

**EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON PERFORMANCE OF
ENERGY SECTOR IN KENYA: A CASE OF GEOTHERMAL DEVELOPMENT
COMPANY LTD**

PAUL PAKKA

D53/NKU/PT/27836/2014

**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS
ECONOMICS AND TOURISM IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS
ADMINISTRATION (STRATEGIC MANAGEMENT OPTION) OF KENYATTA
UNIVERSITY**

2025

DECLARATION

This research project is my original work and has not been presented for an academic award in any other University or institution of higher learning.

Signature

Date

Paul Pakka

D53/NKU/PT/27836/2014

This research project has been submitted for examination with my approval as the University Supervisor.

Signature

Date

Dr. Abel Anyieni,

Department of Business Administration, School of Business Economics and Tourism

Kenyatta University

DEDICATION

This endeavor is affectionately dedicated to my beloved family, with a special mention to my cherished spouses, Annet Cheptarus Suter, Halima Pakka, and our precious children: Valery Chepkemoi Pakka, Laura Chepkukot Pakka, Abel Ruto Pakka, Elly Kiptoo Pakka, Nelly Chepengat Pakka, Emmanuel Ptiyos Pakka, Gabriel Mngangat Pakka, Nobel Poghisio Pakka, Hellen Cheyech Pakka, Esther Chepunton Pakka, and Gloria Cheutich Pakka. They are the cornerstone of my life, filling each day with love, joy, and endless blessings.

ACKNOWLEDGEMENT

I extend my profound gratitude to Dr. Abel Anyieni, my supervisor, whose expert guidance and unwavering support were instrumental in shaping this research project. His insights proved invaluable throughout the project. The faculty and staff at Kenyatta University, particularly within the School of Business, deserve special thanks for fostering an environment of academic excellence that has significantly contributed to my growth as a researcher. I am deeply appreciative of the management and employees of the Geothermal Development Company for their cooperation and participation. Their experiences and perspectives were essential in analyzing the correlation between corporate social responsibility and organizational performance. To my fellow researchers and colleagues, I express my sincere thanks. Our stimulating discussions and collaborative spirit have made this journey both intellectually rewarding and personally enriching. I express my profound gratitude to my loved ones for their steadfast support and encouragement during my academic endeavors. Their belief in me has consistently served as a source of motivation. Finally, I extend my gratitude to all who have helped, in some way or another, to the effective completion of this research endeavor. Your assistance has been indispensable.

TABLE OF CONTENTS

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	vii
LIST OF TABLES	viii
OPERATIONAL DEFINITION OF TERMS	ix
ACRONYMS AND ABBREVIATIONS	xi
ABSTRACT	xii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.1.1. Corporate Social Responsibility	4
1.1.2 Geothermal Development Company.....	5
1.2 Statement of Problem.....	6
1.3 Objectives of the Study.....	7
1.3.1 General Objective	7
1.3.2 Specific Objectives	7
1.4 Research Questions	7
1.5 Significance of the Study	8
1.6 Scope of the Study	9
1.7 Limitations of the Study.....	10
1.8 Organization of the Study	11
CHAPTER TWO	13
LITERATURE REVIEW	13
2.1 Introduction.....	13
2.2 Theoretical Review	13
2.2.1 Corporate Social Responsibility Theory	13
2.2.2 System Theory	14
2.2.3 Stakeholder theory	16
2.2.4 Expectancy Theory of Performance.....	18
2.2.5 Balanced Score Card.....	19

2.3 Empirical Review.....	21
2.3.1 Corporate Social Responsibility	22
2.3.2 Stakeholder Management at Geothermal Development Company.....	23
2.3.3 Legal Responsibilities and Stakeholder Management	27
2.3.4 Ethical Responsibilities and Stakeholder Management.....	29
2.3.5 Philanthropic Responsibilities and Stakeholder Management.....	31
2.4 Summary of Reviewed Studies and Research Gaps	34
2.5 Conceptual Framework.....	36
CHAPTER THREE	37
METHODOLOGY	37
3.1 Introduction.....	37
3.2 Research Design.....	37
3.3 Target Population	37
3.4. Sampling Technique and Sample Size	38
3.4.1 Sample.....	38
3.4.2 Sampling Design.....	38
3.5 Data Collection Instrument.....	38
3.5.1 Pilot Study.....	39
3.5.2 Validity of Research Instrument.....	39
3.5.3 Reliability of Research Instrument	40
3.6 Data Collection Process	40
3.7 Data Analysis and Presentation.....	41
3.8 Ethical Consideration.....	41
CHAPTER FOUR.....	43
DATA ANALYSIS, PRESENTATION AND INTERPRETATION	43
4.1 Introduction.....	43
4.1.1 Response Rate.....	43
4.2 Demographic Information of Respondents	43
4.2.1 Gender Distribution	43
4.2.2 Education Level of the Respondents.....	44
4.2.3 Duration4.2.3 Duration of employment at GDC	45
4.3 Descriptive Analysis for Variables	46
4.4 Performance of GDC	55

4.5 Reliability of the Instrument	57
4.6 Factor Analysis.....	58
4.6.1 Factor Analysis for Legal responsibilities.....	59
4.6.2 Factor Analysis for Ethical Responsibilities	61
4.6.3 Factor Analysis for Philanthropic responsibilities	63
4.6.4 Factor Analysis for Performance of GDC.....	65
4.7 Correlation Analysis of the Variables	67
CHAPTER FIVE	69
SUMMARY, CONCLUSION AND RECOMMENDATION.....	69
5.1 Introduction.....	69
5.2 Summary of Findings.....	69
5.2.2 Influence of Ethical Responsibilities on Organizational Performance at the Geothermal Development Company.....	70
5.2.3 Influence of the Philanthropic Responsibilities on Organizational at the Geothermal Development Company	71
5.3 Conclusions.....	73
5.4 Recommendations.....	74
5.5 Areas for Further Research	75
REFERENCES.....	76
APPENDICES.....	81
Appendix I: Consent Statement	81
Appendix II: Questionnaire.....	82
Appendix III: Research Approval	865
Appendix IV: Research Authorization	876
Appendix V: Nacosti.....	887

LIST OF FIGURES

Figure 2.1: Conceptual Framework (Source: Researcher 2016).....	36
Figure 4.1: Gender Distribution.....	44
Figure 4.2: Education Level of the Respondents	44
Figure 4.3: Duration of employment at GDC	45

LIST OF TABLES

Table 4.1 Legal Responsibilities	47
Table 4.2 Ethical Responsibilities	50
Table 4.3 Philanthropic Responsibilities.....	53
Table 4.4 Performance of GDC	56
Table 4. 5 Reliability Statistics	58
Table 4. 6 Legal responsibilities Rotated Component Matrix ^a	60
Table 4. 7 Ethical responsibilities Rotated Component Matrix ^a	62
Table 4.8 Philanthropic Rotated Component Matrix ^a	64
Table 4.9 Performance of GDC Rotated Component Matrix ^a	66
Table 4.10 Correlation Analysis of the Variables.....	67

OPERATIONAL DEFINITION OF TERMS

Corporate Social Responsibility: The voluntary integration of social, environmental, and economic concerns into an organization's operations and interactions with stakeholders, exceeding legal obligations to make a beneficial impact on society and the environment.

Ethical Responsibilities: The moral obligations of an organization to adhere to principles of fairness, integrity, and respect in its dealings with stakeholders, encompassing issues such as transparency, non-discrimination, and the promotion of ethical business practices.

Legal Responsibilities: The duties and obligations of an organization to comply with all applicable laws, regulations, and legal standards in the jurisdictions where it operates, including environmental regulations, labor laws, and consumer protection laws.

Organizational Performance: A multidimensional construct that encompasses an organization's effectiveness and efficiency in achieving its goals and objectives, as measured by various indicators such as financial performance, operational efficiency, stakeholder satisfaction, and social and environmental impact.

Philanthropic Responsibilities: The discretionary activities and initiatives undertaken by an organization to contribute to the well-being of society and the environment, such as charitable

donations, community development programs, and employee volunteerism, which go beyond legal and ethical obligations.

Stakeholder:

Anyone or any group that might be involved with or influence an organization's actions, decisions, or objectives, including employees, customers, suppliers, shareholders, communities, government agencies, and the environment.

Stakeholder Management:

The process of identifying, analyzing, and working with an organization's stakeholders to recognize their expectations and worries, and design plans that satisfy and support the interests of different parties involved, and support the organization's objectives.

ACRONYMS AND ABBREVIATIONS

AGCE	African Geothermal Centre of Excellence
CH₄	Methane
CO₂	Carbon Dioxide
CSR	Corporate Social Responsibility
CVI	Content Validity Index
EIAs	Environmental Impact Assessments
EMCA	Environmental Management and Coordination Act
GDC	Geothermal Development Company
H₂S	Hydrogen Sulfide
NEMA	National Environmental Management Authority
NGOs	Non-Governmental Organizations
NPS	Net Promoter Score
ROI	Return on Investment
SPSS	Statistical Package for the Social Sciences
UNFCCC	United Nations Framework Convention on Climate Change

ABSTRACT

Corporate Social Responsibility (CSR) has emerged as a critical strategic component for organizations, especially in developing countries where businesses significantly influence both environmental and social systems. In Kenya's energy sector, the Geothermal Development Company (GDC) faces the dual challenge of aligning its operations with CSR principles while striving to maintain sustainable organizational performance. This study investigated the effect of CSR on GDC's performance, specifically assessing the influence of legal, ethical, and philanthropic responsibilities on stakeholder management and organizational effectiveness. The research was anchored on corporate social responsibility theory and stakeholder theory, adopting a descriptive research design. Structured questionnaires were administered to all 54 employees within GDC's Corporate Affairs Department, selected through a census sampling technique due to the department's direct involvement with CSR-related initiatives. Prior to the main data collection, a pilot test was conducted with 10 respondents from a similar government energy institution to refine the questionnaire's clarity and reliability. Validity was ensured through expert review and pre-testing, while internal consistency reliability was evaluated using Cronbach's alpha. The overall Cronbach's alpha value for the constructs was 0.81, indicating high reliability across the legal, ethical, and philanthropic responsibility dimensions. Data were analyzed using SPSS Version 23, with both descriptive and inferential statistics employed. Descriptive statistics (means and standard deviations) summarized the respondents' perceptions, while Pearson correlation analysis assessed the strength and direction of the relationships between CSR components and organizational performance. The findings revealed that legal responsibilities had a significant, positive, and moderately strong correlation with organizational performance ($r = 0.570$, $p = 0.000$), with a mean score of 3.95. Ethical responsibilities showed a significant but weaker positive correlation ($r = 0.375$, $p = 0.005$), with a mean of 4.02. Philanthropic responsibilities also demonstrated a significant, weak positive correlation ($r = 0.389$, $p = 0.004$), with a mean of 3.82. These results underscore the importance of all three CSR dimensions in fostering stakeholder trust and enhancing GDC's operational performance. The study concludes that fulfilling CSR obligations is instrumental in building community goodwill, promoting regulatory compliance, and achieving sustainable organizational outcomes. The study recommends that the Ministry of Environment formulate and enforce robust CSR policies across parastatals, particularly by ensuring adherence to environmental and energy frameworks such as the Kyoto Protocol, NEMA regulations, and the Energy Bill and Policy of 2012. Additionally, it advocates for stronger collaboration between GDC and regulatory bodies to address environmental concerns and to implement equitable philanthropic initiatives in its areas of operation. By contextualizing CSR within a developing country's energy sector, this research contributes valuable insights to the discourse on sustainable development and the strategic function of CSR in public sector enterprises.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In any organization, performance is a way to assess how well set objectives, aims, and ends are being achieved (Njoroge & Maina, 2021). As a result, it mainly focuses on analyzing how the organization uses its resources, carries out its strategies, and responds to stakeholders' expectations. To rate organizational performance, indicators are chosen in advance, can be measured, and are used to assess an organization's ranking in various areas (Njogu, 2022).

Learning about an organization's financial indicators is important for assessing its economic strength. The picture of a company's financial condition is revealed through profitability, increase in revenue, return on investment, and pseudo cost-benefit analyses (Masele et al., 2022). Profitability refers to an organization's ability to make more money than it spends. Therefore, a company with regularly high profits is said to manage its finances well and have a reliable business structure. ROI is the percentage of return the organization gets for everything it invests (Eshaq, 2022). It helps guide decisions on how to use resources. When revenue growth is positive, it means the company can increase its revenues and is still relevant amid competition (Nganga and Nyaga, 2022). These measures focus on resource usage to make certain that costs stay within the value created.

These metrics examine how resources are put to use by the organization. These measurements can cover productivity, the length of each process and how and where resources are used. Productivity shows how much output an organization gets by using its resources (Kubai et al., 2021). If you have efficient processes, there are fewer delays, customers receive better service and cycle times

are shorter (Kipkorir and Maina, 2022). When resources are used in the most suitable way, employees, supplies and tools support the company's goals.

Ensuring that customers are happy ensures that your business will grow and keep its customers. Customer surveys, feedback forms and NPS are all ways organizations measure satisfaction and adjust their services to match what customers expect (Setyowati et al., 2022). When customers are satisfied, they often become loyal, encourage others to use the company and return to buy again. NPS looks at how likely customers are to suggest the organization to people they know. When a company's NPS score is high, it proves that customers support the brand and have a good image of it.

How engaged employees are is a main sign of the organization's internal well-being. One must evaluate how employees feel, review the number of workers who stay and check productivity to encourage staff to stay dedicated and engaged (Kuse and Wanyoike, 2022). Employee satisfaction is closely tied to whether people remain working at the company. Employees who are satisfied tend to remain with the organization for longer which saves money and protects the company's knowledge (Debas, 2022). Besides, when employees are happy, they become more productive and the organization's performance increases.

These metrics check how well the organization provides quality products or services and responds to new changes in the market. Using these metrics encourages organizations to improve and stay up to date in their industry (Imouokhome et al., 2022). Examples of quality metrics are defect rates, the number of customer complaints and how well quality requirements are met. Building a good reputation depends on delivering products or services of high quality. Measuring innovation helps show the company's response to new industry trends and improvements in technology. The

process includes looking at the number of new products or services, how much is spent on research and development and the amount of patents applied for.

Market share assessment measures an organization's performance next to its rivals in the same industry. Knowing your market share helps you see how you stand in your industry and how competitive you are (Israel, 2022). If you have a larger share of the market, you stand in a better position which can give you more options, more large-scale benefits and higher earnings. Monitoring the trends in market share tells organizations where they are doing well and where they require improvement.

These days, many people want to know about a company's social and environmental effects (Njoroge, 2022). They help measure if the organization is responsible about its impact on the environment and society. Community engagement, philanthropy and diversity and inclusion can be part of social impact metrics (Nyangito et al., 2022). Organizations involved in community activities and socially responsible work usually gain a good reputation. Environmental impact metrics pay attention to a company's actions to lower its environmental footprint such as improving energy efficiency, reducing waste and lowering carbon emissions. Pursuing environmental sustainability can lower costs, raise the company's reputation with the public and ensure the business follows the rules.

Managing stakeholders for a Geothermal Development Company (GDC) depends on how well it can interact with and support its various stakeholders (Mutai et al., 2023). There are many different people, groups and organizations among these stakeholders, each with their own motives and problems. Accordingly, stakeholder management means identifying these stakeholders, understanding them and interacting with them to achieve the GDC's aims and principles (Njau, 2020).

Purwanto et al. (2021) divide stakeholders into two categories: those inside the organization and those outside. Among the internal stakeholders are employees, managers and owners, while external stakeholders are clients, suppliers, government agencies, neighborhood groups and non-governmental organizations (NGOs). There is much more to the diversity among stakeholders than only their demographics; it includes differences in their values, goals and what they do. For example, GDC must work with clients of all ages, employees from different cultures, investors who have different goals and authorities with unique compliance rules (Kautsar, 2018). Managing stakeholders successfully requires a set of strategies that assist the GDC in handling multiple interests. The first step is to identify and order stakeholders by how influential or interested they are in the organization (Purwanto et al., 2021). Afterward, companies build personalized ways to interact and engage with each group of stakeholders. The GDC ensures that stakeholders' expectations are in line with what the department can achieve and commit to and sets up processes to solve conflicts among stakeholders. Checking on the views and ongoing changes among stakeholders on a regular basis is also necessary (Amin and Rahmadi, 2020). Thanks to this approach, the GDC is able to adapt its strategies ahead of time to ensure good and helpful relationships with the community. Effective stakeholder management is truly the key to an organization's success. This forms the base for earning trust, managing risk and protecting reputation in the busy and connected business world.

1.1.1. Corporate Social Responsibility

A company has corporate social responsibility (CSR) when it follows the law, acts ethically and provides support to the wider community for social causes (Kautsar, 2018). To comply with the law as a business, you must follow regulations for labour, the environment, taxes and actions specific to your industry. Doing business, the right way is more important than just meeting legal

rules (Purwanto et al., 2021). By doing this, you ensure you are fair to staff, customers, vendors and the community, provide a safe and healthy workplace, pay fair wages, respect everyone, value diversity and do not mislead in your advertising.

Philanthropic responsibilities involve freely offering help to society because people want to benefit it. Such examples are charitable gifts, community advancement, helping with education and healthcare and dealing with issues like reducing poverty and preserving the environment (Purwanto et al., 2021). Taking care of the law, ethics and philanthropy is important as it strengthens a company's image, makes socially minded people want to invest or shop there and helps the company survive over time. Firms that combine all these with their company strategy will do better in a global market that values social and environmental responsibility (Purwanto et al., 2021).

1.1.2 Geothermal Development Company

The government-owned geothermal development company in Kenya specializes in geothermal growth within the country. In 2008, GDC was set up to take the lead in studying and using geothermal energy (Gichuhi, 2021). GDC has important purposes and objectives. One important job is to survey and examine geothermal resources throughout Kenya. Part of this process is carrying out geological studies to locate zones with high geothermal potential (Nyaga, 2022). After that, the Development Committee prepares the geothermal resources by drilling geothermal wells and setting up systems to use geothermal energy.

