

**EFFECTS OF GREEN BUSINESS PRACTICES ON AN
ORGANIZATION'S PERFORMANCE
A Case Study of Safaricom Limited, Nairobi-Kenya**

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DEDICATION

To My Sons Einstein Sissey & Euler Sissey

To My Dad, Mr. Thadayo Ogallo and Mum, Mrs. Winnie Ochieng.

ACKNOWLEDGEMENT

To the Almighty God, thank you for bestowing on me your grace and wisdom as I undertook this study. You have guided me and blessed me beyond measures.

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ACRONYMS/ ABBREVIATIONS

4R	: Reduce, Reuse, Recycle and Recover
BTS	: Base Transceiver System
CAK	: Communications Authority of Kenya
CSO	: Civil Society Organizations
EA	: Environmental Audit
EIA	: Environmental Impact Assessment
EMCA	: Environmental Management Coordination Act
EMF	: Electromagnetic Frequencies
EMS	: Environmental Management System
EPR	: Extended Producer Responsibility
FMS	: Fuel Management System
GBP	: Green Business Practices
GDP	: Gross Domestic Product
GHG	: Green House Gases
GEO	: Global Environmental Outlook
GESIP	: Green Economy Strategy and Implementation Plan
ICNIRP	: International Commission on Non-ionizing Radiation Protection
IPCC	: Intergovernmental Panel on Climate Change
KARA	: Kenya Alliance of Residents Association
NEMA	: National Environment Management Authority
NGO	: Non-Governmental Organization
PPP	: Polluter Pay Principle
RBV	: Resource Based View
SIM	: Subscriber Identification Module
TBL	: Triple Bottom Line
UNEP	: United Nations Environment Programme
WBCSD	: World Business Council for Sustainable Development
WEEE	: Waste Electrical and Electronic Equipment
WHO	: World Health Organization
WMS	: Waste Management System

ABSTRACT

Green business practices are now an important area of focus for companies globally especially in Developed Countries. Rising temperatures, high fuel costs and changing weather patterns are considered as punishments for years of neglecting the environment and to this end Kenya is no exemption. This study sought to established how green business practices affect organizational performance. The specific objectives of the study were to: establish the various green business practices implemented at Safaricom; examine the effects of green business practices on financial wellbeing of Safaricom; examine the effect of the green business practices on Safaricom's employee job satisfaction and finally discuss difficulties faced by Safaricom in implementing green business practices. The following null hypotheses were set as a guide: there are significant effects of green business practices on Safaricom's profit; there is significant effect of green business practices on Safaricom's employee's job satisfaction. The target population of this study was 350 respondents drawn from Safaricom PLC headquarters Nairobi office. Stratified multistage simple random sampling technique was used where the sample was stratified into the 11 departments of Safaricom Limited that include Technology; Internal Audit; Financial Services; Resources; Customer Operations; Enterprise Business Unit, Business Development; Consumer Business Unit; Corporate security, Finance and Corporate Affairs. The sample was further clustered into four stages according to the position of employees in Safaricom which were senior management, managers, senior staff and junior staff. Finally, simple random sampling method was adopted in selecting 106 respondents where only 85 respondents completed and returned their questionnaires. The study used a questionnaire which consists of closed and open-ended questions for data collection. An interview guide was used to get data from key informants. To determine reliability, Cronbach's alpha methodology was used. Descriptive statistics was adopted to analyse, show and interpret data while inferential examination which involves one-way ANOVA was conducted to find out the strength and the association concerning the dependent and independent variables. The paper reveals that Safaricom Limited has implemented several Green Business Practices which include; ISO 14001:2015-environmental management system certification, energy efficiency and renewability, water conservation, waste management (domestic & electronic), conducting EIAs and EAs, planting trees, environmental awareness, trainings and sponsorships, carbon emission reduction strategies, green bond, sustainability champions & awards, green bond, green supply chain, green base stations, electromagnetic frequencies, green office, green products and services and sustainability reporting and environmental policy. It also established that there is noteworthy effect of green business practices on Safaricom's profitability as well as employee's job satisfaction. The main challenges faced were: technical barriers because there are some technologies that might not be available in the Country hence hindering the implementation of green business practices and Government legislation as there are little incentives provided by Kenyan Government to companies who are implementing green business practices, instead many are implementing on voluntary basis as opposed to other Countries where implementing attracts tax levies and other benefits. This study recommends that Kenya Bureau of Standard being the official standard body in the Country should develop Green standards that could guide companies willing to go green. Also, telecommunication companies should take advantage of the new Kenya energy act 2019 which allows for Net metering into the national grid as well as renewable energy feed in tariff system. The Government has further zero-rated green energy solutions and recycling of plastics which were identified as further incentives for companies willing to practice green business. Finally, organizations should build more capacities of their employees and invest in more research and development of green solutions as the study has revealed that green business practices increase profitability and employees' job satisfaction.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

There is an increasing awareness of global environmental concerns like global warming, emission of carbon, usage of toxic substances, and scarcity of natural resources and this has been increasing over the years. The global preference is to go green, and the idea has been adopted by several organisations in a program dubbed green business practice (Xie and Breen, 2012). Implementing green business practices is one of the mechanisms through which organisations can achieve environmental sustainability and conserve the environment in return (Porritt & Winner 2016).

In his paper “The Environmental Policies and Competitiveness” (Sprenger 1996). He was of the investment in environmental protection increases the cost of production reducing the profits of the organisation making them to be less competitive, However, Scholars like Michael Porter (Porter & Linde, (1995) formulated Porter Hypothesis which suggested that strict environmental regulations triggers discovery and introduction of cleaner technologies which in turn results into improved economic performance and environmental performance The model of business is widening, as such high competition has led to innovations and commendable business ideas. The rising population has equally increased the business market (Bachman, 2009). This has made business to be interested in environmental research and investment ventures that would enhance profitability. Organisations green investment can be thought of as activities like resource reuse, ecotourism, energy effectiveness, eco-friendly mobility, organic food production and reusable energy and so on. These include the employment opportunities that are created by these ventures (Lacroix and Stamatou, 2007).

This paper interest is to understand how sustainable investments are going to be beneficial to business ventures. An organisation can be termed as green business if they are dedicated to the ideologies of environmental stewardship and sustainability in its blue print and steps put forth to promote use of renewable energy and internalisation of negative environmental effects of its production activities. These should long term plans where business activities are set such that they do not pose any threat to the economy, social practices, the environment and the future generations. Greening of business is the lasting ability to achieve business mandate while at the same time ensuring that the economic, social or environmental capability is not threatened for both current and future generations (Linas *etal.*, 2014).

A business engaging in green practices can be referred to as sustainable/ smart business, as it is conducting business with minimal negative effect to the local and global environment (Swallow, 2009).

Over time, a lot of policies and environmental frameworks have been put forth in the light of manufacturing. At the present, processes are being revolutionised which supersedes the traditional practices bring a whole perspective to the order of business and their economic implications. Looking at the statistics, service industry contributes greater than 70% of the gross domestic product of the U.S and most of the advanced states, in addition the jobs generated by the service industry is greater than 80% of the U.S economy (Fitzsimmons and Fitzsimmons 2000; Salzman 2000). These show how pertinent the service industry is the need to invest more and capitalise in it.

The Ericson Mobility study predicts that by 2020, there will be 9.5 billion subscribers to mobile services in the world, they are estimating that over 90% of the world population will be in possession of mobile phones which will make the demand for network connections very high putting more pressure on the demand for electricity and fossil fuel from which they are powered. The carbon footprint of the telecommunication industry is growing at a very high rate. The emergence of the Internet of Things (IoT), with so many of devices interconnected, would only be on the rise in the foreseeable future. As document, in the year 2007, ICT's footprint for carbon dioxide accounted for 2% (830 million metric tons of CO₂) of all emissions and it is expected to double to 4% by the year 2020. It is forecasted in the coming 10 years, the demand for internet tariff will be 30 times more than the current demand. This translates to ICT using more than 60% of the world energy resources if nothing is done. In Sweden the sector accounted for almost 1.5 Million tons of CO₂ emission in 2010, this translates to almost 1.2% of the entire Swedish GHG emissions. (Ericsson Energy and Carbon Report, 2014).

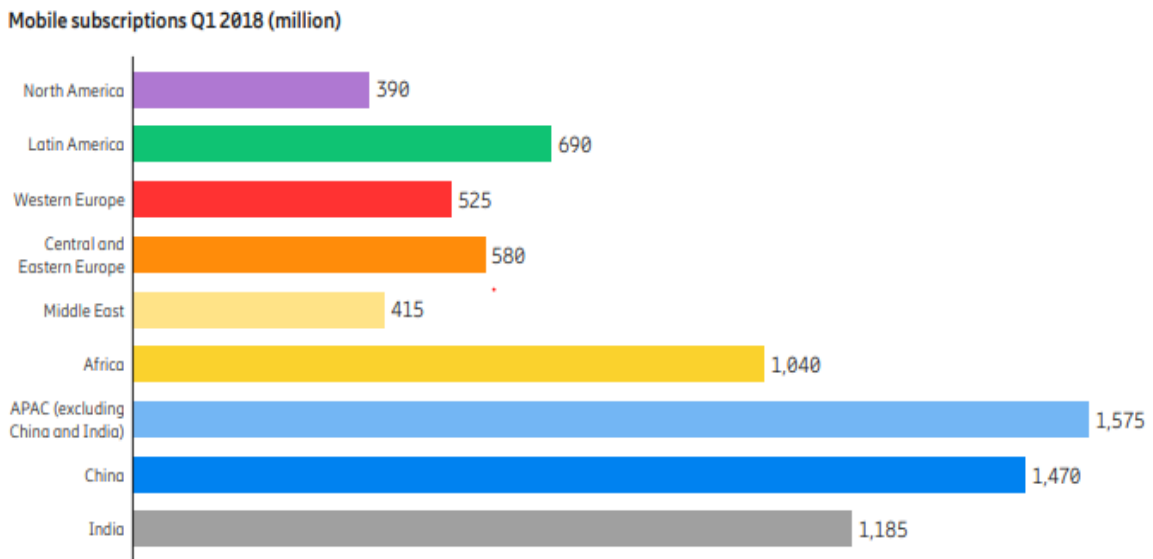
The total GHG emission for Kenya in 2013 was 60.2 Million tons of CO₂ emission which was equivalent to 0.13% of the world total, and Agriculture was the leading source contributing to 62.8% of total emissions while energy follows with emissions amounting to (31.2%), of these, fuel burning through industrial process and locomotives, taking up to 74.3% of emissions from the energy sector (WRI CAIT, 2017). Companies that have accepted their responsibility to the world around them have gone a step further and built social responsibility and action into their company values and mission statements. Nike, a leading shoe manufacturer has shown commitment to sustainable environmental practices as their products have 'reduction of toxic

substances, nil waste and 100 % recoverable product' (Kotler & Armstrong, 2006). It has Air to Earth Program, where it works with environmental organisations to sensitize school going children on conservation, reuse and recycling.

Richard *et al.* (2009) asserts that how an organization performs is the true result compared to their set goals and objectives. The successes can be looked at in terms of: financial outcome, the market it commands, and the benefits to the investors (shareholder returns). Initially, corporations were slow and not ready to invest in sustainable practices in their processes. These attracted costs were deemed to be reducing a corporation profits in the light of clamor for favorable investors review my company managers. But global competitiveness and consumer awareness has made companies that spend on environmental initiatives to be more attractive leading to higher profits. In almost all modern corporations it has become almost mandatory to set a unit for corporate social responsibility where most companies are opting for environmental protection initiatives and the concept of sustainability has become an inevitable subject (Ghauri, 2012).

The total number of Global mobile subscription was around 7.9 billion in 2018 and is forecasted to be 8.9 billion in 2023. The highest growth has occurred in China, India, Indonesia, Nigeria and Bangladesh. The global mobile phone penetration rate was at 66% of the global population in 2017 and it forecasted to be 71% in 2025 while the contribution of the industry to the GDP was at 3.6 trillion dollars (4.5%) in 2017 and is forecasted to be 4.6 trillion dollars (5%) in 2025. In Sub-Saharan Africa the subscriber penetration was at 4% in 2017 and is forecasted to reach 52% in 2025. Nigeria had the highest penetration of 49% in Africa in 2017 (GSMA Mobile Economy, 2018).

Figure 1.1: Ericson Mobility Report



Source: Ericson Mobility Report 2018

The top 5 world's biggest mobile telephony companies in terms of subscriptions are:

1. China Mobile Limited in China with 849 million subscribers
2. Vodacom Group with headquarters in UK with 439 million subscribers
3. Verizon Communication Incorporation in USA with 461 million subscribers
4. AT&T Incorporation in USA with 355 million subscribers
5. Airtel Group with headquarters in India with 340 million subscribers

In Africa the biggest mobile telephony companies include Vodafone, Airtel, Orange and MTN. (Sub-Saharan Africa Mobile Observatory, 2018)

In 2017, the mobile phone industries and services were able to generate up to 7.1% of the GDP in the Sub-Saharan Africa. It is forecasted that the industry will generate 7.9% of GDP in 2022. Regarding the mobile money transfer, the total value and number grew to get to 19.9 and 1.2 billion dollars with East Africa accounting for 56.4% of the aggregate users (Sub-Saharan Africa Mobile Observatory, 2018)

In Kenya, mobile telephony was first witnessed in 1999 when Safaricom Ltd which was born out of Telkom Kenya partnering with Vodafone Group PLC and KenCell Communications Ltd, now Airtel, where able to plan and launch mobile services. The mobile telephony services now comprise of 6 companies; Safaricom, Airtel Networks, Telkom Kenya, FinServ Africa, Mobile Pay and Sema Mobile Services limited among others. By September 2017, there were

a total of 40.2 million active mobile subscriptions and the penetration level stood at 90.4%. Safaricom had the biggest market shares of 71.9%, Airtel at 14.9%, Telkom at 8.4%, Finserve at 4.7%, Mobile Pay at 1.2% and Sema Mobile at 0.0%. (Communication Authority of Kenya (CAK), 2017)

From the start of mobile phones, it has increasingly been accepted as an essential facet of social and economic advancement. The government is major beneficiary of this industry through taxation like in 2017 the industry accounted to more than 11% of total GDP generation. In regards to employment, the mobile industry absorbed approximately 3.6 million people, ranging from the technical fields like qualified engineers, technicians, administrators to indirect service providers to mobile industries bringing about multiplier effect in the economy (Kenya Economic Report, 2017).

The networks of the telecommunication industry are still largely dependent on fossil fuel generated energy which is quite expensive and represents a significant cost in its pricing. Because this sector is growing at a very high rate, more so with population increase and urbanisation, the fossil fuel is becoming scarce and more expensive, research and adoption of alternative technologies that are efficient and environmentally sustainable is inevitable (Chatley, 2015). The mobile telephony sector has also played a big role in polluting the environment.

Mobile telephony is a linking component to the entire economy, with no exception today: overall, it is the inter-link between industrial growth, consumption and consumer choices. The telecommunication system can be used well to promote a sustainable environment through eco-friendly production process and consumer behaviour

1.2 Statement of the Problem

Green business practises are becoming an important area of focus for companies globally. Rising temperatures, skyrocketing fuel costs and changing weather patterns are considered negative effects of neglecting the environment (Kelly, 2008). The deleterious ramification of global warming which is characterised by unpredictable weather patterns and climatic conditions as been acknowledged throughout the world. As such, the state of global environment has attracted considerable global attention. In Kenya, the country experienced drought in 2017 and floods in 2018. Such extreme weather sets back the development process for decades (Polonsky, 2001). Destruction of the tropical rain forests, depletion of the ozone

layer and emission of carbon, have all led to global warming. Issues affecting the natural environment have elicited public debate and concern in recent years. In Kenya, there has been heated debate about saving the Mau Forest which is the biggest of the five water catchment areas in the Country where 60,000 people are to be evicted (www.nation.co.ke, 2019). In addition, Kenya has also banned the use, manufacture and importation of all plastic bags below 0.6mm in thickness for commercial and household packaging as it is the leading cause of environmental degradation (www.nema.go.ke). The late Nobel laureate Wangari Maathai was for a long time been a lone voice in the struggle to conserve the environment.

