ENVIRONMENTAL DISCLOSURE AND MARKET VALUE ADDED OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA

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ABSTRACT

This study assessed the effect of environmental disclosure on market value added of listed industrial goods firms in Nigeria. Emissions Disclosure, Pollution Control Equipment Disclosure, Compliance Disclosure, and Environmental Grievance Mechanisms Disclosure were used to proxy Environmental Disclosure while market value added served as the dependent variable. Ex-Post facto research design was employed. Twelve listed industrial goods firms were sampled just as secondary data extracts from the firms' 2012 – 2023 annual reports and accounts and were analysed using E-Views 10.0 statistical software. The study employed inferential statistics using Pearson correlation, and Panel Least Square (PLS) regression analysis. Findings from the empirical analysis showed that a relationship exists between environmental disclosure and market value added of listed industrial goods firms. As disaggregated components; emissions disclosure (β_1= 0.044360; p-value = 0.000033), pollution control equipment disclosure (β_1= 0.340180; p-value = 0.015444), compliance disclosure (β_1= 0.006466; p-value = 0.000000) and environmental grievance mechanisms disclosure (β_1= 0.469364; p-value = 0.000000) has a significant and positive effect on market value added of sampled listed industrial goods firms respectively. The study concluded that the components of environmental disclosure considered in this study are important variables in explaining market value added of listed industrial goods firms in Nigeria. It was recommended inter alia that corporate firms should as a business ethic implementation, cultivate the habit of environmental disclosure in order to improve the social trust of stakeholders, especially customers to use environmentally friendly products which improve firms' revenue and further increases firms' profitability.

1. INTRODUCTION

Global warming caused by rising temperatures, rising sea levels and unexpectedly shifting weather patterns are likely to have serious economic consequences for countries putting greater strains on economic and military resources. Consequently, the scarce resources spent on dealing with climate related issues will compete with what could have been achieved for economic growth and development of the nation. Global Assessment Report on Disaster Risk Reduction (2023) has put economic losses from disasters such as earthquakes, tsunamis, cyclones and flooding at an average of US$250 billion to US$300 billion annually. These resources could be used to invest in infrastructure, social protection, public health and public education (Global Assessment Report on Disaster Risk Reduction, 2023) The solution to global environmental problems had dominated series of conferences and summits on climate change and global warming, wherever leaders of a number of countries have convened to discourse the issue of environmental improvement and remediation. There is a growing importance on corporations to be ecologically accountable in reaction to the adverse effects of their actions on the atmosphere and community. In the midst of others, Nigeria has been acknowledged as one of those nations with high level of environmental contamination that contributes significantly to global environmental complications (Okudo & Amahalu, 2023). Health Effects Institute (2019) reported that Nigeria ranks world's seventh highest gas flaring nation and that Nigeria has the largest percentage of pollutants caused by air pollution in Africa in 2019. Companies are required to be more productive in their thinking, particularly in terms of ways and processes to alleviate and solve the requirements of various stakeholder groups. Employees, government, community members, consumers, and business owners who have a stake in a company are all stakeholders.

Financial performance identifies how well a company generates revenues and manages its assets, liabilities, and the financial interests of its stakeholders and stockholders. A Financial Performance report is a summary of the financial performance of a company that reports the financial health of a company helping various investors and stakeholders take their investment decision (Ezechukwu, Amahalu & Okudo, 2022). Market value added (MVA) is the amount of wealth that a company is able to create for its stakeholders since its foundation. It is the difference between the current market value of the company's stock and the initial capital that was invested in the company by both bondholders and stockholders (Okudo, Ezechukwu, & Ndubuisi, 2022). Previous research has extensively explored the effect of environmental disclosure on financial performance. The existing studies have presented mixed findings regarding the relationship between performance and environmental disclosure. To address the

research gap, this study sought to contribute to the existing literature by investigating the effect of environmental disclosure on the market value of listed industrial firms in Nigeria.

1.1 Objectives

The main aim of this study is to determine the effect of environmental disclosure on market value added of listed industrial good firms in Nigeria. Specifically, the study is set to:

i.   ascertain the effect of emissions disclosure on market value added.

ii.   evaluate the effect of pollution control equipment disclosure on market value added.

iii. assess the effect of compliance disclosure on market value added.

iv.   determine the effect of environmental grievance mechanisms disclosure on market value added.

1.2 Hypotheses

The following hypotheses were stated in null form:

H_{o1}:   Emissions disclosure has no significant effect on market value added of listed industrial goods firms in Nigeria.

H_{o2}:   Pollution control equipment disclosure has no significant effect on market value added of listed industrial goods firms in Nigeria.