Developing steam fields is a significant role of the GDC in support of geothermal power. To protect the environment, GDC makes sure that geothermal projects meet both environmental and sustainability rules. To achieve this, studies of the environment are done and the industry makes efforts to be sustainable (Amoro, 2021). Building capacity is also an important task for the GDC.

The organization offers training to local human resources in geothermal energy, helping to build more skills in Indonesia.

In addition, GDC supports private investments in the geothermal sector, trying to draw outside backing and abilities to help Kenya's geothermal development move forward. GDC is very important in shaping Kenya's energy sector. Because it is positioned in the geothermally active East African Rift System, Tanzania has a lot of geothermal potential (Njau, 2020). GDC helps Kenya to make use of the country's vast geothermal resources. The development of geothermal energy supports Kenya's goals of increasing energy variety, using less fossil fuel and strengthening its eco-friendly power sector.

In addition, what GDC does matches Kenya's ambition to raise the portion of renewables in its overall energy supply. As a result, the country can address environmental problems, especially by reducing greenhouse gas emissions and provide a more secure source of energy (Mutai et al., 2023). As geothermal energy grows in the nation's energy mix, it aids in providing many Kenyans with safe and economical electricity.

1.2 Statement of Problem

Geothermal Development Company (GDC) is a state-owned corporation in Kenya that offers a cleaner energy option (Mutai et al., 2023). But its activities can harm the environment and communities. These risks come from the release of gases and toxic sludges during the geothermal development process.

Geothermal power plants are eco-friendly compared to fossil fuels but emit gases like hydrogen sulphide (H₂S) and carbon dioxide (CO₂) during geothermal fluid conversion (Odhiambo, 2021). Hydrogen sulphide can be harmful to health, and excessive CO₂ is a contributor to climate change if not managed well (Purwanto et al., 2021). Moreover, geothermal drilling and fluid handling involve the use of chemicals, which, if not handled or disposed of well, can contaminate soil and water (Bank, 2021). The resulting pollution can harm ecosystems and local residents.

Geothermal fluids also contain minerals and elements that can form toxic sludges when brought to the surface. These sludges contain heavy metals like arsenic and lead, which are harmful to aquatic life and humans if they enter water bodies or groundwater. Geothermal power plants also require a lot of water for cooling and reinjection into the geothermal reservoir (Duggal et al., 2022). Over-extraction of water can strain local resources and impact ecosystems and communities that depend on these water sources. Geothermal activities can disrupt local ecosystems, leading to habitat loss and land subsidence and potentially displace communities in sensitive areas (Naseer et al., 2022). Noise and visual pollution from power plants can also affect the quality of life of nearby residents.

1.3 Objectives of the Study

1.3.1 General Objective

The general research objective was to examine the effect of social responsibility on the performance of the geothermal development company, Kenya.

1.3.2 Specific Objectives

The specific objectives of the research were as follows:

- i) To ascertain the effect of the legal responsibilities on organizational performance at the geothermal development company, Kenya.
- ii) To establish the influence of ethical responsibilities on organizational performance at the geothermal development company, Kenya.
- iii) To establish the influence of the philanthropic responsibilities on organizational performance at the geothermal development company, Kenya.

1.4 Research Questions

The study was guided by the following research questions;

- i) What is the effect of legal responsibilities on organizational performance at geothermal development company, Kenya?
- ii) How does ethical responsibilities influence organizational performance at the geothermal development company, Kenya?
- iii) What is the impact of philanthropic responsibilities on organizational performance at the geothermal development company, Kenya?

1.5 Significance of the Study

This study investigated the effect of corporate social responsibility (CSR) on the performance of the energy sector in Kenya with a particular emphasis on the Geothermal Development Company (GDC), bears substantial significance for a wide spectrum of stakeholders within the energy sector and CSR landscape in Kenya.

For the management of the Geothermal Development Company, the findings provide critical insights into the strategic value of CSR in influencing organizational performance. These insights are expected to inform decision-making processes by enabling GDC to align its CSR initiatives more effectively with corporate objectives, thereby fostering improved operational outcomes. Moreover, the study contributes to the enhancement of corporate image and reputation, which are instrumental in attracting key stakeholders such as investors, clients, and skilled personnel.

The corporate affairs department at GDC will benefit from this research by having a better understanding of how to design and implement CSR strategies that integrate legal, ethical and philanthropic dimensions. Such comprehensive strategies will strengthen stakeholder relationships and the company's image. The study also highlights the need for transparent and accountable communication of CSR efforts to strengthen stakeholder engagement and trust.

For regulatory agencies like NEMA, the study provides empirical evidence on how CSR initiatives impact environmental performance in energy companies. This will help refine environmental policies and regulatory frameworks to promote adoption of more sustainable and eco-friendly practices in the energy sector.

The Ministry of Energy can use the findings to develop and implement informed policy frameworks and CSR guidelines that promote sustainable development in energy companies. By promoting responsible business conduct, the ministry will achieve national energy objectives while protecting environmental and social interests.

From an academic perspective, the study contributes to the existing body of knowledge on the link between CSR and organizational performance in the Kenyan energy sector. It provides a robust methodology and empirical foundation for future researchers to build upon or adapt to other sectors and contexts. The study is a catalyst for ongoing research into the role of CSR in organizational development.

In essence, this research provides actionable insights that can inform corporate strategy, regulatory policy, and academic discourse. By examining the CSR-performance relationship through the lens of a key player in Kenya's energy sector, the study supports the broader agenda of promoting ethical, sustainable, and socially responsible business practices that benefit both organizations and society at large.

1.6 Scope of the Study

The scope of this study was limited to examining the effect of corporate social responsibility (CSR) activities on stakeholder management at the Geothermal Development Company. It did not cover GDC's progress in achieving its electricity generation targets or the challenges encountered in that regard. Instead, the study focused on identifying areas of contention between the company and the

surrounding communities, and on evaluating how GDC addressed these concerns through its CSR initiatives. In terms of the timeframe, the research was conducted exclusively during the latter half of the 2023 calendar year. This period was chosen to align with academic schedules, as the study was undertaken for academic purposes and adhered to institutional timelines. With respect to financial constraints, the study was carried out within a self-funded budget of Ksh 66,220. This limited budget highlighted the study's financial independence and the resource constraints under which it was conducted.

1.7 Limitations of the Study

The main problems with the study were that many respondents did not complete all the questionnaires or share personal details. To deal with these issues, a consent statement was developed that made it clear why the study was important and what ethical rules applied. Many respondents chose not to give complete answers, either because they saw the study as not important to them or because they were uncomfortable with the questions. As a result, there were fewer people in the study and less data to work with. We made the consent statement easy to understand and comforting. The researchers explained how their study related to corporate social responsibility (CSR) and how they would manage stakeholders and made clear that taking part was voluntary and all the information provided would be confidential.

Some respondents found it difficult to talk about sensitive matters between GDC and its stakeholders. This issue may have resulted in inaccurate and superficial data. The consent statement helped by clearly promising respondents that their answers would be kept private. It stated that any personal data obtained will be made anonymous and shared in groups to ensure no one's identity is revealed. All participants were asked to speak honestly, and researchers made sure

everyone understood how important data integrity was for the success and value of the study to GDC and its stakeholders.

At the end, the study had a risk of selection bias if those more likely to respond did not reflect the full range of stakeholders. This could have reduced the possibility of applying the results in different situations. We tried to address this risk by making sure the participants were diverse and included. We aimed to reach a wide variety of stakeholders and give them various ways to participate, so that the dataset includes many perspectives.

1.8 Organization of the Study

In Chapter One, the study is introduced, paying close attention to the connection between CSR and performance at the Geothermal Development Company. It covers the background of the study, the problem being investigated, what the research aims to achieve, what questions will be asked, why it is important, its boundaries and its limitations. This chapter points out how CSR is important for improving and steering the outcomes of an organization.

Chapter Two looked at the major studies, theories and ideas related to workplace learning. It analyzed important theories such as Corporate Social Responsibility Theory, Systems Theory, Stakeholder Theory, Expectancy Theory of Performance and the Balanced Scorecard approach. In addition, the chapter reviewed recent studies about stakeholder management and CSR which led to the creation of a conceptual framework and the discovery of research gaps that this study intends to fill. The authors explain how they conducted the research in Chapter Three. It explains the research plan, describes the population to be studied, discusses how samples were selected, describes how information was gathered and describes the test of the tools done in a pilot study. In Chapter Four, the study's findings are presented and explained through different data analysis methods. Demographic data about the respondents is part of it and the information is systematically

examined in light of the study's main objectives. Tables, charts and statistical measures are applied to show the effects of CSR on the performance of an organization.

Chapter Five makes an attempt to understand the findings in terms of the relevant literature discussed in Chapter Two. It examines the findings and uses them to support recommendations for practice and policy improvements. The chapter points out what the study has taught us, admits its weaknesses and proposes topics to be studied further.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the theoretical review, conceptual framework, empirical review, summary of knowledge gaps, and the conceptual framework.

2.2 Theoretical Review

The study was grounded in the following key theories namely corporate social responsibility theory which highlights ethical obligations to stakeholders, systems theory which views the organization as an interconnected system, stakeholder theory which stresses the importance of meeting stakeholder needs, expectancy theory of performance which explains motivation and effort based on expected outcomes and the balanced scorecard which offers a holistic approach to measuring organizational performance beyond financial indicators.

2.2.1 Corporate Social Responsibility Theory

Corporate social responsibility (CSR) theory started to develop in the middle of the 20th century and has been refined by numerous scholars and practitioners ever since. Important contributors to its development are Howard Bowen, Archie Carroll, Milton Friedman, and R. Edward Freeman. The theory points out that businesses have ethical and social responsibilities that are more than just making profits. Amoro (2021) and Freeman and Dmytriiev (2021) explain that Archie Carroll, in proposing his CSR pyramid in the late 20th century, identified four components: economic, legal, ethical, and philanthropic.

In CSR theory, it is believed that companies must make profits, obey the law, act ethically, and support the community. It explains that organizational behavior affects more than just the company's finances (Fares et al., 2021). Applying CSR theory to the current study on

organizational performance at GDC, it provides a theoretical framework for analyzing how GDC's fulfillment of legal, ethical, and philanthropic responsibilities may influence its overall effectiveness and sustainability (Bank, 2021). As a result of looking at these aspects, the study will find out how GDC's activities boost trust among stakeholders, improve its reputation and support its achievements in the geothermal energy sector (Duggal et al., 2022).

The CSR theory is in line with stakeholder theory, which encourages recognition of workers, buyers, suppliers, and the community (Freeman and Dmytriiev, 2021). When companies meet their CSR responsibilities, they often build better relationships with stakeholders and see better outcomes, as many stakeholders now care about how companies act toward the environment and society (Fares et al., 2021).

In short, CSR theory helps us see how GDC's behavior and impact on society can be linked, giving us an idea of how its legal, ethical and giving responsibilities may shape its standing and dealings with stakeholders in the geothermal industry.

2.2.2 System Theory

System Theory, deals with the way in which systems work together. By using this theory, developed by Ludwig von Bertalanffy, we can clearly understand both simple and complex systems and the way they work. In the middle of the twentieth century, it began to serve as an idea that brings together various fields and offers a single method for studying systems. Basically, systems theory sees both physical objects, biological systems and social organizations as systems (Anagnostou, 2020). Such systems are not just alone; they are connected to their environment and regularly interact with it.

In system theory, systems are important because they include a group of interconnected uses that come together to achieve a specific purpose (Edmundson, 2019). Examples of these systems are

mechanical, ecological or social systems. Subsystems which make up part of a bigger system, uniquely contribute and are closely related to the entire system (Musheke and Phiri, 2021).

In system theory, systems are split into open and closed types. Open systems take in or send out matter, energy or information, whereas closed systems do not interact with the outside environment (Jr, 2019). A system's boundaries show where it ends and where the environment begins and how open or closed it is to outside forces. Feedback, divided into positive and negative, helps systems react to how well they are functioning.

Using system theory in CSR studies at the Geothermal Development Company allowed us to see all aspects of complex interactions. This provided us with an opportunity to look at how CSR activities, legal obligations, ethical choices, philanthropic work, stakeholder handling and overall company performance are related.

The first aim of the study examined how organizational performance is influenced by legal responsibilities. This theory made it easier to see that organizations like GDC operate as open systems, dealing with laws and regulations from outside. Legal duties play a key role in shaping a company's internal work and overall results.

The second aim was to study how following ethical responsibilities contributes to performance. Ethics is built into how the organization works and decides. Through systems theory, it was possible to see how a company's culture begins to reflect its values and affects how it works with stakeholders and makes decisions about CSR. The third goal examined how caring for others mattered to the company's overall performance. With systems theory, GDC gained a better understanding of where their philanthropic efforts fit in the big picture. The study focused on the effects these activities had on stakeholders and, consequently, on the organization's overall results. The application of systems theory made it clear how CSR initiatives are connected to an

organization's actions and results. It highlighted the different connections between legal, ethical and philanthropic obligations and the way they influence both managing stakeholders and the success of an organization. The study focused on how GDC's activities affected each department and how corporate social responsibility added to the company's main objectives.

2.2.3 Stakeholder theory

Stakeholder According to R. Edward Freeman (Breesam and Jawad, 2021), stakeholder theory shows how organizations connect with their various stakeholders (Pinto, 2019). To explain, this theory arose as people realized that organizations have responsibilities to shareholders as well as to a wider group of stakeholders who can influence them and are impacted by what the organizations do (Pinto, 2019).

In stakeholder theory, stakeholders are people, groups or companies that have a connection to what an organization achieves. The stakeholders are investors, employees, customers, suppliers, the local community and government organizations (Fares et al., 2021). According to the theory, organizations must pay attention to the needs and concerns of all stakeholders besides shareholders. According to the theory, the Stakeholder Perspective advises organizations to consider their obligations in a wider context. Instead of focusing only on making shareholders happy, organizations are urged to look after their wider stakeholder group and work on their relationships with them (Uribe et al., 2018).

Stakeholder theory puts great importance on the concept of stakeholder salience. Freeman and Dmytriyev (2021) use power, legitimacy and urgency to determine the importance of stakeholders. Those stakeholders are considered high salience stakeholders because they possess high power, legitimacy and urgency and so require more attention from the organization. When we use stakeholder theory for CSR at GDC, we see that GDC is part of a group of stakeholders who have

their individual interests and worries. Stakeholder theory allows us to see the link between CSR and managing relationships with different stakeholders.

According to stakeholder theory, the first objective shows that stakeholders expect organizations to comply with the law as a minimum requirement. Observing legal requirements makes stakeholders accept and appreciate GDC and the company must comply to keep its trust and positive relationships with stakeholders. Using stakeholder theory, we can study the way following the law affects stakeholder views and, in turn, the organization's overall success.

To achieve the second aim which looked at the effect of ethics on an organization's performance, stakeholder theory is important. It is very important within stakeholder theory that organizations are expected to behave ethically and responsibly, as employees and the local community expect this. It stresses that companies should match their values and ethics with the expectations of their stakeholders. It helps us explore the ways ethical duties affect relationships with stakeholders and how this impacts the organization's results.

Going further, regarding the third objective which was to understand the impact of philanthropic duties on organizational performance, stakeholder theory sees philanthropy as a way to add value to stakeholders beyond what is required by law or ethics. Companies such as GDC can use their philanthropic efforts to help meet stakeholder needs and create good relationships. Stakeholder theory supports the study of how philanthropic projects increase stakeholder involvement and impact the performance of the organization.

Because stakeholder theory centers on the different needs of stakeholders, it can show how GDC's CSR efforts affect these groups. It outlined the need to pay attention to stakeholders, keep communication open in both directions and match CSR activities with what stakeholders expect. Using stakeholder theory, the study learns more about how CSR, stakeholder management and

organizational performance are connected and how they meet the concerns of different GDC stakeholders.

2.2.4 Expectancy Theory of Performance

In organizations, Victor Vroom's expectancy theory helps explain what leads people to be motivated. The theory explains how people's predictions about their efforts, results, and success affect their motivation to do certain activities (Apoi and Latip, 2019).

Several important concepts are included in this theory. Expectancy means that a person believes their efforts will bring about a specific chance of doing well. It refers to the belief that making an effort will bring about the desired result (Lumumba and Florah, 2019). Instrumental Continue reading the link in people's minds between what is done and the outcomes that result. How valuable or attractive someone thinks an outcome or reward is called valence (Ratemo et al., 2021). The assessment looks at how keen someone is to reach the goal or how much they hope to gain from it.

Expectancy theory is considered by communities in explaining how people in the community perceive relationships between GDC's obedience to laws and the results expected. If GDC follows the law and this results in better protection of the environment or higher compensation for land use, communities tend to support its projects. Believing that actions lead to outcomes can affect their views, the community's support and finally, the agency's success in those communities.

In addition, expectancy theory helps explain how communities relate what GDC should do ethically to what they hope to achieve. If communities see that GDC's actions lead to better resource management, employment or benefits for the community, they often choose to partner with the company. If communities view CSR programs through expectancy and instrumentality, it

may determine whether they are willing to join such projects which can shape GDC's performance in those areas.

Expectancy theory is also relevant when looking at how communities feel about the connection between GDC's philanthropic tasks and the results they hope to see. If residents think GDC helps improve infrastructure, schools or healthcare, they tend to see GDC as a positive factor in their lives. How communities see expectancy and instrumentality might affect their willingness to allow GDC in their areas and effect its reputation, both of which can impact how GDC is seen and perform.

According to expectancy theory, communities nearby the GDC react according to their personal views on how CSR obligations will bring positive results. It points out that linking CSR actions with local groups' values and expectations can help a business succeed. Through Expectancy Theory, the study learns how GDC can present and describe its CSR efforts to ensure communities support and cooperate which can greatly affect how GDC performs in these areas.

2.2.5 Balanced Score Card

The Balanced Scorecard was first introduced in the early 1990s by Drs. Robert Kaplan and David Norton and has become a main strategic management tool (Said and Maina, 2019). Traditional financial metrics were not enough to measure the many parts of how a company performs, so a new approach was needed (Said and Maina, 2019). With the Balanced Scorecard, companies were able to turn their important goals into clear and measurable steps.