As organizations interact with the environment, processing inputs into goods and services, and discharging back into the environment, it is inevitable that the environment will get degraded. The traditional perception of the environment is evolving and a more aware consumers call companies to account for their environmental conservation initiatives. According to Fern (2011), companies that set social objectives and strive to achieve them position themselves to enjoy the benefits of such involvement. Empirical research and practice evidence that in the long run, an affiliation exists between social responsiveness of an organization and its corporate effectiveness (Kweyu, 2013). It is therefore necessary and important for organizations to protect the environment in which they operate.

Previous studies and research on green business practices have been conducted in the manufacturing sector ignoring the service industry which necessitates this study. According to Kassinis and Soteriou, (2013). They established that very little information has been published on the environmental effects of most service businesses, the impact they have of their environmental practices' vis a vis performance, and how they can effectively be managed to achieved sustainability. The telecommunication is in a growth trajectory at a very high rate in Kenya and no similar study has been conducted on this sector. Therefore, establishing this connection between green business practices and the mobile telecommunication industry in Kenya with regards to how they impact the company's performance both financial and non-financial is the focal point of this study.

1.3 Research Questions

The study sought to answer the following questions:

- i. What are the green business practices adopted by Safaricom in its operations?
- ii. What are the effects of green business practices on the firm's performance?

- iii. What are the challenges faced by Safaricom limited in implementing green business practices?

1.4 Objectives of the Study

1.4.1 Overall Objective

The overall objective of this study is to examine the effect of green business practices on organization's performance focusing on mobile phones service provider, Safaricom Kenya limited.

1.4.2 Specific Objectives

- i. To establish green business practices adopted by Safaricom limited
- ii. To examine the effect of green business practices on profitability of Safaricom limited
- iii. To examine the effect of green business practices on Safaricom's employee job satisfaction
- iv. To discuss challenges faced by Safaricom limited in implementing green business practices

1.5 Hypothesis

Hypothesis 1

Ho: There is significant effect of green business practices on profit of Safaricom limited.

Ha: There is no significant effect of green business practices on profit of Safaricom limited.

Hypothesis 2

Ho: There is significant effect of green business practices on Safaricom's employee job satisfaction.

Ha: There is no significant effect of green business practices on Safaricom's employee job satisfaction.

1.6 Justification of the Study

Telecommunication sector's performance in Kenya is growing in terms of energy consumption. Data centres and networks are the main consumers of energy in the information and communication technology (ICT) sector. They use energy sources such as fossil fuels, diesel, electricity, solar, wind and geothermal some of which contribute to greenhouse gas emissions. It is therefore important to seek for other green business practices that would lead to energy reduction such as reducing overreliance on fossil fuels, improving network efficiencies and investing in renewable energy. In Kenya, Safaricom which was inaugurated in the year 2000

is the biggest telecommunication company with 62.4% of the market share, 31.8 million customers and Ksh. 250.3 billion in annual revenue contributing 6.3% to the GDP (Safaricom 2019). It has therefore been used in this study in order to discuss the ways in which it adopts green business practises to enhance its performance

The empirical data obtained by the study will help various stakeholders in the mobile telecommunication sector. It will identify policy and legislative gaps and inform policy makers on the best strategies for sustainable green business practices. The research has also discussed potential challenges in green business practices allowing those intending to go green early opportunities to overcome these obstacles so as to succeed in green business initiatives.

The study will complement available knowledge on academia in the sector of green economy, consumerism, sustainability and green business practices. It will also be used as a base for more investigation in those fields. The outcome of this study will inform the possible areas that green business practices can be improved to achieve sustainability. Finally, companies will be able to assess the return on investments on the Green Practices for their businesses as well as assess efficacy, efficiency and effectiveness of green strategies.

1.7 Scope and Limits of the Study

This study only covered the effect of Green Business Practice on performance in the mobile telecommunication industry in Kenya and was limited to Safaricom Limited only and did not cover other organisations in the telecommunication industry. The study targeted only employees at the firm's Headquarters who were drawn from the various 11 Departments of Safaricom. Questionnaires were used to collect data where they were circulated to the targeted respondents. The analysis data was gathered from a population of 85 respondents out of the targeted 106 respondents within the head offices of Safaricom in Nairobi. In addition, there are some information that could not be disclosed because of business competition.

1.8 Definition of Operational Terms

Carbon Footprint - This is the aggregated amount of greenhouse gas produced by an entity whether directly or indirectly, the standard of measurement is tons of carbon dioxide.

Eco-labelling – This is the action of putting a mark on a product by some authorised body showing use of environmental friendly technology.

Eco-Products—These are goods and services designed according to eco-design concepts and principles that promote natural resource saving and ecosystem protection when compared to other similar products.

Environmental Impact Assessment - Is a systematic study used to determine the type and level of impacts that project is like the fibre cables and Base Transmitter Networks are likely to have on the physical, biological and social environment. The effects maybe positive or negative.

Green Business Practices- These is production activities that create income satisfying the needs of the present generation but take into account the needs of the future generations. These practices have minimal negative effect to the environment or they have positive impact to the contrary. Examples are of green business practices include; recycling wastes, sustainable consumption and production, resource efficiency, use of renewable energy etc.

Green Economy – it is an economic system that protects the wellbeing man and makes it better, it enhances social equity where environmental threats are significantly reduced and extinction endangered ecological services protected. The process has to be the least in carbon, use resources efficiently and caters for all (equity).

Green Growth – It is the process ensuring that economic growth is realised while protecting the natural ecosystem to protect livelihood.

Green House Gases – Refers to carbon dioxide, nitrous oxide, methane, water vapour and chloro-fluorocarbons occurring naturally and resulting from human activities. They absorb infrared radiation, hold heat in the atmosphere and lead to global warming.

Green Marketing – These are the activities by an organisation to make products, make it known, pack and brand products and services in a way that it is eco-friendly and acceptable.

Mobile Telephony- This is the use phones that can be used remotely rather than the old once that were in a fixed place.

Organization performance – It is the actual output or results of a corporation that is check against its goals and objectives. This can be in terms of financial performance, market penetration and return to the shareholders.

Sustainability– It focusses on meeting the current generation needs while making sure that the generation of the future are able get their needs as well. It comprises of 3 pillars, economic, environmental and social which are also known as profits, planets and people.

Sustainability Reporting – This is where an organisation publishes how it's operations affects the environment, society and the economy at large. It outlines the corporates strature and its values clearly showing the relationship between its plans and how they meet sustainability objectives. Safaricom has been producing sustainability report since the year 2012.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This Chapter details a review of existing literature on green business practices and how it has affected the performance of companies over the years at different levels; globally, regionally and nationally. It documents what green business practices entails and how the various components such as carbon footprint, renewable energy, green marketing, eco-design and eco-products have affected on the performance that are financial in nature and the ones that are not of financial nature. Finally, it discusses the challenges faced by companies in adopting green business practices as well as the theoretical and conceptual framework as well as identifies the gaps in the study.

2.2 Empirical Review

2.2.1 Effect of Green Business Practices on Performance

Global Perspective

Ngniatedema and Li (2014) studied the association between green processes and business's performance for the top 500 companies trading as public institution in America. Green processes were evaluated using 3 indicators which include; the green reputation of the organisation, its green policies and the impact that its operations has on the environment, while the performance of the businesses was weighted in term of book ratio, return on asset, profit margin and debt ratio. The study discovered significant differences between firms in the manufacturing sector and those offering services. Companies in the manufacturing sector were found to have a lower score in environmental impact due to the nature of their business activities and their green reputation had a higher score that is than those in the service industry. The results also showed market performance of service industries are greatly impacted by the green reputation while the impact on the environment and green policies have substantial impact on organisational performance of manufacturing industries.

Pietro, Brodin, Isaksson and Sweeney (2012) conducted a study in USA to show how financial analysis can integrate environmental issue successfully. They came up with a new way of showing this using fundamental principles of financial analysis where the method was applied practically on companies in the USA pulp and paper industry. The outcome indicated that organisations are faced with different environmental factors on various degrees, but the

environmental exposure may not be evident in the financial results or its current market valuation.

Robin (2013) in his study on how quick Service Restaurants are affected by green and how their customers perceived it in USA, they established that “go green” and being green are concepts that are widely adopted to improve the marketability of the firms. Firms’ engaged in these practices would promote products that are energy efficient, environmentally sound, locally produced, eco-friendly, green, organic and biodynamic. These industries, especially the hospitality sector, uses various ways to promote the green concepts, they established that the restaurants are adopting the green concepts at a lower rate than the other sectors in the hospitality industry, but they are following suite to improve customer acceptance (Deveau, 2009).

Weslyne *et al.* (2017) noted that manufacturers globally, go green so as to be competitive, to give back to the society and external stakeholders. They conducted a study among 59 US Midwestern SMEs in order to explore what motivates them to implement green business practices. The research revealed that majority of the firms are concerned about competitiveness and the costs involved than the social responsibility. Furthermore, the government policies and customers pressure seem not to matter so much to the SMEs but rather indirect pressure through incentives to practice green by the government , support programs and what other players are doing pushes them more for survival to the future.

In France, Delmas and Pekovic (2012) looked at how employee’s satisfaction is affected by green business among 5,220 employees in French Companies. The aim was to show how a company’s environmental policies affect its productivity and employee’s satisfaction. These companies had willingly implemented best international standards and eco-labels such as ISO 14001 certification, they were considered green. The outcome showed that these companies faired 16% much better in terms productivity and employee’s job satisfaction. Here, the workers are highly motivated, involve in more training and have more interpersonal relations, making them to be more productive than firms that do not embrace the practice.

Menzel *et. al* (2010) carried out a study among European automotive and pharmaceutical companies. The study investigated the trend and effects of environmentally friendly manufacturing on the financial performance of these companies with special attention paid to resource utilization. The methodology was done through the review of sustainability reports

published by the companies annually, noting the movement in resource usage and how it affected their financial performance. The results pointed to the fact that corporate performance is not significantly affected by going green. But in overall, they observed a decreasing trend in resource utilization more so electricity consumption and increased efforts towards carbon reduction.

Juriah (2010) in his study on how green practices affected the performance Malaysian Automotive industry established that with globalisation, continuous quality improvement and adoption of green technologies has tremendously improved. Most companies who want to remain competitive invest in Green Practices (GPs) like green balanced score card initiatives, green lean six sigma, and green supply chain practices. It was revealed that the automotive sector is deeply into eco-friendly practices where they adopt green innovation, advanced technology, develop green supply chains, strategic green improvement activities, and waste reduction activities.

Hua-Hung *et al.* (2015) researched on how green innovation impact on the environmental performance as well as corporate performance among 202 manufacturing companies in Taiwan. They used stakeholder theory to establish how stakeholders affect green innovation practices of corporations and the resulting impact on environmental sustainability. They established that government policies, competition and employees conduct had positive effects on adoption of green innovative practices. But there is a moderate effect of employee conduct and green product innovation.

In India, Gupta & Gupta (2018) analysed different measures taken by Telecom Industry in India to go Green as well as get the carbon footprint within the wireless and fixed line communication network. This was because of the realization that energy consumption from the telecomm sector was becoming an increasing contributor to the Global Greenhouse gas emission. The study was carried out on Airtel, Idea Cellular, Uninor, Ericsson, Huawei, BSNL and Bharti Infratel. The study recommended that the following low carbon solutions should be adopted by the telecom sector: energy savings techniques; introduction of clean/green energy; active and passive infrastructure sharing; Use free cooling instead of air conditioner for reducing electric load requirement; Government support subsidies, taxes and levies improving efficiency of backup power sources and battery improvement.

Regional Perspective

Chukwuka & Eboh (2018) researched on ten manufacturing businesses in Nigeria. They aimed and investigating how green business practices impacts on organizational performance of these companies. The results of the research showed that Green Business initiatives have a substantial positive impact on the selected company's productivity. Manufacturing firms from in developing economy that reduce their environmental impact are more productive than those that do not. It also found that green initiatives significantly and positively affect employees' productivity leading to productivity of the firms and clean environment.

Theodore (2013) analysed how green business affect retail sector in South African, the objective of the study was establish what constitutes green business in S.A supermarkets where five large players were used in the study. The questionnaires were based on different environmental variables and principles. They found that, most of them adopted sustainable procurement where eco-labelled products were favoured, they had a system of verifying the green claims where local and international sustainability standards were applied.

Local Perspective

Mercyline & Razack (2013) examined the linkages between profitability of manufacturing firms in Kenya and environmental performance. In this study, the indicators for profitability were return on assets and market share while those one for environmental performance were environmental management system and ecological efficiency. The green practices were shown by the EMS that is adopted by a firm where they were categorised as environmental leader or laggard. The analysis was done using panel data where the return on investments and ecological-efficiency were dependent variable and independent variable respectively. The analysis indicated when an organisation improves on how it uses its resources then it also increases its profitability. Organisations in the fore front in innovation were more profitable than market followers, but the once that are innovative and adoptive performed even better, showing the benefits of continuous innovation and bench marking initiatives to eco-friendly systems

Okeyo & Ragui (2017) tried to establish how implementation of green practices has impacted on the financial performance of Bamburi Cement Manufacturing Company in Kenya. They tried find out how land rehabilitation, waste management, alternative furl measures and reduction of emissions influence the financial performance of the company. They established that the company had moderately incorporated green processes. The recommendations were;

plant more trees at its quarry sites, ensure no spillage during transportation of materials, use more bag filters technology to reduce emissions, and consider using solar and wind energy as an alternative to petrol fuel.

Omonge (2013) studied on how green processes affect the competitiveness of commercial banks in Kenya, the objective was to find out how green supply chain management practices of commercial banks affect their overall performance. They found that most banks have adopted green in all production processes, monitoring, environmental collaboration, and purchasing. Green supply chain practices resulted to improved financial performance, superior services, reduction in wastages, increased customer base and operation efficiency. They concluded by recommending that for commercial banks to have competitive edge over their competitors, it is imperative for them to implement green business practices at the core of their strategy.

Omariba (2011), tried to examine how greening the supply chain influence on performance. His approach aimed at redesigning the supply chain (SC) by analysing the life cycles of different products with a view of looking at impacts on the environment. In his research, he identified green supply chain practices which entailed; the use of environmentally friendly inputs which can be used to produce products that can be recycled or they are beneficial to the environment, the objective was to minimise waste and reduce on the emissions that products have on the environment.

Okemba and Namusonge (2014) established that green manufacturing is partially correlated with organizational performance. They put out the following as the initiatives that an organisation can put so as to evaluate environmental impact when conducting capital budget decisions: increase stakeholders involvement in decision making, employee training to increase efficiency, setting up a dedicated unit or department for green processes and ensuring efficient coordination across units. Management systems can be thought of as; a monitoring process for both internal and external reporting, and compliance system.

2.2.2 Importance Green Business Practices

Global Perspective

According to Ambec and Lanoie, (2008) implementing green business practices is likely to reduce costs for an organisation. First, it gives it an upper edge over their competitors in the same business. Companies may address environmental degradation through several mechanisms such as selling pollution control technologies, reducing their costs and managing

risks that are likely to occur due to environmental degradation. The paper goes to discuss that green processes involves resource efficiency to minimise wastage, reuse where possible and recycling to realise economic, environmental and social sustainability. Some of the green practices include activities such as; green product design, recycling of waste, preventing pollution and energy saving initiatives.

