

**ENVIRONMENTAL SUSTAINABILITY AND SHAREHOLDER VALUE
CREATION: AN EMPIRICAL REVIEW OF LISTED OIL AND GAS COMPANIES
IN NIGERIA**

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Abstract

This study investigated the influence of environmental sustainability disclosure on shareholder value creation in listed oil and gas companies in Nigeria. Specifically, it assessed how green environmental policies and green environmental projects affect the return on equity (ROE) of these firms. An ex post facto research design was adopted, with a population of eight listed oil and gas firms, from which six firms were sampled. The study relied on secondary data collected from companies annual report within ten years period 2015-2024, used purposive sampling method and hypotheses were tested using panel estimated generalized least squares at a 5% level of significance. The findings revealed that green environmental policies exert a positive but statistically insignificant effect on ROE ($\beta = 0.0327$; $p = 0.5990$), while green environmental projects have a positive and statistically significant impact on ROE ($\beta = 0.1745$; $p = 0.0000$). The study concludes that investors are more responsive to tangible and observable sustainability initiatives. Consequently, it recommends that management of listed oil and gas firms enhance the implementation and enforcement of existing green environmental policies.

Keywords: Environmental Sustainability, Shareholder Value Creation, Green Environmental Policies, Green Environmental Projects, Return on Equity.

1.1 Introduction

Over the past twenty years, the global business landscape has undergone profound changes, with sustainability emerging as a central element of corporate decision-making. This evolution has been largely fueled by growing concerns about environmental degradation and climate change resulting from industrial activities, particularly within the oil and gas sector. Consequently, governments, regulators, and other stakeholders increasingly expect firms to operate in an environmentally responsible manner and to ensure sustainable use of natural resources (Anaïke et al., 2024). Given their association with carbon emissions, pollution, and ecosystem damage, oil and gas companies face heightened pressure to implement sustainable practices (Elom et al., 2025). In response to these demands, many firms have incorporated

environmental considerations into their operational and financial planning, resulting in the growing adoption of green reporting as a means of enhancing transparency and accountability. Green reporting entails the disclosure of environmental policies, initiatives, and performance indicators in corporate reports to demonstrate adherence to environmental regulations and commitment to sustainability objectives (Hidayat & Widoretno, 2025). This practice reflects a broader global movement toward integrating environmental stewardship into corporate conduct, emphasizing the creation of economic value without undermining the welfare of future generations. In Nigeria, where the oil and gas industry remains a cornerstone of economic activity, persistent environmental challenges such as oil spills, gas flaring, and land degradation have intensified calls for greater corporate responsibility through transparent environmental disclosures (Patrick et al., 2025). Through green reporting, firms communicate their environmental strategies and outcomes, thereby signaling compliance and responsible behavior to investors. As global capital markets increasingly incorporate environmental, social, and governance (ESG) considerations into investment decisions, sustainability disclosures have become a critical source of information for investors. Firms that neglect environmental reporting risk diminished investor trust and restricted access to capital, whereas those that adopt robust green reporting practices often benefit from enhanced reputation and stronger stakeholder relationships (Nworie et al., 2024). Moreover, international guidelines and regulatory frameworks, including the Global Reporting Initiative (GRI) and the United Nations Sustainable Development Goals (SDGs), have further strengthened the role of environmental disclosure within corporate governance structures.

The linkage between green reporting and shareholder return has attracted growing attention in both academic research and corporate practice. Shareholder return, frequently proxied by measures such as return on equity (ROE), represents the level of profit generated for owners relative to their equity investment (Oke & Ajeigbe, 2024). It is generally assumed that firms that adopt and clearly communicate environmentally responsible practices may benefit from improved operational efficiency, lower exposure to regulatory and legal risks, and enhanced long-term profitability (Nisaa & Hidayati, 2025), which could ultimately translate into higher returns for shareholders. By enhancing the visibility of environmental initiatives, green reporting can shape investor perceptions and serve as a signal of effective risk management, potentially resulting in stronger market valuation and better access to capital (Doobee et al., 2024). Nonetheless, this relationship is not always linear. The adoption of green policies and environmental projects often involves substantial upfront costs, which may raise short-term expenses and adversely affect immediate financial returns. Consequently, concerns remain as to whether the advantages of green reporting materialize into measurable financial benefits for shareholders, especially within the oil and gas industry in developing economies such as Nigeria, where environmental regulatory frameworks are still maturing and investors frequently prioritize short-term financial outcomes.

