# Environmental Remediation Cost Disclosure and Value Creation: Impact Analysis

**Mofehintolu Tony Akinnola[1], Olusola Esther IGBEKOYI (Phd)[2], Elijah Oladeji Oladutire (Phd)[3]**

**[1]Postgraduate Student, Department of Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria**

**[2,3]Department of Accounting, Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria.**

**DOI: https://doi.org/10.47772/IJRISS.2026.100500763**

**Received: 03 May 2026; Accepted: 08 May 2026; Published: 12 June 2026**

## ABSTRACT

Business activities to meet the target market needs and satisfy stakeholders result in Environmental threats, such as, degradation, pollution, oil spillage, gas flaring, climatic changes, depletion of freshwater supplies, deterioration of natural resources, habitat loss, anti-social activities, and societal unrest. The study investigated environmental remediation cost and value creation of listed consumer products companies over a period of Ten (10) years in Nigeria. It looked into how the value creation of these Nigerian listed companies is impacted by the expenditures associated with community development, waste management, and employee health and safety. An ex-post facto research design and secondary sources of information obtained from the published annual reports of the purposively sampled sixteen (16) out of Twenty-One (21) Nigerian publicly traded consumer goods companies. Data collected were analysed using descriptive statistics and multivariate regression analysis. It was discovered that the value creation of these firms is negatively and negligibly impacted by expenditures associated with community development and employee health and safety but positively and negligibly impacted by waste management cost disclosure. The investigation, therefore, concluded that these companies environmental remediation costs disclosure influences how they were valued. It recommended that these companies and other Nigerian firms, should enhance transparency and accountability in the disclosure of their environmental-related activities as it has shown evidence of its influence on earnings per shares. Companies should carefully assess the trade-offs between environmental remediation efforts and value creation, prioritize actions that agree with their corporate goals and have the greatest potential to enhance long-term value creation.

**Keywords**: Environmental remediation cost, value creation, community development cost, waste management cost, employee health and safety cost, value creation.

## INTRODUCTION

Every organization have goal to optimize its performance, that is, stakeholders' satisfaction. To achieve this, organization must produce and supply goods and services for the target market. Environmental threats, such as degradation, pollution, oil spillage, gas flaring, climatic changes, depletion of freshwater supplies, deterioration of natural resources, ozone layer depletion, energy use, pesticides, toxic chemicals, nuclear power, urban growth, habitat loss, anti-social activities, and societal unrest due to protests by civil society groups and indigenous people, are largely connected to exploration, production, transportation, and marketing activities of organization (Nwanwu, 2022). Hence, many developing countries including Nigeria have witnessed significant environmental challenges in recent years (Igbekoyi et al., 2021). These worries have mostly affected the manufacturing industry, which has made sustainable business practices necessary to address environmental difficulties. Consequently, a number of Nigerian businesses have embraced environmental accounting (Igbekoyi et al., 2021).

This inevitably resulted in their involvement in environmental remediation activities and the associated societal costs (Okezie et al., 2019). This will ensure that the environment is preserved and encourage the company to grow to meet the needs of the global market. These activities will invariably build strong relationships with stakeholders that can help facilitate trust, loyalty, new ideas, public image, avoid conflicts, improved resource distribution which will result in more ethical and sustainable business practices and success, thereby generate a healthy return on invested capital(Onoh et al., (2023). Notwithstanding, the influence of these activities on firms' value creation is not well comprehended. This is the reason for the request for a thorough analysis of how environmental remediation costs affect the value creation of listed Nigerian companies.

Nevertheless, a number of academics from industrialized and developing nations have examined the connection between the performance of listed manufacturing companies and the cost of environmental remediation. Molokwu et al. (2022), for example, looked at the impact of environmental accounting on a portion of the financial performance of oil and gas businesses in Nigeria. The chosen firms provided secondary data, which were gathered and subjected to multiple regression analysis. It was found that whereas Cost of Pollution Control had a major negative impact on oil and gas companies' earnings per share in Nigeria, ERC had a favourable and considerable impact on those same companies' earnings per share. However, the study challenges remain in ensuring this effect on other manufacturing businesses like industrial goods, health care and consumer goods in Nigeria.

The financial performance of Nigerian listed oil and gas corporations was examined by Enekwe et al. (2023) in relation to environmental expenses. The study employed purposive sampling and ex post facto study methodology. The multiple regression model was statistically analysed using Panel Ordinary Least Square technique. The results showed that employee health and safety expenses and community development expenses had a positive but small impact on the return on assets of listed Nigerian oil and gas businesses, whereas staff development expenditures have a negative but small impact. Nevertheless, the study did not look at how environmental remediation expenses, such waste management costs, affect a company's ability to make money.