Basically, the Balanced Scorecard uses several aspects which are best represented by its four main perspectives. The financial perspective is especially important because it shows organizations how to monitor their finances and create wealth (Intiswar and Rugami, 2019). This part of the business is measured by revenue, profit and the value of its shares to the shareholders.

At the same time, looking at customers amplifies the importance of relationships with stakeholders. At this stage, the company's reputation with its customers is reviewed, looking at satisfaction, loyalty, its market share and how many customers stay. Identifying and addressing customer needs is very important because it allows a company to remain competitive and lead its market (Owolabi et al., 2020).

Internally, the business processes viewpoint highlights the workings of the business that fuel its progress. The organization's ability to deliver value and stick to its strategy depends largely on how well its main processes are run (Intiswar and Rugami, 2019). To be agile and responsive, organizations need continuous improvement and strong operational excellence which shape this perspective.

In addition, the learning and growth dimension deals with the organization's source of human capital and intellectual capital. It suggests that a company can achieve long-term growth only by focusing on creativity, learning and flexibility (Wang and Xie, 2023). Programs that develop employees' abilities and the company's environment for work are examined, since they lead to innovation and help the company endure changes in the market.

The Balanced Scorecard rises as a key solution in the examination of this study. It is natural that this study's focus, looking at how GDC balances its legal, ethical and philanthropic duties and its overall performance, connects well with this framework (Said and Maina, 2019). With this approach, researchers can study how the different areas relate and what impact they have on a company's vitality. For example, you might look at finances. At this stage, the study examines what is required by law and looks at how these obligations affect finances. All three of these—compliance costs, legal expenses and risk exposure—can be studied to reveal how obeying

regulations affects a company's finances. In addition, understanding the impact of legal obligations on financial results can support smart decision-making about resources and risk.

The study focuses on the customer aspect by tracking the effects of ethics on what stakeholders think. A company's ethical actions are clear in how much customers are satisfied, how loyal they remain and the overall reputation of its brand (Owolabi et al., 2020). Through experimental studies, experts can discover how being ethical leads to loyal customers and the important role of ethics in strengthening ongoing customer relationships.

When looking at internal business processes, the study can identify how operations support the company's philanthropic activities. Here, the success of internal processes in helping with philanthropy is examined. Through looking at resource distribution and project management, the study can highlight the key factors that support successful philanthropy, suggesting ways to enhance it.

In the last dimension, research will explore the ways in which people are engaged and developed in their workplaces. Here, the study can examine how learning and growth strategies help support an ethical culture and raise the organization's performance. Cultivating a good workplace and great work results depend on employee training, development programs and knowledge management strategies.

The Balanced Scorecard supports organizations in their aim for excellence by structuring how to look at different performance areas. This study relies on it to steer through the challenging issues related to legal, ethical and philanthropic duties and their effects on how an organization operates. Because it takes a broad approach, the study can reveal information that surpasses the two-sided nature of financial results, making our understanding of the whole organization better.

2.3 Empirical Review

2.3.1 Corporate Social Responsibility

Amin and Rahmadi (2020) The researchers, used a quantitative approach to look at how corporate social responsibility affects the image of PT Pertamina Geothermal Energy in the Kamojang region. The study gathered data mainly by using structured questionnaires to understand what local communities thought and felt. The researchers interviewed 170 participants as part of their study. A significant positive correlation was found between Corporate Social Responsibility and Corporate Image ($r = 0.442$, $p < 0.01$). It appears that the way the local community sees the company's image is powerfully linked to its CSR initiatives. Moreover, the authors created a model summary showing that the CSR factor explained a significant portion of the differences in corporate image (R Square = 0.196). Even when we considered other possible factors, the link between the variables was still significant (Adjusted R Square = 0.191). The measurement showed a standard error of the estimate of 2.736.

The paper by Purwanto et al., (2021) looked at how businesses in Indonesia implement corporate social responsibility practices in the development of geothermal energy. The study mainly looked at how Corporate Social Responsibility (CSR) helps solve social and environmental problems in sustainable geothermal operations in Indonesia. The paper highlighted that CSR programs act as a crucial approach to addressing social and environmental challenges. It specifically highlighted the importance of community involvement, meaning people and organizations in the community, corporations and government worked together. It was considered necessary for geothermal operations to remain sustainable over the long run and to protect the environment and society. The paper also pointed out that CSR activities cover various areas, including road improvements, supplying clean water and strengthening the community by fixing mosques, encouraging composting, supporting handicrafts, farming brown sugar and raising cattle and fish. The

combined effect of these initiatives was to better the local environment, people's lives and the economy within Indonesia's geothermal areas.

Rongei and Muturi (2018) carried out a detailed investigation titled the influence of corporate social responsibility on the performance of Sony and Chemelil Sugar Factories in Kenya. Their study examined what impact CSR had on the performance of these Kenyan companies. The study used a descriptive research design and collected its data using questionnaires that focused on philanthropic, ethical, economic and legal activities and how they shape an organization's performance. The analysis of the data by R-value found that there is a positive relationship between CSR activities and how the organization performs. Specifically, because the R-square was 0.782, ethical, philanthropic, economic and legal CSR activities positively and strongly influenced the performance of Sony and Chemelil Sugar Factories in Kenya. Essentially, Rongei and Muturi found that CSR efforts greatly improved how these companies did business, highlighting how being ethical, philanthropic, economically sound and lawful made them more effective and successful.

2.3.2 Stakeholder Management at Geothermal Development Company

Stakeholder management is a key part of Geothermal Development Company's activities. Managing stakeholders is very important for GDC, especially as it faces the many issues involved in producing geothermal energy. These issues cover harm to nature, gas emissions, poisons found in geothermal water and noise pollution (Mutai et al., 2023). Here, we look at why it is so important to handle stakeholders, particularly the community, when working on complex environmental topics.

Lately, the geothermal energy sector has expanded a lot due to its ability to provide renewable and environmentally safe power. Since Geothermal Development Company aims to harness the Earth's

heat for electricity, it is now more important than ever to consider the possible environmental effects of these activities (Purwanto et al., 2021). The environmental damage to land is one of the main challenges. The use of geothermal energy requires huge areas of land, including the building and running of power plants which may affect the environment and disrupt the lives of local people (Mutai et al., 2023). Including local people and landowners in decisions is very important to guarantee that land-use changes are sound and for the good.

The opinions of those affected by geothermal projects give us valuable information. Those who live in a community can explain sustainable land-use methods and help plan conservation measures (Njau, 2020). Teamwork with these groups allows GDC to carry out reforestation and land rehabilitation efforts to address the negative effects of land degradation. They also help the environment and encourage everyone in the area to care for it, which strengthens trust and good feelings among the communities where GDC works.

Gas emissions are a major issue when creating geothermal energy. When fluids are pulled out from deep in the ground, they are frequently a mix of gases, including carbon dioxide (CO₂), hydrogen sulfide (H₂S), and methane (CH₄), says Amin and Rahmadi (2020). If these gases are not controlled properly, they can lead to pollution and climate change (Mutai et al., 2023; Njau, 2020). Businesses need to involve environmental organizations and regulatory bodies in managing their emissions (Amin and Rahmadi, 2020). It guarantees that GDC meets emission requirements and takes actions to cut down on emissions, which helps lower its environmental impact.

It is also important to consider the problem of toxic sludges within geothermal fluid (Amin and Rahmadi, 2020). If not handled properly, these sludges may lead to health problems and serious environmental harm, since they can include harmful metals such as arsenic and lead (Mutai et al., 2023). This problem can only be solved with involvement from all stakeholders. Partnering with

experts, regulators and local people can help create ways to avoid toxic sludges and to safely manage them when they form (Purwanto et al., 2021). In addition, people involved in the industry can encourage using advanced technology like binary cycle power plants which aid in using geothermal gases and help in cutting down emissions and hazardous sludges.

The production of geothermal energy can lead to several types of pollution which calls for better involvement of stakeholders (Njau, 2020). Geothermal fluid can include minerals and chemicals that, when discharged, may pollute nearby water bodies (Amin and Rahmadi, 2020). Local communities and environmental groups should be involved in keeping an eye on and handling possible water pollution problems (Kautsar, 2018; Mutai et al., 2023). Such stakeholders can offer their knowledge and experience to create strategies for responsible wastewater management and to help protect waterways.

Generating geothermal energy can be a source of pollution, so it is important for stakeholders to be involved (Njau, 2020). Water sources can be contaminated by minerals and chemicals in the hot water from geothermal plants (Amin and Rahmadi, 2020). Keeping local communities and environmental groups involved is necessary to watch for and solve water pollution problems (Kautsar, 2018; Mutai et al., 2023). Thanks to their local experience, these stakeholders can shape approaches for safely dealing with fluids, water treatment and protecting rivers and lakes. Air pollution remains an important concern because geothermal plants release gases like hydrogen sulfide and sulfur dioxide (Amin and Rahmadi, 2020; Njau, 2020). They can lead to problems with air quality and harm people's health. Keeping in touch with regulators and the public helps GDC stay compliant with air quality standards and install the most effective pollution control solutions. It not only aids in lowering air pollution, but also makes things clearer and more accountable.

People should be concerned about noise pollution as well (Purwanto et al., 2021). Because of their operations, geothermal facilities produce noise that can disturb the community life and comfort of nearby people (Njau, 2020; Purwanto et al., 2021). Residents living nearby are most affected by noise pollution and can describe its results from their personal experience. Talking to residents makes it easier to find and carry out useful noise-reduction steps such as installing barriers, adding soundproofing or shifting operations to make less noise.

During these environmental difficulties, stakeholder management relies heavily on community participation (Amin and Rahmadi, 2020; Mutai et al., 2023). Good relationships with communities in the area help GDC's geothermal projects thrive and last over time (Amin and Rahmadi, 2020). If communities know what GDC is doing and care, they are more likely to support GDC and help address environmental issues (Amin and Rahmadi, 2020; Kautsar, 2018). If local people take part in planning, they often become involved in efforts to protect the environment. Involving communities helps to solve conflicts (Kautsar, 2018). Involving stakeholders gives GDC a chance to solve environmental concerns early, lowering the risk of lawsuits and negative news (Kautsar, 2018; Njau, 2020). When there are open channels and teams that solve problems collaboratively, understanding increases and relationships between GDC and communities become more peaceful.

In addition, engaging with the community can encourage agreements that help GDC and the local residents (Amin and Rahmadi, 2020; Mutai et al., 2023). Communities can be encouraged to take care of the environment when revenue-sharing programs are offered (Amin and Rahmadi, 2020). GDC can achieve greater community support and secure its right to operate by including stakeholders in the financial rewards of geothermal projects.

Geothermal Development Company relies strongly on community engagement to overcome the environmental issues that come with producing geothermal energy (Mutai et al., 2023; Njau, 2020). When organizations rely on stakeholders and work together, they encourage sustainable steps, limit harm to the environment and secure their social license to function (Kautsar, 2018; Mutai et al., 2023). As geothermal energy projects face problems such as land damage, air pollution, toxic waste and noise, having active and open participation from all stakeholders brings hope for their success and sustainability.

2.3.3 Legal Responsibilities and Stakeholder Management

Being legally responsible and effectively managing stakeholders is essential in the daily operations of the Kenyan Geothermal Development Company (GDC). Researchers such as Amin and Rahmadi (2020) and Njau (2020) have emphasized the importance of stakeholder responsibility, which is governed by a range of national and international regulations that ensure geothermal energy development is both sustainable and environmentally sound.

At the national level, geothermal activities in Kenya are primarily regulated by the Geothermal Resources Act of 1982 and its subsequent amendment in 1990. These laws form the legal foundation for managing geothermal resource operations in the country (Odhiambo, 2021). They provide guidelines on what is permitted and expected of entities like GDC and other licensed stakeholders. Importantly, they underscore the necessity of public participation and consultation at every stage of geothermal project development to ensure that local communities are actively engaged (Kungu et al., 2022).

Additionally, the Environmental Management and Coordination Act (EMCA) of 1999 offers a comprehensive legal framework for environmental governance in Kenya. The Act established the National Environment Management Authority (NEMA), which oversees environmental oversight

and coordination (Odhiambo et al., 2020). Under EMCA, GDC is required to conduct Environmental Impact Assessments (EIAs) for all geothermal projects, incorporating input from local communities and environmental organizations (Gichuhi, 2021). These assessments ensure that potential environmental effects are carefully considered and mitigated in accordance with the law. The Energy Bill and Energy Policy of 2012 further consolidated various energy-related regulations across Kenya. These documents highlight the importance of stakeholder engagement and advocate for inclusive and transparent decision-making processes in energy projects (Mostafa & Hamersma, 2021). This aligns with international best practices in sustainable energy development.

On the global stage, Kenya's commitment to the United Nations Framework Convention on Climate Change (UNFCCC) is particularly significant. Geothermal energy, being a clean and renewable source, directly supports international efforts to combat climate change. As a signatory to the UNFCCC, Kenya collaborates with a wide range of stakeholders to shape its climate policies and strategies (Odhiambo et al., 2020). GDC's geothermal power generation contributes to Kenya's climate goals and garners support from international partners.

Regionally, Kenya's participation in initiatives such as the African Geothermal Centre of Excellence (AGCE) further enhances stakeholder engagement. AGCE facilitates collaboration and knowledge-sharing among African nations involved in geothermal development (Kinampai, 2019). Through AGCE, GDC engages with regional and international organizations, fostering cooperation and collective advancement in the sector.

Furthermore, Kenya's involvement in global environmental agreements like the Kyoto Protocol and the Paris Agreement reinforces its dedication to reducing greenhouse gas emissions and combating global warming. The low carbon footprint of geothermal energy aligns perfectly with

the objectives of these accords (Mukandala et al., 2020). GDC's geothermal initiatives not only contribute to Kenya's global climate commitments but also position the country as a leader in sustainable energy. This, in turn, enables GDC to form international partnerships and secure funding for the expansion of geothermal projects, thereby strengthening global stakeholder engagement (Kautsar, 2018). Kenya's Geothermal Development Company is subject to laws and agreements from both domestic and foreign sources (Njau, 2020). Stakeholder participation, public involvement, and environmental care are key parts of the regulations surrounding geothermal energy (Amin and Rahmadi, 2020; Mutai et al., 2023). The company's obedience to these regulations allows for responsible and lasting geothermal growth and helps build good relationships with local communities, environmental organizations, and partnering countries (Kautsar, 2018). By working together, Kenya's geothermal energy sector becomes more successful and sustainable.

2.3.4 Ethical Responsibilities and Stakeholder Management

Ethical All companies everywhere, including those in the geothermal energy business, make ethical responsibility and strong stakeholder management a top priority (Njau, 2020). They require more than just complying with laws and also focus on being open, fair, and responsible (Mutai et al., 2023). We look at the ethics of diverse companies, including geothermal firms, and study how these are connected to their approaches to engaging with stakeholders on a worldwide scale.

Being responsible means always committing to ethical governance (Mutai et al., 2023; Purwanto et al., 2021). High ethical standards are expected from companies, wherever they may be or what industry they are in. These standards include integrity, transparency, and honesty, and they direct how a company acts and communicates with its stakeholders (Mutai et al., 2023; Njau, 2020). Ethical governance means more than following rules; it helps a company maintain ethical integrity

in how it interacts with stakeholders (Kautsar, 2018). Because of this ethical foundation, everyone from nearby communities to investors and authorities can trust the company which builds a firm base for enduring and mutually beneficial connections.

Being socially responsible is something that all industries must do. Firms everywhere are acknowledging the value of giving back to the communities they operate in (Mutai et al., 2023). Besides making a profit, these companies work on improvements to infrastructure, education, health and the general well-being of the community (Kautsar, 2018). Social responsibility efforts are consistent with the rules of ethical behavior and communication with stakeholders (Amin and Rahmadi, 2020). Working with local communities gives companies a chance to find out about important social problems and address them in line with their responsibilities.

All around the world, companies in sectors like geothermal energy agree that protecting the environment is a shared responsibility (Mutai et al., 2023; Njau, 2020). The business has to try to use fewer resources and take actions to avoid causing problems for the environment. This responsibility supports global efforts to reduce negative effects on the environment (Amin and Rahmadi, 2020). Taking part in stakeholder engagement by cooperating with environmental organizations and local people is vital for spreading knowledge and supporting environmental practices everywhere a company operates.

Being ethical means treating all stakeholders, no matter their sector or location, according to Kautsar (2018). Companies must ensure that each group of stakeholders is treated fairly, given their due, communicated with openly and follow the terms of their agreements (Kautsar, 2018; Mutai et al., 2023). Having open conversations with stakeholders and using their input helps a company gain a reputation for being fair and equitable (Njau, 2020). This way of thinking helps companies avoid conflicts and ensures stakeholders respect the company which is vital for their

growth.

Community development is a common value that applies to many businesses and areas worldwide. A business in any field is expected to support the economic and social growth of the communities where it works (Amin and Rahmadi, 2020; Njau, 2020). For example such policies can support things like job growth, training people and helping local businesses (Purwanto et al., 2021). When stakeholders join forces, identifying community needs becomes easier, so the projects can truly benefit the local area.

All companies globally are responsible for respecting cultural heritage, understanding that this helps preserve the culture of the communities in which they are located (Kautsar, 2018). It means taking care of and respecting important places, traditions and cultural ways of life (Mutai et al., 2023). To show their commitment, companies should talk with local residents and cultural experts, learn about cultural importance in their areas and decide on actions that protect the heritage.

Every company is required to follow the universal principles of transparency and accountability (Njau, 2020). Openness in how a business runs, its finances and in decision-making forms the foundation of corporate accountability (Amin and Rahmadi, 2020; Kautsar, 2018). Communication with regulatory bodies and outside watchdogs gives an extra level of supervision that supports ethical actions and helps ensure companies are answerable for everything they do, no matter the country or industry.

2.3.5 Philanthropic Responsibilities and Stakeholder Management

For geothermal firms around the world, philanthropic responsibilities and managing stakeholders well are key parts of their commitment to society and the environment (Kautsar, 2018; Njau, 2020). (Kautsar, 2018; Njau, 2020). These philanthropic initiatives are meant to go over and above what the law requires, as they represent a geothermal company's desire to make a difference in the

community.