1.2 Statement of Problem

A significant number of firms offer only broad or superficial statements regarding their environmental commitment, with limited disclosure of specific initiatives or measurable results. In many cases, environmental disclosures are not aligned with established sustainability frameworks, thereby reducing their comparability and credibility for stakeholders (Ezuwore-Obodoekwe et al., 2022). Some organizations disclose environmental information solely in response to regulatory requirements, and even such disclosures are often partial or inadequate. This challenge is further exacerbated by weak regulatory enforcement and the substantial costs involved in implementing environmental initiatives, which discourage firms from fully integrating sustainability into their operations. As a result,

shareholders lack sufficient information to properly evaluate the relationship between environmental responsibility and financial outcomes, creating uncertainty about whether green reporting has a meaningful influence on performance indicators such as return on equity.

In the absence of robust and reliable environmental sustainability reporting, shareholders may find it difficult to assess environmental risks and their potential implications for a firm's financial stability. Limited transparency can undermine investor confidence and reduce a firm's appeal to both local and international investors who increasingly factor environmental, social, and governance (ESG) considerations into their investment decisions. For oil and gas companies in particular, inadequate environmental disclosure may result in reputational harm, reduced competitiveness, and possible exclusion from global value chains that demand compliance with sustainability standards. Moreover, when the financial benefits of green reporting are unclear, firms may continue to perceive environmental initiatives as cost-intensive obligations rather than as strategic investments, thereby slowing progress toward sustainable development.

Existing empirical studies, including those by Hidayat and Widoretno (2025), Huwaida et al. (2025), and Maryanti (2025), have largely examined the relationship between environmental sustainability accounting and firm performance within Asian contexts, focusing mainly on manufacturing and energy industries, with limited emphasis on African oil and gas firms. Similarly, research by Nisaa and Hidayati (2025), Romandhon et al. (2025), and Adebajo and Wisdom (2024) has concentrated on environmental disclosure and market-based performance measures such as Tobin's Q and price-earnings ratios, rather than return on equity, which is a more direct indicator of shareholder return. In the Nigerian context, studies by Patrick et al. (2025), Doobee et al. (2024), and Ihenyen and Pabraebiwei (2024) have explored green accounting practices in the oil and gas sector; however, these studies tend to adopt a broad approach without differentiating between specific components such as green environmental policies and green environmental projects, which may have distinct effects on shareholder returns. Although Chude et al. (2022) and Akpan and Nkanta (2023) examined the impact of green accounting on shareholder value and return on equity, their analyses focused primarily on consumer goods firms rather than oil and gas companies and did not isolate the effects of environmental policies or projects. These gaps highlight the need for a focused investigation into the effects of green environmental policies and green environmental projects on return on equity among listed oil and gas firms in Nigeria, in order to provide clearer evidence on the financial implications of sustainability practices within this environmentally sensitive sector.

1.3 Objectives of the study

The main aim of the study is to investigate the effect of environmental sustainability reporting on shareholder value creation among listed oil and gas firms in Nigeria. The specific objectives are as follows:

1. To examine the effect of green environmental policies on return on equity of listed oil and gas firms in Nigeria.
2. To ascertain the effect of green environmental projects on the return on equity of listed oil and gas firms in Nigeria.