Sani et al. (2021) investigated the effect of environmental costs on the financial performance of foreign oil and gas companies operating in Nigeria. To ascertain how the variables under investigation related to one another, the study employed regression models and panel data. Environmental activities have a considerable and positive impact on ROA, according to the study's data. Still, only foreign gas and oil companies doing business in Nigeria were included in the study's scope. Summarily, the research results denote that the financial result of industries is positively impacted by the price of cleaning up the environment. This suggests that adopting environmentally sustainable practices can boost the firms' economic success and increase their value creation. To allow for greater generalization, these studies' industrial application scope was restricted to Nigerian gas and oil. Hence, some research has yielded contradictory or unclear results, suggesting that there might not always be a direct relationship between environmental remediation costs and financial performance (Molokwu et al., 2022).

The objective of this study is to investigate the impact that environmental remediation costs have had on listed Nigerian companies' ability to create value. The study's specific goal is to look into how the value creation of consumer products companies listed in Nigeria is impacted by the expenditures associated with community development, waste management, and employee health and safety. Through this research, Nigerian organizations and the general public would be able to see environmental remediation costs as a means of enhancing their own value and fostering the community's sustainable growth. In addition, it will serve as a blueprint for Nigeria's future environmental accounting disclosure regulations. The study seeks to increase the body of current literature.

There are four components left to the study, except the introduction. The second part includes a review of related literature, the third section covers the methods, and the fourth discusses data analysis and result interpretation. The conclusion and suggestions are captured in the fifth and final section.

## LITERATURE REVIEW

This section conducts a comprehensive evaluation of the relevant literature, encompassing conceptual and theoretical reviews, empirical investigations, and identified gaps in the literature.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue V May 2026

### Conceptual Review

This subsection offers conceptual viewpoints on the dependent and independent variables pertinent to this study.

### Value Creation

Value creation is the primary aim of any business entity financial management (Siburian and Yohanes, 2018). Value creation is the process by which a company's management develops and implements financial and strategic decisions to increase the market worth of the company's capital beyond the capital put in it (Nasiru et al., 2020). Generating wealth for investors encourages a proactive, competitive mind-set that propels the company's long-term, balanced growth, focused on identifying new opportunities for value creation and risk management (Vigo-Llempé et al., 2022). Stated differently, it relies on management's strategic investment decisions (investment and/or de-investment activities), which involve their capacity to make prudent investments and produce a healthy percent return on capital invested. The creation of this value will raise the share price and enable the business to give shareholders higher dividends. It is a crucial performance metric for businesses.

The attention given to environmental impacts, the numerous strategies, and their flexibility in achieving competitive capacities are all necessary for wealth generation. Environmental remediation will mitigate environmental risks, foster sustainable development, strengthen community relations, infrastructural development and improve operational efficiency which will serve as a boost to organisation’s performance and invariably increase shareholders’ wealth. Value generation is measurable, and Earnings per share serves as a proxy.

### Earnings per Share

This is the monetary value of earnings per outstanding share of common stock for a company (Iliemena, 2020). It is the portion of a company’s net income that would be allocated to each outstanding share. Earnings per Share is typically used by economic analysts and investors to ascertain the financial strength of a company (Osaloni & Oso, 2023). Hence, a higher Earnings per Share indicate greater value because investors will pay more for the company’s shares if they think the company has higher profits relative to its share price.

Investing in environmental remediation projects can provide investors with an assortment of benefits, both direct and indirect, extending beyond traditional financial metrics of wealth, these include: enhanced brand credibility and image, reduced regulatory risk, improved operational efficiency, enhanced access to capital, increased revenue and cost savings, reduced long-term liabilities, improved employee morale and engagement, strengthened community relations, and enhanced social license to operate. These benefits will affect the organisation’s financial performance.

### Environmental Remediation Costs

Environmental remediation is the process for restoring contaminated sites to their original or acceptable conditions, ensuring the protection of human health and the surrounding. This incurs significant costs, creates value by reducing environmental risks, improving public perception, and fostering sustainable development. In this investigation, Environmental Remediation Costs (ERC) components that are used as indicators are: Community Development Costs (CDC), Waste Management Cost (WMC), and Employee Health and Safety Costs (EHSC).

### Community Development Cost

Community development cost describes the monetary resources invested in initiatives aimed at improving the standard of living in a specific community or region (Nwambeke et al., 2019). Community development costs are cost incurred by businesses operating in the offering of development projects within the host localities. There has been a growing demand for businesses to offer community development initiatives to the communities within which they are carrying out their operations. Hence, for businesses to thrive, they must carry out their business in a way that will increase value, rather than detracting the social and economic frameworks of their host societies.

Business initiatives may encompass an array of activities, programs, and projects. For instance, Nestlé Nigeria partners with vocational training centres to provide skills training for youths in their host societies. This equips them for potential employment opportunities within Nestlé or strengthens their entrepreneurial endeavours. Nigerian Breweries Plc construct and equipped boreholes to enhance the availability of clean water in their host societies.

**Waste Management Cost**

Waste management cost pertains to the expenses associated with the gathering, moving, preparing, recycling, or disposing of garbage, usually produced by human activity, in an ecologically responsible manner (Kameri-Mbote et al., 2023). The cost of waste management depend on factors, such as, the volume and type of waste produced, the methods of disposal used, and the regulations governing waste management in a particular area. Some common elements of waste management costs include: gathering and transportation, composting and recycling, landfill or incineration fees, compliance and regulatory costs.