Geothermal firms, working in many regions and cultures, understand that they must support the local communities where they are active (Njau, 2020; Purwanto et al., 2021). As a result, companies often develop education programs, provide health services and give money to charities within the community. Companies choose specific community issues to support and learning about these issues depends on engaging stakeholders (Njau, 2020). Involving stakeholders enables geothermal firms to discover the special needs of each community (Purwanto et al., 2021). If geothermal companies get local communities and nonprofits involved, they can help ensure their philanthropic efforts are meaningful and last for years, demonstrating they care about the welfare of society.

Many companies in the geothermal industry have made CSR the main part of their giving (Kautsar, 2018; Mutai et al., 2023). These CSR activities may be related to environmental safety or social issues, as Njau (2020) explained. A majority of the time, such initiatives align well with stakeholders' interests and concerns, reflecting what customers, employees, and investors value most (Amin and Rahmadi, 2020). Geothermal companies get a good picture of what can be incorporated into their CSR programs by talking to their stakeholders (Mutai et al., 2023). Working together and engaging in conversations allows these firms to make sure their charitable activities meet stakeholder expectations and support the community.

In addition, geothermal firms should support and contribute money to deserving charitable groups (Amin and Rahmadi, 2020; Kautsar, 2018). A part of the earned profits may be given to nonprofit organizations, used for disaster relief or invested in community development (Purwanto et al., 2021). Joining efforts with non-governmental organizations (NGOs) and local community leaders allows us to use funds the way they are meant to be used. Talking with stakeholders helps

geothermal companies discover trustworthy and effective charities (Amin and Rahmadi, 2020; Njau, 2020). Getting stakeholders involved in decision-making means these firms can smartly direct their donations to the causes that will do the most good.

In addition to offering funds, geothermal firms might help employees take part in activities that use their skills (Amin and Rahmadi, 2020; Kautsar, 2018). It means staff members use their skills to help with community projects (Kautsar, 2018). Stakeholder feedback helps geothermal companies choose projects that use employees' skills well and support what the community needs (Mutai et al., 2023; Purwanto et al., 2021). Both workers and local residents regularly wish to help in volunteer efforts that fit with their principles (Njau, 2020). Collaborations with stakeholders enable geothermal companies to find volunteering chances that bring a sense of satisfaction to their workforce.

Support for educational and workforce building projects is a common way to fulfill philanthropic responsibilities in the geothermal industry (Kautsar, 2018; Mutai et al., 2023). Some geothermal companies launch scholarship programs, arrange mentorships or organize vocational training for people around their projects. Working with stakeholders helps make sure that these programs respond to the specific skill and educational needs of participants (Amin and Rahmadi, 2020). Local schools, students and parents make it possible for geothermal companies to adapt their giving to the specific needs of the education system (Njau, 2020). By partnering, resources are focused on making programs that benefit the community's education for years ahead. Philanthropic responsibilities of geothermal companies must be directed toward environmental conservation and sustainability (Amin & Rahmadi, 2020; Mutai et al., 2023). These entities may support initiatives related to non-profit environmental concerns, such as engaging in reforestation projects, promoting clean energy, and endorsing environmentally friendly practices (Kautsar, 2018). Stakeholder engagement is important for identifying environmental issues and sustainable solutions relevant to local

communities (Purwanto et al., 2021). The engagement with conservation organizations and local communities permits geothermal companies to design firmly oriented philanthropic activities (Njau, 2020). The collaborative intervention could ensure that projects state the stakeholders' values in line with broader sustainability aspirations.

2.4 Summary of Reviewed Studies and Research Gaps

In a study conducted by Amin and Rahmadi (2020), noted how the corporate social responsibility (CSR) activities of PT Pertamina Geothermal Energy in Indonesia's Kamojang area affect its corporate image. The researchers employed a quantitative research approach and collected data from 170 participants through structured questionnaires. The investigation identified that CSR and corporate image are closely related, indicating that community members' views of a company are strongly affected by its CSR activities (Qudus & Sri Amelia, 2020). A research gap identified in this study is the need to delve deeper into the specific influence of legal responsibilities, which are a subset of CSR, on the corporate image of geothermal companies like PT Pertamina Geothermal Energy.

Purwanto et al., (2021) examined the community engagement support in sustainable geothermal operations: An analysis of corporate social responsibility in Indonesia. The study emphasized that community involvement plays a key role in solving social and environmental issues related to geothermal energy. It pointed out that empirical research is needed to confirm the effectiveness of CSR efforts such as community participation in various geothermal areas (Purwanto et al., 2021). The study noted that more empirical studies are required to confirm the effectiveness of CSR efforts in geothermal operations, which is not fully covered in the theoretical framework.

Rongei and Muturi (2018), assessed the effect of CSR on the performance of Sony and Chemelil Sugar Factories in Kenya. Surveys were given to participants so that the study could explore philanthropic, ethical, economic and legal areas of CSR activities. Both companies showed a

positive relationship between their CSR activities and how well they performed (Rongei and Muturi, 2018). Examining the role of ethics which forms a part of CSR, on the performance of geothermal companies is a worthwhile research area. Further exploration could analyze the details of ethics related to geothermal energy.

2.5 Conceptual Framework

The conceptual framework in Figure 2.1 below, represents the correlation between legal responsibilities, ethical responsibilities, philanthropic responsibilities, and performance diagrammatically.

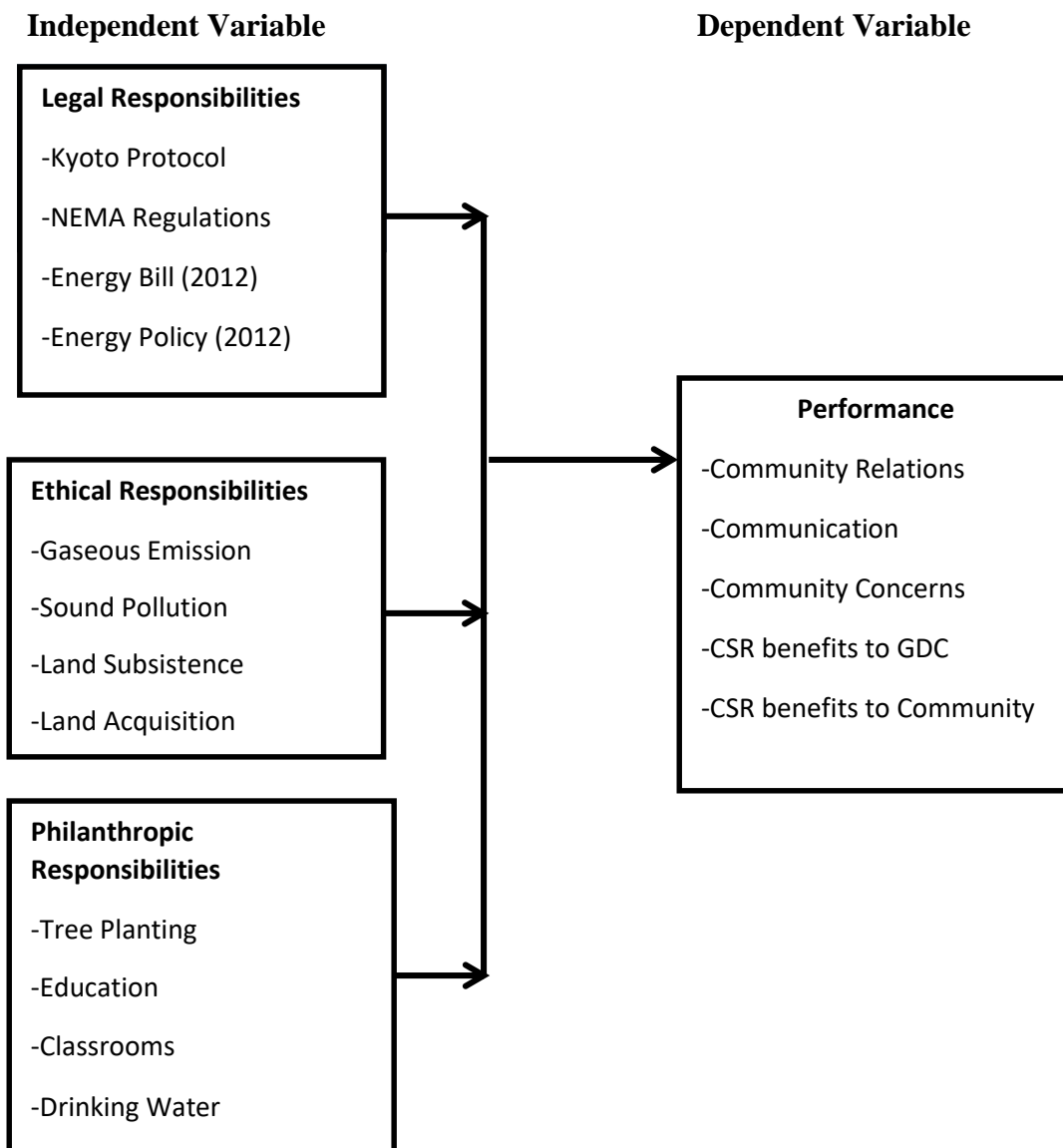


Figure 2.1: Conceptual Framework (Source: Researcher 2016)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter examined the research methodology that was used in this study. It gives a detailed description of the research design, target population, sampling technique, data collection instrument, pilot study, data collection process, and data analysis.

3.2 Research Design

A descriptive research design was decided upon for this study since it is best suited to meeting the study's aims and objectives. The method was to carefully observe and record certain traits, actions, or situations that mattered for a particular research question that do not involve changing variables (J. K. Gathii et al., 2019). It fit perfectly with the study's three goals, which include examining studying how legal duties affect companies, how ethical duties play a role, and how philanthropy affects things on the effectiveness of our organization at GDC. It gives us a way to gather information about what these roles mean and how they are currently practiced within the organization and not interfering in the way of what it does. Because it's easy to use, objective, and not intrusive, researchers can offer a fair look at what is going on. It is also useful for studying possible relationships between these responsibilities and the organization because of its performance. It's the best research design for studying how legal, ethical, and philanthropic matters interact in GDC and their effect on the organization's total performance.

3.3 Target Population

The research targeted a population of 54 staff members from the Corporate Affairs Department of the Geothermal Development Company (GDC), Kenya. Their selection was based on how closely they are involved in running the company's legal, ethical and philanthropic matters. Because of

their experience and expertise, they were able to give useful advice on how these tasks affect the organization's overall results. The main unit observed in this study was individuals from the Corporate Affairs Department, since information was gathered directly from the staff. For this study, only GDC as a whole is examined, as we want to see how its overall performance is influenced by its legal, ethical, and philanthropic duties.

3.4. Sampling Technique and Sample Size

3.4.1 Sample

Sampling happens when researchers pick a group from a broad population to represent that population in their data collection (Mugenda & Mugenda, 2019). 54 employees from the GDC's Corporate Affairs Department were part of this study. Having this number of participants was helpful, letting us gather valuable information and analyze it well, so that our findings would be relevant to all employees.

3.4.2 Sampling Design

The research used a census sampling whereby it included every professional in GDC's Corporate Affairs Department, which made up of 54 employees. As a result, all the needed data was collected, worked with high accuracy, and kept the research relevant, which was right for the small population and led to reliable and valuable findings.

3.5 Data Collection Instrument

Data was gathered through 54 employees from GDC's Corporate Affairs Department using questionnaires, which provided several valuable advantages. All participants were asked the same questions using structured questionnaires. Certainty was ensured that every person used the same set of questions and options, making answers less likely to be affected by bias. Also, questionnaires helped gather information from many people in a short span of time, so they fit this study

particularly well. With this structure, quantitative research can be conducted to see how legal, ethical, and philanthropic obligations influence how well an organization performs. You should be sure to plan the questionnaire well, test it first, and choose wording that makes each question clear and relevant to your research.

For data collection, the team used 54 employees from the Corporate Affairs Department and found that using structured questionnaires with a 5-point Likert scale had many advantages. These questionnaires provide a set method, making sure the questions and answers are always the same. The use of a 5-point Likert scale lets us assess how people think the impact of legal, ethical, and philanthropic responsibilities affects the performance of an organization. Likert scale use also makes it possible to analyze data with great accuracy because it has many response options. In addition, questionnaires are very efficient at obtaining answers from many people within a short time, making them appropriate for this study. To make sure the Likert scale is beneficial, you must design the questionnaire carefully, pilot it, and pay attention to each question's wording.

3.5.1 Pilot Study

Before carrying out the main research, 54 employees from the Corporate Affairs Department at GDC were involved in a pilot test to improve the research instruments and procedures used. A few participants from the group assessed the questionnaire and the process, giving their opinions (Gathii et al., 2019). By doing this, the study's main results can be trusted because the data collection tools are well-structured and efficient.

3.5.2 Validity of Research Instrument

Validity refers to the extent to which a measuring instrument accurately captures the specific concept or constructs it is intended to measure, thereby providing a true representation of the underlying phenomenon (Mutua, 2022). In this study, concentrated on content validity. It reviews

the questionnaire to make sure all the aspects of the topics are included. It looks at how well the questions in the questionnaire match and illustrate the constructs being studied. The Content Validity Index (CVI) is commonly applied to check the validity of content in an assessment (Gathii et al., 2019). To do this, the researchers ask a group of experts or experienced scientists to go through each question and judge how relevant it is to the targeted construct. In general, experts measure the importance of each item from 1 (not relevant) to 4 (highly relevant). The CVI is found by determining the percentage of experts who have rated an item as 3 or 4. When the CVI score is 0.80 or greater, most experts find the items important, validating the content of the instrument. A pilot study was also carried out to check the questionnaire's clarity and appropriateness. In Nairobi County, Kenya, a small sample from a similar population took part in the piloting stage. The objective was to evaluate how easily understandable and relevant the questionnaire was. Responses from the pilot participants, together with comments from experts, helped to modify the questionnaire. As a result, the content validity of the instrument improved, making it better able to measure the important topics and making the research more reliable.

3.5.3 Reliability of Research Instrument

When the research instrument is reliable, the results are likely to be very similar each time it is used in the same way (Gall et al., 2007). The reliability of the results was checked by comparing how much the items within each scale are related to each other. For each part of the instrument, we computed Cronbach's alpha coefficient. When the coefficient was 0.7 or more, the results were considered acceptable for internal reliability. Every scale in the study was assessed for its reliability using the SPSS statistical software.

3.6 Data Collection Process

The first step in the data collection process involved obtaining a formal letter from Kenyatta University to facilitate the data collection. The letter affirmed that the researcher was an enrolled student of the university and explained the purpose of the research. After presenting the letter to the management of the Geothermal Development Corporation, the researcher received formal approval to proceed with the data collection. Each participant was provided with a consent statement that clarified the study before being asked to complete the questionnaire. Following up with the respondents was made easier through their telephone numbers. Participants submitted their completed questionnaires at the prearranged times.

3.7 Data Analysis and Presentation

All the data collected was cleaned, coded, categorized, and tabulated in a planned way to guarantee it was accurate, uniform, and prepared for analysis. SPSS version 21, since it is good for analyzing survey data and has powerful statistical tools, the cleaned dataset was analyzed using this package. All data presented in the study were quantitative and arranged in tables to make it easier to interpret. The analysis used both types of statistical tools, descriptive and inferential. The data was summarized by relying on frequency distributions, the mean, and standard deviation to examine the main trends and spread in the dataset. To study the relationships between variables, we turned to inferential statistics and used the data to draw important conclusions. The research made use of principal component factor analysis and Pearson correlation analysis. Correlation analysis showed the degree and direction of links among the independent variables legal, ethical and philanthropic responsibilities and organizational performance. The analysis helped uncover the relationship between corporate social responsibility and organizational success which improved our understanding of those dynamics.

3.8 Ethical Consideration

To maintain integrity, credibility, and trustworthiness in a study, research ethics are very important. Ethical issues were given the highest priority by encouraging volunteers, keeping the study participants' identities secret, clearly stating the study's purpose and who supported it, and applying the strictest honesty and objectivity when analyzing and reporting. Those who took part were informed of the purpose of the study, a promise of confidentiality, information that their involvement was voluntary, and that financial participation was not required. The researchers tried to solve ethical issues, protect everyone involved, and ensure the research was valid by following these principles and providing a clear consent statement.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This section presents the analysis, presentation, and interpretation of findings regarding the effect of social responsibility on the performance of the GDC in Kenya. It outlines the data analysis methods employed to achieve the study objectives. The results are organized as demographic characteristics of the respondents, descriptive analysis of the independent and dependent variables, assessment of reliability and validity, and inferential analysis using the Pearson product-moment correlation coefficient.

4.1.1 Response Rate

Primary data were collected from employees of the Geothermal Development Company through the use of a questionnaire. A total of 54 questionnaires were distributed, and all 54 were completed and returned, representing a 100% response rate. According to Blumenberg and Barros (2018), a response rate of 70% or higher is considered very good for analysis. Therefore, the 100% response rate achieved in this study was highly appropriate for robust data analysis.

4.2 Demographic Information of Respondents

The study determined the respondents' demographic characteristics for those who participated in the study, which include: gender, age, level of education, and experience at work.

4.2.1 Gender Distribution

The distribution of the gender for the participants in the study is presented in the Table and Figure 4.1.