2.0 Literature Review

2.1 Conceptual Review

2.1.1 Environmental Sustainability Reporting

Environmental sustainability reporting involves the structured communication of an organization's environmental activities, initiatives, and impacts through its formal corporate disclosures (Ezekwere & Ikilidi, 2024). Its primary purpose is to provide stakeholders with information on how the firm addresses environmental risks, utilizes natural resources responsibly, and adheres to sustainability requirements. Such disclosures are commonly presented in annual financial reports or dedicated sustainability reports and reflect the organization's commitment to environmental responsibility and accountability (Ihenyen & Pabraebiwei, 2024). Green reporting typically covers areas such as emissions reduction, waste management practices, energy efficiency measures, and compliance with environmental regulations. Over time, this form of reporting has transitioned from a largely voluntary practice to a compulsory requirement in many regulatory environments. Increasingly, international institutions and investors expect firms to integrate environmental information into their financial and corporate reporting frameworks. This shift is driven by heightened awareness that environmental challenges have significant implications for corporate performance and long-term viability (Elom et al., 2025). Consequently, green reporting functions not only as a tool for enhancing transparency but also as a strategic signal to shareholders and other stakeholders of the firm's commitment to environmental stewardship.

2.1.2 Green Environmental Policies

Green environmental policies consist of formal rules, principles, and commitments established by organizations to guide the management of their environmental obligations (Yusuf et al., 2017). These policies outline strategic goals aimed at minimizing environmental damage and encouraging the sustainable utilization of natural resources. They offer an institutional framework through which firms can meet environmental regulatory requirements, reduce pollution, and embed sustainability considerations into their operational activities. Green environmental policies convey an organization's position on environmental responsibility and demonstrate its intent to fulfill both legal and ethical responsibilities. Serving as a basis for corporate decision-making, these policies influence resource allocation and operational practices while articulating a long-term commitment to harmonizing economic objectives with environmental protection (Israel et al, 2025). In sectors such as oil and gas, such policies may encompass pledges to limit gas flaring, prevent and manage oil spills, and restore degraded ecosystems. While regulatory pressures motivate the adoption of these policies in some firms, others implement them voluntarily as part of broader corporate social responsibility strategies designed to strengthen investor confidence and stakeholder relationships (Yusuf et al., 2017). Additionally, green environmental policies are often aligned with international sustainability initiatives, including the United Nations Sustainable Development Goals and global climate change accords.

2.1.3 Green Environmental Projects

Green environmental projects are concrete initiatives or programs implemented by organizations to minimize environmental impact and support ecological sustainability (Yusuf et al., 2017). They represent actionable measures that operationalize a company's environmental policies into quantifiable outcomes. Examples include investments in renewable energy, waste recycling schemes, water conservation efforts, biodiversity restoration, and technologies designed to reduce emissions. Unlike policy frameworks, these

projects reflect practical, demonstrable commitments that highlight a company's responsibility toward environmental management. The primary aim of green environmental projects is to alleviate the negative effects of industrial activities on natural ecosystems. Within the oil and gas industry, such projects may encompass measures like enhancing pipeline safety to prevent leaks, implementing gas re-injection systems instead of flaring, or supporting community-driven environmental restoration initiatives. These efforts typically demand considerable financial resources and technical expertise, making them a vital component of a firm's long-term sustainability strategy (Yusuf et al., 2017).

2.1.4 Shareholder Value Creation

Shareholder value creation refers to the financial gains or benefits that investors earn from owning a company's shares (Oke & Ajeigbe, 2024). It is commonly measured by the income received, such as dividends, and the capital appreciation of the shares over time. This metric provides an important indication of a company's performance and its capacity to create value for investors. In contemporary corporate governance, enhancing shareholder return is often considered a key objective for management. Investors allocate capital with the expectation of achieving positive outcomes, either through consistent dividend distributions or increases in share price (Oke & Ajeigbe, 2024, Israel et al., 2025). The magnitude of shareholder return is influenced by various factors, including the company's profitability, efficiency in utilizing resources, effectiveness of risk management strategies, and prevailing market conditions. Strong financial performance typically boosts investor confidence, which can drive demand for shares and contribute to higher market valuations.