Community Waste Management Initiatives, a forward-thinking company might pilot projects in their host societies to enhance waste sorting, composting, or responsible waste disposal practices. For instance, Nestle Nigeria have introduced refill packs for products like Milo, allowing consumers to reuse packaging and reducing overall waste generation. Partnership for Recycling Programs, these firms partner with waste management companies or NGOs to establish collection and recycling programs for specific materials used in their packaging. This could target plastics, cartons, or other materials.

**Employee Health and Safety Cost**

When carrying out company processes, employees are exposed to environmental health-related challenges. Given this, businesses are anticipated to make provisions for protection of human lives, avoidance of accidents, and preventions against all forms of disability within the environment. Employee health and safety cost are the expenses incurred by an organization to guarantee the well-being and protection of its workforce, including the cost of securing the environment (Chinedu et al., 2019). The target of health and safety costs is on ensuring and advancing the physical and mental well-being of employees and the inhabitants of the host towns (Amahalu et al., 2018). These costs include; occupational health programs, safety training and equipment, workers' compensation, compliance and regulatory costs, and health insurance and healthcare benefits.

Nestle Nigeria have programs such as Safety training on food handling, hygiene, and machine operation. Access to health screenings or wellness programs. Guinness Nigeria programs focus on Brewery safety guidelines to avert mishaps in the course of production. Flour Mills Nigeria focus on Safety protocols for grain handling and milling operations. Programs to prevent respiratory issues from flour dust.

## CONCEPTUAL FRAMEWORK

The conceptual framework reveals the connection between the independent and dependent variables. Figure 1 illustrates the study's focus on the dependent variable proxy by earnings per share and independent variable's proxies with: community development cost, waste management cost and employee health and safety cost used in the investigation.

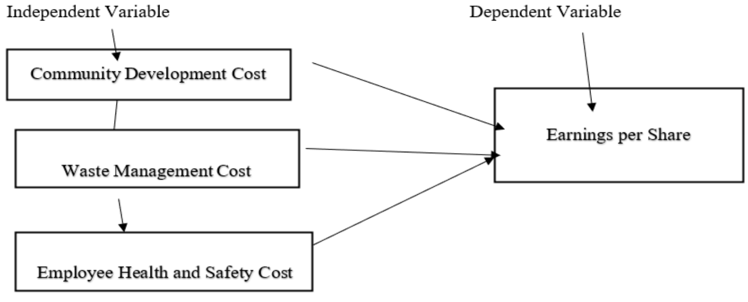


Figure 1: Conceptual framework showing relationship between environmental remediation cost and value creation.

**Source: Author's Design (2025)**

## THEORETICAL REVIEW

### Stakeholder Theory

Stakeholder theory was propounded by Freeman and Reed in1984. The theory was predicated on the assumption that stakeholders are multiple, interconnected and interdependent interests which the companies have an ethical obligation to create value and achieve long-term sustainable success. It challenges the traditional shareholder-centric model with the argument that a company's success depends not just on maximizing shareholder value, but equally fulfilling the anticipations of various groups impacted by its actions and or impacted the business operation (Uwuigbe & Olayinka, 2011), this inevitably resulted in solid connections with stakeholders that can help facilitate trust, loyalty, new ideas, higher employee engagement, public image, avoid conflicts, better resource allocation which will give birth to more ethical and ecologically friendly business methods, practices and success.

The theory motivates businesses to engage in sustainable practices that benefit all parties involved, not just shareholders, embrace a long-term perspective on environmental challenges, identify key concerns and actively engage stakeholders in dialogue and decision-making, resulting in more informed decisions. However, stakeholder theory shifts the focus away from shareholders by prioritizing other stakeholders' needs, leading to potential conflicts and dissatisfaction among the owners. It offers no precise guidelines on prioritizing conflicting stakeholder interests which lead to decision-making challenges and conflicting objectives, as companies are forced to harmonise the demands of multiple parties involved without a clear framework for doing so. Hence, satisfying all stakeholders simultaneously can be difficult, requiring compromises and potentially hindering decisive action.

The presumptions indicate how stakeholder theory relates to this investigation. Environmental, social, and shareholder interests were the main focuses of the theory. This study aimed to demonstrate the connection between firms' environmental remediation activities and sustaining the core objectives of their owners. The theory was chosen because it maintained that all parties involved in the business have an equal entitlement to firm information and other benefits at all times. The stakeholder theory, which considers share appreciation as financial outcome measured in terms of earnings per share is in concurrence with the research by Mahoney et al. (2007) and Al-Tuwaijiri et al. (2004) in separate studies, they asserted that there is a direct relationship between the health of the environment and the economy.

### Empirical Review

This section will go over earlier research that is pertinent to the topic of how environmental clean-up affects value generation. It provide valuable insights into the intricacies of environmental restoration in Nigeria by exhibiting diverse methodologies, highlighting key findings, benefits, weaknesses and pointing out potential gaps for further research.

