reliability	4.16	0.73	18.51
	Responsiveness	4.09	0.77	18.51
	Communication	3.87	0.83	24.11
	Training	4.43	0.60	13.88
	Motivation	4.01	0.81	21.55
Sub Mean/SD		4.14	0.74	18.89
Overall Mea	an/SD	4.02	0.83	21.96

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study sought to determine the perception of the management of the oil marketing companies in Kenya towards the adoption of green marketing practices by the Kenya Petroleum Refineries. After having analysed the findings, discussions, conclusions and recommendations were presented in this chapter.

5.2 Discussion

The influence of environmental issues in today's world can not be ignored (Walley, Custance and Parsons, 2000). For firms to take advantage of this and be competitive, businesses have to re-adjust their operations to accommodate this development. Many countries, organizations and individuals have raised concerns on the effects of fossil fuels on global warming, and currently the oil industry faces a major challenge in coming up with better processes that lead to less harm on the environment (Sharma, 2000).

The research had the objective of determining the perception of the management of oil marketing companies towards green marketing practices by the Kenya Petroleum Refineries. In order for this objective to be achieved, semi-structured questionnaires were sent to the respondents. The questionnaires were divided into two parts, part one was to get information on the demographic profile of the Oil Marketing firms and part two was to get the perception of the management of the oil marketing companies towards the adoption of green marketing practises by the refinery, through a 5-point likert scale. The questionnaires were sent to 32 Oil Marketing companies and only 19 of them were returned. This represented a response rate of 59.38%

It was observed from the findings that 68.42% of the firms were wholly locally owned while 31.58% were wholly foreign owned. In addition, 78.95% of the firms were less than 20 years old. The findings were important as they show that many indigenous Kenyans took the opportunity of the partial liberalization of the petroleum industry in 1994 to form local Oil Marketing Companies for trading. On the process, many people were employed in the sector where they have now gained a lot of experience and are better placed to give their opinion towards the research.

The finding on the product and price variables show that more needed to be done on the refining processes. For example, when compared to imports the respondents' perception was that products from the refinery costed more than imports. This was so because the refinery was perceived to be charging a high processing fee, with little profit margin being realised by the firms due to the high crude oil prices currently experienced in the world petroleum market (Petroleum Insight, 2006). Moreover, the refining processes releases toxics to the atmosphere that led to the suffering of the environment to a medium extent, seen from the mean scores of 3.26 and 3.42. The refinery therefore has to address this concern for it to be competitive and not be perceived as being socially irresponsible (Global Market Insight, 2006).

Promotion and distribution variables were also tested and the findings show that for the refinery to be a good corporate citizen, it needs to re-evaluate itself on participating on worthy causes. On this aspect, the average mean score was 2.95. From this, the refinery as an organization has to improve on its image by paying back to the society what it owes them. This could be achieved through the use of surveys to know how it is faring in the provision of services to its customers of which it is currently poor at.

It had been argued in the past that where and when one needed the products or services to be available, this had a very significant impact on the customers that the business attracted (EPA, 2007). The refinery's location was perceived by the respondents to be better for business as the findings show that the perception was to a large extent as the mean score was 3.97. In addition, the respondents' perception on the suitability or appropriateness of the refinery in the refining activities was to a large extent.

The process managements' finding show that the company was rated highly in green marketing practices. This was in agreement with the literature that argued that environmental concerns were reshaping the way the businesses people were conducting their businesses (Menon, Chowdhury, Jankovich, 1990). However, one area that had not been perceived positively was on the release of toxics to the environment with respondents arguing that the company needed to improve on that aspect (mean score was 3.05). In addition, there was a need for the firm to find out why the respondents' perception on the employee relationship with the tasks they performed was average. This

will help the company to put in retention structures for the company to avoid poaching by competitors.

Findings from the sales force indicated that the sales force was perceived to be competent, courteous reliable and credible in carrying out their tasks to a large extent, as shown by the mean scores of above 3.5 and standard deviations of less than one.

In general, the respondents' perception on KPRL's adoption of green marketing practises was to a large extent and this was in agreement with studies done in other sectors by Obuya (2003) and Kiongera (2003).