Klimova (2011), put it that green business practices investment is strategic to an organisation as it will be the basis of future competitiveness. International competitiveness hinges on best practice rather than low cost initiatives. These may include; environmental technologies that are latest and seamless processes and services. The longevity of our economic system will be built on physical growth but also ecological protection for continued existence (sustainability), (Klimova & Zitek, 2011). Moreover, green business practices have been seen as the solution to our environmental problems in that natural resources are becoming finite day by day, for example forests, birds, minerals, fish or gas are limited in their supply. These resources cannot be recreated again after we have consumed the hence the need to sustain them or utilise them efficiently.

Martinez (2013) advised that environmental concerns should be integrated into the daily activities of an organisation. Green business practices should be highly entrenched into the organisation's strategy and operations into what he calls Environmental Social Responsibility (ESR). He further noted which frameworks are vital for the successful implementation of ESR listing management support and leadership as the main factor. The findings further showed that systematic pressures such as shareholders disapproval, economic instability and market volatility are the main constraints to successful implementation of ESR

Santos and Brito (2008) in trying to find out the best approach in addressing environmental challenges in an organisation, they identified use of environmental management systems as the key approach. This can be achieved through establishment of environmental objectives and targets, collection of prerequisite environmental data, analysing, and reporting of this information to measure firm's environmental performance. Such system is vital in mainstreaming environmental aspects in the organisation's activities.

Regional Perspective

According to Engel (2008), one of the Countries in Africa that has made substantial development in regards to environmental practices and legislation is South Africa. This has been possible through implementing regulations and legislations that focus on green issues and sustainability. The Country has a big percentage of the population that is aware of environmental sustainability and have the purchasing power to buy green products. This has been achieved despite the assumption that most businesses are still reluctant in greening their processes and products. Incorporating green practices was previously was previously considered a huge cost in terms of money by businesses, but businesses have now realised that they can no longer ignore negative impacts that their actions have on the environment because in the future, it will be extremely expensive. Businesses are now going green by using approaches and methodologies that reduce on pollution, use less resources, maximise on resource efficiency, recycle wastes and have positive effect on the natural environment.

Utilising alternative sources or renewable sources as a replacement of natural resources has been found to have positive benefitting the environment such as having low carbon emissions, reducing the amount of greenhouse gases that is produced into the environment leading to sustainability (Dallas 2008: 9). Additionally, sustainable consumption and production has resulted in efficient use of natural resources reducing the amount of wastes thereby conserving the environment. Gunningham, Kagan & Thornton (2003) asserts that sustainable businesses need to have green visions, green missions, environmental policies with strategic plans that are specific, measurable, time bound, and realistic.

Yusof (2013) researched on the best practices of greening the hospitality industry focussing on island resorts. His research aimed at discovering what are the best practices of resort operators as well as the factors that are prompting the best practice of these green hotels. The findings were that greening of the resorts have resulted in reducing the cost of operating these resorts resulting into savings. Additionally, each resort was found to be implementing different green business practice that is in tandem with their operating environment.

2.2.3 Carbon Footprint on Performance

Carbon footprint which is expressed in equivalent tonnes of carbon dioxide, is the total set of Green House Gas emissions caused by an organization activity through burning fossil fuels. (Ercin and Hoekstra, 2012). It is a measure of how our activities affect our environment, and in particular climate change. In order to track, reduce and manage carbon emissions,

researchers have developed different tools to calculate carbon footprints. These tools have helped organizations to identify their areas of high emissions after which they have developed mitigation measures to improve. Today many business report on their carbon footprint as a green business practice.

According to Nielsen et al. (2009), the business nature is ever changing resulting into complexities. Different methodologies have been developed for calculating carbon footprint however none of them has been able to take into account all the various breakdowns. This is also because the sector has not attained the maturity to sufficiently apply some of its methodologies globally.

Developing and implementing strategies that prevents pollution instead of those ones that capture and remediates it, has helped firms reduce GHG (Anderson & Newell, 2014; Riahi, Rubin, & Schrattenholzer, 2014). Studies have shown that preventing pollution has several gains such as more efficiency which in turn results into more productivity and this has helped in avoiding compliance costs and fines. (Hart, 2015). Therefore, preventing pollution has been identified as a mechanism that businesses can use to their advantage in cutting costs which strongly depend on liability and cost efficiency costs as well as efficiency and effectivity gains (Christmann, 2010). One of the challenges that businesses have been facing in relation to GHG emissions is the inability to realise savings made from reducing emissions in the short term due to lack of proper regulations. There are no regulatory punishments to firms that emit GHGs. Also, through international agreements like Kyoto Protocol, businesses have been urged to reduce their GHG emissions by conserving energy, using renewable energy and energy efficiency. (DeCanio, 2013).

2.2.4 Green Marketing

According to Ghoshal 2011, Businesses are now embracing green marketing as an approach of selling their services and products. Green Marketing entails activities such as modifying products, packaging in environmentally friendly, advertising products as eco-friendly, as well as eco-certification. He further explains that firms practice green marketing for the following reason; it is cost effective; change in customers attitudes demanding green products; pressure by governments to adopt green marketing through laws and regulations; pressure from other businesses in the same sector and finally desire to make profits.

Eneizan 2016, green marketing involves the five Ps of marketing while incorporating environmental concern, they include: green place, green products, green promotion, green price, green people and green processes. His study asserts that green marketing has positively impacted on the performance of companies as companies that implement green marketing are more likely to make more money, increase their turn over and market share than those ones that do not. Firms that practice green marketing are also believed to have strong brand as most consumers endear to them than those one that practice traditional marketing.

Telecommunication companies are now collecting and publishing environment related data visible to all interested stakeholders. Global Reporting Initiatives (GRI) is an organization that developed a framework of standards that businesses can use to develop their sustainable reports. Organisations use their sustainable reports in reporting on how its everyday activities impacts on the economy, environment and society (Klimova & Zitek, 2011). Sustainable reporting of a company demonstrates its governance as well as interlinks its role to the global economy. Through these reports, firms are able to clearly communicate to its stakeholders its broader performance outlining economic (profit/loss), environmental (carbon footprint, pollution, conservation mechanism) and social governance performance (gender, employee satisfaction, impact on society). These reports communicate both positive and negative impacts from which the business is able to set goals and reach them more effectively and transparently.

2.2.5 Renewable energy on performance

Renewable energy is collected from renewable sources that occur naturally. RES includes solar energy, wind energy, hydroelectric power, geothermal energy, bioenergy, ocean energy, etc. (Adejumobi *et al.* 2011). There are other alternatives to sources of energy that are not replenishable in nature. Although these are alternative energy rather than renewable energy, they use the existing energy more efficiently than older technologies. The use of renewable and alternative energy sources can save funds, conserve energy, save the environment, and reduce overdependence on energy supplies outside the country borders (Zobaa Bansal, 2011)

It is estimated that by 2020, the telecommunication industry will account for 60% of all energy sources. With increasing demand for energy, cheap and consistent energy sources have a major interest globally. Consumers and businesses are paying more attention to solutions such as nuclear, geothermal, wind and solar. Global investors, suppliers, consumers and distributors are easily attracted by low cost and reliable energy solutions as opposed to the expensive solutions challenging the domination of traditional sources such as electricity (Zhiyong, Lin,

and Guofang, 2018). Apart from producing reliable energy, the off-grid systems have greatly reduced power losses, maintenance and production costs (Tiwari, Bhim, and Goel, 2018). Today, more and more cellular networks are being powered by green energy sources. Telecommunication companies aim to reduce power consumption through efficiency and dependency on national grids and other sources like coals and diesel. (Hui-Ju, et. Al 2018)

2.2.6 Eco-design and Eco-products

Eco-design and Eco-products have various economic, environmental and social benefits and opportunities to organizations (Cramer 2002). Green business practices such as optimising inputs and outputs of the production process, sustainable consumption and production and increased efficiency have greatly improved the environmental performance of a products. Furthermore, adoption of eco-design approaches has promoted the application of Environmental Management Systems (EMS). Businesses use environmental data for marketing purposes or communicating to the consumers through eco-labelling which informs the buyer on the environmental performance of the product during purchasing. Additionally, eco-design and eco-products have contributed to the global sustainability.

Eco-products have given businesses an opportunity to distinguish themselves from other businesses in the same sector and industries, develop innovative products and enter new markets. Incorporating environmental aspects in to the design improves the image of the products. Furthermore, eco-design has allowed businesses to disseminate their environmental information to various supply chains. This improves the social image of the business as it presents on the environmental criteria and reports on environmental responsibility. Eco-design and Eco-products spur innovation among companies as they turn out to be better than their competitors, increasing employee motivation. Apart from competitive advantage over their competitors, green procurement and demands from new green markets are additional ways through which companies are now benefitting for implementing eco-designs and eco-products. Finally, marketing and communicating about the environmental profiles of products has played a critical role of creating awareness and knowledge among consumers (Stevens, 2016)

Most Businesses have developed methodologies and guidelines which provide basis for implementing eco-designs. Companies like Philips, Volvo, Samsung, have developed and published environmental guidance and eco-design manuals for their products. Tesla has an environmental guideline for its electric cars. (Cramer 2012). Companies are now investing on research and development so as to remain on top in regards to eco-designs and eco-products.

Most brands are now providing an environmentally friendly option for their products because of the growing demands for environmentally conscious consumers.

2.2.7 Challenges in Implementing Green Business Practices

The adoption of Green business practices could be hindered by various factors like lack of government support. Lee (2008) found that the government can boost awareness on green business practices through increasing funding, business training to promote the green supply chain initiatives and developing taxation policies. Failure to take part can be a barrier in green supply chain development. Cramer (2002) found other barriers lack of information regarding environmental benefit led to fewer firms adopting the green initiative, lack of management support, high Investment costs and existence of other techniques. Walker et al. (2008) categorized these challenges as external barriers of which he identified weak legislative frameworks, inability by the suppliers to commit to green business practices and other barriers affecting specific industries. High costs to fully implement green practices and lack of authenticity by leadership were identified as the internal challenges.

Different Companies have adopted ways of implementing Green Business Practices, and while success stories are told in different places, other companies continue to register challenges. In the maiden days of the modern environmental movement, ecological issues were easy to understand. For instance, if waste like oil was spilled into a lake, one could see it and smell it. The impact was local, immediate and acute, for instance, the death of fish. Today, the environmental problems are hidden, global, long-term and chronic. For instance, the oil spill in the Gulf of Mexico near Texas USA that occurred in April 2010 caused a drop in the US GDP as fishing and tourism was greatly affected. In case, the oil spill was not contained and cleaned up completely, both humans and marine life would have been affected in the long term.

Successful execution of eco-friendly practices in the telecommunication sector has its own costs and counterbalances. There is still need to research on energy efficient equipment as well as the most effective alternative sources of energy that can replace fossil fuels. These research and development require massive funding that most businesses lack. There is a misconception that renewable energy sources require massive investments to set up as compared to the grid electricity, fossil fuels or diesel generators. (Pooja 2015). Minimizing the adverse environmental impacts is a great challenge to many and requires the concerted efforts of the government decision makers, academicians, NGOs and the public. Another challenge by businesses is the negative perception about green products by certain consumers. Generally,

poor consumers are unable to pay premium priced green products and would rather buy traditional products that are cheaper in cost. This is partially entrenched in consumers incredulity of environmental claims that has been caused by companies that have green washed their products passing them off as green; thus, putting the credibility of the green products in doubt. Where there are no standards to ascertain green claims, consumers are left their own to decide whether the product is green or not.

Kotler (2004) identifies other factors such as regulations and policies varying from one country to another. This makes it difficult for regional and global monitoring. Also, environmental factors vary from region to region, motivating consumers differently (Kotler & Gay, 2004). Ottman & Terry (1998) argue that innovative environmental experts and product designers have faced the challenge of making considerable progress toward reducing the environmental impacts of products. There is huge demand for green products hence businesses should seize the opportunities and capitalize on these demands. Majority of these demands will continue to be driven by regulations like extended producer responsibility, product take back and recycling schemes. The more innovative companies will reap the benefits as well as become the market leaders.

In addition, Green Business Practices are still a relatively new concept hence there is no census regarding the suitability of some of the indicators even within the telecommunication industry given the diversity of the business settings. Governments should therefore embrace Green Business Practices by providing enabling environment as well as provide incentives to those companies that entrench sustainability in their business models. This could be through selective reduction of taxes as well as investments allowances on sustainable processes.

2.3 Theoretical Framework

This research had been guided by two theories that which are: Triple Bottom Line Theory and Resource- Based View theory

2.3.1 Triple Bottom Line Theory

In 1994, a researcher by the name John Elkington came up with the concept triple bottom line theory. According to Elkington, Businesses should measure their impacts on three different bottom lines. The theory explains that there is more to business activity than just making profit hence business should asses and report their activities based on Planet, People and Profit. Business are encouraged to adopt sustainable business models, for a long-time business had

focused on the traditional bottom line whose main concern was maximising profit and bonuses. The triple bottom line therefore encourages business to focus also on the people that work for them, the society that the business is based and also environmental performance. (Hindle, 2008)

There has not been any universal standard or variable to measure each of the three bottom lines making adopting the concept of triple bottom line a big challenge. Scholars have found it difficult to monetize the values linked with planet and people aspects of the organisation since they are essentially qualitative in nature. Even though some organizations have managed to build environmental portfolios and have also been able to report on the amount of money saved through employing some environmental and social initiatives, it is still limited to a handful of Businesses. (Ghuri, 2012). This study adopted the triple bottom line theory since it requires businesses to consider their economic, social and ecological aspects.



Figure 2.1: The 3 spheres of sustainability

Source: www.researchgate.net (the three spheres of sustainability) (accessed 28/09/19)

2.3.2 Resource Based View Theory

This theory argues that each organisation has a finite amount of resources of which some are tangible while others are intangible. Penrose (1959) who has been identified as one of the initial contributors to this theory theorizes that just by having resources does not make a business competitive, rather, competitive and profitable companies are those ones that use their

resources competently, efficiently and effectively. Also, as businesses enjoy the benefits of resources, they should make decisions on allocation and maintenance to provide competitive advantage. The types of resources for most businesses are; tangible (Financial, equipment, land); Intangible (technology, brand, culture) and Human (skills, motivation).

Makadok's (2001) differentiates between a resource and a capability. He views a resource as an observable and tangible such as a brand, a patent, a parcel of land, or a license, while a capability is not observable and hence intangible, cannot be valued, and changes hands only as part of its entire unit. He further states that performance of a firm is primarily determined by the resources that it possesses. Competitive advantage is achieved when an organisation employs its capabilities on these resources. This theory has been used to explain how the Safaricom's resources are utilised for the firm to improve on its performance. The research will reveal the extent by which the firm is implementing the green practices using its available resources and making profits in the process.

2.4 Conceptual Framework

Showing the interlinkages between dependent variable (Performance) and sets of independent and intervening variables. According to this conceptual framework above, increased environmental efficiency together with good intervening variables will result in improved performance.