Iliemena (2020) studied how listed Nigerian oil and gas companies' corporate performance is affected by environmental accounting. Ex post facto research approach was adopted, and simple linear regression analysis was performed. The findings demonstrated that while environmental accounting had a negligible but favourable effect on net profit, it greatly increased return on capital utilized. The study clarified how cost reductions and a better reputation resulting from sustainability accounting enhance corporate success; nevertheless, it disregarded the impact of environmental remediation costs on the profitability of other Nigerian listed companies. Thus, further research is needed to ascertain how environmental remediation expenditures impact the long-term corporate viability of other quoted companies in Nigeria.

Nkwoji, (2021) investigated the connection between environmental accounting and the profitability of selected oil and gas companies in Nigeria between 2012 and 2017. Ex post facto research design, ordinary least squares analysis was engaged and the outcome demonstrates no discernible correlation between environmental remediation costs and corporations' net profits of Nigerian oil and gas companies. The study, which had a limited industrial emphasis, demonstrated the relationship between environmental remediation costs and a sample of listed Nigerian oil and gas companies' profitability. Therefore, more research is needed to look at different industrial sectors like consumer goods, healthcare, and industrial goods in order to get a more thorough generalization.

Ogbu et al. (2021) worked on how social peace of communities dependent on solid mineral resources and corporate success in Nigeria are impacted by environmental remediation cost management. This study employed an ex-post facto and a survey research design. Regression analysis using E-View 9 statistical programs were employed and the results indicated that disputes over mineral and benefit rights resulting from environmental remediation costs characterized community conflicts which invariably affected business performance. This study provided insights to the consequence of improper handling of yearly community development benefits on corporate success. Nevertheless, the impact of environmental remediation costs on corporate operations was not disclosed. Further research could explore the impact of environmental remediation costs on business operations.

Onipe and Aminu (2021) examined how listed Nigerian insurance companies' profitability was affected by their sustainability performance. The data extracted from the yearly financial statements of listed insurance companies in Nigeria, were assessed by descriptive and inferential statistics. The findings demonstrated that whereas social durability has a considerable and positive influence on profitability, ecological durability has a large and negative consequences on profitability. By examining the impact of the sustainability factors on profitability, the paper sparked a greater discussion and improved readers' understanding of sustainability reporting. However, these sustainability impacts were not given a wider industrial coverage. Consequently, future research might concentrate on different industrial sectors for more thorough generalization.

Sani et al. (2021) examined how Nigerian multinational oil and gas firms' financial performance was impacted by environmental remediation costs. Regression models and panel data were employed in the study to ascertain the association between the variables. The study's conclusions indicated that environmental remediation costs significantly and favourably affect ROA. The study highlighted that organizations that invested in sustainability activities would have significant competitive advantages but assuring this impact on additional Nigerian producers still presents difficulties. Further research could delve deeper into widening industrial scope of the investigation in Nigeria to give room for better generalization.

Imong et al. (2022) examined how environmental remediation costs affected the Niger Delta oil and gas industry's bottom line in Nigeria. In this study, survey research methodology and regression models were applied. The findings demonstrated that the financial result of oil and gas operating businesses in Nigeria's Niger Delta is significantly impacted by the expenditures related to environmental contamination assessment. The research indicated that environmental remediation costs have an effect on the operational success of the oil and gas companies operating in the Niger Delta. Assessing the effect of these expenses on other industrial firms in other regions of Nigeria is still difficult, though. Expanding the industrial and geographical application scopes in Nigeria could be the subject of future research to allow for improved generalization.

Molokwu et al. (2022) looked into how environmental accounting affected a subset of Nigerian energy and gas firms' financial results. A Multiple Regression Analysis was performed on the secondary data provided by the selected companies. The outcome indicated that Community Pollution Control had a high and negative influence on the profits per share of petroleum and gas companies in the country. The research demonstrated how environmental remediation costs and Contamination control expenses relate to the profits per share of energy and gas corporations in Nigeria, but there are still obstacles in the way of assuring that other manufacturing firms in Nigeria are also affected. Expanding the industrial application breadth of the research in Nigeria could facilitate better generalization.

Okafor et al. (2022) investigated the possible impact of sustainability-related environmental disclosure on the petroleum and gas sector's financial outcome in Nigeria. Ex post facto study methodology was used and regression analysis with aid of E-view 9.0 utilised. The research indicated that environmental preservation have a marginally favourable influence on the fiscal result of Nigerian energy and gas corporations. The study offered empirical proof that ecological sustainability disclosure by businesses influences the yield on assets of quoted petroleum and gas corporations in Nigeria; however, its impact on non-oil and gas enterprises was not taken into account. Therefore, the research may be expanded to include non-oil and gas enterprises in order to provide a more comprehensive picture and generalisation.