5.3 Conclusion

The findings from the study revealed that with pressure from the parliament and other organizations, businesspeople could re-shape their entities to take advantages of new developments in the business world for the better. As businesses are now becoming more competitive, those ones that do not recognise this development are likely to loose out. In addition, the management of any company must put in place structures that support green marketing practises for the success of the firm. As information nowadays is readily available, customers have now become conscious of what they would like to have thus forcing many companies to change their strategies so as to attract more customers.

From the research, findings show that the Kenya Petroleum Refineries had put in mechanisms that help check on the environment and hence making it to be perceived as practicing green marketing. The company has invested heavily on its employees who were perceived to be well trained in their areas of specialization and above all, there was management support in all the activities that take place. The location also adds to the advantage of the firm as it is able to do business with its customers better.

5.4 Recommendations

The major challenge facing the company was on corporate social responsibility. Respondents' perception on this area was that the company was not doing enough to give back to the society. It is therefore wise if the management reconsidered its attitude towards the society.

Another challenge was on pricing. Many organizations felt that they were being exploited when they refined at the company. Their suggestion was for the refinery to lower its processing fee charges for them to increase their processing. The company need to take up this challenge by trying to find out the real issues raised by the marketers with the possibility of lowering the processing fee.

LIMITATIONS OF THE STUDY

The major limitation to the study was that it was done only for the Kenya Petroleum Refineries despite the fact that there are many registered oil marketing companies operating in the countries' oil industry.

SUGGESTIONS FOR FURTHER RESEARCH

- i. The study was limited to the Kenya Petroleum Refinery and was to determine the perception of only those oil marketing companies that had signed a processing agreement with the firm. However, there are other petroleum marketing companies in the industry that do not have a refining contract with the Kenya Petroleum Refineries. A similar research that would include all the oil marketing companies in Kenya could be done to determine if they were perceived to be practising green marketing.
- ii. There are other companies that do business with the refinery and were not involved in the initial study. Examples of these include companies in the maintenance, information technology, catering and the utilities. It would be a very good idea if a study was to be carried out that would include them.

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APPENDICES

Appendix 1. Operationalizing the Green Marketing Mix Variables

DIMENSION: PRODUCT				
Relevant Issues	Relevant Question			
-is customer perception on product	1,3,10			
specification good?				
-is the customer perception on				
product storage at the refinery good?				
-are the products that are produced				
at KPRL meet the correct				
specification as required by law, and				
international standards?				
-do products from the refinery harm	2,4,5,7,9,24,			
the atmosphere, human beings and	26,27,29,30,			
the animals?	31,33,36,37,			
	38,39			
-does the company conform to	1,3,27,28,			
specifications when manufacturing	29,37,38,			
the products?	42			
-does the company comply with the				
law when refining?				
-does the company conform to				
international standards when				
refining?				
-does the company conform to the				
requirements of the customer when				
refining?				
-can the company serve its	11,19,21,22,			
customers with products without any	23,24,37,			
delays?	38,44			
-can oil marketing companies				
	Relevant Issues -is customer perception on product specification good? -is the customer perception on product storage at the refinery good? -are the products that are produced at KPRL meet the correct specification as required by law, and international standards? -do products from the refinery harm the atmosphere, human beings and the animals? -does the company conform to specifications when manufacturing the products? -does the company comply with the law when refining? -does the company conform to international standards when refining? -does the company conform to the requirements of the customer when refining? -can the company serve its customers with products without any delays?			

	depend on KPRL to supply them	
	with products?	
	-is the perception of customers on	
	reliability of the firms products	
	good?	
Recyclability	-can the products obtained at KPRL	8,24,27,28,
	be recycled if they do not meet the	29,42
	correct quality?	