Independent Variables

Intervening Variables

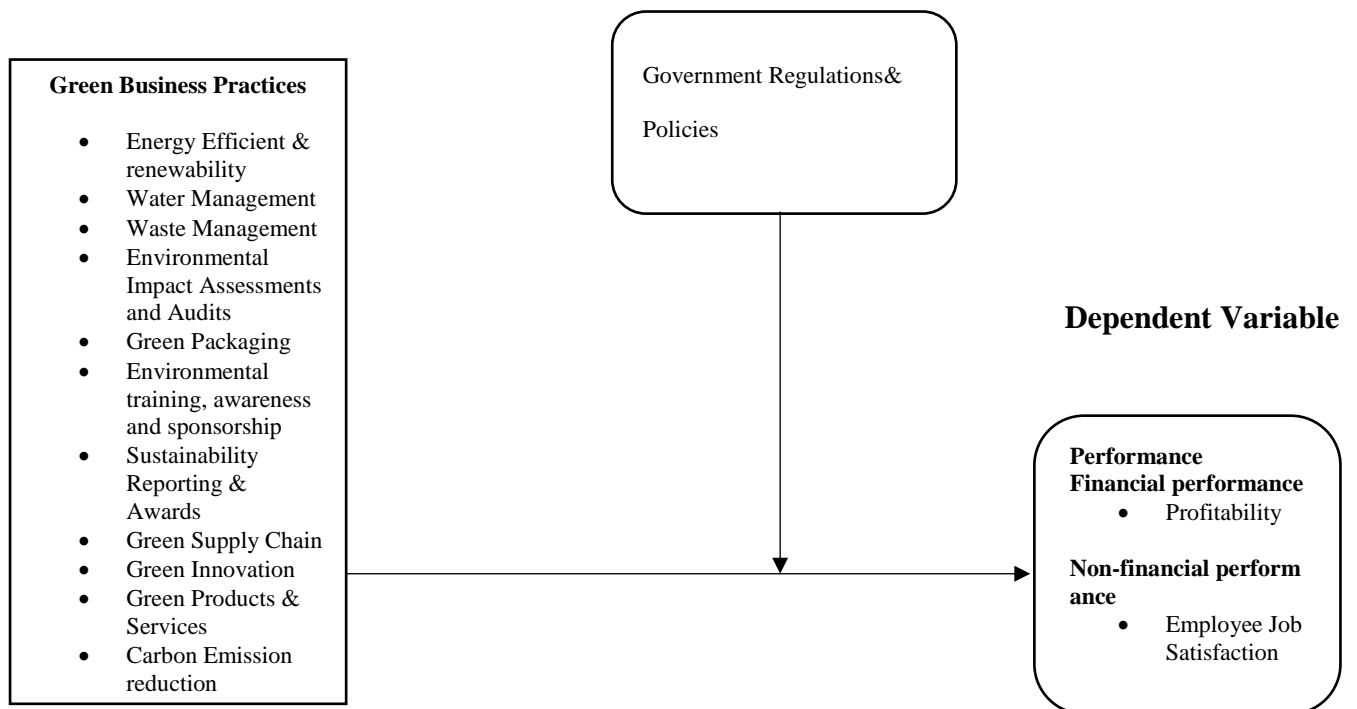


Figure 2.2: Conceptual Framework

Source: Researcher 2019

2.5 Research Gaps

This study anchors on the empirical studies in terms of methodological approach and the conceptualisation and operationalisation of variables of interest. In particular, the empirical studies reviewed provided relevance in designing this study and expounded on the explanatory variables that might affect the adoption of green business practices. From the findings of previous empirical studies, it is noted that most of the studies such as (Ngniatedema ad Li, 2004); Menzel et. al. 2010); (Hua-Hung et al., 2015); (Delmas & Pekovic , 2015); (Sarkis, Zhu & Lai, 2011); (Chukwuka & Eboh ,2018); (Theodorre, 2013); (Mercyline & Raack, 2013); (Okeyo & Ragui, 2017) (Okemba & Namusonge, 2014). Murphy (2012); (Mwaura, Letting, Ithinji, Orwa, 2015); Momanyi, (2013) and Ong'ong'o, (2012) among others conducted studies related to green practices on performance but focussed on manufacturing industry. Few that investigated the impacts in service industry did not focus on the telecommunication industry. Furthermore, a review of the literature indicated that majority of the research were conducted in developed Countries like United States, France, Malaysia, Australia, China, Hong Kong, South Korea, Nigeria, South Africa and failed to focus Kenya as a Country. There are more published researches in developed countries than in developing nations such as Kenya. It was observed that studies conducted have scantily dealt with the impact of green business practises on the performance of firms and more specifically telecommunication sector in Kenya. Therefore, this study will fill this gap by establishing the impacts of green business practises on both financial and non-financial performance in the telecommunication industry.

In Kenya, some of the studies on green marketing that have been undertaken include the following: Kiongera (2003) surveyed on some of the green marketing practices that are implemented at Bamburi Cement in Athi River; Chebet (2013) established behaviours of consumers in the Kenyan supermarkets in relationship to green marketing. Aida (2016) sought to establish whether how Kenyan airlines are adopting green marketing practices and it it has ant non-financial impact on their performance. Bakari (2013) conducted a research among small and medium sized enterprises in Mombasa. He aimed at finding out if they practice any greening of their business. These studies in Kenya mainly concentrated on green marketing and green supply chain practises and did not consider the green business practises and their effect on performance in the telecommunication industry in Kenya and thus the need for the study.

Some challenges faced while implementing Green Business Practices are unique to developed Countries and not developing Countries. This study will therefore establish the challenges faced by firms in a developing Country like Kenya. Green business practices are still a relatively new concept hence there is no census regarding the suitability of some of the indicators even within the telecommunication industry given the diversity of the business settings.

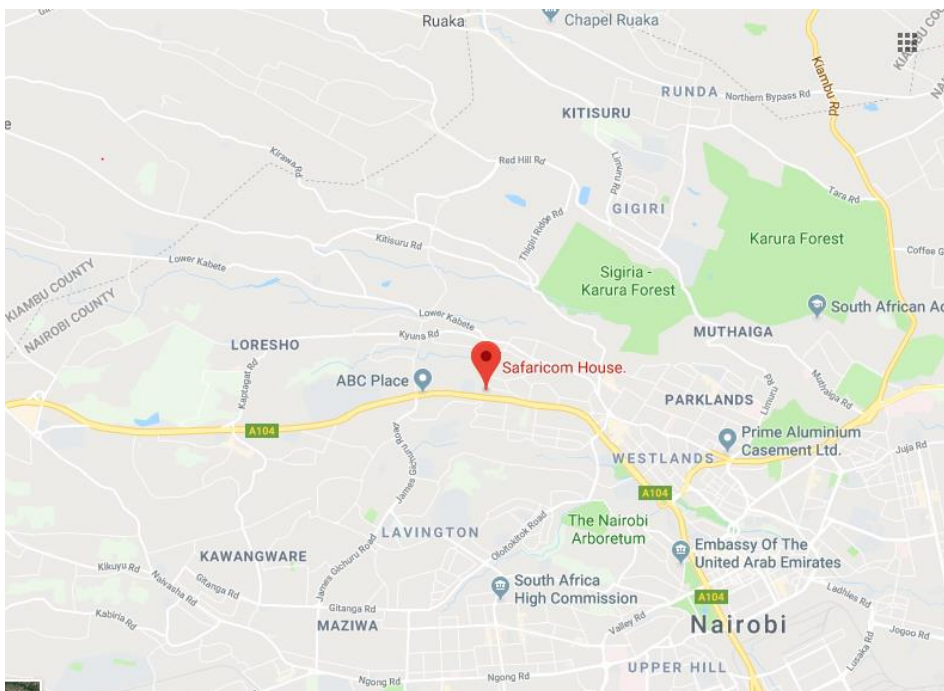
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Study Area

The study was conducted at the Safaricom headquarters in Nairobi, Kenya. The firm's headquarter is located along Waiyaki Way in Westlands at Safaricom House approximately 8 km from the Nairobi CBD. **Safaricom Limited** is a telecommunication company that was founded in year 2000. Some of the services provided by Safaricom include mobile telephony, e-commerce, mobile money transfer, cloud and hosting services, sale of electronics, data, fibre optic services and music streaming.

Safaricom controls approximately 62.4% of the Kenyan market as at June 2019. Safaricom has a subscriber base estimated at approximately 31.8 million, 4949 network sites, 6700 km of fibre optic footprint and annual revenue of Ksh. 250.3 billion. Safaricom has employed over 4,000 people, who are based all over Kenya. It aims at transforming lives through the various services and products that it offers to its clients. The study population for this study was Safaricom employees based at the headquarters ranging from the senior management to junior staff.



Source: google maps

Figure 3.1: Map showing the location of Safaricom Headquarters



Figure 3.2: Image of Safaricom House in Westlands

Source: safaricom.co.ke

3.2 Research Design

The study used descriptive research design which utilised open ended questions to collect data. The study aimed at collecting information on how Green Business Practices affect Safaricom's performance. Questionnaires were appropriate for this study because they helped in collecting data from a huge population of respondents and allow the researcher to compare the outcome with the best practice in other parts of the world.

3.3 Target Population

Three Hundred and fifty (350) employees of Safaricom PLC based at the firm's Headquarters in Westlands were targeted. These employees were drawn from the 11 departments of Safaricom Limited that include: Technology; Internal Audit; Financial Services; Resources; Customer Operations; Enterprise Business Unit, Business Development; Consumer Business Unit; Corporate security, Finance and Corporate Affairs

3.4 Sampling

Stratified multistage simple random sampling technique was used. The Sample was stratified into the 11 departments. After stratification in terms of departments, the sample was further clustered into four stages according to the position of employees in Safaricom which were senior management, managers, senior staff and junior staff. Finally, simple random sampling method was used to select respondents that enabled the researcher to achieve the objective of

this investigation. When the target population is less than a thousand people, a minimum of thirty percent is recommended as adequate for educational research. (Orodho, 2002). The researcher used 30% of the target population of 350 respondent giving a sample size was 106 respondents as shown below.

Table 3.1: Target population

Target	Target Population	Sample Size (30%)
Senior Management	12	4
Managers	60	18
Senior Staff	92	28
Junior Staff	186	56
Total	350	106

3.5 Research Instruments

Quantitative methods were used to collect quantitative data: questionnaires obtained numerical data while qualitative methods were used to obtain qualitative data: in-depth interviews and observation to understand key issues explore possibilities and understand green business practises. The interviews were guided by an in-depth interview guide. Questionnaires were found to be adequate for the study because of their ability to collect information that can not be directly observable. They also capture accomplishments and experiences of individuals.

The research questionnaire has sections with open ended questions and others were closed ended. The questionnaire was made to capture the three objectives and was divided into two subsections. The first section enquired general information about the respondents such as age, gender, educational level and department, while the second section sought to answer the three objectives which were the various green business practices adopted by Safaricom; the effect of these green business practices on profitability and finally the effect of the green business practice on employee’s job satisfaction . Qualitative data was obtained through in-depth interviews with the Head of environmental sustainability and Manager Resources. Although four interviews were scheduled, the researcher was only able to reach 2 as stated above.

The purpose of employing the key informant interview method was to derive qualitative data from the senior managers who are more informed about the green business practices within the company. Face to face was used in conducting the key informant interviews as opposed to

telephone interviews. A more informal approach was adopted to reduce ambiguity in repeating the questions since it allows the interviewees to respond outside the box, be more open to the researcher, and it saves time for the interviewee. An interview guide was however used to guide the researcher not to forget any important issues that the researcher had planned to raise. This guide also guides the time the interview takes, and ensures the interview remains within the areas of interest.

3.5.1 Reliability of Research Instruments

The questionnaire’s reliability was assessed through Cronbach’s Alpha which measures the internal consistency. This was calculated by using the statistical package for social sciences version 20. Usually the value of the alpha coefficient ranges from 0-1 and may be used to describe the reliability of factors extracted at 0.5 significance level from dichotomous or multi-point formatted questionnaires or scales. A more reliable scale is shown by a higher value while less reliable scale is indicated by less value. Cooper & Schindler (2008) indicated 0.7 to be an acceptable reliability coefficient.

Table 3.2: Reliability test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.930	.925	85

Source: Field data

From table 3 Cronbach's alpha was calculated as 0.930 which indicates a high level of internal consistency for our scale.

3.6 Data Analysis Techniques

Data that was collected through the questionnaire was cleaned by checking if they are complete or some questions were answered twice or ignored all together. Once that was done, the valid questionnaire was coded by putting the responses in the respective category. Some questions needed binary answers while others were left open for the respondent to answer. After the coding was complete, they were entered and analysed using Statistical Package for Social Science (SPSS, Version 20). The data was analysed according to variables and objectives of the study. The variable data was measured using an ordinal scale of measurement where the indicators were given scores of 1-5. The scores of data in the questionnaires were recorded and evaluated in terms of expected results. The expected results were assigned most favored score

of 5 while the less favored score was assigned the value of 1. All the resulting scores were added then averaged to get the score. Qualitative data was analyzed using content analysis. Qualitative data was extracted from the interview guides and the open-ended questions on the questionnaire.

The data collected from the key informants were read and re-read for similarities and differences. Each question represented a topic, and the various responses were grouped into similar ideas, terms, or ideologies. Significant differences were also noted and presented in the results and discussion section. In-depth interviews were used to add on the information collected through the questionnaires.

3.7 Ethical Considerations

Ethical principles were used to ensure that the rights of participants are protected all times during the progress of this study. Before data collection, I sought for permission from the University of Nairobi. A research permit was given by NACOSTI and Authority to conduct this study was obtained from Safaricom Limited. The participants were also assured of the confidentiality of information provided and that the information obtained was used for academic purposes only. Confidentiality was ensured by limiting the accessibility of the data to the researcher only. This was done by use of passwords in the computer contained the data. In addition, to ensure de-identification and anonymity of the respondents, no names were used in the questionnaires.

CHAPTER FOUR

RESULTS AND DISCUSSION

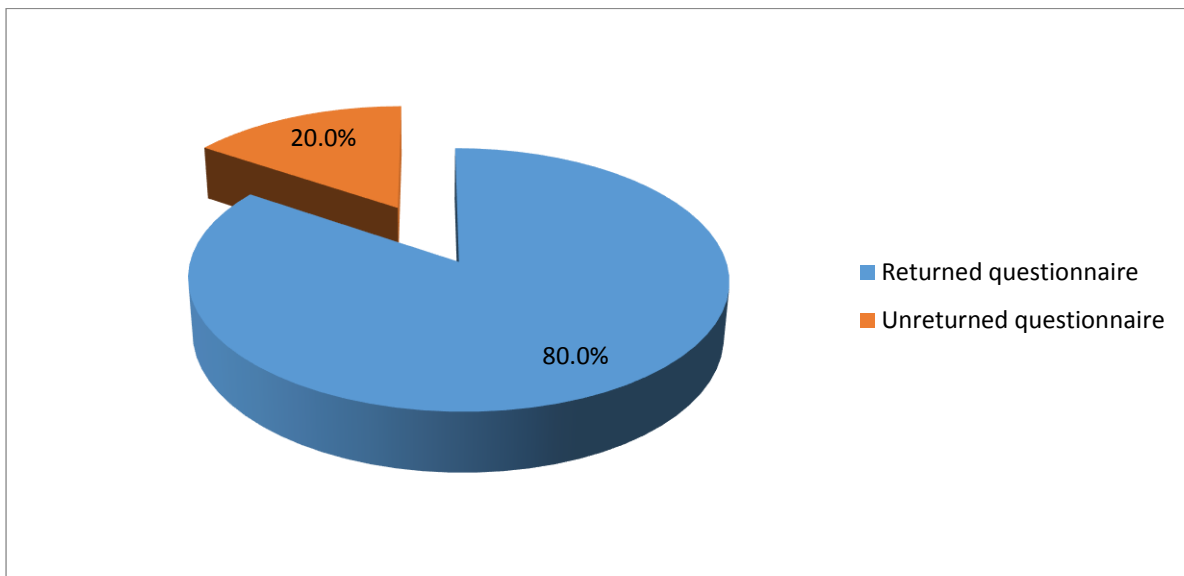
4.0 Introduction

This chapter seeks to answer the research objective of determining the effect of Green Business Practices on an Organization's Performance using Safaricom Limited as the case study. It presents the response rate, descriptive statistics, inferential statistics and discussion of the results in line with the objective. Descriptive statistics is captured in terms of mean and standard deviation of the observation.