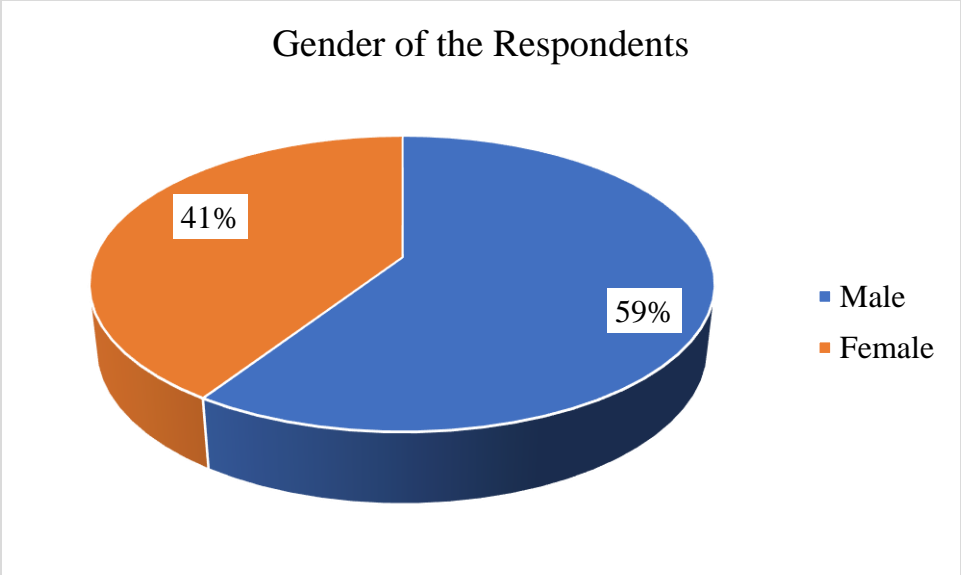


Figure 4.1: Gender Distribution

The results indicated that the majority of respondents, 32 (59%), were male, while 22 (41%) were female. This suggests that the distribution of respondents was uneven.

4.2.2 Level of Education

It was important to establish the education level held by the study respondents in order to ascertain whether they understood the objective of the study, and the results are as shown in Figure 4.2.

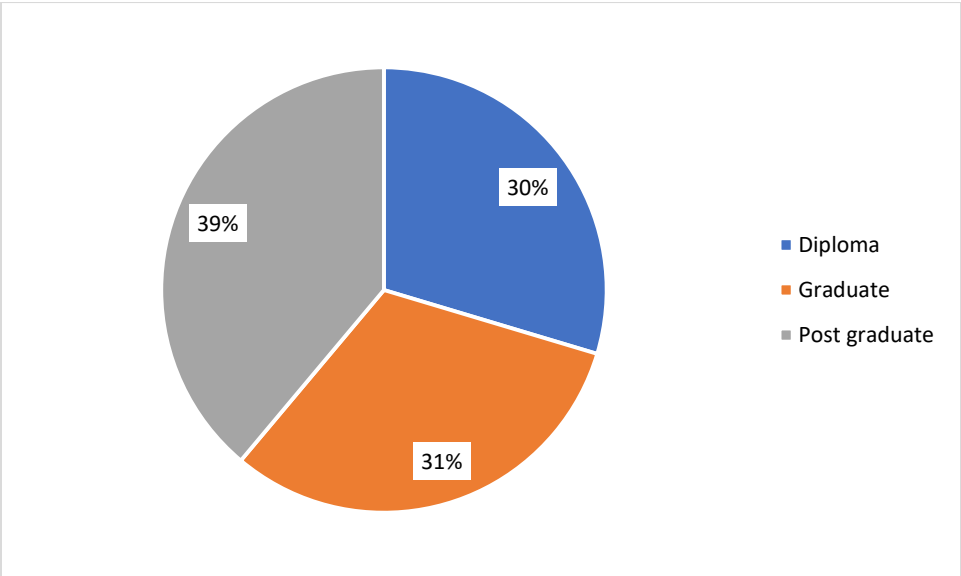


Figure 4.2: Level of Education

The results indicated that 21 (39%) of the respondents had postgraduate qualifications, 31% held graduate degrees, and 30% possessed diploma qualifications. These results imply that the majority of respondents had attained a relatively high level of education, equipping them with the cognitive and analytical skills necessary to understand and evaluate organizational performance. This educational background strengthens the credibility of their responses, suggesting that the data collected on performance at GDC is likely to be informed, reflective, and reliable. Findings indicated that 21(39%) of the respondents had postgraduate qualifications, 31% had a graduate degree, and 30% had diploma qualifications. These findings implied that most of the respondents were qualified to understand performance at GDC.

4.2.3 Duration of employment at GDC

The study aimed to determine the respondents' duration of employment at GDC, with the results presented in Figure 4.3.

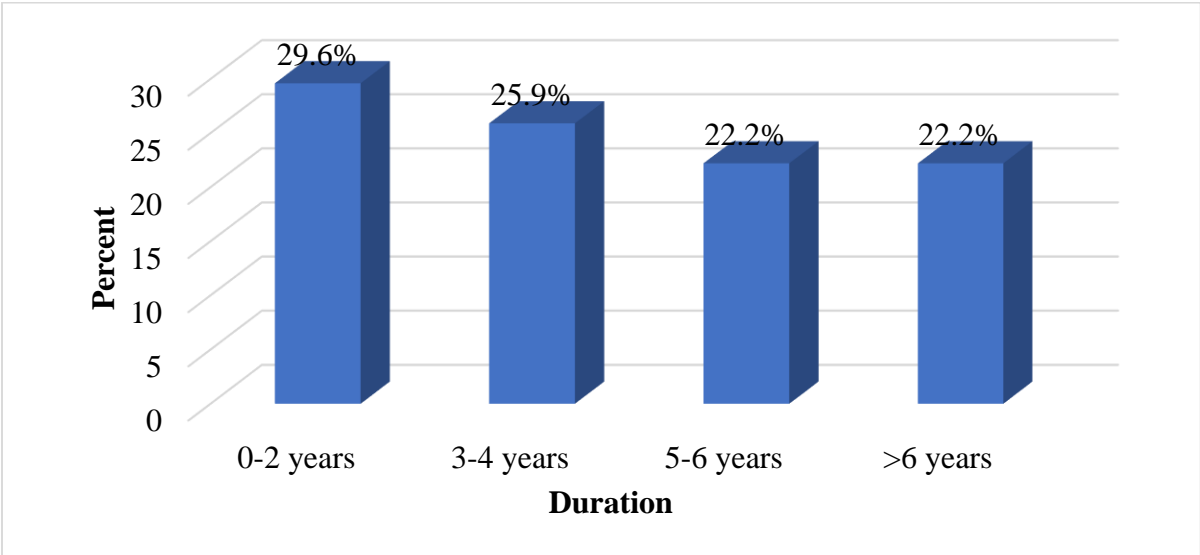


Figure 4.3: Duration of employment at GDC

The findings showed that 16 (29.6%) of the respondents had been with the company for less than 2 years, 14 (25.6%) had worked between 3 and 4 years, while 12 (22.2%) had been employed for between 5 and 6 years or more. These results suggest that a substantial proportion of respondents had been with GDC for

an extended period, with over 47.8% having served for more than 3 years. This level of tenure indicates a strong base of organizational experience and institutional knowledge among the respondents, which likely enhances the depth and accuracy of their insights into company performance and operations. Duration of employment at GDC, the findings showed that 16(29.6%) had being in the company for below 2 years, with 14(25.6%) having spent 3 and 4 years, while 12(22.2%) had being in the company for between 5 and 6 years as well as above six years. Results showed that most of the employees who work in GDC had spent more than 3 years working in the company.

4.3 Descriptive Analysis for Variables

Descriptive analysis was employed to describe the variables and show their key characteristics. The respondents were asked to state the extent to which they agreed with the statements using the five-point Likert scale of 5= [SA] Strongly Agree, 4= [A] Agree, 3= [N] Neutral, 2= [D] Disagree, 1= [SD] Strongly Disagree. Descriptive statistics comprised frequencies, percentages, mean, and standard deviation, which gave a meaningful description of the quantitative data collected from the questionnaires. To illustrate the key findings, the study used mean and standard deviations. According to Margaret (2017), the Likert scale of mean (\bar{x} =4.2 to 5 strongly agree; 3.4 to 4.2 agree; 2.6 to 3.4 undecided; 1.8 to 2.6 disagree; and 1 to 1.8 strongly disagree) was used.

4.3.1 Effect of Legal Responsibilities on Organizational Performance at the Geothermal Development Company

The first objective of the study was to examine the effect of legal responsibilities on the organizational performance of the Geothermal Development Company (GDC). This was achieved by assessing the relationship between legal responsibilities and performance using descriptive statistics. Legal responsibilities were measured through eight statements rated on a five-point Likert scale, ranging from SD to SA. The descriptive statistics summarizing this data are presented in Table 4.1.

Table 4.1 Legal Responsibilities

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Adherence to the Kyoto Protocol has an effect on stakeholder management at GDC			3	5.6	8	14.8	13	24.1	30	55.6	4.30	0.92
Compliance with Kyoto Protocol targets contributes to increased stakeholder confidence in GDC.	2	3.7	6	11.1	7	13.0	15	27.8	24	44.4	3.98	1.17
Adherence to the National Environment Management Authority (NEMA) regulations has an effect on stakeholder management at GDC.	7	13.0	7	13.0	8	14.8	20	37.0	12	22.2	3.43	1.33
Reduction in environmental infractions due to NEMA compliance influences stakeholder perception of GDC.	1	1.9	5	9.3	6	11.1	15	27.8	27	50.0	4.15	1.07
Adherence to the Energy Bill of 2012 has an impact on stakeholder management at GDC.	1	1.9	5	9.3	9	16.7	19	35.2	20	37.0	3.96	1.05
Monitoring energy efficiency practices under the Energy Bill (2012) enhances stakeholder engagement at GDC.	3	5.6	1	1.9	10	18.5	30	55.6	10	18.5	3.80	0.96
Adherence to the Energy Policy of 2012 provisions has an effect on stakeholder management at GDC.	2	3.7			8	14.8	35	64.8	9	16.7	3.91	0.81
Operational alignment with Energy Policy (2012) goals promotes stakeholder support for GDC initiatives.	4	7.4	2	3.7	5	9.3	19	35.2	24	44.4	4.06	1.17
Mean											3.95	0.73

A majority of 43 (79.7%) of the respondents saw the Kyoto Protocol as interfacing with stakeholder management at GDC, while 3 (5.6%) opposed this fact and 8 (14.8%) took a neutral position; hence really according to an average score (\bar{x}) of 4.30 with a standard deviation (σ) of 0.92. In addition, 39 (72.2%) respondents agreed with the assertion that compliance with Kyoto Protocol targets increases confidence

among stakeholders in GDC; whereas, 8 (14.8%) disagreed and 7 (13%) were neutral ($\bar{x} = 3.98$; $\sigma = 1.17$). Therefore, the findings attest to international environmental commitments being perceived as the foundation of stakeholder trust and engagement. In correlating these findings, Maamoun (2019) considered Kyoto Protocol as actually assisting in reducing emissions by 7% for the participating countries, thus enhancing global environmental credibility and stakeholder perception.

Similarly, 32 respondents (59.2%) agreed that adherence to National Environment Management Authority (NEMA) regulations impacts stakeholder management at GDC, while 14 (26%) disagreed and 8 (14.8%) were neutral ($\bar{x} = 3.43$; $\sigma = 1.33$). More respondents, however, totaling 42 (77.8%), agreed that an underreporting of environmental infractions due to NEMA compliance positively impact stakeholder perception of GDC, with only 6 (11.2%) dissenting and a majority of 21 (38.9%) remaining neutral ($\bar{x} = 4.15$; $\sigma = 1.07$). The results imply that national regulatory compliance is very much a necessary ingredient for stakeholder trust. This is supported by the statement of Michael et al., (2024) whereby it was stated that adherence to domestic environmental frameworks increases a public agency's accountability and cements organizational legitimacy within the energy sector.

Regarding the Energy Bill of 2012, 39 respondents (72.2%) agreed that adherence to the bill affects stakeholder management at GDC, while 6 (11.2%) disagreed, and 9 (16.7%) were neutral ($\bar{x} = 3.96$; $\sigma = 1.05$). Moreover, 40 respondents (74.1%) agreed that the monitoring of energy efficiency practices under the Energy Bill (2012) enhances stakeholder engagement, while 4 (7.5%) disagreed, and 10 (18.5%) remained neutral ($\bar{x} = 3.80$; $\sigma = 0.96$). With regard to the Energy Policy of 2012, 44 (81.5%) respondents agreed that adherence to the provisions of this policy definitely influences stakeholder management, 2 (3.7%) disagreed, and 8 (14.8%) remained neutral ($\bar{x}=3.91$; $\sigma=0.81$). Furthermore, 43 (79.6%) agreed that stakeholder support for GDC activities could be enhanced when operations are aligned with the goals of the Energy Policy (2012), 6 (11.1%) disagreed, and 5 (9.3%) remained neutral ($\bar{x} = 4.06$; $\sigma = 1.17$). In summary, the findings reveal that enforcing energy efficiency measures aids in improving internal operational performance, which in turn attracts external support from stakeholders. Ezeh et al. (2024)

concur, stating that strategic alignment with policy frameworks fosters stakeholder buy-in and the long-term success of the project.

Overall, the descriptive results show that eight statements measuring the legal responsibilities of GDC yielded a (\bar{x}) score of 3.95 with deviation of 0.73. A moderate to high agreement exists among respondents on the GDC's commitment level to legal responsibilities, indicating good perceptions from their stakeholders on the compliance culture of the company. These results imply that GDC's compliance with international and national environmental laws such as Kyoto Protocol, NEMA regulations, the Energy Bill (2012), and Energy Policy (2012) positively affects stakeholder management. Such perceptions matter as they have a direct relationship with transparency, stakeholder engagement, and organization sustainability (Michael et al., 2024). The positive sentiments denote that regulatory compliance can be increased as a strategic tool, opening opportunities for GDC to be recognized and matured further.

4.3.2 Influence of Ethical Responsibilities on Organizational Performance at the Geothermal Development Company

The objective two of the research determined the influence of ethical responsibilities on the organizational performance of the GDC. Ethical responsibilities were assessed using eight statements rated on a five-point Likert scale, ranging from SD to SA. The descriptive statistics summarizing the findings are tabulated in Table 4.3.

Table 4.2 Ethical Responsibilities

	SD		D		N		A		SA		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
GDC ability to take care of its gaseous emissions is important to stakeholder management.			1	1.9	9	16.7	15	27.8	29	53.7	4.33	0.82
Reduction in greenhouse gas emissions by GDC enhances its reputation among stakeholders.	1	1.9	2	3.7	8	14.8	18	33.3	25	46.3	4.19	0.95
GDC ability to care for sound emissions during operations is important to stakeholder management.			2	3.7	12	22.2	18	33.3	22	40.7	4.11	0.88
Decline in noise-related complaints reflects effective sound management by GDC.	2	3.7	2	3.7	24	44.4	17	31.5	9	16.7	3.54	0.95
GDC measures to address land subsistence as a result of its operations is important to stakeholder management.	1	1.9	6	11.1	8	14.8	22	40.7	17	31.5	3.89	1.04
Implementation of land subsistence mitigation strategies improves stakeholder assurance in GDC.			1	1.9	9	16.7	27	50.0	17	31.5	4.11	0.74
GDC measures to address challenges associated with land acquisition is important to stakeholder management.	2	3.7	1	1.9	7	13.0	28	51.9	16	29.6	4.02	0.92
Timely and fair resolution of land acquisition disputes fosters trust among stakeholders.	2	3.7	3	5.6	5	9.3	27	50.0	17	31.5	4.00	0.99
Mean											4.02	0.65

Most stakeholders, 44 (81.5%), felt that GDC's proper management of gaseous emissions is vital, whereas 1 (1.9%) disagreed and 15 (27.8%) were neutral. Accordingly, the mean (\bar{x}) of the response was 4.33, while the standard deviation was 0.82. In a similar vein, 43 (79.6%) believed greenhouse gas reductions furthered the company's reputation among stakeholders, 3(5.6%) denied, and 8 (14.8%) were neutral, with a (\bar{x}) 4.19 and deviation (σ) of 0.95. This finding confirms past findings suggesting that CSR activities, including carbon management initiatives, are induced by stakeholder pressures and act to enhance the reputation of the firm as well as the stakeholder relations (Yunus et al., 2020).

Thirty (74%) respondents were of the opinion that GDC's operations in managing sound emissions are important in stakeholder management, while 2 (3.7%) disagreed, and 12 (22.2%) remained neutral (mean $(\bar{x}) = 4.11$; standard deviation $(\sigma) = 0.88$). Contrarily, 26 (48.2%) respondents agreed that a reduction in noise-related complaints showed GDC's effective sound management, 4 (7.4%) disagreed, while 24 (44.4%) remained neutral ($\bar{x}) = 3.54$; standard deviation $(\sigma) = 0.95$). Yunus et al., (2020) mentioned that Cosmic environment-friendly methods including noise pollution control are CSR issues and can probably influence stakeholders' perception.

In addition, 39 respondents accounting for 72.2% considered GDC's efforts for addressing land subsidence caused thereby on stakeholder management to be important; while 7 (13%) disagreed and 8 (14.8%) were neutral. The (\bar{x}) of 3.89 and (σ) of 1.04 was recorded for this item. Regarding implementation of land subsidence mitigation strategies, 44 (81.5%) respondents agreed that it enhances stakeholders' confidence in GDC; one (1.9%) disagreed, and 9 (16.7%) remained neutral, with a mean of 4.11 and a (σ) of 0.74. These results concur with the results of Hadj (2020), who emphasized the importance of CSR in environmental management toward alignment with stakeholder trust and the corporation's competitiveness. The situation could be viewed from another angle: 44 respondents (81.5%) agreed that measures put in place by GDC to mitigate challenges related to land acquisition are crucial for stakeholder management, whereas 3 (5.6%) disagreed, and 7 (13%) held a neutral stance. This came with a (\bar{x}) of 4.02 and a (σ) of 0.92. Finally, 44 (81.5%) respondents felt that when land acquisition disputes are promptly and fairly resolved, stakeholders develop trust, whereas 5 (9.3%) did not agree and another 5 (9.3%) remained neutral. Thus, the mean (\bar{x}) for this statement was 4.00, while the standard deviation (σ) was 0.99. It is this particular scenario the study by Ibrahim and colleagues (2022) validates as due to much stakeholder trust has been fostered through alternative dispute resolution mechanisms used in resolving land conflicts. The descriptive results underlined that the eight statements given to measure the ethical responsibilities of GDC presented a general (\bar{x}) of 4.02 and a (σ) of 0.65, indicating that most respondents agreed with statements measuring the ethical responsibilities of GDC.