H_{o3}:   Compliance disclosure has no significant effect on market value added of listed industrial goods firms in Nigeria.

H_{o4}:   Environmental grievance mechanisms disclosure has no significant effect on market value added of listed industrial goods firms in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Environmental Disclosure

Environmental disclosure practices are means of communicating to the stakeholders, the impact of the firm's activities on the environment. Disclosure of environmental information forecasts financial and reputational benefits. Sometimes, managers advocate sustainability to provide comprehensive and significant information about companies' environmental performance (Ndubuisi & Okudo, 2023). Environmental disclosure is a declaration that demonstrates a company's environmental efforts, such as the company's aims, environmental policies, and environmental consequences, which are documented and publicized annually to the general public (Amahalu, Aruna & Orji-Okafor, 2024).

2.1.2 Emissions Disclosure

Emission is the production and discharge of something, especially gas or radiation. Emissions are basically chemicals in exhaust gases that are harmful to air quality, mainly carbon monixide (CO), hydrocarbons (HC), and nitrogen oxides (NO). Carbon emission is the release of carbon into the atmosphere (Davenport, 2016). Emission is an amount of something, especially a gas that harms the environment, that is sent out into the air (Amahalu, Okudo, Okafor & Onyeka, 2023). Emissions fees is a surcharge on the pollution created while producing goods and services. For example, a carbon tax is a tax on the carbon content of fossil fuels that aims to discourage their use and thereby reduce carbon dioxide emissions.

2.1.3 Pollution Control Equipment Disclosure

Pollution control is an essential task. Waste products enter the environment in various forms and threaten the quality of the air, land, and water. The presence of waste products in water is especially serious, as many of these products can enter the food chain, where the biochemical processes can rapidly increase their concentration to toxic level. Hence, it is extremely important to eliminating them from aqueous system (Aderobaki, Amahalu & Adeniyi, 2024). To Amahalu and Okudo (2023), Pollution Control Equipment Cost is a term referring to equipment and systems used to regulate and eliminate the emission of potentially hazardous substances including particulate matter and gases produced by manufacturing, process system, and research applications into the air.

2.1.4 Compliance Disclosure

Compliance cost connotes all the expenses which a firm incurs in order to comply with industry regulations. It includes: salaries of people working in compliance, time and money spent on reporting, new systems required to meet retention and so on. These costs typically increase as the regulation around an industry increases. According to Okudo, Amahalu, Obi and Okafor, (2022)., compliance costs can be incurred as a result of local, national and international regulations, and they generally increase as a company operates in more jurisdictions. Compliance cost is incurred by a firm to comply with applicable regulations, these regulations may cover such areas as tax reporting, environmental topics, transport, and finances. Compliance costs can include cost of the systems needed to collect information for compliance reporting; cost of the personnel needed to construct and monitor the compliance systems; Cost to compile and issue reports.

2.1.5 Environmental Grievance Mechanisms Disclosure

The Environmental Grievance Mechanisms is a system that allows anyone to file complaints, principally local residents that live near plants. It is a system that will enable us to make fully-fledged environmental improvements for local residents and also lead to environmental improvements within plants (Ndubuisi & Moedu, 2023). Grievance mechanisms provide a way to reduce risk for projects, offer communities an effective avenue for expressing concerns and achieving remedies, and promote a mutually constructive relationship.

2.1.6 Market Value Added

The market value added (MVA) is a performance measurement tool that computes for the increase in the value of the company's stock price (Amahalu, Ezechukwu, & Okudo, 2022). The MVA is derived by comparing the total market value of the firm and the book value of the invested capital. Market value added (MVA) is a calculation that shows the difference between the market value of a company and the capital contributed by all investors, both bondholders and shareholders.

MVA = Market Value of Stocks - Book Value of Stockholders' Equity

The market value (MV) of stocks is computed by multiplying the number of outstanding shares by the market price per share (Okudo, Ezechukwu, & Ndubuisi, 2022).

2.1.7 Environmental Disclosure and Market Value Added

Climate change is becoming one of the most important issues of the twenty-first century and it is widely recognised as the most significant environmental issue facing the global economy. Majority of the scientists agreed that carbon emissions (CO2) is the most prominent factor responsible for climate change (Mbonu & Amahalu, 2023). A serious threat of climate change and Carbon emissions on the environment are already observable by people and business. Evidence does suggest that the failure of the business to manage these impacts can expose them to considerable risk (Okoye, Amahalun & Okoye, & Obi, 2022; .Luo, 2017). Nowadays, many businesses are aware and accept that they need to address the issue of climate change in order to survive (Mbonu & Amahalu, 2022).