2.1.4.1 Return on Equity (ROE)

Return on Equity (ROE) is a financial metric that assesses a company's profitability in relation to the equity invested by its shareholders (Chude et al., 2022). It reflects the effectiveness with which management utilizes shareholders' capital to generate net income. ROE is calculated by dividing net income after taxes by total shareholders' equity and is typically expressed as a percentage. This ratio is widely recognized as a key indicator of performance, as it connects profitability directly to investor-provided resources, offering insights into financial efficiency (Maryanti, 2025). A high ROE indicates that the company is achieving substantial profits relative to its equity base, often signaling effective financial management and operational competence. In contrast, a low ROE may suggest inefficiencies or an overreliance on debt financing instead of equity.

2.2 Theoretical Framework and Development of Research Hypothesis

The stakeholder theory, introduced by R. Edward Freeman in 1984 within the context of strategic management and business ethics, provides an alternative framework to the traditional shareholder-focused approach, which centres solely on profit maximization (Anaïke et al., 2024). The theory asserts that organizations should generate value for all stakeholders rather than prioritizing shareholders alone. It highlights that the long-term success of a business depends on fostering positive relationships with all parties affected by its operations. Ignoring any stakeholder group, according to the theory, can create risks that jeopardize organizational stability and sustainable profitability. Furthermore, stakeholder theory emphasizes that ethical considerations should inform corporate strategies, requiring firms to balance diverse and sometimes competing interests to achieve enduring performance (Anaïke et al., 2024). This study draws on stakeholder theory due to its focus on accountability and transparency in addressing stakeholder concerns, particularly regarding environmental matters. The operations of oil and gas companies often have significant environmental and societal impacts, making them subject to public and regulatory scrutiny.

Green reporting represents a mechanism through which companies acknowledge these responsibilities, by providing stakeholders, especially shareholders, with information on environmental policies and initiatives (Adebanjo & Wisdom, 2024). By implementing green reporting practices, firms demonstrate their commitment to managing environmental risks, which can enhance investor confidence and, ultimately, influence shareholder returns. Based on this, the following hypotheses are proposed:

- Ha1:** Green environmental policies will positively affect return on equity of listed oil and gas firms in Nigeria.
- Ha2:** Green environmental projects will positively affect on the return on equity of listed oil and gas firms in Nigeria.

2.3 Empirical Review

Research on the relationship between green reporting and firm outcomes, particularly return on equity (ROE), presents mixed evidence across different contexts and methodologies. Patrick et al. (2025) and Doobee et al. (2024) both investigated oil and gas companies in Nigeria and reported that environmental sustainability expenditures and pollution control investments, respectively, had no significant effect on profitability or overall financial performance, including ROE. Similarly, Ihenyen and Pabraebiwei (2024) found only a weak but significant positive correlation between green disclosures and return on assets (ROA), while no significant association was established for net profit margin or return on capital employed, which indirectly suggests minimal impact on equity-based returns. These findings align with those of Huwaida et al. (2025), who observed negative relationships between green accounting and profitability in Indonesian energy sector firms, as well as Nisaa and Hidayati (2025), who concluded that green accounting and environmental disclosures did not significantly influence firm value due to limited awareness and inconsistent implementation. Conversely, some studies highlight positive trends; Chude et al. (2022) reported a significant positive effect of green accounting on ROA but an insignificant negative effect on ROE.