The study revealed that the stakeholders believed that the ability of GDC in air pollution control was essential to stakeholder management and that stakeholders perceive greater reputational enhancement when there are decreased emissions of greenhouse gases into the atmosphere. This, in essence, is supported by studies to the effect that CSR activities concerning the environment set a positive tone for stakeholder perceptions and corporate reputation (Dzage et al., 2024). Respondents also agreed that the management of sound emissions during GDC operations is very important, while reduced complaints on noise signal the effective control of noise emissions. Control of noise emissions is among sound environmental management practices; such practices form part of CSR and can influence stakeholder perceptions positively (Dzage et al., 2024). Addressing land subsidence due to its activities was found crucial to GDC in stakeholder management, whereas the presence of implemented mitigation measures gave assurance to stakeholders. Conversely, resolving land acquisition issues was essential to stakeholder management; thus, the timely and fair resolution of land acquisition disputes is said to foster trust among stakeholders. Research confirming the efficiency of alternative dispute resolution mechanisms in land conflict resolution and stakeholder trust-building supports these findings (Ibrahim et al., 2022).

4.3.3 Influence of the philanthropic responsibilities on organizational performance at the Geothermal Development Company

The objective three determined the influence of philanthropic responsibilities on organizational performance at the Geothermal Development Company (GDC). This was achieved by assessing GDC's philanthropic activities and organizational performance using descriptive statistics. Philanthropic responsibilities, identified as the first independent variable, were measured using eight statements rated on a five-point Likert scale ranging from SD to SA. The descriptive statistics summarized the results and were tabulated in Table 4.4.

Table 4.3 Philanthropic Responsibilities

	SD		D		N		A		SA		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
GDC undertaking of tree planting activities is important to stakeholder management.			2	3.7	7	13.0	37	68.5	8	14.8	3.94	0.66
Increased community involvement in GDC's tree planting programs enhances environmental awareness.	2	3.7	1	1.9	4	7.4	33	61.1	14	25.9	4.04	0.87
GDC undertaking of sponsoring of educational activities is important to stakeholder management.	1	1.9	2	3.7	10	18.5	34	63.0	7	13.0	3.81	0.78
Academic progress of GDC-sponsored students strengthens stakeholder goodwill.	1	1.9	2	3.7	15	27.8	29	53.7	7	13.0	3.72	0.81
GDC construction of classrooms for community schools is important to stakeholder management.	1	1.9	3	5.6	14	25.9	29	53.7	7	13.0	3.70	0.84
Improved school enrollment due to classroom construction reflects positively on GDC's community role.			3	5.6	5	9.3	34	63.0	12	22.2	4.02	0.74
GDC provision of clean drinking water for the community is important to stakeholder management.	3	5.6	4	7.4	15	27.8	22	40.7	10	18.5	3.59	1.06
Access to clean water points provided by GDC improves public health outcomes and stakeholder appreciation.	4	7.4	2	3.7	7	13.0	31	57.4	10	18.5	3.76	1.04
Mean											3.82	0.58

The majority, 45 (83.3%), of respondents agreed that GDC's undertaking of tree planting activities is important for stakeholder management, while 2 (3.7%) disagreed and 7 (13%) were neutral ($\bar{x} = 3.94$; $\sigma = 0.66$). Additionally, 47 (87%) of the respondents agreed that increased community involvement in GDC's tree planting programs enhances environmental awareness, with 3 (5.6%) disagreeing and 4 (7.4%) remaining neutral ($\bar{x} = 4.04$; $\sigma = 0.87$). These results imply that

environmental CSR initiatives such as afforestation are widely accepted by stakeholders as integral to responsible corporate conduct. This aligns with the findings by Mwangi and Ouma, (2024) who found that tree planting not only aids environmental restoration but also boosts public perception of companies as environmentally conscious actors.

Similarly, 41 (73%) of the respondents agreed that GDC's sponsorship of educational activities is important to stakeholder management, while 3 (5.6%) disagreed and 10 (18.5%) were neutral ($\bar{x} = 3.81$; $\sigma = 0.78$). Furthermore, 36 (66.7%) of respondents agreed that the academic progress of GDC-sponsored students strengthens stakeholder goodwill, while 3 (5.6%) disagreed and 15 (27.8%) were neutral ($\bar{x} = 3.72$; $\sigma = 0.81$). A similar number, 36 (66.7%), also agreed that GDC's construction of classrooms for community schools is important to stakeholder management, with 4 (7.5%) disagreeing and 14 (25.9%) neutral ($\bar{x} = 3.70$; $\sigma = 0.84$). These findings suggest that investments in educational infrastructure are key drivers of stakeholder trust and goodwill. This is supported by research showing that educational CSR initiatives significantly improve social cohesion and stakeholder alignment with corporate objectives in community settings (Fusheini and Salia, 2020).

A majority, 46 (85.2%), agreed that improved school enrollment resulting from classroom construction reflects positively on GDC's role in the community, while 3 (5.6%) disagreed and 5 (9.3%) remained neutral ($\bar{x} = 4.02$; $\sigma = 0.74$). This reinforces the notion that CSR in education is not only beneficial to societal outcomes but also enhances institutional legitimacy. Moreover, 32 (59.2%) of respondents agreed that GDC's provision of clean drinking water for the community is important to stakeholder management, with 7 (13%) disagreeing and 15 (27.8%) remaining neutral ($\bar{x} = 3.59$; $\sigma = 1.06$). Likewise, 41 (75.9%) agreed that access to clean water points provided by GDC improves public health outcomes and stakeholder appreciation, while 6 (11.1%) disagreed

and 7 (13%) were neutral ($\bar{x} = 3.76$; $\sigma = 1.04$). These results imply that public health CSR programs, particularly access to clean water, enhance stakeholder satisfaction and trust. Wyk et al. emphasized that such initiatives contribute directly to improved health indices in rural areas and shape community attitudes toward companies.

Overall, the descriptive findings show that the eight statements used to assess the philanthropic responsibilities of GDC had a collective (\bar{x}) score of 3.82 and a (σ) of 0.58. This demonstrates broad agreement among respondents on the importance of GDC's philanthropic activities in supporting stakeholder management. The results suggest that environmental stewardship, educational sponsorship, and public health support are perceived as central to the company's stakeholder engagement strategy. These perceptions are consistent with contemporary CSR literature, which highlights the strategic role of philanthropy in reinforcing community ties and improving corporate legitimacy (Fusheini and Salia, 2020).

4.4 Performance of GDC

The performance of GDC as a dependent variable was measured using ten statements rated on a five-point Likert scale from SD, to SA, and its descriptive statistics were used to summarize the data as shown in Table 4.2.

Table 4.4 Performance of GDC

	Strongly Disagree		Neutral		Agree		Strongly agree		Mean	Std. Dev		
	F	%	F	%	F	%	F	%				
The GDC is successful in maintaining positive relationships with the community where it operates.	2	3.7	3	5.6	17	31.5	25	46.3	7	13.0	3.59	0.92
Community satisfaction surveys reflect the quality of GDC’s relationship management.	3	5.6	3	5.6	8	14.8	21	38.9	19	35.2	3.93	1.11
The GDC has ideal communication levels with the community where it operates.	2	3.7	7	13.0	19	35.2	20	37.0	6	11.1	3.39	0.98
Frequency and clarity of GDC’s community meetings enhance stakeholder awareness.	3	5.6	6	11.1	21	38.9	19	35.2	5	9.3	3.31	0.99
The GDC is successful in addressing the community’s concerns as a result of its operations.	3	5.6	8	14.8	12	22.2	25	46.3	6	11.1	3.43	1.06
Speed and effectiveness of grievance resolution by GDC influence community trust.	4	7.4	1	1.9	15	27.8	22	40.7	12	22.2	3.69	1.08
The GDC corporate social responsibilities are beneficial to GDC operations.	1	1.9	3	5.6	21	38.9	18	33.3	11	20.4	3.65	0.93
Community support for GDC projects due to CSR efforts improves operational efficiency.	1	1.9	8	14.8	8	14.8	25	46.3	12	22.2	3.72	1.04
The community has benefited from GDC corporate social responsibility activities.	7	13.0	11	20.4	20	37.0	8	14.8	8	14.8	2.98	1.22
Improved access to social amenities through GDC CSR programs strengthens stakeholder satisfaction.	9	16.7	6	11.1	9	16.7	18	33.3	12	22.2	3.33	1.39
Mean											3.50	0.68

But other respondents (31 or 57.4%) agreed that the GDC successfully resolves community issues arising from its operations, with 11 (20.4%) disagreeing and 17 (31.5%) remaining neutral ($\bar{x} = 3.43$; $\sigma = 1.06$). Even more, 40 (62.9%) agreed that the speed and effectiveness of the GDC’s resolution of grievances influence community trust, 5 (9.3%) disagreed, and 15 (27.8%) remained neutral ($\bar{x} = 3.69$; $\sigma = 1.08$). The results point towards timely and responsive handling of grievances as the grounds for community

perception of transparency and integrity. Ochieng and Juma, (2019) concur that formal grievance mechanisms increase organizational credibility and sustain stakeholder trust.

When it comes to corporate social responsibility, 29 (53.7%) of the respondents agreed to be of benefit to GDC operations, while 4 (7.5%) respondents disagreed, and 21 (38.9%) remained neutral ($\bar{x} = 3.65$; $\sigma = 0.93$). In addition, 37 (68.5%) agreed that community support to GDC projects generated through CSR initiatives enhances operational efficiency, 9(16.7%) disagreed and 8(14.8%) remained neutral ($\bar{x} = 3.72$; $\sigma = 1.04$); and 30 (55.5%) respondents agreed that there is an increase in stakeholder satisfaction through the improvement of social amenities from the GDC CSR programs, 15 (27.8%) disagreed, and 9 (16.7%) were neutral ($\bar{x} = 3.33$; $\sigma = 1.39$). If anything, these results demonstrate the very important role that CSR has on community engagement and operations continuity. Muraya et al. (2023) found that well-executed CSR practices enhance stakeholder goodwill and organizational resilience.

According to the descriptive statistics, the ten statements considered in assessing GDC's community engagement and CSR performance resulted in a collective (\bar{x}) score of 3.50, with a σ of 0.68. This means that the respondents agreed on the effectiveness of GDC's initiatives towards its stakeholders. The results indicate that satisfaction and trust from stakeholders are linked to active grievance handling, continuous relationship building, and CSR actions of impact. Such perceptions sustain the claim that social responsibility actions, especially those dealing with conflicts and public relations, foster legitimacy and ensure organizational sustainability in the long run (Oyigo and Ntabo, 2019).

4.5 Reliability

Cronbach's alpha test was used to examine the instruments' reliability. A Cronbach's alpha test validates the consistency and reliability of a Data collecting Instrument, according to FitzPatrick (2019) and findings presented in Table 4.5 summarizes the reliability statistics test.

Table 4. 5 Reliability Statistics

	Cronbach's Alpha	N of Items
Legal	.839	8
Ethical	.856	8
Philanthropic	.831	8
Performance	.834	10
Overall	.913	34

Cronbach's alpha, considered a reliability estimate, was used to establish the internal consistency of the tool. Ethical responsibilities recorded the highest alpha of 0.856, followed by legal (0.839), performance (0.834), and philanthropic responsibilities (0.831). The overall scale, consisting of all 34 items, had an alpha of 0.913, which indicates excellent internal consistency. All alpha values lie above the value usually taken as a benchmark, which is 0.7, so the instrument is defined as consistent and reliable. These results suggest good coherence among the items of each construct, thereby enhancing the results obtained through this instrument. High internal consistency is a measure to check whether items under each CSR dimension effectively average the same underlying construct, and the overall alpha with a value higher than 0.9 indicates that the scale is appropriate for research purposes and capable of delivering stable and reliable results in a similar context. The results are consistent with more recent literature on measurement reliability: Izah et al. (2023) emphasize the importance of Cronbach's alpha for examination tools with values of 0.7 and above that indicate acceptable reliability. Hussey et al. (2025), meanwhile, said that alpha values of 0.80 were accepted as indicative of strong internal consistency in social science research, though the authors discouraged mechanical reliance on such thresholds without conceptual justification.

4.6 Factor Analysis

Factor analysis was used for data reduction and interpretation, enabling researcher to uncover underlying dimensions or factors that explain patterns in data sets. All the five Likert scales were

subsequently subjected to exploratory factor analysis using Principal Component Analysis (PCA) extraction and rotated using Varimax rotation with Kaiser Normalization method. Only components with Eigen values greater than one were extracted according to Kaiser (1960). Although the generally accepted rule of thumb factor loading of 0.50 and above (Hair et al., 2010) are acceptable. This study established cut-off point was 0.50.

Factor analysis was carried out as part of assessing the consistency and sampling adequacy of the research instruments. To check the adequacy of data for factorability, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were used. Consequently, the threshold according to Hair et al., (1995) as well as Tabachnick and Fidell (2001) KMO of 0.50 is considered suitable for factor analysis. Bartlett's test of Sphericity as per (Bartlett, 1950) should provide a chi-square output that is significant with indication that the matrix was not an identity matrix and should be significant ($p < 0.05$) for factor analysis to be suitable (Hair et al., 2006; Tabachnick & Fidell, 2001). The number of factors to retain was determined by Kaiser Criterion. Eigenvalues, which represent the variance explained by a factor out of the total variance, are critical for understanding the contribution of each factor in explaining the pattern in the data. An eigenvalue greater than one suggests that the factor should be retained.

4.6.1 Factor Analysis for Legal responsibilities

To measure legal responsibilities eight items were proposed and results of Kaiser-Meyer-Okin measure of sampling adequacy test of (0.773) and Bartlett's test of sphericity ($\chi^2 (28) = 164.3, p < 0.000$) indicated that data was accepted for factor analysis as shown in table 4.6.

Table 4. 6 Legal responsibilities Rotated Component Matrix^a

	Component	
	1	2
Reduction in environmental infractions due to NEMA compliance influences stakeholder perception of GDC.	.844	
Adherence to the Energy Policy of 2012 provisions has an effect on stakeholder management at GDC.	.833	
Adherence to the Energy Bill of 2012 has an impact on stakeholder management at GDC.	.779	
Adherence to the Kyoto Protocol has an effect on stakeholder management at GDC	.548	
Operational alignment with Energy Policy (2012) goals promotes stakeholder support for GDC initiatives.		.864
Adherence to the National Environment Management Authority (NEMA) regulations has an effect on stakeholder management at GDC.		.717
Compliance with Kyoto Protocol targets contributes to increased stakeholder confidence in GDC.		.680
Monitoring energy efficiency practices under the Energy Bill (2012) enhances stakeholder engagement at GDC.		.584
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.773	
Bartlett's Test of Sphericity Approx.	Chi-Square	164.30
df		28
Sig.		.000
Total Variance Explained		
Total Eigenvalues	2.656	2.428
Rotation Sums of Squared Loadings % of Variance	33.199	30.345
Cumulative %	63.544	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

The factor analysis of legal responsibility statements extracted two components with Eigenvalues greater than 1, cumulatively accounting for 63.544% of the variance. After Varimax rotation, four items loaded on the first factor, explaining 33.199% of the total variance with loadings between 0.548 and 0.844. Another four items loaded on the second factor, explaining 30.345% of the variance with loadings ranging from 0.584 to 0.864. All eight items were retained and computed into a legal responsibility construct for further statistical analysis.

These findings suggest that legal responsibility is a multidimensional construct within the CSR framework. The strong cumulative variance explained confirms the robustness of the measurement model. The consistent and high factor loadings across items reinforce the internal validity and reliability of the construct. This result aligns with contemporary CSR research methodologies, such as those described by (Iacobucci et al., 2022), who emphasize the importance of reporting and interpreting variance explained in factor analysis to ensure strong construct validation. Their work supports the approach used in this analysis and reinforces the legitimacy of retaining all items when variance benchmarks are met and factor loading strength is established.

4.6.2 Factor Analysis for Ethical Responsibilities

To measure ethical responsibilities, eight items were proposed, and results of the Kaiser-Meyer-Okin measure of sampling adequacy test of (0.739) and Bartlett's test of sphericity (χ^2 (28) =208.89, $p < 0.000$) indicated that data was accepted for factor analysis as shown in Table 4.7.

Table 4. 7 Ethical responsibilities Rotated Component Matrix^a

	Component	
	1	2
Reduction in greenhouse gas emissions by GDC enhances its reputation among stakeholders.	.888	
GDC ability to care for sound emissions during operations is important to stakeholder management.	.756	
GDC measures to address land subsistence as a result of its operations is important to stakeholder management.	.754	
GDC ability to take care of its gaseous emissions is important to stakeholder management.	.674	
GDC measures to address challenges associated with land acquisition is important to stakeholder management.		.845
Timely and fair resolution of land acquisition disputes fosters trust among stakeholders.		.806
Implementation of land subsistence mitigation strategies improves stakeholder assurance in GDC.		.747
Decline in noise-related complaints reflects effective sound management by GDC.		
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.739	
Bartlett's Test of Sphericity Approx.	Chi-Square	208.89
df		28
Sig.		.000
Total Variance Explained		
Total Initial Eigenvalues	2.756	2.468
Rotation Sums of Squared Loadings % of Variance	34.447	30.844
Cumulative %	65.291	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 3 iterations.

Ethical responsibility statements were subjected to factor analysis, and two components with Eigen values greater than 1 were extracted, which cumulatively explained 65.291% of the variance. When rotated using Varimax with Kaiser Normalization reveals that two components. The rotated component matrix of ethical responsibilities showed four items were loaded on the first factor, whose factor loadings ranged from 0.674 to 0.888, explained 34.447% of the total variance. Three items were loaded on the second factor, whose loadings ranged from 0.747 to 0.845, explained 30.844% of the total variance. One item (Decline in noise-related complaints

reflects effective sound management by GDC) was deleted, and seven items were retained, computed, and renamed ethical for further analysis. This aligns with research by Meynhardt & Jasinenko (2020) on CSR measurement and construct development, emphasizing the importance of robust construct validation in public value and CSR domains. The research supports using validated, multidimensional scales to distinguish ethical responsibility from adjacent constructs like reputation or compliance.