4.1 Response rate

As discussed previously, this research had a sample size of 106 respondents therefore 106 questionnaires were distributed. Out of these, only 85 filled in and returned the questionnaires. This made the response rate to be at 80% which is considered adequate and satisfactory for academic research.

Figure 4.1: Response rate



Source: Field data

4.2 Characteristics of the respondents

This research sought to establish the characteristics of the respondents in terms of their age group gender, years worked in the organization, level of education and the respective department in which the respondents are assigned within Safaricom Limited.

4.2.1 Gender

Table 4.1: Gender

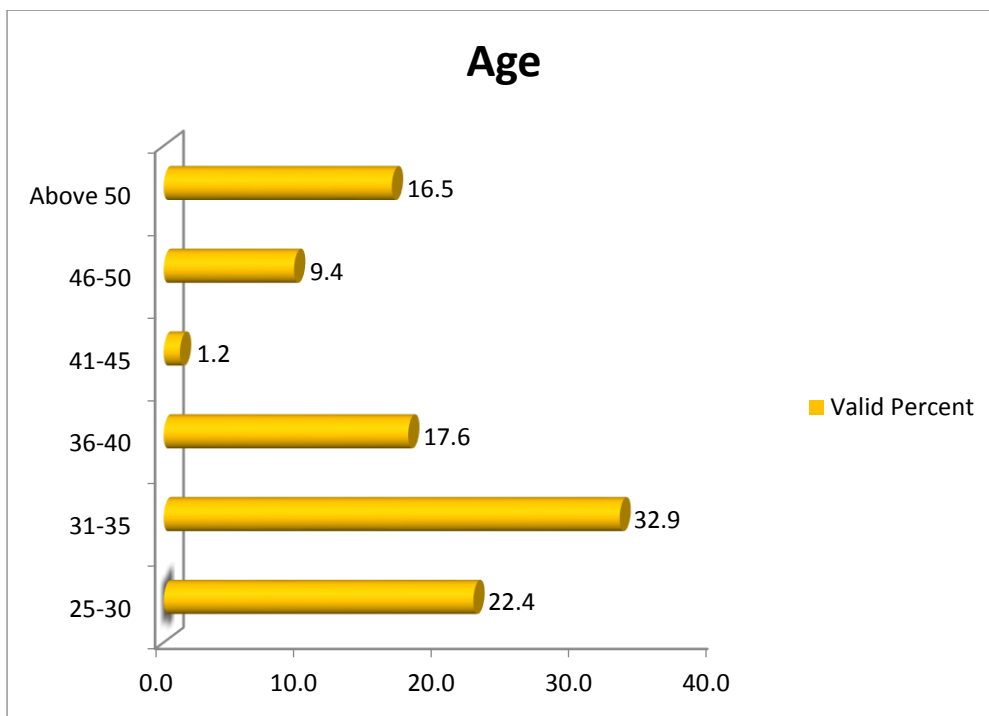
	Frequency	Percent
Female	49	57.6
Valid Male	36	42.4
Total	85	100.0

Source: Field data

Table 4.1 demonstrates gender distribution for the respondents. More than half of the respondents who participated in the study were female (57.6%) while male constituted 42.4%. It is noted that Safaricom is one of the Companies with 50% of the workforce being female employees.

4.2.2 Age

Figure 4.2: Age distribution

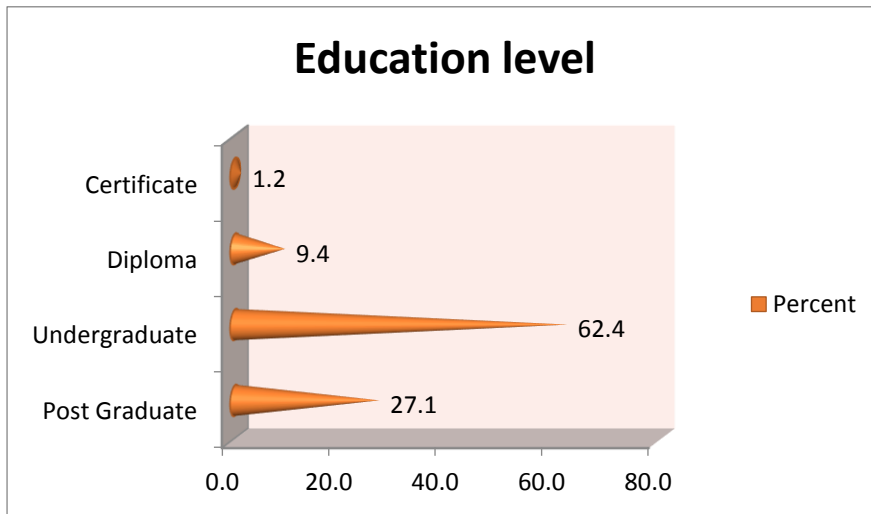


Source: Field data

Figure 4.2 indicates age distribution of the respondents who participated in the study. As illustrated, majority of the respondents (32.9%) are of the age between 31 and 35 years, 25-30 years were 22.4%, 36-40 years were 17.6%, above 50 years were 16.5%, 46-50 were 9.4% while 41-45 years were only 1.2%.

4.2.3 Education level

Figure 4.3: Education level

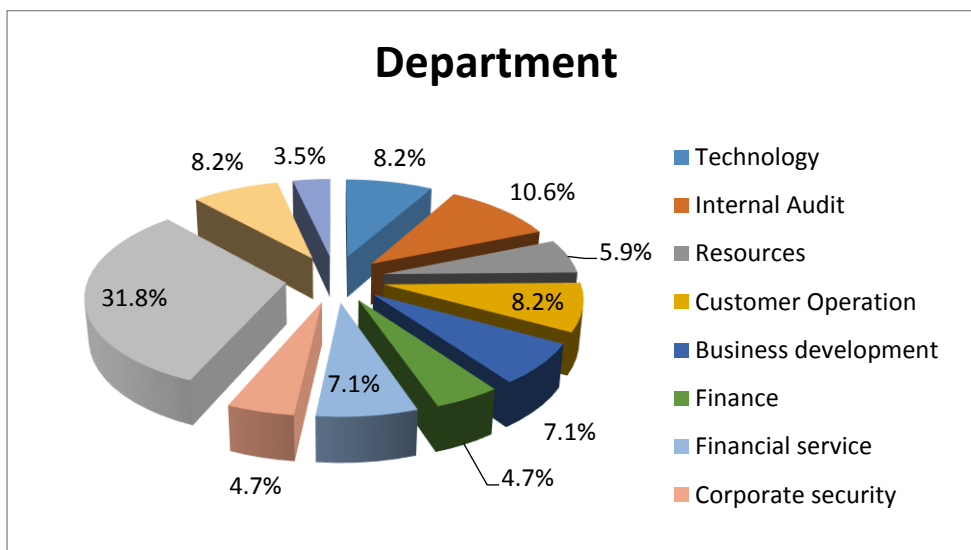


Source: Field data

The study inquired on the respondent's level of education. This information is crucial in research since it signals the level of knowledge of the topic of study by the respondents. Education level further elicits the reliability and validity of the study findings. Figure 1 illustrates that majority of the respondents who work with Safaricom Limited possess undergraduate qualification (62.4%), 27.1% have post graduate qualification, 9.4% possess diploma while only 1.2% have certificate credentials.

4.2.4 Department

Figure 4.4: Department



Source: Field data

Respondents were evenly distributed in the eleven departments of Safaricom Limited with majority (31.8%) working in the department of corporate affairs and only 4.7% working in the resource department.

4.4 Green Business Practices adopted by Safaricom Limited

The first attempt was to establish whether Safaricom Limited has adopted Green Business Practices and also to identify some of the GBP that Safaricom Limited has adopted.

Table 4.2: Knowledge of GBP at Safaricom Limited

		Frequency	Percent
Valid	Yes	76	89.4
	No	9	10.6
	Total	85	100.0

Source: Field data

Table 4.3 indicates that majority (89.4%) of the respondents are aware of GBP adopted by Safaricom Limited. Only 10.6% of the respondents are unaware of GBP within Safaricom Limited. Safaricom has adopted various GBP and some of them include:

- a) **ISO 14000 series certification** – in 1996, the international Organization for Standardization (ISO) developed ISO 14000 series which are international standards used by organisations globally to managing best environmental practices. It was developed as global concern on effect of industrialization on the environment. Safaricom is ISO14001; 2015certified. In addition, Safaricom is participant of the United Nations Global Compact by adhering and reporting on how it complies to the its 10 principles.
- b) **Energy Efficiency and Renewability** – The networks at Safaricom uses several energy sources such as national grid, diesel generator, renewable energy (wind, solar,hybrid). An increase in networks size and sophistication has made energy efficiency and reliability to remain a priority. This has been achieved through several initiatives such as; reducing overreliance on fossil fuels, improving site efficiencies. The company has developed a comprehensive Fuel Management System (FMS) which has a played a key role in reducing theft as well as optimizing fuel supplies across all the networks. It has also reduced the number of sites relying on diesel generators and replacing them with national, wind and solar solutions as shown below.

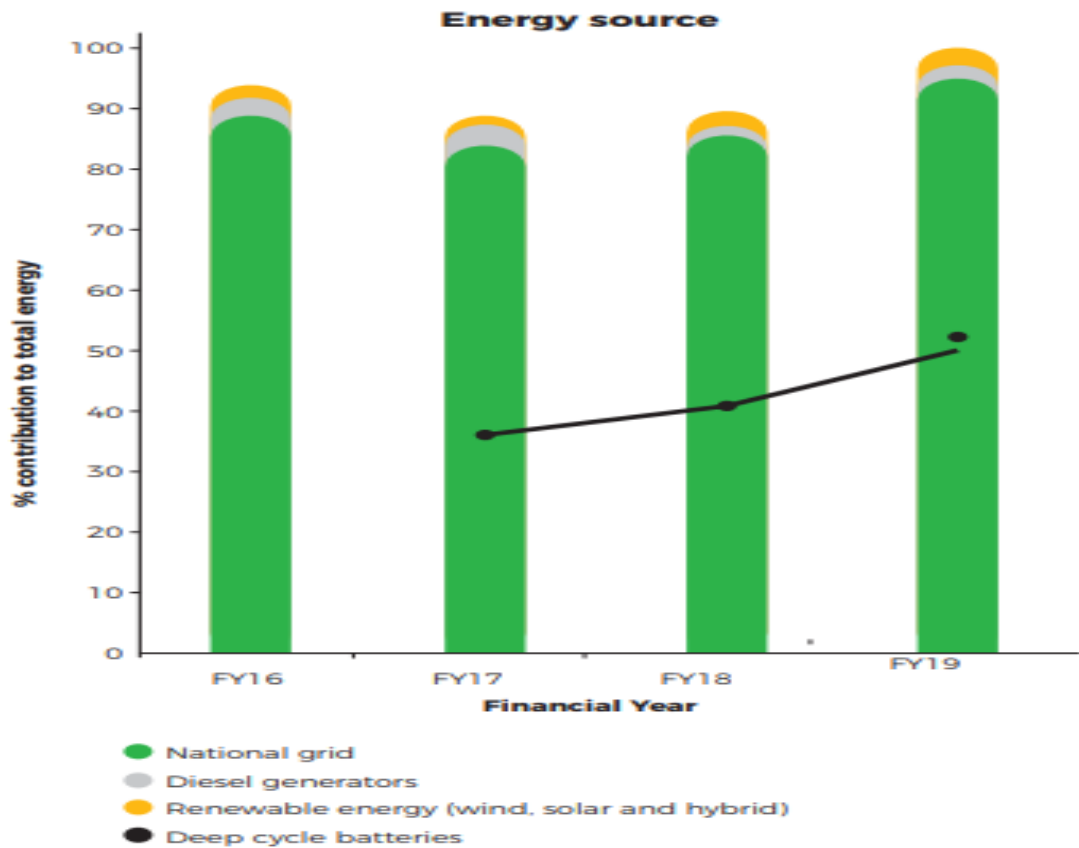


Figure 4.5: Network Energy Sources

Source: (www.safaricom.co.ke)

- c) **Water Conservation** – Safaricom tracks and measures its water usage every year. This has been achieved through installation of meters on kitchen inlet pipes to measure water usage more accurately as well as termination of the reverse osmosis process on their boreholes. More emphasis is put on effective and efficient water use. The increase in the amount is as a result of increase in new offices and expansion. The figure below shows the water use from 2016 to 2018.

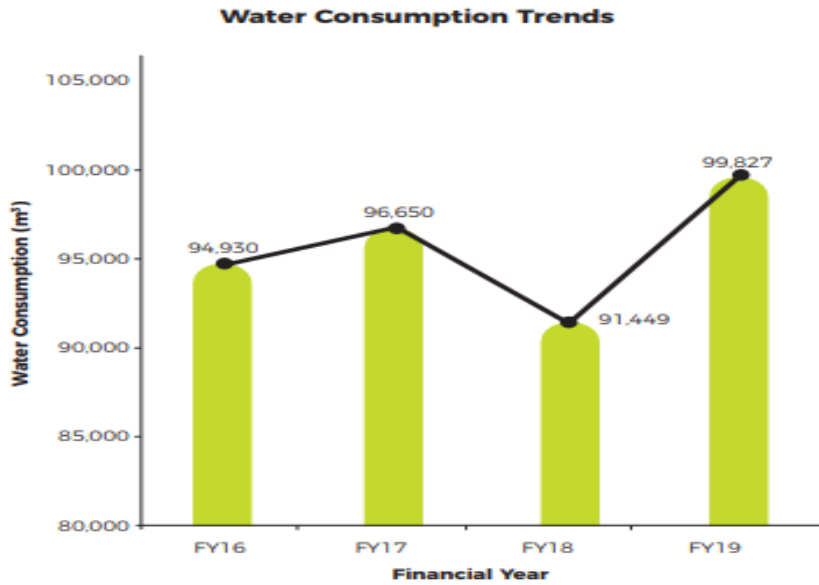


Figure 4.6: Water Consumption

Source: Safaricom 2019

- d) **Waste Management** – The organization’s moto on waste is to take zero waste to landfill. The company has rolled out an integrated waste management Programme where waste is separated, reused repurposed or recycled. Safaricom has partnered with a waste company called Taka Taka Solutions which has a recycling plant, the recycled are sold hence earning the company credits. It also does sustainable sourcing where by a product’s life cycle is analyzed (end to end)) and considers buying from companies that accept old equipment.



Figure 4.7: Waste segregation.

Source; Field photography



Figure 4.8: Waste collected

Source: Safaricom, 2019

On electronic waste the company initiated an e waste management programme which included an awareness training on the dangers of e waste as well as collecting e wastes for end to end treatment. This is done in partnership with the Waste Electrical and Electronic Equipment (WEEE) Centre. To date the company has collected 1,072 tonnes of e wastes as shown below.