Doobee et al. (2024) documented that while environmental protection investments positively influenced ROA, they exerted negative, albeit insignificant, effects on profit after tax, reinforcing the notion that such projects improve asset utilization without substantially driving shareholder returns. Similar patterns were identified by Ogochukwu et al. (2024), whose study on oil and gas firms revealed that specific green disclosures produced heterogeneous effects: gas flaring disclosures exhibited a significant positive relationship with firm performance proxies, while water pollution disclosures had a significant negative impact. Additional hints are offered by Adebanjo and Wisdom (2024), who established that waste management disclosures, though unrelated to Tobin's Q, positively influenced the price-earnings ratio, hinting at potential valuation benefits rather than direct returns. Meanwhile, Romandhon et al. (2025) noted that while qualitative CSR disclosures sometimes negatively influenced firm performance, detailed comparative tables within environmental reports positively affected ROE, suggesting that transparency in reporting can foster investor confidence. Maryanti (2025), through meta-analysis, confirmed a significant positive association between green accounting practices and financial performance. This hint explains why studies such as those by Hidayat and Widoretno (2025) and Huwaida et al. (2025) in Indonesia, and Patrick et al. (2025) in Nigeria, failed to establish strong links between green practices and equity returns, given that both countries operate in regulatory environments with relatively weaker enforcement compared to developed economies. Further, Akpan and Nkanta (2023) demonstrated that biodiversity and compliance-related disclosures significantly improved shareholder value in Nigeria's consumer goods sector, while Adeleye

and Asebiode (2023) reported that green accounting significantly influenced business sustainability through leverage, mediated by firm size. Finally, Ezekwere and Ikilidi (2024) supported this view by revealing significant positive effects of environmental and social disclosures on consumer goods firms' performance.

3.0 Methodology

This research adopts an ex-post facto design, appropriate for examining the impact of variables that have already taken place and are beyond the researcher's control. In accounting and finance studies, this design is commonly utilized to investigate causal relationships using historical data (Ikwuo et al., 2025). The population of this study comprises all oil and gas firms listed on the Nigerian Exchange Group as of December 31, 2024. According to NGX records, there are eight oil and gas firms, namely: Aradel Holdings Plc, Conoil Plc, Eterna Plc, Japaul Gold & Ventures Plc, MRS Oil Nigeria Plc, Oando Plc, Seplat Energy Plc and TotalEnergies Marketing Nigeria Plc.

A purposive sampling technique was adopted to select firms that provided consistent and complete data over a ten-year period (2015–2024). Firms without comprehensive annual reports or sustainability disclosures for this timeframe were excluded. Consequently, six firms qualified for inclusion after removing Aradel Holdings Plc and Seplat Energy Plc.

The research relies exclusively on secondary data obtained from the annual reports and audited financial statements of the selected firms. The data set covers a 10-year period (2015–2024) to capture recent developments in environmental reporting practices. Variables of interest include:

Table 1 Operational Measurement of Variables

Variable	Type	Measurement	Source
Return on Equity (ROE)	Dependent	Net Income ÷ Shareholders' Equity	Chude et al. (2022)
Green Environmental Policies	Independent	A binary score of "1" if a policy on the implementation of environmental audits is disclosed, or "0" if not; and "1" if a policy on environmental commitments is disclosed or "0" if not.	Adapted from Yusuf et al. (2017)
Green Environmental Projects	Independent	A binary score of "1" if a project on the implementation of environmental audits is disclosed, or "0" if not; and "1" if a project on environmental commitments is disclosed or "0" if not.	Adapted from Yusuf et al. (2017)

Source: Researcher's Compilation (2025)

The functional relationship for this study is expressed as:

$$ROE = f(GEPOL, GEPROJ) \text{ eq. i}$$

Transforming this into a linear econometric model yields:

$$ROE_{it} = \alpha_0 + \beta_1 GEPOL_{it} + \beta_2 GEPROJ_{it} + \mu_{it} \text{ eq. ii}$$

Where:

ROE_{it} = Return on Equity of firm *i* at time *t*

GEPOL_{it} = Green Environmental Policies disclosure score of firm *i* at time *t*

GEPROJ_{it} = Green Environmental Projects disclosure score of firm *i* at time *t*

μ_{it} = Error term capturing unobserved factors

β_1 and β_2 measure the extent to which green policies and projects impact shareholder return.