4.6.3 Factor Analysis for Philanthropic responsibilities

Eight items were proposed to measure philanthropic responsibilities and results of Kaiser-Meyer-Okin measure of sampling adequacy test of (0.779) and Bartlett's test of sphericity (χ^2 (28) =169.58, $p < 0.000$) indicated that data was accepted for factor analysis as shown in Table 4.8.

Table 4.8 Philanthropic Rotated Component Matrix^a

	Component	
	1	2
Improved school enrollment due to classroom construction reflects positively on GDC’s community role.	.876	
Access to clean water points provided by GDC improves public health outcomes and stakeholder appreciation.	.812	
Increased community involvement in GDC’s tree planting programs enhances environmental awareness.	.764	
GDC construction of classrooms for community schools is important to stakeholder management.	.552	
GDC undertaking of tree planting activities is important to stakeholder management.	.522	
GDC undertaking of sponsoring of educational activities is important to stakeholder management.		.865
Academic progress of GDC-sponsored students strengthens stakeholder goodwill.		.817
GDC provision of clean drinking water for the community is important to stakeholder management.		.756
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.779	
Bartlett's Test of Sphericity Approx. Chi-Square	169.58	
df	28	
Sig.	.000	
Total Variance Explained		
Total Initial Eigenvalues	2.716	2.392
Rotation Sums of Squared Loadings % of Variance	33.955	29.896
Cumulative %	63.851	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

The factor analysis of philanthropic responsibility statements identified two components with Eigenvalues greater than 1, explaining a substantial 79.68% of the total variance. Varimax rotation revealed five items loading on the first factor (33.96% variance explained) and three items on the second factor (29.90% variance explained), with factor loadings ranging from 0.522 to 0.876. All

eight items were retained, demonstrating strong construct validity and internal consistency for further analysis.

These results imply that philanthropic responsibility within the GDC context is best understood as a dual-dimensional construct. The high cumulative variance indicates that these two factors capture the majority of the variability in responses, validating the conceptual model. The retention of all items affirms their relevance and reliability in measuring philanthropic activities.

Supporting literature reinforces the value of such multidimensional CSR assessments. For instance, Montazeri et al., (2019) validated a five-factor CSR model including philanthropic responsibility and highlighted the robustness of using factor analysis to structure CSR dimensions. Similarly, Khuong et al., (2021) found philanthropic initiatives to significantly impact corporate reputation, confirming the importance of maintaining a well-validated philanthropic construct in CSR studies.

4.6.4 Factor Analysis for Performance of GDC

Performance of GDC was measured using ten items, and results of Kaiser-Meyer-Okin measure of sampling adequacy test of (0.563) and Bartlett's test of sphericity ($\chi^2 (45) = 238.150, p < 0.000$) indicated that data was accepted for factor analysis as shown in table 4.9.

Table 4.9 Performance of GDC Rotated Component Matrix^a

	Component		
	1	2	3
The GDC has ideal communication levels with the community where it operates.	.881		
Frequency and clarity of GDC's community meetings enhance stakeholder awareness.	.768		
The GDC corporate social responsibilities are beneficial to GDC operations.	.682		
Community support for GDC projects due to CSR efforts improves operational efficiency.		.798	
Improved access to social amenities through GDC CSR programs strengthens stakeholder satisfaction.		.754	
The GDC is successful in maintaining positive relationships with the community where it operates.		.668	
Community satisfaction surveys reflect the quality of GDC's relationship management.		.590	
The GDC is successful in addressing the community's concerns as a result of its operations.			.831
The community has benefited from GDC corporate social responsibility activities.			.760
Speed and effectiveness of grievance resolution by GDC influence community trust.			.585
KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.563		
Bartlett's Test of Sphericity Approx.	Chi-Square	238.15	
df		45	
Sig.		.000	
Total Variance Explained			
Total Initial Eigenvalues	2.473	2.373	1.848
Rotation Sums of Squared Loadings % of Variance	24.73	23.73	18.475
Cumulative %	66.934		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

The factor analysis of GDC's performance revealed three components with Eigenvalues greater than 1, collectively explaining 66.934% of the variance. This suggests a strong and multidimensional structure underlying the performance construct. Varimax rotation clarified the

loading patterns: three items on the first factor (24.73% variance), four on the second (23.73%), and three on the third (18.475%). All ten items were retained, indicating robust internal consistency and relevance for further analysis. These findings imply that GDC performance is influenced by multiple dimensions, enabling targeted management strategies. The high cumulative variance underscores the model's strength, and the retention of all items validates the instrument's reliability. Comparable results were found by Tambare et al., (2021), who emphasized the importance of achieving over 60% variance in performance models. Similarly, Asiaei et al. (2021) identified three key components in their study on performance systems, affirming the multidimensional nature of organizational performance and supporting the findings of the GDC analysis.

4.7 Correlation Analysis of the Variables

The correlation analysis between the variables was determined. The correlation Coefficient (r) was used to establish the association among the variables as shown in Table 4.10.

Table 4.10 Correlation Analysis of the Variables

		Performance	Legal	Ethical	Philanthropic
Performance	Pearson Correlation	1			
	Sig. (2-tailed)				
Legal	Pearson Correlation	.570**	1		
	Sig. (2-tailed)	.000			
Ethical	Pearson Correlation	.375**	.547**	1	
	Sig. (2-tailed)	.005	.000		
Philanthropic	Pearson Correlation	.389**	.301*	.342*	1
	Sig. (2-tailed)	.004	.027	.011	

The findings showed that there was a significant positive relationship between legal responsibilities ($r= 0.570$, $p =0.000$) and the performance of energy sector. This implies that an increase in legal responsibilities the performance of the GDC energy sector improved. There was a significant positive and weak relationship between ethical responsibilities ($r= 0.375$, $p =0.005$) and performance of GDC energy sector. This indicated that an increase in ethical responsibilities

there was a corresponding improvement of performance of GDC energy sector. There was a significant positive and weak relationship between philanthropic responsibilities ($r= 0.389$, $p =0.004$) and performance of GDC energy sector. This showed the more the philanthropic responsibilities led to higher performance of GDC energy sector. From the correlation results there was significant relationship between legal, ethical and philanthropic CSR and performance of GDC energy sector in Kenya.

The implications of these findings indicate that GDC can strategically prioritize legal compliance as a foundational CSR element to enhance its performance, while also investing in ethical and philanthropic programs to support long-term stakeholder engagement. The results also highlight that CSR activities are not just social imperatives but can serve as levers for organizational efficiency and stakeholder trust. These results align with the study by Gillan, Koch, and Starks (2021), which demonstrated that legal and governance-related CSR activities significantly boost firm value and stakeholder confidence. Furthermore, Uwhejevwe-Togbolo et al., (2024) emphasized that ethical CSR enhances brand credibility and stakeholder trust, especially in digital and energy-intensive industries.

Overall, the correlation results support the premise that legal, ethical, and philanthropic CSR responsibilities are significant predictors of performance at GDC. These insights reinforce the role of CSR as a strategic framework that not only fulfills regulatory and societal expectations but also improves organizational outcomes in the Kenyan energy sector.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The section presents the findings, conclusions, its recommendations, and areas for further research.

5.2 Summary of Findings

The summary of findings was presented based on the study objectives. The findings showed that GDC was successful in maintaining positive relationships with the community where it operates and the community satisfaction surveys reflect the quality of GDC's relationship management. The GDC was successful in addressing the community's concerns as a result of its operations and speed and effectiveness of grievance resolution by GDC influence community trust. The GDC corporate social responsibilities are beneficial to GDC operations and community support for GDC projects due to CSR efforts improves operational efficiency. The improved access to social amenities through GDC CSR programs strengthens stakeholder satisfaction. The ten statements used to explain the performance of the GDC Company had an overall (\bar{x}) of 3.50 and a σ of 0.68.

5.2.1 Effect of the Legal Responsibilities on Organizational Performance at the Geothermal Development Company

The first objective was to study the impact of legal duties on how the GDC performed. With the help of descriptive statistics, the focus was on how adherence to laws affects both stakeholder management and the business's overall results. The research showed that being legally responsible has a strong effect on how GDC manages its stakeholders. The Kyoto Protocol was seen to help with stakeholder management and respondents agreed strongly, as shown by a (\bar{x}) of 4.30 and a low σ of 0.92. Stakeholder confidence in GDC was boosted when Kyoto Protocol targets were followed ($\bar{x} = 3.98$, $\sigma = 1.17$). It was found that sticking to rules outlined by NEMA (National

Environment Management Authority) influenced how stakeholders were managed, but opinions varied a bit more ($\bar{x} = 3.43$, $\sigma = 1.33$). The results also showed that following NEMA rules lowered the number of environmental violations and improved stakeholders' opinions of GDC ($\bar{x} = 4.15$, $\sigma = 1.07$). Following the Energy Bill of 2012 and tracking energy efficiency practices under it encouraged more people to get involved, with average scores of 3.96 and 3.80. Also, by complying with the Energy Policy of 2012 and following its objectives, the company won more support from stakeholders, with scores of 3.91 and 4.06, respectively.

In general, the eight statements showed that the majority of respondents view legal adherence as helpful for GDC's relationships with stakeholders. The results of the correlation analysis also showed that there is a close positive link between the energy sector's responsibilities and its performance ($r = 0.570$, $p = 0.000$). The data shows that an improved energy sector in GDC happens as legal requirements increase.

5.2.2 Influence of Ethical Responsibilities on Organizational Performance at the Geothermal Development Company

The aim of the second objective was to see how the company's ethics impact its approach to managing stakeholders at the Geothermal Development Company (GDC). People surveyed agreed that GDC's emissions control is essential for managing stakeholders, as the (\bar{x}) score was 4.33 and the σ was 0.82. Also, respondents agreed that GDC's reputation with stakeholders is enhanced by reducing greenhouse gas emissions, as indicated by a (\bar{x}) score of 4.19 and a σ of 0.95. Sound emissions during operations were also addressed in importance, with the (\bar{x}) score being 4.11 and the σ reaching 0.88. A reduction in complaints about noise was seen as proof of good sound management, with a (\bar{x}) of 3.54 and a σ of 0.95. It was agreed by respondents that steps taken to address subsistence of land caused by operations are crucial for handling stakeholders, with a (\bar{x})

score of 3.89 and a σ of 1.04. Stakeholder assurance in GDC was boosted by the use of land subsistence mitigation strategies, as shown by a (\bar{x}) of 4.11 and a σ of 0.74. Also, respondents acknowledged that GDC's measures to overcome land acquisition difficulties are valuable for stakeholder management, with an average of 4.02 and a σ of 0.92. The same was seen for resolving land disputes, as it was considered important for building trust between stakeholders, getting an (\bar{x}) of 4.00 and a σ of 0.99.

There was strong agreement from respondents on why ethics is important for stakeholder management and GDC's reputation, as the (\bar{x}) was 4.02 and the σ was 0.65. The analysis found that the energy sector's performance in GDC was positively and weakly related to ethical responsibilities ($r = 0.375$, $p = 0.005$). As the GDC's ethical duties grow, its energy sector tends to improve.

5.2.3 Influence of the Philanthropic Responsibilities on Organizational Performance at the Geothermal Development Company

The third objective was to explore how following philanthropic responsibilities affects the success of the geothermal development company. According to the study, the bulk of respondents see the value of GDC's philanthropy for stakeholder management and supporting the community. It is found that GDC's tree planting activities are very important for stakeholder management, with a (\bar{x}) of 3.94 and a σ of 0.66. Furthermore, a high number of respondents suggest that more community participation in GDC's tree programs increases environmental understanding, with a (\bar{x}) of 4.04 and a σ of 0.87. Respondents say that GDC's environmental efforts are valuable for improving relationships with stakeholders.

Also, GDC sponsoring educational activities is seen as key for stakeholder management, rated 3.81 on average and 0.78 σ . The academic achievements of students supported by GDC are noted

favorably, with a (\bar{x}) of 3.72 and a σ of 0.81 which increases the positive attitude of stakeholders. In other words, people recognize what the company does for education and consider it a way to create good feelings and relationships within the community.

Building classrooms for community schools is also important in stakeholder management, with a (\bar{x}) of 3.70 and a σ of 0.84. Because school enrollment has increased due to classroom construction, GDC's presence is considered positive in the community, with a (\bar{x}) of 4.02 and a σ of 0.74. These findings highlight the good effect that GDC's educational work has on the community, making its relationships with stakeholders even stronger.

Clean drinking water for the area is recognized as a major social responsibility for GDC, with a (\bar{x}) of 3.59 and a σ of 1.06. It is commonly believed that more access to clean water helps both the health of the public and the appreciation of stakeholders, with a (\bar{x}) of 3.76 and a σ of 1.04. As a result, GDC is recognized for supporting public health and the good effects of its clean water projects on the community and its partners.

In general, the study shows that many respondents strongly believe in GDC's philanthropic duties, with an (\bar{x}) of 3.82 and a σ of 0.58. Activities aimed at helping the environment, educating people and promoting health are regarded as beneficial to GDC's stakeholders and the community. The analysis further suggests that GDC's energy sector performance might be moderately improved by their philanthropic actions. Results from the correlation analysis indicate that GDC's involvement in philanthropy was linked to a positive but weak change in its energy sector performance ($r = 0.389$, $p = 0.004$). The findings imply that GDC's philanthropy might be linked to better energy outcomes, although the connection is not very strong.

5.3 Conclusions

The research found that there was a meaningful and average connection between what is legally required and the performance of the Geothermal Development Company (GDC). Obtaining the Kyoto Protocol targets helped to increase stakeholder confidence which in turn influenced how stakeholders managed the company. The findings suggest that compliance with NEMA helped reduce environmental problems which improved how stakeholders viewed GDC. It was also found that sticking to the Energy Bill of 2012 and checking energy efficiency practices as required by this bill helped increase stakeholder engagement. Following the rules in the 2012 Energy Policy and working towards its goals helped win the support of GDC's stakeholders. Strong compliance with laws helps organizations achieve better results and improves their connections with stakeholders.

The analysis showed that there was a meaningful but modest connection between acting ethically and the GDC's performance. The company's efforts to control gaseous emissions, as well as cut down on greenhouse gases, were very important for improving its image and earning stakeholders' trust. It was also important that GDC lowered noise levels during operations and decreased the number of complaints from people living nearby. In addition, undertaking actions to minimize land impact due to activities and settling land dispute cases quickly and fairly, was considered necessary to strengthen trust among all parties. They may not have had a large impact, yet they were very important for maintaining the company's good name and building better relationships with stakeholders.

It was found that there was a noticeable, but weak, positive link between GDC performance and philanthropic duties. The company's tree planting programs played a big role in making community members aware of environmental issues. Because of GDC's school support such as

providing classrooms for community schools, the number of students attending classes rose which increased how satisfied stakeholders were. Providing clean drinking water was considered an important way to boost the well-being of communities. Having access to clean water points helped keep the public healthy and increased respect for the project. Even though the link between philanthropic activities and performance was not as strong as legal and ethical responsibilities, it still showed that community initiatives help GDC work well with stakeholders. Overall, the findings confirm that GDC needs to follow legal, ethical and philanthropic responsibilities to strengthen trust among stakeholders, improve community satisfaction and ensure the company performs sustainably.

5.4 Recommendations

According to the research, the Ministry of Environment should make and enforce policies to improve corporate social responsibility in parastatals. It is especially necessary to ensure that the country fully observes international and national rules like the Kyoto Protocol, the rules of NEMA, the Energy Bill of 2012, and the Energy Policy of 2012. Following these frameworks properly will improve how organizations handle stakeholders and perform industry-wide.

GDC's management should team up with NEMA to solve any problems about sound emissions and noise pollution. Taking timely care of environmental matters such as responding to complaints about noise, will improve trust and make the company more respected by its stakeholders. Moreover, GDC's management should make sure that philanthropic initiatives are increased and shared equally among all the communities they serve. Organizations should give importance to tree planting programs, support for education, construction of classrooms for schools and providing clean water, as these efforts will be most helpful to both the community and the company's relationships.

5.5 Areas for Further Research

The research dwelt on the effect of corporate social responsibility, specifically legal, ethical, and philanthropic responsibilities, on the performance of the Geothermal Development Company. Future research should consider examining the influence of other dimensions of CSR, such as social and economic responsibilities, on organizational performance. Furthermore, since this study was limited to a parastatal organization, future studies should investigate private sector companies and public institutions to allow for comparative analysis. Such research would provide deeper insights into how corporate social responsibility practices differ across sectors and contribute to organizational success.