Enekwe et al. (2023) investigated the impact of environmental remediation costs on the financial outcome of Nigerian publicly traded energy and gas businesses. Ex post facto research technique and regression analysis using E-View 9 statistical programs were used. The results demonstrated that Staff development costs had a negative but negligible impact on the sampled businesses return on assets, while employee health and safety and community development charges had a positive but minor impact. The inquiry suggested that the costs incurred and its disclosure had an impact on the company's success indicators. Petroleum and gas businesses and a few particular environmental remediation costs variables are utilised in the investigation. Further research is needed to broaden the industrial scope and definition of environmental remediation costs to include waste management expenses of the study in order to provide a better generalisation.

Onoh et al. (2023) studied the effects of reporting related to ecological, social, and economic sustainability on the public traded Nigerian petroleum and gas businesses value. The work relied mainly on secondary source of data and analysed by multiple regression. The research indicated that the value of public traded energy and gas companies in Nigeria is positively impacted by ecological sustainability reporting. The paper provided insights into the reporting of ecological, social, and economic sustainability and its influence on Petroleum and Gas Corporation's worth in the country, however, it did not consider the non-oil sector of the economy in Nigeria. Therefore, for comprehensive picture, future study might examine how these reporting methods affect the listed non-oil and Gas Company's worth in Nigeria.

The empirical review yields series of conclusions about the correlation between business outcome and environmental remediation costs. Some demonstrated a positive connection and others showed contradictory results. The majority of earlier research, particularly the one this article reviews, concentrated on petroleum and gas with insignificant attention on the consumer goods sector, and primarily in Nigeria, Niger Delta region. The review indicates gaps in knowledge, which is why this study looks at Nigerian publicly traded consumer goods firms that are significant to the country's economy during a ten-year period using multiple regression analysis.

The following null hypotheses are hereby stated:

$Ho_1$: Environmental remediation cost has no significant impact on value creation.

$Ho_2$: Community development cost has no significant impact on value creation.

$Ho_3$: Waste management costs has no significant impact on value creation.

$Ho_4$: Employee health and safety cost has no significant impact on value creation.

## METHODOLOGY

Ex post facto research design was adopted because the data used are available and not intended to be manipulated. Data were collected from annual reports and sustainability reports of 16 Nigerian listed firms in the consumer goods sector purposively selected. The study covered a period of 2013 to 2022. Data collected were analysed using descriptive and multiple regression analysis.

**Model Specification**

This study modified the model of Enekwe et.al, (2023) used to investigate the impact of environmental remediation costs on the financial result of Nigerian energy and gas businesses that were publicly traded. The study has Return on Asset as dependent variable with Community Development Cost, Staff Development Cost and Employee Health and Safety Cost as independent variables.

This study modified the model by substituting Earning per Share as a stand-in for value creation for the dependent variable, Return on Asset. In order to better represent other stakeholders and make the study more appropriate, the researcher believes that waste management costs should be used in place of staff development costs because SDC and employee health and safety costs are independent variables based on the employee.

Thus, below is the study model with the linear representation:

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue V May 2026

EPS= $f$(CDC, WMC, EHSC)………………………………….(1)

The model for econometrics will be:

$EPSij = \beta 0 + \beta_1 CDC_{ij} + \beta_2 WMC_{ij} + \beta_3 EHSC_{ij} + \mu_{it}$………………….(2)

Where:

EPS = Earnings per Share,

CDC = Community Development Cost,

WMC= Waste Management Cost,

EHSC = Employee Health and Safety Cost.

i = Company script

t = Year script

$\mu_{it}$ = Oversight script or error term

$\beta_0$ = constant/intercept;

$\beta_1 - \beta_3$ = slope of the independent elements

The *a priori* expectations were predicted as: $\beta_{1 < 0,}$ $B_{2< 0}$ and $\beta_{3 < 0.}$

Where:

$\beta_{1 < 0;}$ indicating that the higher the CDC, the lesser the EPS.

$B_{2< 0;}$ which suggests that the higher the WMC, the lesser the EPS.

$\beta_{3 < 0;}$ signifies that the higher the EHSC, the lesser the EPS.

Table 3.1: Variable Description

| S/N | Variables | Description | Measurement | Source |
|---|---|---|---|---|
| 1 | Earnings per Share (EPS) | It is the monetary value of earnings per outstanding ordinary share of a firm. | Profit after Tax before Extraordinary Items less Preference Dividend ÷ Number of Ordinary Shares Outstanding | Iliemena (2020) |
| 2 | Waste Management Cost | Cost of collecting, transporting, recycling, and disposal of waste. | Cost of collecting, transporting, recycling, composting, and incineration fees. | Oshiole et al. (2020) |
| 3 | Community Development Cost | Cost of carrying out projects in host communities. | Infrastructure development, job creation, education and healthcare, and social services in host communities. | Nwambeke et al. (2019) |
| 4 | Employee Health and Safety Cost | Cost of sustaining the health and safety of workers. | Occupational health programs, safety training and equipment, workers' compensation, and health insurance and healthcare benefits. | Oshiole et al. (2020) |

**Source: Authors' Design (2025)**

# DATA ANALYSIS AND DISCUSSION OF FINDINGS

## Descriptive Statistics

The illustrative statistics for the dependent and explanatory variables of interest are presented and every variable is examined from the standpoints of the maximum, minimum, standard deviation, and mean. The study's descriptive statistics are shown in Table 1.