DIMENSION: PRICE									
Expanded	Expanded Relevant Issues Relevant Question								
Price settings	-are the processing prices offered by	10,12,13,14,							
	the company affordable/high?	15,16,17							
	- When compared to imports, are								
	KPRL's products expensive?								
	-do you think that part of the money								
	that you pay for services goes to								
	worthy causes?								
Invoicing	-are you being invoiced correctly?	10,13,14,15,							
	-do you receive invoices promptly?	41,43							
	-When you raise issues on invoicing,								
	are the responses satisfying?								
	-are the processing fees that are								
	charged by the refinery credible?								

DIMENSION: PROMOTION				
Expanded	Relevant Question			
Corporate Activities	-does the company participate in any	12,18,24,32,		
	social responsibility activities?	37,38		
Location	-are the company premises attractive	3,11,19,29		
	to people *			
	-is the location of the company			

	convenient for doing business? -are its facilities portraying the good image of the company? DIMENSION: DISTRIBUTION	
Expanded	Relevant Issues	Relevant Question
Timeliness	-can the products from the refinery	3,11,21,
	be maintained on spec for a long	22,23
	time before their delivery to the oil	
	marketing companies?	
	-are the products delivered when	
	planned?	

DIMENSION: PROCESS MANAGEMENT							
Expanded Relevant Issues Relevant Questio							
Commitment	-is the management committed to	24,31,33,					
	the task of refining?	38,44					
	-is the staff committed to the work						
	they perform?						
Service delivery	-are KPRL offices easily accessible	11,19,21,38,					
	to customers?	40,44					
2	-are customers always briefed before						
	any activities take place?						
	-is staff at the refinery trustworthy						
	and honest?						
	-is the service delivery done in time?						
Quality audits	-are health, safety and environment	1,3,8,10,24,					
	audits usually done on a regular	26,27,29,31,					
	basis?	33,36,					
	-are the processes usually being	37,39,					
	monitored to correct any deviations?						
Health, Safety and	-does the company have a system in	2,6,24,26,27,28,					
Environmental	place to monitor the performance of	29,30,31,33,36,37,					

Performance	the company in waste management,	
	pollution, health, safety and the	
	environment?	
	-are the employees always checked	
	if they are fit to work?	
Expertise	-does the company have the	24,29,30,33,
	necessary expertise in its	38,40,42,43,45
	employment?	
	-is the staff skilled to carry out their	
	tasks?	
	-are staff equipped with the	
	necessary emergency skills?	

DIMENSION: SALES FORCE							
Expanded	Expanded Relevant Issues Relevant Question						
Competence	-is the staff competent on the type of	24,30,33,38,					
	work they are performing?	39,40,41,43,45					
	-do KPRL employees solve issues/						
	complaints very fast?						
Credibility	-is there trust between KPRL staff	24,38,40,43,45					
	and its customers?						
	-are transactions done by the						
	employees supported by honesty						
Courtesy	-do employees respect customers	24,40,41,					
	when solving complaints?	43,44,45,46					
	-are employees respectful when						
	visiting customers?						
	-are employees friendly when						
	interfacing with customers?						
Reliability	-can employees be relied upon when	24,38,40,41,					
	there is a problem?	43,44,45,46					
	-is work between KPRL employees						

	and its customers done to	
	satisfaction?	
Responsiveness	-are employees quick to respond to	24,40,41,43,44
	consumer issues promptly?	45,46
	-are employees quick and accurate	
	in solving customers' problems?	
Communication	-does the company carry out surveys	24,32,40,41,
	to know the needs of its customers?	43,44,45,46
	-do employees listen and act to	
	customers complaints?	
	-is feedback usually given when	
	issues of concern have been raised?	
	-do employees give information to	
	customers in case of emergencies,	
	delays, or problems?	
Training	-are employees usually trained on	2,38,39,40,42
	customer care?	
	-are staff usually trained to handle	
	petroleum products?	
	-are employees usually trained on	
	matters to deal with health, safety	
	and the environment?	
Motivation	-is the staff motivated on the work	24,40,44,45
	they perform?	
	-are the employees able to go an	
	extra mile to satisfy customers?	