REFERENCES

- Amin, F. F., & Rahmadi, A. (2020). The effect of corporate social responsibility on the corporate image of PT Pertamina Geothermal Energy Area Kamojang (Study of the Kamojang Regional Communities). *International Journal of Administration, Business & Organization*, 1(3), 47–53.
- Amoro, E. (2021). *Work-Life Balance and Employee Performance at Geothermal Development Company in Nairobi City County, Kenya*. Kenyatta University.
- Anagnostou, I. (2020). *Risk management in trading activities through the lens of complex systems theory*. dare.uva.nl.
- Apoi, A., & Latip, H. B. A. (2019). The Impact of Transformational Leadership on Employee Reactions towards Individual Work Performance: A Conceptual Paper. *International Journal of Academic Research in Business and Social Sciences*, 9(8), 47–60.
- Bank., T. W. (2021). *Turkey to Scale-up Renewable Geothermal Energy Generation with World Bank Support*.
- Breesam, H. K., & Jawad, Z. A. K. (2021). Application of stakeholder theory in procedures for maintenance work for government buildings in Iraq. *IOP Conference Series: Materials Science and Engineering*, 1–7.
- Debas, A. (2022). The Effect of Knowledge Management Practice On Organizational Performance: A Case Study on Commercial Bank Of Ethiopia, Bahir Dar City Branches. *Journal Applied Business and Technology*, 2(3), 54–60.
- Duggal, R., Rayudu, R., Hinkley, J., Burnell, J., & ... (2022). A comprehensive review of energy extraction from low-temperature geothermal resources in hydrocarbon fields. ... *and Sustainable Energy ...*
- Edmundson, A. S. (2019). *A Selective Affinity: Niklas Luhmann's Systems Theory and the Sense of Contingency, 1958-1973*. escholarship.org. <https://escholarship.org/uc/item/2gp5h602>
- Eshaq, M. (2022). The Effect of TQM and Innovation on Organizational Performance of Dubai Police: The Mediating Role of Organizational Culture. *Journal of Contemporary Issues and Thought*. <http://ojs.upsi.edu.my/index.php/JCIT/article/view/7031>
- Fares, J., Chung, K. S. K., & Abbasi, A. (2021). Stakeholder theory and management: Understanding longitudinal collaboration networks. In *Plos one*. journals.plos.org. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0255658>

- Freeman, R. E., & Dmytriiev, S. D. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of Management*, 47(7), 1757–1770.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An Introduction*. Pearson Education.
- Gathii, J. K., Wamukuru, D. K., Karanja, D., Muriithi, W., & Maina, K. (2019). *Research Methods, Data Analysis & Defences (Building Competences in Education & Social Sciences Research)*. (1st ed.). Education and Social Sciences Research Association of Kenya (ESSRAK).
- Gathii, K. J., Wamukuru, D. K., Karanja, D., Muriithi, W., & Maina, K. (2019). *Research methods, data analysis & defences (Building competences in education and social sciences research)*. Education and Social Sciences Research Association of Kenya (ESSRAK).
- Gichuhi, R. W. (2021). Does E-payment influence procurement performance? A case of geothermal development company in Kenya. *Editon Consortium Journal of Arts, Humanities ...* <http://editoncpublishing.org/ecpj/index.php/ECJAHSS/article/view/285>
- Imouokhome, E. O., Abdulraheem, M., & Olujide, J. O. (2022). *Strategic Marketing Planning: A Tool for Organizational Performance in the Nigerian Hospitality Industry*. 5(1). [http://amity.edu/UserFiles/admaa/13b01AJM 491-506.pdf](http://amity.edu/UserFiles/admaa/13b01AJM%20491-506.pdf)
- Intiswar, M. S., & Rugami, J. M. (2019). Balanced Score Card and Service Delivery at National Health Insurance Fund in Mombasa County, Kenya. *International Journal of Current Aspects*, 3(VI), 251–270.
- Israel, R. U. (2022). *Communication channels and organizational performance of Globacom Limited (a multinational telecommunications corporation based in Nigeria)*. [ikee.lib.auth.gr. https://ikee.lib.auth.gr/record/340921/files/GRI-2022-36131.pdf](https://ikee.lib.auth.gr/record/340921/files/GRI-2022-36131.pdf)
- Jr, D. B. E. (2019). Shifting the perspective on community-based management of education: From systems theory to social capital and community empowerment. *International Journal of Educational Development*.
- Kariuki, C. W., & Kiiru, D. (2021). Employee recognition and employee performance at public hospitals in Nyeri County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(10), 243–264.
- Kautsar, F. (2018). ... and Commitment of Extractive Industry Corporate Social Responsibility (CSR) Programs: A Case Study on A Geothermal Company in Sukabumi Regency In *Masyarakat, Jurnal Sosiologi*. scholarhub.ui.ac.id.
- Kinampai, J. S. (2019). Factors Affecting Supplier Performance In Geothermal Development

- Company, Kenya. *Journal of Business & Change Management*, 2(3), 56–65.
- Kipkorir, D. K., & Maina, S. (2022). Enterprise Risk Management and Organizational Performance of Sc Johnson and Son Kenya Limited. *International Journal of Current Aspects in ...* <http://journals.ijcab.org/journals/index.php/IJCFA/article/view/225>
- Kubai, P. K., Gachunga, H., & Odhiambo, R. (2021). Transactional leadership and organizational performance: A study of private universities in Kenya. *Machakos University Journal of Science and Technology*, 3, 1–17.
- Kungu, M. M., Omare, M., & Tumwet, E. C. (2022). *Staff Involvement on Employee Performance in Geothermal Development Company in Nakuru County, Kenya*. library.kabarak.ac.ke. <http://library.kabarak.ac.ke:8080/handle/123456789/1404>
- Kuse, S., & Wanyoike, R. (2022). Strategic human resource management practices and organizational performance of Information Services Department in Ghana. https://iajournals.org/articles/iajhrba_v4_i1_274_296.pdf
- Lumumba, W., & Florah, O. M. (2019). Intrinsic Reward and Organization Performance at Vihiga County Government, Kenya. *International Journal of Research and Innovation in Social Science (IJRISS) /Volume III, Issue XI, III(XI)*, 2454–6186. <http://www.rsisinternational.org>
- Masele, A. D., Mayala, N. M., & ... (2022). Contribution of accounting information systems on enhancing organizational performance of parishes in catholic archdiocese of Dodoma. *Asian Journal of Research* <https://www.indianjournals.com/ijor.aspx?target=ijor:ajrbem&volume=12&issue=9&article=003>
- Mostafa, K., & Hamersma, E. (2021). Hydrogen sulfide emission and policy barriers to the sustainable development of the Olkaria geothermal power plant facilities in Kenya. In ... *ジャーナル= Journal for information, study and ...* cir.nii.ac.jp.
- Mugenda, O., & Mugenda, A. (2019). *Research methods: Qualitative, quantitative & mixed methods approaches* (3rd ed.). Africa Centre for Transformative and Inclusive Leadership (ACTIL).
- Mukandala, P. S., Kasay, G. M., & Mambo, V. S. (2020). Project for development of geothermal resources in the Ruwenzori sector, a preliminary report. *Proceedings, 8th African Rift Geothermal Conference*, 1–13.
- Musheke, M. M., & Phiri, J. (2021). The effects of effective communication on organizational performance based on the systems theory. In *Open Journal of Business and Management*. scirp.org. <https://www.scirp.org/journal/paperinformation.aspx?paperid=107818>

- Mutai, E., Ndetta, W., & Mutisya, C. (2023). The Role of Corporate Communication in Building an Organization's Reputation in The Geothermal Development Company, Kenya. *African Multidisciplinary Journal of ...* <https://journals.spu.ac.ke/index.php/amjr/article/view/190>
- Mutua, S. M. (2022). *Quality in Mixed Human Resource Management Research : Evidence from Published Literature. 2014.* <https://doi.org/10.1177/2319510X221139397>
- Naseer, M. N., Noorollahi, Y., Zaidi, A. A., Wahab, Y. A., & ... (2022). Abandoned wells multigeneration system: promising zero CO2 emission geothermal energy system. ... *Journal of Energy and ...* <https://doi.org/10.1007/s40095-022-00496-3>
- Nganga, G. N., & Nyaga, J. (2022). Continuous improvement practices and organizational performance of large manufacturing companies in Kenya: A case study of Nairobi Bottlers Limited. *International Academic Journal of Innovation, Leadership and Entrepreneurship*, 2(3), 77–79. https://iajournals.org/articles/iajile_v2_i3_411_469.pdf
- Njau, R. W. (2020). *Corporate Social Responsibility and Performance Of Geothermal Development Company Limited In Kenya.* Kenyatta University.
- NJOGU, K. E. N. (2022). *Functional Strategies and Organizational Performance of Banks in Nakuru City County, Kenya.*
- Njoroge, N. G. (2022). Continuous improvement practices and organizational performance of large manufacturing companies in Kenya: A case study of Nairobi Bottlers Limited. *International Journal of Business Management and Processes*, 2(3), 411–469.
- Njoroge, S. M., & Maina, S. M. (2021). Entrepreneurial Orientation and Organizational Performance of Airlines in Kenya. In ... *Organizational Performance of Airlines in ...* researchgate.net.
- Nyaga, E. M. (2022). *Compliance Assessment for Safety and Health Measures in a Geothermal Development Company: a Case Study of Baringo-silali Geothermal Drilling Sites.* [erepository.uonbi.ac.ke. http://erepository.uonbi.ac.ke/handle/11295/162151](http://erepository.uonbi.ac.ke/handle/11295/162151)
- Nyangito, C. O., Momanyi, C., & Omari, S. (2022). Influence of Modern Technology on Revenue Mobilization on Organizational Performance of Nairobi County Government, In Kenya. In *Journal of Strategic.* academia.edu.
- Odhiambo, K. O. (2021). *Risk factors ,contract management and performance of public private partnerships renewable energy projects: The case of geothermal renewable energy projects in Kenya.* Unpublished Doctor of Philosophy in Project Planning and Management Thesis. University of Nairobi.

- Odhiambo, K. O., Rambo, C. M., & Okello, S. L. (2020a). Political Risk Factors on Performance of Public Private Partnership Renewable Energy Projects: The Case of Geothermal Renewable Energy Projects in Kenya. *International Journal of Econometrics and Financial Management*, Vol. 8, 2020, Pages 21-29, 8(1), 21–29.
- Odhiambo, K. O., Rambo, C. M., & Okello, S. L. (2020b). Political Risk Factors on Performance of Public Private Partnership Renewable Energy Projects: The Case of Geothermal Renewable Energy Projects in Kenya. *International Journal of Econometrics and Financial Management*, Vol. 8, 2020, Pages 21-29, 8(1), 21–29. <https://doi.org/10.12691/jfe-8-2-1>
- Owolabi, F., Adetula, D. T., & Taleatu, A. (2020). *Balanced score card and performance evaluation in Small and Medium Enterprises (SMEs) in Nigeria*. ir.mtu.edu.ng. <http://ir.mtu.edu.ng/jspui/bitstream/123456789/400/1/pages-from-28th-ibima-conference-3pdf.pdf>
- Pinto, J. (2019). Key to effective organizational performance management lies at the intersection of paradox theory and stakeholder theory. *International Journal of Management Reviews*.
- Purwanto, E. H., Fathoni, A., Nazif, H., Yulianugroho, S., & Primasatya, S. (2021). *Community Engagement Support on Sustainable Geothermal Operation: A Perspective on Corporate Social Responsibility Implementation in Indonesia*. April, 0–7.
- Ratemo, V., Bula, H., & Felistus, M. (2021). Job Promotion and Employee Performance in Kenya Forestry Research Institute Headquarter in Muguga, Kiambu County. *European Journal of Human Resource Management Studies*, 5(1), 166–180.
- Rongei, G. C., & Muturi, W. (2018). Effect Of Corporate Social Responsibility On Organizational Performance: A Case Of Sony And Chemelil Sugar Factories, Kenya. *International Journal of Social Sciences and Technology*, 4(2), 50–62.
- Said, I. M., & Maina, R. J. (2019). *Balanced Score Card and Service Delivery at National Health Insurance Fund in Mombasa County , Kenya*. 3(Vi), 251–270.
- Setyowati, D., Rony, Z. T., & ... (2022). ... On Organizational Performance At The Development Of Dinas Bina Marga Dan Sumber Daya Air Kota Bekasi (Department Of Highways And Water Resources).
- Uribe, D. F., Ortiz-Marcos, I., & Uruburu, Á. (2018). What is going on with stakeholder theory in project management literature? A symbiotic relationship for sustainability. *Sustainability*.
- Wang, Y., & Xie, Y. (2023). *Application of Balanced Score Card in the Evaluation of High-Quality Development of Environmental Service Industry: A Case Study of Grandblue*. *Isaic* 2022, 504–517.

APPENDICES

Appendix I: Consent Statement

Paul Pakka,
Kenyatta University,
School of Business,
P.O BOX 43844-00100,
Nairobi, Kenya.

9th May, 2016.

Dear Participant,

My name is Paul Pakka, a Master's of Business Administration (Strategic Management) student at Kenyatta University, Nakuru Campus. You has been selected to take part in this research titled **“Social Responsibility Effect on Performance of Geothermal Development Company”**. I am inviting you to participate in the research by completing the attached questionnaire.

The questionnaire will require a maximum of 20 minutes to complete. The information you provide will remain confidential and will only be accessible to the researcher and individuals closely associated with the project. Your participation is optional, and you may withdraw at any moment without consequence. Your responses will remain secret. No financial remuneration will be provided for participation in this study. The findings of this research may be utilized for academic and general purposes, including research reports, conference papers, or publications.

Thank you,
Paul Pakka

Appendix II: Questionnaire

SOCIAL RESPONSIBILITY EFFECT ON PERFORMANCE OF GEOTHERMAL DEVELOPMENT COMPANY

Instructions: Kindly fill out the subsequent questionnaire accurately.

Discretion: Your responses will remain entirely secret. The final outcome of the research will not allusion any individual(s).

Kindly respond accordingly to each of the given questions.

PART A: BACKGROUND INFORMATION

- | | | |
|---------------------------------------|---------------------|-----|
| 1) Gender | Male | [] |
| | Female | [] |
| 2) Educational qualification | Diploma Level | [] |
| | Graduate Level | [] |
| | Post Graduate Level | [] |
| 3) Duration of your employment at GDC | 0-2 Years | [] |
| | 3-4Years | [] |
| | 5-6 Years | [] |
| | Over 6 Years | [] |

PART B: CORPORATE SOCIAL RESPONSIBILITY

I. Legal Responsibilities

Please rate the following statements based on your experience with GDC’s legal responsibilities and their impact on stakeholder management. Use the scale below:

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

No.	Statement	1	2	3	4	5
1	Adherence to the Kyoto Protocol has an effect on stakeholder management at GDC					
2	Compliance with Kyoto Protocol targets contributes to increased stakeholder confidence in GDC.					
3	Adherence to the National Environment Management Authority (NEMA) regulations has an effect on stakeholder management at GDC.					
4	Reduction in environmental infractions due to NEMA compliance influences stakeholder perception of GDC.					
5	Adherence to the Energy Bill of 2012 has an impact on stakeholder management at GDC.					
6	Monitoring energy efficiency practices under the Energy Bill (2012) enhances stakeholder engagement at GDC.					
7	Adherence to the Energy Policy of 2012 provisions has an effect on stakeholder management at GDC.					
8	Operational alignment with Energy Policy (2012) goals promotes stakeholder support for GDC initiatives.					

II. Ethical Responsibilities

Please rate the following statements based on your experience with GDC's ethical responsibilities and their effect on stakeholder management. Use the scale below:

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

No.	Statement	1	2	3	4	5
1	GDC ability to take care of its gaseous emissions is important to stakeholder management.					
2	Reduction in greenhouse gas emissions by GDC enhances its reputation among stakeholders.					
3	GDC ability to care for sound emissions during operations is important to stakeholder management.					
4	Decline in noise-related complaints reflects effective sound management by GDC.					

5	GDC measures to address land subsistence as a result of its operations is important to stakeholder management.					
6	Implementation of land subsistence mitigation strategies improves stakeholder assurance in GDC.					
7	GDC measures to address challenges associated with land acquisition is important to stakeholder management.					
8	Timely and fair resolution of land acquisition disputes fosters trust among stakeholders.					

III. Philanthropic Responsibilities

Please rate the following statements based on your experience with GDC’s philanthropic responsibilities and their importance to stakeholder management. Use the scale below:

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

No.	Statement	1	2	3	4	5
1	GDC undertaking of tree planting activities is important to stakeholder management.					
2	Increased community involvement in GDC’s tree planting programs enhances environmental awareness.					
3	GDC undertaking of sponsoring of educational activities is important to stakeholder management.					
4	Academic progress of GDC-sponsored students strengthens stakeholder goodwill.					
5	GDC construction of classrooms for community schools is important to stakeholder management.					
6	Improved school enrollment due to classroom construction reflects positively on GDC’s community role.					
7	GDC provision of clean drinking water for the community is important to stakeholder management.					
8	Access to clean water points provided by GDC improves public health outcomes and stakeholder appreciation.					

PART C: PERFORMANCE OF GEOTHERMAL DEVELOPMENT COMPANY

Please rate the following statements based on your experience with GDC’s organizational performance and community relations. Use the scale below:

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

No.	Statement	1	2	3	4	5
1	The GDC is successful in maintaining positive relationships with the community where it operates.					
2	Community satisfaction surveys reflect the quality of GDC’s relationship management.					
3	The GDC has ideal communication levels with the community where it operates.					
4	Frequency and clarity of GDC’s community meetings enhance stakeholder awareness.					
5	The GDC is successful in addressing the community’s concerns as a result of its operations.					
6	Speed and effectiveness of grievance resolution by GDC influence community trust.					
7	The GDC corporate social responsibilities are beneficial to GDC operations.					
8	Community support for GDC projects due to CSR efforts improves operational efficiency.					
9	The community has benefited from GDC corporate social responsibility activities.					
10	Improved access to social amenities through GDC CSR programs strengthens stakeholder satisfaction.					

Appendix III: Research Approval



KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Website: www.ku.ac.ke

Internal Memo

FROM: Executive Dean, Graduate School

DATE: 26th March, 2025

TO: Paul Pakka
C/o Business Administration Dept.

REF: D53/NKU/PT/27836/2014

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 18th March, 2025 approved your Research Project Proposal for the M.B.A Degree Entitled, "Effect of Corporate Social Responsibility on Performance of Energy Sector in Kenya; A Case of Geothermal Development Company Ltd."

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and progress report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your project before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.


JANE KAMONDE
FOR: EXECUTIVE DEAN, GRADUATE SCHOOL

c.c. Chairman, Business Administration.

Supervisors:

1. Dr. Abel Anyieni
C/o Department of Business Administration
Kenyatta University

JNK/mo

Transforming Higher Education... Enhancing Lives
Kenyatta University is ISO 9001:2015 Certified



Appendix IV: Research Authorization



KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: D53/NKU/PT/27836/2014

DATE: 26th March, 2025

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR PAUL PAKKA – REG. NO. D53/NKU/PT/27836/2014

I write to introduce Paul Pakka who is a Postgraduate Student of this University. The student is registered for M.B.A degree programme in the Department of Business Administration.

Paul intends to conduct research for a M.B.A Project Proposal entitled, “Effect of Corporate Social Responsibility on Performance of Energy Sector in Kenya; A Case of Geothermal Development Company Ltd.”

Any assistance given will be highly appreciated.

Yours faithfully,


J PROF. ELIUD NJAGI
EXECUTIVE DEAN, GRADUATE SCHOOL

JNK/mo

Transforming Higher Education... Enhancing Lives
Kenyatta University is ISO 9001:2015 Certified



Page 1 of 1