**Table 1: Descriptive Statistics**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| EPS | 160 | 3.452 | 10.391 | -5.74 | 57.63 |
| CDC | 160 | .688 | .465 | 0 | 1 |
| WMC | 160 | .256 | .438 | 0 | 1 |
| EHSC | 160 | .9 | .301 | 0 | 1 |
| MCAP | 160 | 7.503 | .972 | 5.18 | 9.1 |

**Source: Author s' Computation (2025)**

Descriptive statistics yielded a mean of 3.452 and a standard deviation of 10.391 for the dependent variable, value creation proxy by profits per share. In the case of the explanatory variables, the study finds that community development cost disclosure has a mean of 0.688 with a standard deviation of 0.465 suggesting that on average, 69% of the companies provided information regarding the cost of community development. Furthermore, the study indicated that the mean of waste management cost disclosure was 0.256 with a standard deviation of 0.438 indicating that on average, about 26% of the firms disclosed details regarding the cost of their trash management. Also, the result indicated that the mean of employee health and safety cost disclosure was 0.90 with a standard deviation of 0.301 indicating that on average 90% of the firms disclosed their employee health and safety cost information. In the case of the control variable, the research indicated that the mean of market capitalization (MCAP) was 7.503 with standard deviation of 0.972.

## Correlation Analysis

In examining the association among the variables, the study employed the Spearman Rank Correlation Coefficient, the outcomes are presented in Table 2.

**Table 2: Correlation Analyses**

| Variables | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| (1) EPS | 1.000 | | | | |
| (2) CDC | 0.121 | 1.000 | | | |
| (3) WMC | 0.220 | 0.396 | 1.000 | | |
| (4) EHSC | 0.138 | 0.494 | 0.196 | 1.000 | |
| (5) MCAP | 0.636 | 0.438 | 0.431 | 0.353 | 1.000 |
| **Source: Author s' Computation (2025)** | | | | | |

Table 2 presents the relationship between value creation and the environmental remediation cost disclosure. In particular, the data shows that during the study period, there was a positive correlation between the dependent variable of value creation as measured by earnings per share and the independent variable of community development cost disclosure (0.121). Additionally, the data demonstrated that, during the study period, earnings per share was positively correlated with waste management cost disclosure (0.220), the disclosure of employee health and safety costs (0.138) and market capitalization (0.636). Since correlation test does not capture cause-effect relationship, a regression results is needed.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue V May 2026

**Environmental Remediation and Value Creation**

Robust regression was used in the study to evaluate the proposed hypotheses and analyse the cause-and-effect relationships between the independent and dependent variables. The presence of variations in the error term led to the choice of this strategy. Table 3 displays the OLS pooled results, and the findings of the robust regression.

**Table 3: Regression Result**

| | EPS Model (Pooled OLS) | EPS Model (Robust Regression) |
|---|---|---|
| CONS. | -41.187<br>{0.000} *** | -3.798<br>{0.000} *** |
| CDC | -2.091<br>{0.283} | -0.438<br>{0.065} |
| WMC | -5.038<br>{0.007} ** | 0.231<br>{0.304} |
| EHSC | -3.361<br>{0.236} | -0.374<br>{0.010} ** |
| MCAP | 6.716<br>{0.000} *** | 0.704<br>{0.000} *** |
| F-statistics/Wald Statistics | 14.53 (0.0000) *** | 13.04 (0.0000) *** |
| R- Squared | 0.2727 | 0.2727 |
| VIF Test | 1.46 | |
| Heteroscedasticity Test | 167.21 (0.0000) | |

Note: (1) bracket {} are p-values; (2) **, ***, implies statistical significance at 5% and 1% levels respectively

**Source: Author s' Computation (2025)**

The result obtained from the multivariate regression analyses is presented in table 3. The pool OLS regression yielded an R-squared value of 0.2727, this suggested that, over the study period, the independent and control variables of the research may account for roughly 27% of the systematic variations in the dependent variable of value creation, which is assessed in terms of earnings per share. The result of the F-statistics (14.53) of the pool OLS regression model for the sampled Nigerian consumer products firms with the associated p-value of 0.0000 indicated that the pool OLS regression model on the overall is statistically fit at 1% level of significance and can be employed for statistical inferences. However, to further validate this results, this research also tests multicollinearity and heteroscedasticity. The detection of multicollinearity mostly relies on the use of tolerance and its reciprocal, known as the variance inflation factor (VIF). The data presented in Table 3 reveals that the average VIF is 1.46. None of the independent variables should be eliminated from the model since the mean VIF is less than 10 (Greene, 2009), indicating that multicollinearity is not present. According to the homoscedasticity assumption, it will be challenging to trust the standard errors of the least square estimates if the errors are heteroscedastic. Hence, the confidence intervals will be excessively large or narrow. The result displays a 0.0000 p-value and a $chi^2$ value of 167.21. The outcome shows a substantial p-value, indicating that the pool OLS regression results of homoscedasticity assumption has been violated. Therefore, using the robust regression as advised by Greene (2009), the study re-specifies the model to account for this violation.