Figure 4.9: E-waste collection points; Source field Photography

Cumulative E-waste Collected (tonnes)

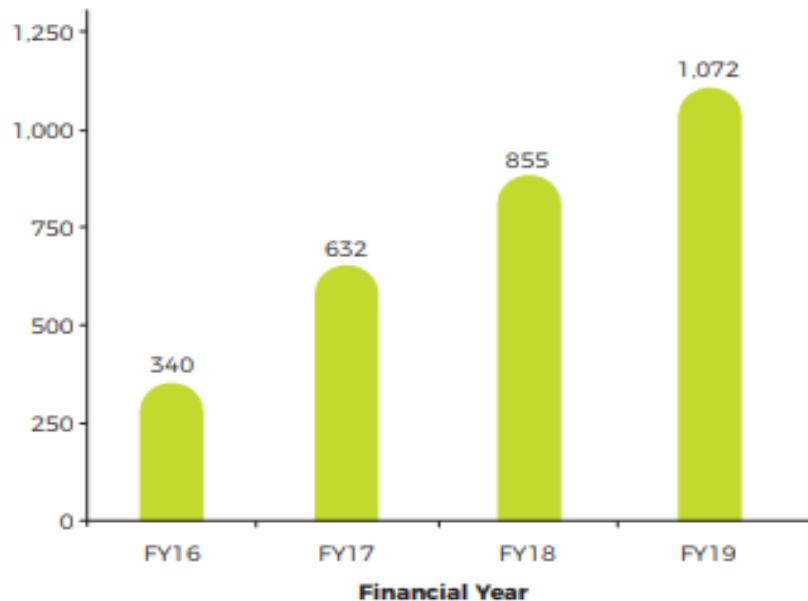


Figure 4.10: E-waste collected: Source: Safaricom.co.ke

- e) **Plastic Free Waste Organization** – The Company has embarked on becoming a plastic free organization through eliminating all single use plastic at offices as well as minimizing the plastic used in retail packaging. This has been achieved through these initiatives: banning single use plastic in all the cafeterias across the county providing reusable water glasses for use by visitors, encouraging staff to carry reusable water bottles, reducing the sizes of SIM cards into half. This has removed 2.52 tonnes of plastic from the organization, conserved 8.62 tonnes of paper and saved Kshs. 46.8 million.



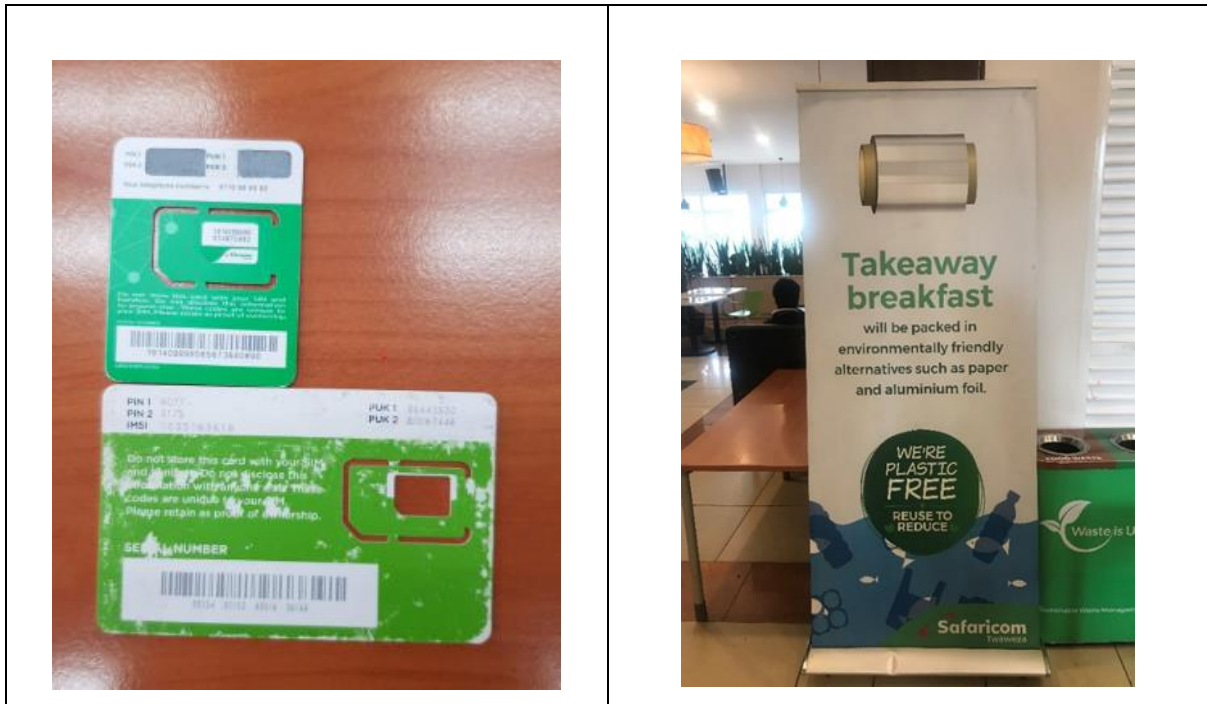


Figure 4.11: Plastic free awareness materials and Sim cards

Source; Field photography

- f) **Conducting EIAs, EAs and Monitoring** - In compliance to the Environmental Management and Coordination Act, Safaricom has been continuously monitoring and evaluating its environmental impact by conduction EIAs on its infrastructural development such as new Base Transceiver Systems (BTS), fibre optic networks and Environmental Audits (EA) for existing infrastructure as required by NEMA. In 2017, the organisation undertook 527 EIAs and 447 EAs as compared to 463 and 342 in 2016 respectively.
- g) **Planting trees** – As a way of carbon sinking, the company has partnered with Kenya Forest Services to pant 1 million trees over the next 5 years. Safaricom has also been providing seedlings to companies with land needing restoration, which when planted, contributes to carbon sinking.
- h) **Environmental Awareness and Trainings** – The staff are trained regularly on the importance of conserving the environment. They have also been tasked on ensuring that they reduce their personal carbon footprint.
- i) **Environmental Sponsorships** – Apart from participating in environmental clean-ups, other companies sponsor environmental conservation ventures and participate in the events through which funds are raised to help conserve the environment. Some of the

Environmental activities that were held by the company include; Lewa Marathon, Climate Change Hackathon, Construction of electric fence along Mau Eburu forest, ‘Maji naUhai’ project, Global Goals World cup among others.

- j) **Carbon Emissions Reductions** – The Company has committed to becoming a net zero emitting company by the year 2050. This shall be achieved through improving energy efficiencies, deploying renewable energy solutions and exploring carbon offset programmes. In addition, the company has developed a Staff carbon footprint calculator which is a tool that allows staff members to calculate the amount of greenhouse gases emitted into the atmosphere as a result of their personal activities. They also track, monitor and report on their carbon footprint for the last seven years of which the emissions for 2018/2019 were 65,708 tCO₂e.

The Company has partnered with Kenya Forest Services to plant one million indigenous trees over a span of five years and this is expected to offset 300,000 tonnes of carbon.

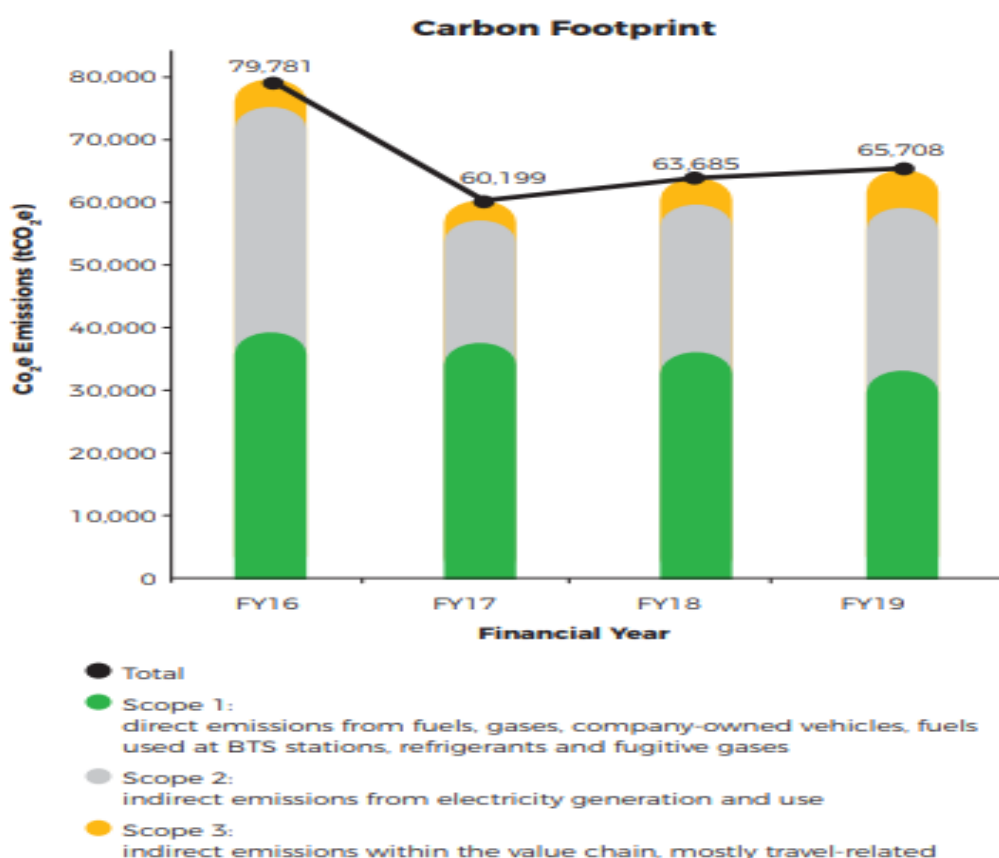


Figure 4.12: Company’s Carbon Footprint

Source: (www.safaricom.co.ke)

- k) **Green Bond** – The Company has developed a draft framework for issuing a green bond that would be used to fund green solutions in the facilities. The framework has already been discussed by the stakeholders and is awaiting approval by the management.
- l) **Sustainability Champions & Awards** – The Company has more 50 Environmental champions whose role is to increase awareness among peers on environmental sustainability.
- m) **Green Supply Chain** - Safaricom aims to reduce their overall emissions through their suppliers. Studies have shown that companies can reduce their carbon footprint by using suppliers who reduce their GHG emissions in their own product operations by using energy responsibly and making sparing use of natural resources (Chaabane, 2011). Safaricom is implementing a Green Procurement Policy as from 2018 across all its business.
- n) **Green Base Stations**–Safaricom has rolled a total of 256 green base stations. In places where the base stations are located in the Forests or national park, they are made in the shape of a tree so as to blend with the surrounding landscape.
- o) **Electromagnetic Frequencies**–There has been concerns on electromagnetic frequencies impact on human health and the general environment. Safaricom has therefore done training and awareness campaigns among engineers, Communication Authority, KARA, NEMA. The company has continued to conduct annual audits to measure radiation which have all been lower that the ICNAP and WHO standards. They also ensure that equipment type approval as per the standards set by WHO. Employees working on the base stations have been trained and follow procedures depending on durations of exposure.
- p) **Green Office** – Though the offices have not been officially certified, although they have a comprehensive energy management system. The lights have sensors that go off while not in use. The kitchens have also been fitted with water meters to monitor water usage. The new offices have large windows that ensures use of natural lights and fresh air during the day.
- q) **Green Products & Services** – Safaricom strives to introduce and promote use green products and services such as M-pesa, M-kopa Solar. Mpesa has greatly reduced the use of scratch cards resulting to saving on paper for the Company.
- r) **Sustainability Reporting and Environmental Policy** – The Company has an environmental policy in place that acts as the main guidance material for environmental

mainstreaming and activities across the business. It has also been reporting on its environmental impacts since 2013 through the sustainability reports.

Basis of Adopting Green Business Practices

Empirical findings have indicated that firms are more likely to be more profitable when they improve on their efficiency while utilising resources. In addition, firms that are proactive in implementing green practices tend to perform better than those that are reactive. Essentially businesses that combine both proactive and reactive approaches in addressing environmental sustainability perform even better. Table 5 illustrates that Safaricom Limited has adopted a proactive approach (81.2%) in dealing with Green Business Practices.

Table 4.3: On what basis are the GBP adopted

	Frequency	Percent
Proactive Approach	69	81.2
Valid Reactive Approach	16	18.8
Total	85	100.0

Source: Field data

4.5 Business Practices and financial performance of Safaricom Limited

The main objective of the study was to assess the effect of Green Business Practices on the firm's profitability with reference to Safaricom Limited. A number of functions of GBP were identified on the likelihood of their effect on performance of firms. Respondents were required in a scale of 1 to 5 to indicate the extent to which they agree on how these factors impact on organization's performance where 1= to a small extent, 2= to some extent, 3=to a moderate extent, 4=to a great extent and 5=to a very great extent.

Table 6 indicates the mean, standard deviation, skewness and kurtosis of the components of GBP adopted by Safaricom Limited. The functions with the highest scores were: Sponsorship of environmental ventures and events (mean of 4.07), Energy savings and efficiency (mean 4.00), Presence of Company Environmental Policy (mean 3.94), Use of green renewable energy (mean of 3.88) and green packaging had a mean of (3.66) This finding implies that to a great extent, adoption of the above GBP has an effect on the profitability of Safaricom. The practices with the lowest means were; Eco-labelling (2.96) followed by Green supply chain (3.0), green office (3.06) and participating in environmental clean ups at mean of (3.06).

Table 4.4: Green Business Practice and Firm Performance

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Presence of Company Environmental Policy	85	3.94	.792	-1.071	.261	2.139	.517
Undertaking Environmental Impact Assessments and Environmental Audits for its Projects	85	3.33	1.276	-.471	.261	-1.000	.517
Green Packaging	85	3.66	1.108	-.790	.261	.078	.517
Sustainability Reporting	85	3.24	1.360	-.236	.261	-1.232	.517
Planting Trees as way of carbon sinking	85	3.38	1.300	-.438	.261	-.986	.517
Carbon Trading	85	3.56	1.239	-.806	.261	-.283	.517
Carbon Footprint Disclosures	85	3.87	1.223	-1.028	.261	.109	.517
Conduct Environmental Awareness and Trainings	85	3.34	1.220	-.124	.261	-1.037	.517
Sponsorship of environmental ventures and events	85	4.07	1.044	-1.172	.261	1.023	.517
Participating in Environmental Clean ups	85	3.06	1.331	-.017	.261	1.288	.517
Environmental Champions/ Awards	85	3.21	1.346	-.367	.261	-1.158	.517
Proper Waste Management	85	3.39	1.390	-.349	.261	-1.211	.517
Water conservation	85	3.42	1.294	-.300	.261	-1.161	.517
Use of Green/ Renewable Energy	85	3.88	1.096	-.874	.261	.096	.517
Energy Savings and Efficiency	85	4.00	1.205	-1.172	.261	-1.023	.517
Minimizing Emissions and Effluents	84	3.37	1.438	-.404	.263	-1.279	.520
Green Supply Chain	85	3.00	1.282	.035	.261	-1.149	.517
Green Products and Services	85	3.28	1.259	-.224	.261	-1.111	.517
Green innovations & technologies	85	3.34	1.332	-.129	.261	-1.342	.517
Eco-labelling	84	2.98	1.140	-.052	.263	-.822	.520
Green building/ Green office	85	3.06	1.348	-.020	.261	-1.181	.517
Average	85	3.444	1.239				

Source: Field data

In general, the adopted GBP had an average mean score of 3.44 with a standard deviation of 1.239. The score implies that to a moderate extent, green business practices have affected the profitability of the Safaricom.

4.6 Green Business Practices on Safaricom’s Employee Job Satisfaction

The second objective of the study was to establish the effect of Green Business Practices on Safaricom’s employee job satisfaction. Respondents were asked to indicate if they think Green Business Practices has affected on employee job satisfaction. The likert scale were 1= to a small extent, 2= to some extent, 3=to a moderate extent, 4=to a great extent and 5=to a very great extent. Result demonstrates that to a greater extent (mean=3.92, standard deviation=1.236) GBP has an effect on employee’s job satisfaction. The finding is consistent with Delmas and Pekovic (2012) who found that on average, organisations that implement green business practices were 16% more productive financially with happier and more motivated employees than average employees from traditional organisations.

Table 4. 5: Descriptive

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
To what extent do you think GBP has impacted on employee job satisfaction?	85	3.92	1.236	-.168	.261	-1.034	.517
Valid N (listwise)	85						

Source: Field data

The result of how Green Business Practices impact on the employee’s performance is presented in Table 8. The findings show that to a great extent, adoption of GBP leads to a reduction of workplace environmental health and safety accidents (Mean =3.69, standard deviation=1.134).