Data analysis combines descriptive and inferential statistics. Descriptive statistics (mean, standard deviation, minimum, and maximum values) summarize the characteristics of the variables. For hypothesis testing, the study employs Panel Estimated Generalised Least Squares (PEGLS) regression, which is appropriate for panel data comprising cross-sectional units observed over multiple time periods. The statistical analyses were performed using E-Views to ensure accuracy in parameter estimation and significance testing.

The study adopts a 5% significance level ($\alpha = 0.05$). The decision rule for hypothesis testing is that if $p\text{-value} < 0.05$, reject the null hypothesis and conclude that green reporting significantly affects ROE. However, if $p\text{-value} \geq 0.05$, fail to reject the null hypothesis, indicating no statistically significant effect.

4.0 Result and Discussion

4.1 Descriptive Analysis and Model Diagnosis

Table 2 Descriptive Analysis

	ROE	GEPOL	GEPROJ
Mean	0.190607	0.566667	0.205556
Median	0.133373	1.000000	0.000000
Maximum	4.337795	1.000000	1.000000
Minimum	-2.750861	0.000000	0.000000
Std. Dev.	0.972319	0.499717	0.402869
Skewness	1.303329	-0.269069	1.466649
Kurtosis	10.66800	1.072398	3.182778
Jarque-Bera	163.9821	10.01310	21.59412
Probability	0.000000	0.006694	0.000020
Observations	60	60	60

Source: Eviews 10 Output (2025)

In Table 2, ROE has a mean of 0.19, suggesting modest profitability relative to equity among firms. The maximum value of 4.34 and minimum of -2.75 indicate wide variations in performance, while the high standard deviation (0.97) confirms this dispersion. Positive skewness (1.30) and high kurtosis (10.67) reveal a right-tailed distribution with extreme outliers, and the Jarque-Bera probability (0.0000) shows the data is not normally distributed.

For GEPOL, the mean of 0.57 indicates that slightly more than half of the firms disclosed environmental policies. The binary nature of the variable is reflected in the maximum of 1 and minimum of 0. The standard deviation of 0.50 shows moderate variability. Skewness (-0.27) suggests slight left skew, while kurtosis (1.07) indicates a flat distribution. The Jarque-Bera probability (0.0067) implies deviation from normality.

For GEPROJ, the mean of 0.21 suggests that only about one-fifth of firms disclosed environmental projects. The variable ranges from 0 to 1, with a standard deviation of 0.40, indicating lower variation than GEPOL. Positive skewness (1.47) and kurtosis (3.18) point to a right-tailed and slightly peaked distribution. The Jarque-Bera probability (0.00002) confirms non-normality.

Table 3 Panel Heteroskedasticity Test

Panel Cross-section Heteroskedasticity LR Test

	Value	df	Probability
Likelihood ratio	116.8738	6	0.0000

Source: Eviews 10 Output (2025)

Table 3 indicates a probability of 0.0000, confirming significant heteroskedasticity across panels. This suggests that error variances differ among cross-sections, which could bias standard errors. To address this, the model was corrected using Cross-section SUR (PCSE) standard errors and covariance for robust estimates.

4.2 Test of Hypotheses

H01: Green environmental policies does not significantly affect return on equity of listed oil and gas firms in Nigeria.

H02: Green environmental projects will positively affect on the return on equity of listed oil and gas firms in Nigeria.

Table 4 Hypotheses Testing

Dependent Variable: ROE

Method: Panel EGLS (Cross-section SUR)

Cross-section SUR (PCSE) standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EPOL	0.032666	0.061777	0.528780	0.5990
EPROJ	0.174501	0.036445	4.788126	0.0000
C	0.081598	0.059404	1.373607	0.1749
Adjusted R-squared		0.297025		
Prob(F-statistic)		0.000016		
Durbin-Watson stat		2.287181		

Source: Eviews 10 Output (2025)

Table 4 shows that the adjusted R-squared is 0.297, meaning green environmental policies and projects jointly explain about 30% of the variation in return on equity. The Prob(F-statistic) of 0.000016 indicates the model is statistically valid at 5%, confirming that the independent variables collectively have a significant effect on ROE. The Durbin-Watson statistic of 2.29 suggests no serious autocorrelation problem, ensuring model reliability. The constant term (C) has a coefficient of 0.0816 with a p-value of 0.1749, meaning its effect on ROE is not significant at 5%. This implies that when green environmental policies and projects are absent, ROE is slightly positive but not statistically different from zero.