Appendix 2

List of Oil Marketing Companies

- 1. Addax Petroleum Limited
- 2. Alba Petroleum Limited
- 3. Annel Petroleum Limited
- 4. Bahriya Petroleum Limited
- 5. Bakri International Petroleum (K) Limited
- 6. Chevron Kenya Limited
- 7. Dalbit Petroleum Limited
- 8. Engen (Kenya) Petroleum Limited
- 9. Eppic Petroleum Limited
- 10. Fossil fuel Petroleum Limited
- 11. Fuelex Petroleum Limited
- 12. Galana Petroleum Limited
- 13. Gapco Petroleum Limited
- 14. Global Petroleum Limited
- 15. Gulf Energy Petroleum Limited
- 16. Hashi Empex Petroleum Limited
- 17. Hass Petroleum Limited
- 18. Intoil Petroleum Limited
- 19. Jovenna Petroleum Limited
- 20. Kenya Oil Company Limited
- 21. Kobil Petroleum Limited
- 22. Mafuta Petroleum Limited
- 23. Metro Petroleum Limited
- 24. MGS International Petroleum (K)Limited
- 25. Mobil Petroleum Limited
- 26. Moco Oil Products
- 27. Moil Petroleum Products Limited
- 28. Muloil Petroleum Limited
- 29. National Oil Corporation Of Kenya
- 30. Oilcom Petroleum Products
- 31. Oilmark Petroleum Limited
- 32. Pentoil Petroleum Limited

- 33. Petro Petroleum Limited
- 34. Riva Oil Products Limited
- 35. Royal Petroleum Limited
- 36. Shell Kenya Limited
- 37. Southwest Petroleum Limited
- 38. Tecaflex Petroleum Limited
- 39. Total Kenya Limited
- 40. Transoil Petroleum Limited
- 41. Triton Petroleum Limited
- 42. Vitol Petroleum Limited

Source, Kenya Petroleum Refineries Limited Hydrocarbon Entitlement Statement For April 2007

Appendix 3

Letter of Introduction

Eric Kalama School of Business C/O Bandari Campus University of Nairobi P. O. Box 30197

<u>NAIROBI</u>

May 2007

Dear Respondent,

RE: COLLECTION OF SURVEY DATA

I am a postgraduate student of the University of Nairobi, School of Business, Bandari Campus. In order to fulfill the degree requirement, I am undertaking the above project as part of the academic requirements towards completion of the course.

You have been selected to form part of this study. This is to kindly request you to assist me collect the data by filing out the accompanying questionnaire, which I will collect from you personally.

The information that you are going to provide will be used exclusively for academic purposes and will be treated with strict confidence. At no time will your name appear in my report. A copy of the final paper will be availed to you upon request.

Your co-operation will be highly appreciated.

Thank you in advance.

Yours faithfully,

ERIC KALAMA

MBA STUDENT SCHOOL OF BUSINESS UNIVERSITY OF NAIROBI

M. OMBOK

LECTURER/SUPERVISOR SCHOOL OF BUSINESS UNIVERSITY OF NAIROBI

Appendix 4

Questionnaire

PART I

	YC	
General	Intorr	nation
Cilciai	TITL OIL	

i.	Name of your Company(Optional)
ii.	Your Name(Optional)
iii.	Your position in the company(Optional)
iv.	For how long have you been working in the petroleum industry?(Optional)
V.	For how long have you been working with the present company(Optional)
vi.	Is your company
	Wholly foreign owned? () Wholly locally owned? () Jointly owned? ()
vii.	If the company is jointly owned, what is the proportion of ownership?
	Largely foreign owned
viii.	For how long has your firm been in existence?(Optional)
ix.	Is your company a shareholder of the KPRL?(Optional)
Х.	Using the categories below, please indicate the status of your company. (Please tick one). Have you at one time imported crude oil on behalf of the other Oil Marketing Companies?
xi.	If the answer to x. above is No. please indicate any reasons

PART II

Please indicate the extent to which you rate Kenya Petroleum Refineries Limited, on a scale of 1-5 where,

5 is-to a very large extent; 4 is-to a large extent; 3 is-to some extent; 2 is-a small extent; 1 is-to no extent