## DISCUSSION OF FINDINGS

The value creation of these firms is negatively and negligibly impacted by the community development cost disclosure {-0.438 (0.065)}, that is, companies' value generation tends to marginally decline when community development cost disclosure rises, as indicated by the robust regression's result shown in Table 3. The consequence of this result is twofold. Firstly, the higher levels of community development costs disclosure does not necessarily translate into enhanced value creation for these firms, challenging the findings that community development charges had a positive but minor impact (Enekwe et al., 2023). Secondly, the insignificance of the effect indicates that other factors, such as, market conditions, competitive dynamics, macroeconomic factors, or firm-specific strategies, not included in the analysis may have a more substantial impact on the value creation of listed Nigerian consumer products firms. Hence, the influence of community development cost disclosure on EPS may be limited.

Furthermore, the data showed that waste management cost disclosure {0.231}(0.304)} has a positive, negligible impact on the value creation of listed consumer products firms in Nigeria, in agreement with the findings that disclosures about pollution control and restoration have no significant positive influence on financial result (Okafor et al., 2022). This suggests that companies may benefit from transparency regarding their waste management practices, potentially enhancing stakeholder perception and corporate reputation. However, the lack of statistical significance indicated that this relationship may be influenced by other factors, such as, customer behaviour, regulatory changes, and market dynamics, not considered in the analysis. The lack of importance of the effect highlights the need for additional research on the variables affecting value creation in Nigerian listed consumer goods companies.

In addition, the findings indicated that employee health and safety cost disclosure significantly reduces the value creation of listed Nigerian consumer products firms {-0.374 (0.010)}. The negative coefficient indicated that higher levels of disclosure will negatively impacted financial performance, potentially due to increased costs or perceived liabilities associated with addressing health and safety concerns, challenging the findings that employee health and safety cost disclosure had a positive but minor impact (Enekwe et al., 2023). The impact is significant such that worker health and safety procedures be taken into account when estimating the costs of environmental clean-up projects in the consumer goods industry. However, there is the need for possible trade-offs between social responsibility and shareholder value and how transparency in reporting on these expenses may improve stakeholder trust and business reputation, but it also seems to have a negative impact on financial performance.

## CONCLUSION AND RECOMMENDATIONS

This study examines the impact of environmental remediation costs on listed Nigerian consumer products companies' ability to create value between 2013 and 2022. Based on the study's findings, environmental remediation cost disclosure has a positive but insignificant effect, suggesting that while there may be a tendency for value creation to increase with higher disclosure, this relationship is not statistically significant. Conversely, employee health and safety cost disclosure has a negative and significant effect, indicating that increased disclosure in this area is associated with decreased value creation during the studied period. This findings highlight the importance of considering employee health and safety cost disclosure within the context of environmental remediation initiatives. While transparency in reporting on environmental remediation costs may have limited impact on financial performance, disclosure related to employee health and safety costs appears to significantly influence value creation in publicly traded consumer products firms.

It is recommended that Nigerian consumer products firms carefully assess the trade-offs between environmental remediation efforts and value creation. While both are important, firms should prioritize actions that agree with their corporate goals and have the greatest potential to enhance long-term value creation. This may involve conducting cost-benefit analyses to evaluate the financial and social impacts of different environmental activities and determining the optimal allocation of resources. Firms should enhance transparency and accountability in their disclosure practices, particularly regarding environmental remediation costs. Environmental remediation costs disclosure can help build trust with stakeholders and demonstrate a firm's commitment to responsible business practices. However, firms should also be mindful of the potential implications of disclosure on financial performance and investor perceptions, ensuring that disclosures are balanced and accurately reflect the firm's environmental remediation costs and financial health.

## REFERENCES

1. Al-Tuwaijri, S. A., Christensen, T. E., & Hughes, K. (2004). The relations among environmental disclosure, environmental performance, and economic performance: A simultaneous equations approach. Accounting, Organizations and Society, 29(5–6), 447–471.
2. Amahalu, N. N., Okoye, P. V., & Obi, J. C. (2018). Effect of sustainability reporting on economic value added of quoted brewery firms in Nigeria. Journal of Accounting, 7(1), 1–20.