For green environmental policies (GEPOL), the coefficient is 0.0327, meaning a one-unit increase in policy disclosure raises ROE by 0.033 units on average. However, with a p-value of 0.5990, this effect is not significant at 5%, so we fail to reject H01. Thus, green environmental policies do not have a significant positive effect on ROE among listed oil and gas firms in Nigeria.

For green environmental projects (GEPROJ), the coefficient is 0.1745, indicating that a one-unit increase in project disclosure raises ROE by 0.175 units on average. With a p-value of 0.0000, this effect is highly significant at 5%, so we reject H02 in favor of the alternative. This means green environmental projects significantly increase ROE among listed oil and gas firms in Nigeria.

4.3 Discussion of Findings

The first result shows that green environmental policies have a positive, but statistically insignificant, impact on ROE ($\beta = 0.0327$; $p = 0.5990$). This suggests that merely disclosing such policies does not enhance shareholder value creation, possibly due to weak regulatory enforcement and low investor engagement. Similar findings of insignificance were reported by Patrick et al. (2025) and Hidayat and Widoretno (2025) in Nigeria and Indonesia, while Nisaa and Hidayati (2025) attributed this to inconsistent implementation in emerging markets. Conversely, Maryanti (2025) observed significant effects in developed markets, indicating that the market context influences outcomes.

The second finding reveals that green environmental projects significantly increase ROE ($\beta = 0.1745$; $p = 0.0000$). This shows tangible environmental actions enhance financial outcomes through efficiency and reputation gains. Maryanti (2025) confirmed strong effects of green practices, while Doobee et al. (2024) and Akpan and Nkanta (2023) reported similar positive impacts in Nigeria. Ezekwere and Ikilidi (2024) also linked real environmental efforts to improved performance, indicating action drives returns more than disclosure.

5.0 Conclusion and Recommendation

5.1 Conclusion

The results indicate that adopting green environmental initiatives generally has a positive impact on shareholder returns, although the effect depends on the type of initiative. Green environmental projects, in particular, show a significant influence on return on equity (ROE), suggesting that tangible, project-focused sustainability investments can improve operational efficiency, encourage innovation, and enhance stakeholder confidence, thereby boosting financial performance. In contrast, green environmental policies alone appear to have an insignificant effect, implying that policy frameworks without concrete implementation may not yield immediate financial gains. This underscores that investors and capital markets respond more favorably to visible, measurable sustainability actions than to policy statements or intentions. Overall, the findings emphasize that the effectiveness of environmental responsibility in enhancing firm performance depends largely on the execution and credibility of sustainability efforts rather than on policy articulation alone.

5.2 Recommendations

1. Listed oil and gas companies should enhance the implementation and oversight of current green environmental policies to ensure they produce tangible operational and financial results.
2. The board of directors of listed oil and gas firms should increase investment in green environmental projects as they demonstrably enhance shareholder returns and long-term profitability.

5.3 Limitations of the Study and Suggestion for Further Studies

The study is constrained by its small sample of six firms, which may not adequately represent all publicly listed oil and gas companies in Nigeria. Relying solely on secondary data from annual reports also limits the depth of the analysis, as it does not directly reflect management

insights or investor behavior. Furthermore, the research examined only return on equity, excluding other financial performance metrics that could be influenced by green reporting. Future studies could address these limitations by including a larger sample, collecting primary data through surveys or interviews, and exploring additional financial indicators such as return on assets or market value to offer a more comprehensive assessment of the effects of green reporting.