No	Issue	(5) Very large extent	(4) Large extent	(3) Same extent	(2) Small extent	(1) No extent
	A. PRODUCT					
1.	Products from the refinery meet the correct product specifications that are required by law					
2.	Products from KPRL can be handled easily because the necessary handling/protective equipments are available					
3.	The petroleum products are stored in a manner that their quality is maintained					
4.	The environment does not suffers when the products are being manufactured					
5.	Animals or humans do not suffer when the product is being produced					
6.	Products from the refinery generate wastes					
7.	Wastes from KPRL processes damage the environment					
8.	The wastes can be re-used/recycled after generated					
9.	Products from KPRL do not harm the environment like imports					
10.	Additives added to the products to improve on quality are used unnecessarily, thus making the products to cost more					
11.	The refinery ensures that its products are readily available					

	B. PRICE	(5)	(4)	(3)	(2)	(1)
No		Very	Large	Same	Small	No
		large	extent	extent	extent	extent

		extent		
12.	A portion of the price charged as processing fee by KPRL goes to a worthy cause			
13.	The processing price covers the real cost of production			
14.	Oil marketing companies are not exploited when they refine at KPRL than when they import			
15.	The company correctly invoices oil marketing companies from the services rendered			
16.	You are receiving a fair margin of the business from the sale of the products from KPRL			
17.	If processing price decreases at KPRL, this will lead to more processing of crude oil at the company.			

No	C. PROMOTION	(5) Very large extent	(4) Large extent	(3) Same extent	(2) Small extent	(1) No extent
18.	The refinery usually participates in social responsibility activities					
19.	The company's location makes it attractive for customers to want to refine					
20.	The refinery is a well known company in the country					

No	E. DISTRIBUTION	(5) Very large extent	(4) Large extent	(3) Same extent	(2) Small extent	(1) No extent
21.	Products from the refinery are delivered as per schedule					
22.	Products from the company are delivered at the right quantities					
23.	Products from KPRL are delivered at the right place					

	D. PROCESS MANAGEMENT	(5)	(4)	(3)	(2)	(1)
No		Very	Large	Same	Small	No
		large	extent	extent	extent	extent
		extent				

24.	There is management commitment to			
	all activities that occur at the company			
25.	The manufacturing process involves			
	long hours of exposure to the			
	employees			
26.	The manufacturing processes release			
:	toxic gases and effluent to the			
	environment			
27.	The company has put in place a proper			:
20	waste management system			
28.	The company has put in place a proper			
	recycling program for its products and			
20	effluents			
29.	The place of work is properly managed			
20	in waste containment and disposal		-	
30.	An emergency response system exists if			
	an employee is exposed to any harmful substances			
31.				
31.	A regular check by the company on its			
	employees is usually taken to make sure			
32.	that they are fit to work at the refinery The company conducts surveys to		ı	
32.	identify customer needs			
33.	Accidents are thoroughly investigated			
55.	to prevent re-occurrence			
34.	The company makes use of sustainable			
34.	resources like water and the soil in its			
	various activities.			
35.	The company conserves energy during			
55.	its production processes			
36.	At any given time, the company			
50.	provides the necessary protective gear			
	to its staff.	-		
37.	The company uses management tools			
	like auditing, life cycle analysis, so as			
	to find out how it is fairing in cleaner			
	and efficient production so as to select			
	opportunity for improvement.			
		 I	1	

	F. SALES FORCE	(5)	(4)	(3)	(2)	(1)
No		Very	Large	Same	Small	No
		large	extent	extent	extent	extent
		extent				

38.				
	trained to handle petroleum products			
39.	The staff is well informed on the			
	hazards posed by the products			
40.	Employees are trust worthy,			
	dependable, and honest when handling			
	products.			
41.	3 0			
	feedback to issues raised by the oil			
	marketing companies.			
42.	The staff is usually trained to avoid			
	wasted resources			
43.	The employees are helpful in solving			
	customers complaints			
44.	The employees are courteous, friendly			
	and polite when they serve their			
	customers.			
45.	Staff is highly motivated on their work			
46.	Communications by KPRL's sales force			
	to the oil marketing companies is			
	always good.			

Thank you very much for your valuable time.