2.2 Theoretical Framework

2.2.1 Stakeholders' Theory

Stakeholders' Theory was originally introduced at Stanford research institute (SRI) by Freeman, 1984). The elementary proposal of the stakeholders' theory is that corporate success is reliant upon the effective administration of all the interactions that an entity has with all its stakeholders (current and potential shareholders, and other stakeholders). The concept affirms that, administrators must please suppliers, employees, customers, local community, and others. who can influence the firm's results. Stakeholders' theory maintains that it is not appropriate for managers to focus completely on the needs of shareholders alone.

2.3 Empirical studies

Ekwueme (2022) examined firms' specific attributes and risk management disclosure of quoted health care companies in Nigeria. The general objective of this study is to examine whether firms specific attributes lead to risk management disclosure. The study adopts the *ex post facto* research design. The data used were sourced from the annual financial reports of the quoted health care companies in the Nigeria Exchange Limited for the period of five years from 2017-2021. The study used panel regression to test the null hypotheses formulated in the study. The findings states that firm growth has significant effect on financial risk disclosure of health care firms in Nigeria and that firm performance has significant effect on firm financial risk disclosure of health care firms in Nigeria. The study therefore concludes that firm growth has significant effect on financial risk disclosure of health care firms in Nigeria.

Moruff , Salisu, Muhammed and Garba (2021) examined the relationship of specific oil and gas firms' attributes; firms age, board composition, financial performance, existence of foreign directors on the board and financial leverage with Environmental Disclosures (ED). Data were collected from the published annual reports of nine listed oil and gas firms quoted on the floor of the Nigerian Stock Exchange (NSE) as at 2018, for a period of seven years (2012-2018). Generalized Least Square (GLS) was used to test the hypotheses after satisfying the criteria of post estimation tests. The result established a positive and significant relationship between board composition, financial leverage, existence of foreign directors on the board and ED. However, firm age and financial performance was found not to have significant relationship with ED.

Shuaibu (2020) investigated the effects of company features on environmental disclosure quality in a research conducted on listed Cement Companies in Nigeria. STATA 12.0 was employed for the descriptive statistics, correlation and multiple regression analysis. The study found among other things that firm age, has significant impact on quality of environmental disclosure and the study recommended among others that Nigerian Government should make all listed cement companies in Nigeria to disclosure their environmental disclosures mandatory rather than voluntary.

3. MATERIAL AND METHOD

The study adopted the *ex post facto* research design. The population of the study comprised of 12 industrial goods firms in Nigeria as at year ended December 2023. They include: Austin Laz & Co, Berger Paints Plc, Beta Glass Company, CAP Plc, Cement (BUA) Coy Of Northern Nig, Cutix Plc, Dangote Cement, Greif Nig. Plc, Lafarge, DN Meyer, Portland Paints, Premier Paints. The census sampling method was employed in choosing the entire twelve (12) industrial goods firms in Nigeria as the benchmark sample size for equal representation. The study used secondary data sourced from the annual reports and sustainability report of the sampled firms. The study covered a period of twelve (12) financial years (2012-2023).

Table 1 Operationalisation of Variables

Variable Type	Indicators	Variable Symbols	Definition and Measurement
Independent Variable (Environmental Disclosure)			
	Emissions Disclosure	EMD	$\dfrac{\text{Total Emissions Disclosure Score}}{\text{Maximum Emissions Disclosure Possible Score for a Firm}}$
	Pollution Control Equipment Disclosure	PCED	$\dfrac{\text{Total Pollution Control Equipment Disclosure Score}}{\text{Maximum Pollution Control Equipment Disclosure Possible Score for a Firm}}$
	Compliance Disclosure	CD	$\dfrac{\text{Total Compliance Disclosure Score}}{\text{Maximum Compliance Disclosure Score Possible for a Firm}}$

	Environmental Grievance Mechanisms Disclosure	EGMD	$\dfrac{\text{Total Environmental Grievance Mechanisms Disclosure Score}}{\text{Maximum Environmental Grievance Mechanisms Disclosure Score for a Firm}}$
Dependent Variable			
	Market Value Added	MVA	Market Value of Stocks - Book Value of Stockholders' Equity

Inferential statistics of this study was also carried out using:

i.   Pearson Correlation Analysis: This is a good measure of relationship between two variables which tells us about the strength of relationship and also the direction of relationship.

ii.   Panel least square (PLS) regression analysis: was used to predict the value of a variable based on the value of the other variables.

Moreover, content analysis was adopted in this study. This study adopted the Global Reporting Initiative (GRI) framework disclosures according to the G4 guidelines for the purpose of developing the Environmental cost disclosure indices. Environmental Reporting was evaluated by 12 indicators: Materials; Energy; Water; Biodiversity; Emissions; Effluents and Waste; Products and Services; Compliance; Transport; Overall; Supplier Environmental Assessment; Environmental Grievance Mechanisms (refer to appendix A).