References

- Adebanjo, A. A., & Wisdom, O. (2024). Green accounting practices and value of listed firms in Nigeria. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 9(9), 1.
- Akpan, D. C., & Nkanta, U. O. (2023). Green accounting practices and shareholders' value of listed consumer goods companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 11(6), 1-23.
- Chude, D. I., Chude, N. P., & Egbunike, F. C. (2022). Green accounting practices and corporate performance: evidence from quoted consumer goods manufacturing companies in Nigeria. *Journal of Global Accounting*, 8(3), 53-65.
- Doobee, L. P., Ironkwe, U. I., & Nwaiwu, J. N. (2024). Green accounting and financial performance of listed oil and gas companies in Nigeria. *Int. J. Business Management*, 7(06), 01-20.
- Elom, J., Nworie, G. O., Ugwu, J., Nwogo, J., & Nwele, A. (2025). Carbon management disclosure and firm value in the Nigerian energy market. *Journal of Current Social Issues Studies*, 2(7), 8-23.
- Ezekwre, U., & Ikilidi, J. (2024). Effect of green accounting disclosure and financial performance: a study of consumer goods firms in Nigeria. *Journal of the Management Sciences*, 61(7), 1-19.
- Ezuwore-Obodoekwe, C. N., Ozoji, A. P., Ebisi, L. N., & Nwariaku, I. S. (2022). Green accounting in oil & gas firms in Nigeria; its prospects and challenges: a study of selected oil & gas companies in Nigeria. *Journal of Emerging Trends in Management Sciences and Entrepreneurship*, 4(1), 99-116.
- Hidayat, A. S. J., & Widoretno, A. A. (2025). The contribution of green accounting, csr, environmental performance, and company size to financial performance of manufacturing companies enlisted in IDX at 2019-2022. *Jambura Economic Education Journal*, 7(1), 98-110.
- Huwaida, S., Puspitasari, R., & Djanegara, M. S. (2025). Green accounting implementation and csr disclosure on company profitability with gcg as a moderating variable: case study on a listed energy company in Indonesia stock exchange 2017-2022. *Jurnal Ilmiah Akuntansi Kesatuan*, 13(1), 13-22.
- Ihenyen, C. J., & Pabraebiwei, E. Z. (2024). Green accounting disclosure and financial performance of oil and gas companies in Nigeria. *International Journal of Innovative Finance and Economics Research*, 12(3), 180-191.
- Ikwuo, A. K., Nwite, I. M., & Nworie, G. O. (2025). Reflecting staff reward in employee output: A validation of Henri Fayol's 7th principle of management using the Nigerian manufacturing sector. *Golden Ratio of Human Resources Management*, 5(2), 488-500.
- Israel, O.E.I, Anichebe,N.A, Ama,I.O, Promise,N.E, Ikwuo, A. K, Aliu,K.A & Nnam,H.I. (2025)._Gambia's growth and foreign capital inflows: A dual-gap approach. *Journal of Xi'anShiyou Daxue Xuebao (Ziran Kexue Ban)/ Journal of Shiyou University, Natural Scienc Edition*, 68(8), 120-136. DOI; 10.5281/zenodo.16900348

- Ogochukwu, N. C., Ifurueze, M. I., & Ifurueze, P. (2024). Green accounting and corporate performance of selected quoted oil & gas firms in Nigeria. *IIARD International Journal of Economics and Business Management*, 9(4), 113-31.
- Romandhon, R., Pramuka, B. A., Lestari, P., & Kaukab, M. E. (2025). The impact of disclosure of green accounting information on company performance on the Indonesia Stock Exchange. *Contaduría y Administración*, 70(1), 484.
- Yusuf, I., Samuel, J. & Ekundayo, O. (2017). The Extent of Environmental Disclosures in Listed Oil and Gas Companies in Nigeria. Available at: https://www.zbw.eu/econis-archiv/bitstream/11159/323408/1/EBP075453932_0.pdf