The study found out that adopting GBP has led to reduction of workplace environmental health & safety accidents (mean=3.69, standard deviation=1.134). Increased quality of job input (mean=3.60, standard deviation=1.242). increased performance appraisal (mean=3.58, standard deviation=1.347); reduced mental stress (mean=3.58, standard deviation=1.189); reduced absenteeism (mean=3.48 standard deviation=1.350) and finally reduced healthcare costs (mean=3.19, standard deviation=1.366).

The result further illustrates that a great extent, Adoption of GBP has resulted to improved employee's job satisfaction with an average mean score of =3.520, standard deviation=1.271.

Table 4.6: Descriptive statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Reduction of Workplace Environmental Health and Safety accidents	85	3.69	1.134	-.471	.261	-.811	.517
Reduction of Health care costs	83	3.19	1.366	-.299	.264	-1.118	.523
Reduced Mental Stress	85	3.58	1.189	-.556	.261	-.618	.517
Led to Increased Quality of Job Output	81	3.60	1.242	-.527	.267	-.793	.529
Reduced Absenteeism	80	3.48	1.350	-.611	.269	-.884	.532
Performance Appraisal	84	3.58	1.347	-.597	.3287	-.817	.528
Average	80	3.520	1.271				

Source: Field data

4.7 Reasons for adopting Green Business Practices

The study sought to establish motivation for adopting GBP by the organizations. Table 9 indicates that the following are top reasons for adopting GBP: Corporate Social Responsibility (CSR) to a very great extent (mean=4.07, standard deviation=1.044), Extended producer responsibility to a very great extent (mean 4.00, standard deviation 1.205), government regulations requirements to a very great extent (mean=3.94, standard deviation=0.792) while the lowest reasons were; competition from other service providers and Government incentives which were at a (mean of 3.24, standard deviation .792) and (mean 3.33 and standard deviation 1.276) respectively.

The study found out GBP such as conducting EIAs, EA, as well Health and Safety audits have led to reduced workplace accidents. This is because the assessments identify risks before they happen and employees are also trained on safety and hazard response. Reduced accidents and mental stress have further resulted to reduced healthcare costs hence savings for the company. Provision of green office and sustainability awards for the employees has led to increased job output and performance appraisals as the staff are appraised on their environmental scores.

Table 4.7: Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Government Regulations	85	3.94	.792	-1.071	.261	2.139	.517
Requirements	85	3.33	1.276	-.471	.261	-1.000	.517
Government Incentives	85	3.66	1.108	-.790	.261	.078	.517
Demands from Consumers and Other Stakeholders	85	3.24	1.360	-.236	.261	-1.232	.517
Competition from other Service Providers	85	3.38	1.300	-.438	.261	-.986	.517
Reduced Costs and Better Returns	85	3.56	1.239	-.806	.261	-.283	.517
Increased Market Share	85	3.87	1.223	-1.028	.261	.109	.517
Personal Satisfaction for Conserving Environment	85	3.88	1.096	-.874	.261	.096	.517
Scarcity of Resources	85	4.07	1.044	-1.172	.261	1.023	.517
Corporate Social Responsibility	85	4.00	1.205	-1.087	.261	.248	.517
Extended Producer Responsibility	85						

Source: Field data

4.8 Government Policy

Government interventions through taxation and environmental policies through an act of parliament plays fundamental role in the adoption of GBP by actors of the economy. Respondents were asked to the extent they agree that government policies and Legislation enhance the adoption of Green Business Practices at Safaricom Limited. With a mean of 3.29 and a standard deviation of 1.526, result in Table 10 demonstrates that to a moderate extent government policies and legislation has enhanced adoption of Green Business Practice by Safaricom Limited. The implementation of Green Supply Chain Management practices can be hindered by various factors like lack of government support. The result is consistent with Lee (2008) who found that the government can boost awareness by involvement through funding, taxation policy and business training to promote the green supply chain initiative. Failure to take part can be a barrier in green business development

Table 4.8: Descriptive statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
To what extent has the government policies and Legislation enhanced the adoption of Green Business Practices at Safaricom Limited	80	3.28	1.526	-.239	.269	-1.490	.532
Valid N (listwise)	80						

Source: Field data

4.9 Suggestions to Government in Implementing Green Business Practices

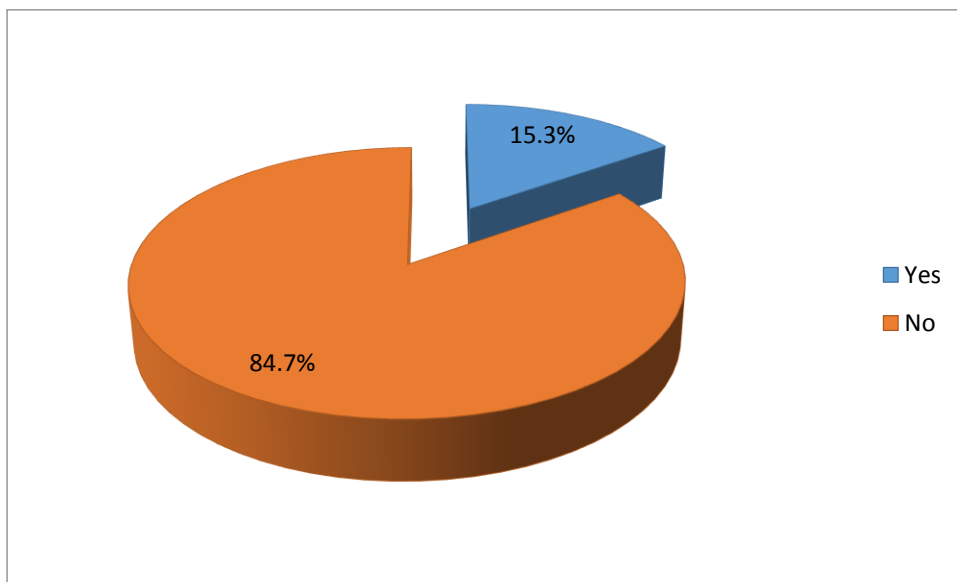
Respondents were then asked to state what they think the Government should do to enhance adoption of Green Business Practices of which the following suggestions were given;

- a) KEBs should come up with standards to be used in measuring Green Business Practices for various sectors in the Kenyan context
- b) The Government should give incentives to companies that are successfully implementing GBP
- c) The Government should provide tax relief for companies implementing GBP
- d) Law enforcement should be applied equally

4.10 Challenges in adopting Green Business Practices

The fourth objective was to assess some of challenges faced by Safaricom Limited in adopting Green Business Practices. Results in Table 11 indicates that 85% feel that lack of support from top management is not an impediment to the adoption of GBP by Safaricom Limited Company. An example was given about the delay by the top management in approving the green bond framework being a hindrance.

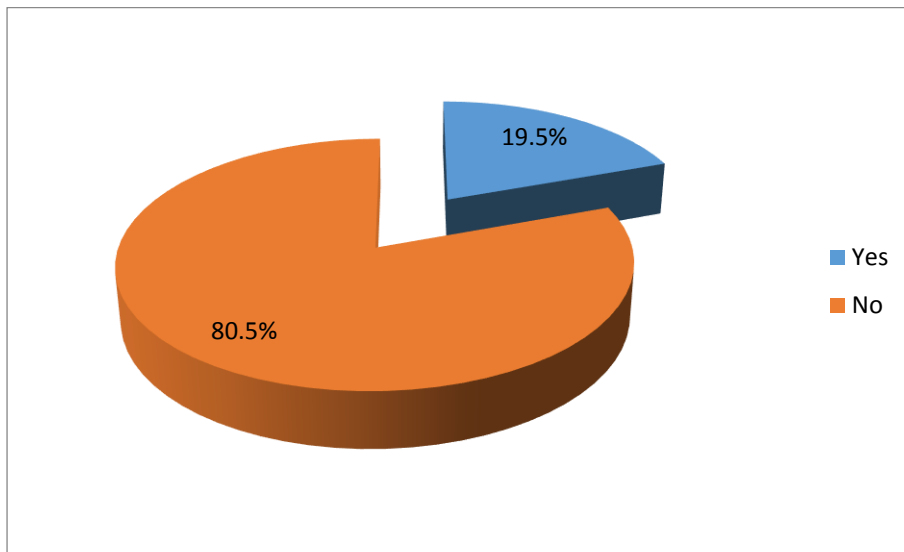
Figure 4.13: Lack of support from top management



Source: Field data

Also, 80.5% feel that employees have positive attitudes for implementing GBP and this has played a major role in mainstreaming environmental sustainability within the organization. Only 19.5% feel that it is a challenge as shown.

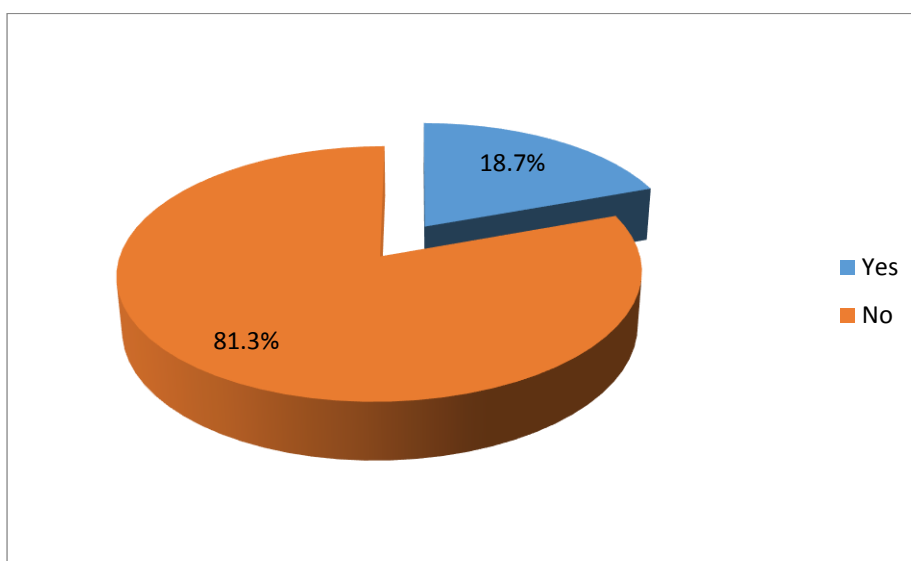
Figure 4.14: Negative attitudes and perception from employees



Source: Field data

Asked whether implementing GBP attracts additional costs and expenses, 18.7% stated that it indeed expensive while 81.3% feel that it has actually led to a lot savings for the company hence it is not a challenge. The initial costs of installing solar and wind networks are costly but they become cheaper in the long run as they use renewable energy hence do not attract monthly fees as compared to grid and diesel-powered networks. The company reported lots of savings after they switched from plastics to green packaging. Several environmental trainings carried within the organisation has helped staff prioritise on resource efficiency and optimal use.

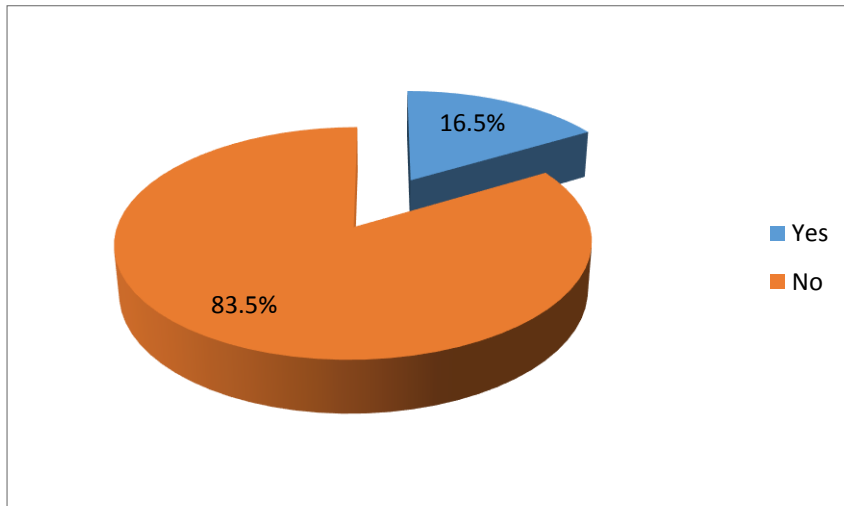
Figure 4.15: Additional costs and expenses



Source: Field data

Majority of the respondents 83.5% stated that Lack customer demand is not a challenge while 16.5% stated that it is. This is because there hasn't been pressure from the consumers demanding that the company greens its operations as is the case with the developed countries. In addition, Safaricom has not faced any environmental litigation from the members of the public.

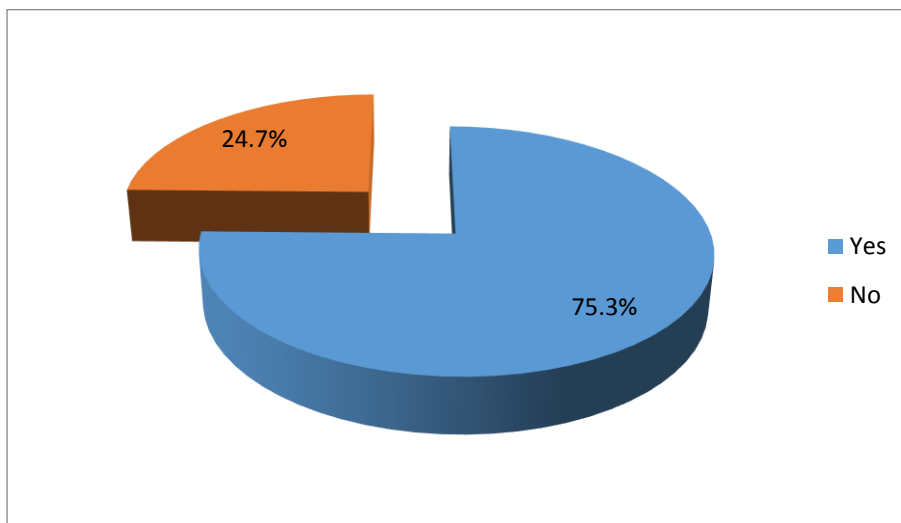
Figure 4.16: Lack of customer demand



Source: Field data

Technical barriers were identified as a challenge with 75.3% agreeing and 24.7% disagreeing. They stated that there are some technologies that might not be available in the Country hence hindering the implementation of GBP.

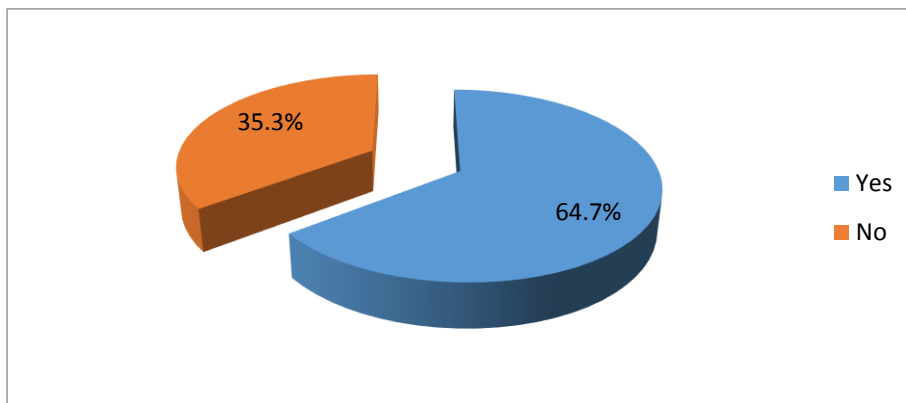
Figure 4.17: Technical barriers



Source: Field data

Government legislation was a barrier because there are no incentives provided by our government to companies who are implementing GBP, instead many are implementing on voluntary basis as opposed to other Countries where implementing attracts tax levies and other benefits. Some of the respondents stated that there is selective enforcement of regulations where big companies like Safaricom are fined heavily for non-compliance while others with the same mistakes are not punished.