3. Chinedu, N. G., Udama, U. D., & Ali, O. R. (2019). Impact of environmental accounting disclosure on financial performance in cement companies in Nigeria. IDOSR Journal of Arts and Humanities, 4(1), 1–14.
4. Enekwe, C. I., Ugwudioha, O. M., & Uyagu, B. D. (2023). Effect of environmental costs on the financial performance of listed oil and gas companies in Nigeria. International Journal of Accounting Research, 8(1), 31–36.
5. Freeman, R., & Reed, N. (1984). The association between accounting earnings and security returns for large and small firms. Journal of Accounting & Economics, 9, 195–228.
6. Igbekoyi, O. E., Ogungbade, O. I., & Olaleye, A. G. (2021). Financial performance and environmental sustainability reporting practices of listed manufacturing firms in Nigeria. Global Journal of Accounting, 7(1), 15–24.
7. Iliemena, R. O. (2020). Environmental accounting practices and corporate performance: Study of listed oil and gas companies in Nigeria. European Journal of Business and Management, 12(22), 58–70.
8. Imong, N. R., Umagu, U. B., Oni, T. O., & Nkang, M. E. (2022). Environmental appraisal costs and profitability of oil and gas companies in the Niger Delta Region of Nigeria. The Certified National Accountant Journal, 30(4), 5–16.
9. Kameri-Mbote, P., Pisupati, B., Smagadi, A., Meso, A., Sung, H., & Gachie, A. (2023). United Nations environment programme: The role of environmental law and governance in transformational change to address the triple planetary crisis. Law, Environment and Development Journal, 19(1), 251–265.
10. Mahoney, L., & Roberts, R. W. (2007). Corporate social performance, financial performance and institutional ownership in Canadian firms. Accounting Forum, 31(3), 233–253.
11. Molokwu, I. M., Inyiama, O. I., & Ugwuigbe, O. I. (2022). Environmental remediation costs and earnings of oil and gas firms in Nigeria. IOSR Journal of Business and Management, 24(12), 1–8.
12. Nasiru, A. K., Abdulrahman, B. S., Babangida, M. A., & Abubakar, S. Y. (2020). Assessment of the relationship between sustainability activities and financial performance of oil and gas companies in Nigeria. IOSR Journal of Business and Management, 22(1), 1–8.
13. Nkwoji, N. (2021). Environmental accounting and profitability of selected quoted oil and gas companies in Nigeria (2012–2017). Journal of Accounting and Financial Management, 7(3), 22–39.
14. Nwambeke, G. C., Udama, D. U., & Oko, R. A. (2019). Impact of environment accounting disclosure on financial performance in cement companies in Nigeria from 2006–2017. Journal of Arts and Humanities, 4(1), 63–76.
15. Nwanwu, P. O. (2022). Environmental management cost and financial performance of oil and gas companies in Nigeria. International Journal of Innovative Finance and Economics Research, 10(2), 119–134.
16. Ogbu, I. I., Nwafor, O. C., & Onyeanu, E. O. (2021). Environmental remediation cost management and social harmony of solid mineral resource-based communities cum firm performance in Nigeria. International Journal of Management, 12(9), 136–150.
17. Okafor, G. I., Anichebe, A. S., Emeka-Nwokeji, N. A., & Agubata, N. S. (2022). Sustainability environmental disclosure and financial performance of oil and gas companies in Nigeria. International Journal of Trend in Scientific Research and Development, 6(2), 11–31.
18. Okezie, B. N., Ibe, S. U., & Kanu, C. I. (2019). Environmental costs and financial performance of listed firms in Nigeria. AE-FUNAI Journal of Accounting, Business and Finance, 5(1), 98–112.
19. Onipe, A. Y., & Aminu, A. (2021). Sustainability and profitability of Nigeria listed insurance companies. International Journal of Innovative Research in Accounting and Sustainability, 6(1), 17–28.
20. Onoh, U. A., Kayadi, B., & Ndubuisi, O. C. (2023). Sustainability reporting and firm value of listed oil and gas companies in Nigeria. Journal of Development Economics and Finance, 4(1), 177–223.
21. Osaloni, B. O., & Oso, O. O. (2023). An evaluation of environmental accounting information and financial performance of listed manufacturing firms in Nigeria. International Journal of Advanced Multidisciplinary Research and Studies, 3(2), 1055–1064.
22. Oshiole, S., Elamah, A. F., & Ndubuisi, A. N. (2020). Effect of environmental cost disclosure on profitability of oil and gas in Nigeria. International Journal of Academic Research in Accounting, Finance and Management Sciences, 10(2), 157–165.

23. Sani, A. B., Babangida, M. A., & Mustapha, I. (2021). Sustainability reporting and financial performance of multinational oil and gas firms in Nigeria: The paradox of environmental cost. International Journal of Innovative Research in Accounting and Sustainability, 6(1), 1–16.
24. Siburian, E., & Yohanes, A. (2019). Shareholder value creation measurement analysis in healthcare, materials, and real estate industry in Indonesia. Advances in Economics, Business and Management Research, 89(1), 380–387.
25. Uwuigbe, U., & Olayinka, M. U. (2011). Corporate social and environmental disclosure in Nigeria: A comparative study of the building material and brewery industry. International Journal of Business and Management, 6(2), 258–264.
26. Vigo-Llempé, L. A., Abanto-Merino, L. A., & Márquez-Yauri, H. Y. (2022). Value creation in financial, business and academic organizations: A review study. Journal of Positive School Psychology, 6(2), 1617–1633.