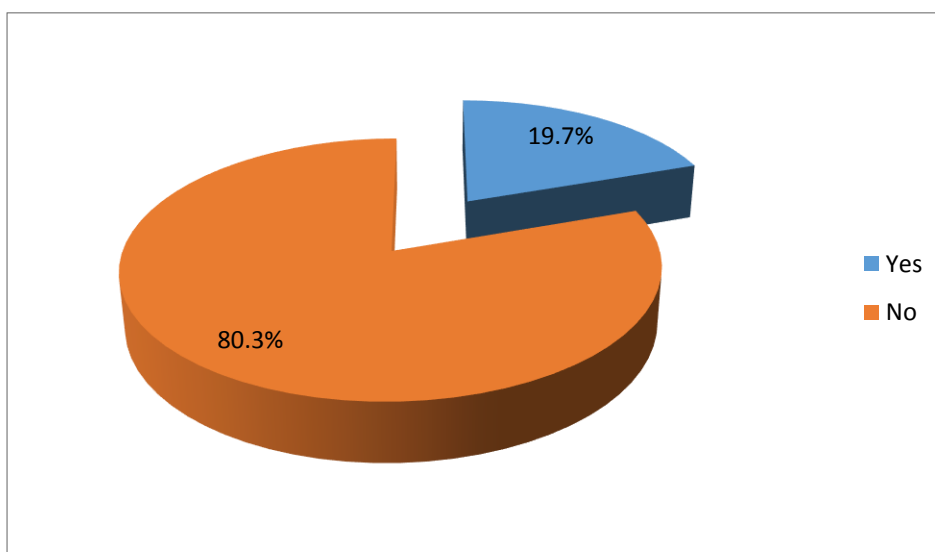
Figure 4.18: Government legislation and barriers



Source: Field data

Lack of skilled personnel to implement GBP is not a challenge in Safaricom as the staffs' technical capacities have been built adequately. Regular trainings and awareness activities have played a great role in building capacities of the staff.

Figure 4.19: Lack of skilled personnel to implement GBP



4.11 Suggestions for improving on GBP implementation

Finally, the respondents were asked to state any suggestions that they might have for Safaricom Limited on how to improve on its implementation of GBP and they stated that;

- a) The company should learn from best practices around the world
- b) It should ensure implementation of policies and strategies
- c) The management should allocate more resources for implementation
- d) The company should create more partnerships and collaborations

4.12 Hypothesis Testing

The first hypothesis was that there is significant effect of Green Business Practices on performance of Safaricom Limited. The researcher performed One-Way ANOVA and the result is presented in Table 11. The table shows the output of the ANOVA analysis and whether there is a statistically significant difference between the group means. The results show that the significance value is 0.000 (i.e., $p = .000$), which is below 0.05 and, therefore, there is a statistically significant difference in the mean of the extent to which adoption of Green Business Practices impact on profit of Safaricom Limited. Therefore, we do not reject our null hypothesis and conclude that Green Business Practices has a significant effect on performance of Safaricom Limited.

Table 4.9: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.037	4	.037	13.650	.000
Within Groups	.272	75	.003		
Total	.309	79			

Table 4.10: Analysis of variance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.692	4	6.673	4.199	.004
Within Groups	116.026	73	1.589		
Total	142.718	77			

The second hypothesis stated that there is a significant effect of Green Business Practices on Safaricom's Employees Job Satisfaction. Table 12 reports a significance value of 0.000 (i.e., $p = .004$), which is below 0.05 and, therefore, there is a statistically significant difference in the mean of the extent to which adoption of Green Business Practicess impact on Employees Job Satisfaction. We do not reject the null hypothesis and conclude that there is a significant impact of GBP on Safaricom's employees' job satisfaction.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This section summarizes the findings of the study briefly highlighting the key issues identified. In addition, the researcher proposes ways in which the Companies can effectively implement Green Business Practices.

5.1 Summary of Findings

Study participants were drawn from Safaricom staff from the company's headquarters. Out of the 106 questionnaires given out, only 85 of them were returned fully filled. This represents 80% of the response rate which is considered adequate. 89% of the respondents were aware of the Green Business Practices at Safaricom and listed the following; ISO 14001:2015 certification, energy efficiency and renewability, water conservation, waste management (domestic & electronic), conducting EIAs and EAs, planting trees, environmental awareness, trainings and sponsorships, carbon emission reduction strategies, green bond, sustainability champions & awards, green bond, green supply chain, green base stations, electromagnetic frequencies, green office, green products and services and sustainability reporting and environmental policy.

Regarding the effect of GBP on profitability, the study found out that to a moderate extent (average mean score of 3.44 with a standard deviation of 1.239), green business practices have affected the profitability of the Safaricom. The results also demonstrate that to a greater extent (mean=3.92, standard deviation=1.236) GBP has an effect on employee's job satisfaction. The findings were consistent with Delmas and Pekovic (2012) who found that on average, firms that practice green business practices were 16% more productive as well as have more job satisfaction than average employees.

The top three reasons why Safaricom is implementing GBP were because of Corporate Social Responsibility (CSR) to a very great extent (mean=4.07, standard deviation=1.044), Extended producer responsibility to a very great extent (mean 4.00, standard deviation 1.205), government regulations requirements to a very great extent (mean=3.94, standard deviation=0.792) while the lowest reasons were; competition from other service providers and Government incentives which were at a (mean of 3.24, standard deviation .792) and (mean 3.33 and standard deviation 1.276) respectively.

To a moderate extent, the study revealed that government policies and Legislation enhance the adoption of Green Business Practices at Safaricom Limited. It had a mean of 3.29 and a standard deviation of 1.526. The main challenges faced in implementing Green Business practices were; technical barriers because there are some technologies that might not be available in the Country hence hindering the implementation of GBP and Government legislation because there are no incentives provided by our Government to companies who are implementing GBP, instead many are implementing on voluntary basis as opposed to other Countries where implementing attracts tax levies and other benefits.

Finally, One-Way ANOVA analysis was used to test the first hypothesis which was that there is significant effect of GBP on performance of Safaricom Limited. The results showed that the significance value is 0.000 (i.e., $p = .000$), which is below 0.05, hence the null hypothesis was not rejected and concluding that GBP has a significant effect on performance of Safaricom Limited. The second hypothesis stated that there is a significant effect of GBP on Safaricom's Employees Job Satisfaction of which the results showed a significance value of 0.000 (i.e., $p = .004$), which is below 0.05, therefore, the null hypothesis was not rejected concluding that there is a significant impact of GBP on Safaricom's employees job satisfaction.

5.2 Conclusions

From the analysis and findings, it can be concluded that Safaricom has implemented green business practices from a proactive approach. It is evident that there has been support from the management and employees. Certain green business practices such as eliminating plastics, reducing the sizes of the SIM cards, recycling wastes, energy efficiency and renewability has led to direct savings resulting to more profits for the company. The study also revealed that the company has conducted trainings and awareness among its staff on environment sustainability. This has helped build capacity and knowledge enabling them to adequately mainstream green business practices in the company's operations. The organization should continue investing in new research and development of green solutions that could be adopted in Africa, Kenya.

5.3 Recommendations

Recommendations for Policy Makers in the Government

A significant gap identified was lack of guidance standard or legislation on how Green Business Practices should be implemented. Most of the Environmental initiatives at Safaricom have been implemented on voluntary basis and on what the company feels is a priority. Kenya

Bureau of Standard being the official standard body in the Country should develop Green standards that could guide companies willing to go green.

NEMA should create more awareness to organizations on why going green can never be ignored and the many benefits it attracts.

Recommendations for the Telecommunication Companies

Business can no longer ignore the effects of climate change and the impact of their business activities on the environment. Telecommunication industries should therefore continue building capacities of their employees as well as conducting awareness campaigns on environmental sustainability.

Kenya has enacted the new Energy Act 2019, which aims at promoting use and development of renewable energy technologies and provides for establishment Renewable Energy Resource Advisory Committee manage the resources. The new Act has Net-metering which allow consumers to supply excess energy into the grid. It also allows or Renewable energy Feed in Tariff System which intends to encourage the uptake and innovation of renewable energy technology and help reduce greenhouse gas emissions. This a great opportunity for telecommunication industries as they are able to leverage and sell excess energy earning additional income.

The Government has further zero-rated green energy solutions and plastic recycling of plastics. Telecommunication industries should therefore take advantage of the tax exemptions.

The industries should also invest heavily on research and development of green products and green innovations

5.3 Recommendations for Further research

Areas which require further research are the following:

1. Investigating Consumer awareness of Green Business Practices in the telecommunication Industry
2. Comparative Study on the effect of Green Business Practices on performance of other Telecommunication Companies (Airtel, Telkom)
3. Green University, Innovation and Practices.
4. Investigating the effect of Green Business Practices on brand

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APPENDICES
Appendix I: Questionnaire

The purpose of the study is to assess the Effect of Green Business Practices on an Organization's Performance using Safaricom limited as the case Study. Kindly fill the questionnaire as honest as possible. The information you provide will be used purely for academic purposes and the recommendations made will be of great importance to our Country and the Telecommunication Industry. The information you provide will be treated with utmost confidentiality.

A. Demographic Factors

Instructions: TICK (✓) appropriately.

1. Gender.

Male

Female

2. What is your age?

3. What is your highest level of education?

Post Graduate

Undergraduate

Diploma

Certificate

4. Indicate your Department

Technology

Internal Audit

Resources

Customer Operation

Business Development

Finance

Financial Services

Corporate security

Corporate Affairs

Consumer Business Unit

Enterprise Business Unit

PART II: Green Business Practices adopted by Safaricom Limited

5. Are you aware of Green Business Practices at Safaricom Limited?¹

Yes [] No []

6. List some of the Green Business Practices adopted by Safaricom Limited.....

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7. On what basis are the Green Business Practices adopted?

Proactive Approach [] Reactive Approach []

¹ Green Business Practices are activities with minimal negative impact on the local/global environment, economy and society or those that directly benefit the natural environment.

PART III: Green Business Practices and Financial Performance of Safaricom Limited

8. To what extent has the following aspects of Green Business Practices impacted on your Organization’s Profitability; use a scale of 1-5. Where 1= to no extent and 5= to very great extent.

	1	2	3	4	5
Presence of Company Environmental Policy					
Undertaking Environmental Impact Assessments and Environmental Audits for its Projects					
Green Packaging					
Sustainability Reporting					
Planting Trees as way of carbon sinking					
Carbon Trading					
Carbon Footprint Disclosures					
Conduct Environmental Awareness and Trainings					
Sponsorship of environmental ventures and events					
Participating in Environmental Clean ups					
Environmental Champions/ Awards					
Proper Waste Management					
Water conservation					
Use of Green/ Renewable Energy					
Energy Savings and Efficiency					
Minimizing Emissions and Effluents					
Green Supply Chain					
Green Products and services					
Green Innovation &New technologies					
Eco-labelling					
Green building/ green office					

PART IV: Green Business Practices on Safaricom’s Employee Job Satisfaction

9. To what extent do you think Green Business Practices has impacted on employee job satisfaction?

To a very low extent [] to a great extent [] to a low extent []

To a very great extent [] to a moderate extent []

10. To what extent has adoption of Green Business Practices impacted on the employee’s Performance; use a scale of 1-5. Where 1= to no extent and 5= to very great extent.

	1	2	3	4	5
Reduction of Workplace Environmental Health and Safety accidents					
Reduction of Health care costs					
Reduced Mental Stress					
Led to Increased Quality of Job Output					
Reduced Absenteeism					
Performance Appraisal					

PART IV: Reasons for adopting Green Business Practices.

11. To what extent has the following reasons led to adoption of Green Business Practices at Safaricom Limited: use a scale of 1-5. Where 1= to no extent and 5= to very great extent.

	1	2	3	4	5
Government Regulations Requirements					
Government Incentives					
Demands from Consumers and Other Stakeholders					
Competition from other Service Providers					
Reduced Costs and Better Returns					
Increased Market Share					
Personal Satisfaction for Conserving Environment					
Scarcity of Resources					
Corporate Social Responsibility					
Extended Producer Responsibility					

PART V: Government policy

12. To what extent has the Government policies and Legislations enhanced adoption of Green Business Practices at Safaricom Limited: use a scale of 1-5. Where 1= to no extent and 5= to very great extent.

To a very low extent [] to a great extent [] to a low extent []

To a very great extent [] to a moderate extent []

13. In your opinion, what more should the Government do, in terms of policies to improve the implementation of Green Business Practices.

.....

PART VI: Challenges faced by Safaricom Limited in implementing Green Business Practices.

14. State whether the following pose challenges to your organization in the implementation of Green Business Practices

	Yes	No
Lack of support from top management		
Negative attitudes and perception from employees		
Additional costs and expenses		
Lack of customer demands		
Technical barriers		
Government legislations and barriers		
Lack of skilled personnel to implement GBP		

15. Please state any suggestions you might have on how Safaricom Limited can improve on its implementation of Green Business Practices.

.....

End
Thank you for your feedback





Appendix II: Key Interview Guide

Interview Guide for the Key informant's interview at Safaricom.

I am a student at the University of Nairobi, undertaking M.A. Environmental Planning and Management. As part of my studies I am required to undertake research in my area of interest. The research purpose is to determine the effect of Green Business Practices on organization's performance within Safaricom Ltd. Information collected will be used for academic purposes only.

1. What are some of the GBP implemented by the organization?
2. In your opinion, has the implementation of GBP resulted in improved profitability? If yes, how?
3. In your opinion, has the implementation of GBP resulted into improved employees job satisfaction? If yes how?
4. Does the company have a budget for GBP?
5. How much as the company set aside/ invested in environmental activities in the last 5 years?
6. How is the support from the management in regards to GBP?
7. Has there been any environmental lawsuits against the company in the last 5 years?
8. What are some of the policy / legislative hinderances in terms of implementing GBP?
9. What are the challenges of implementing GBP?
10. How have you been able to overcome the challenges?
11. How is the cadre of staff at Safaricom?

Appendix III - NACOSTI Research Permit

 <p>REPUBLIC OF KENYA</p>	 <p>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION</p>
<p>Ref No: 122576</p>	<p>Date of issue: 09/September/2019</p>
<p>RESEARCH LICENSE</p>	
	
<p>This is to Certify that Miss. Diana Ochieng of University of Nairobi, has been licensed to conduct research in Nairobi on the topic: The Impact of Green Business Practices on Organizations Performance, Case Study of Safaricom Limited for the period ending : 09/September/2020.</p>	
<p>License No: NACOSTI/P/19/1190</p>	
<p>Applicant Identification Number 122576</p>	
<p align="right"><i>(Signature)</i> Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION</p>	
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Website: www.nacosti.go.ke

Appendix IV: Introductory Email

Request for an introductory Meeting - Academic Research at Safaricom  Inbox x   



Diana Ochieng <diana.ochieng@gmail.com>

Wed, Jun 19, 1:20 PM   

to AOsiko ▾

Dear Mr. Osiko,

Greetings.

My name is Diana Ochieng, an Environmental and Social Safeguard Experts as well as a Masters of Arts Students from the University of Nairobi's Department of Geography and Environmental Studies.

I am in the process of conducting an academic research on the Impact of Green Business Practices on an organization's performance (both financial and non financial); A case study of Safaricom Limited.

In this regard, I am hereby requesting for an introductory meeting with you this week or early next week. My phone number is 0726177177.

Thank you,
Diana Ochieng