All the above indicators were rated on a scale from 0 to 3 points (This is to enable us assign values to variables, since the study utilised content analysis) (Yongliang, Wen & Li, 2020). When a company does not take into account the specific indicator at all, it is rated with 0 (that is, non-reporting). A company is ranked 1 or 2 depending on the broadness of the description (for example, 1 if the company only names the indicator and 2 if there is a very poor or unclear description (partial reporting). The company is rated 3 if it takes the indicator into consideration with a satisfying description (full disclosure). So, a total score for environmental environmental disclosure could reach the maximum score of 36 (i.e. = 12 x 3 = 36) (Oshiole, Elamah & Amahalu, 2020).

Therefore,

EDI =TDP/MP…………………Eqn 1.

Where;

EDI = Environmental Disclosure Index

TDP = Total Disclosure Points of a Firm

MP = Maximum Points for a Firm

To test H_1, H_2, H_3, H_4 and H_5, this study estimated the following regression equations based on the formulated hypotheses:

$MVA_{it} = \beta o + \beta_1 EMD_{it} + \beta_2 PCED_{it} + \beta_3 CD_{it} + \beta_4 EGMD_{it} + \mu_{it}$ ………………Eqn 2.

Where:

βo is the intercept of the regression.

$\beta_1 =$ the coefficient of the regression

MVA_{it} = Market Value Added of firm í in period t

EMD_{it} = Emissions Disclosure of firm í in period t

$PCED_{it}$ = Pollution Control Equipment Disclosure of firm í in period t

CD_{it} = Compliance Disclosure of firm í in period t

$EGMD_{it}$ = Environmental Grievance Mechanisms Disclosure of firm í in period t

í = individual firms (1,2,3...12)

t = time periods (2012, 2009 ... 2023)

μ_{it} = Error term

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

Table 2 Pearson Correlation Matrix

	MVA	EMD	PCED	CD	EGMD
MVA	1.0000				
EMD	0.2587	1.0000			
PCED	0.1772	-0.1662	1.0000		
CD	0.4234	-0.6308	0.2621	1.0000	
EGMD	-0.0237	0.0090	0.1973	0.3517	1.0000

Source: E-Views 10.0 Correlation Output, 2024

The result of the Pearson Coefficient analysis in table 1 indicates that MVA positively correlates with EMD, PCED, and CD at correlation coefficients of 0.2587, 0.1772, and 0.4234

but inversely associates with EGMD as revealed by the coefficient factor of -0.0237 respectively.

4.2 Test of Hypotheses

Table 3 Panel Least Square Regression Analysis testing the effect of Environmental Disclosure on MVA

Dependent Variable: MVA

Method: Panel Least Squares

Date: 07/07/24 Time: 05:49

Sample: 2012 2023

Periods included: 12

Cross-sections included: 12

Total panel (balanced) observations: 144

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.588513	0.026645	22.08681	0.0000
EMD	0.044360	0.005616	7.899148	0.0000
PCED	0.340180	0.138769	2.451408	0.0154
CD	0.006466	0.002347	6.754657	0.0000
EGMD	0.469364	0.034793	13.49013	0.0000
R-squared	0.814751	Mean dependent var		0.483231
Adjusted R-squared	0.808517	S.D. dependent var		0.131960
S.E. of regression	0.124595	Akaike info criterion		-1.313711
Sum squared resid	2.204382	Schwarz criterion		-1.272464
Log likelihood	96.58720	Hannan-Quinn criter.		-1.296950
F-statistic	184.0687	Durbin-Watson stat		2.044790
Prob(F-statistic)	0.000000			

Source: E-Views 10.0 Panel Regression Output, 2024

The regressed coefficient correlation result in table 3 shows the existence of a positive relationship between EMD, PCED, CD. EGMD and MVA at a statistically significant level of 5%. The Beta coefficient; β_1= 0.044360 with the t-statistic equals to 7.899148 and an associated probability value = 0.0000; Beta coefficient; β_2= 0.340180 with the t-statistic

equals to 2.451408 and an associated probability value = 0.0154; Beta coefficient; β_3= 0.006466 with the t-statistic equals to 6.754657 and an associated probability value = 0.0000; Beta coefficient; β_4= 0.469364 with the t-statistic equals to 13.49013 and an associated probability value = 0.0000delineate that EMD. PCED, CD and EGMD have a positive and significant effect on MVA. The coefficient of determination obtained is 0.808517, which is commonly referred to as the adjusted R^2. The cumulative test of hypothesis using adjusted R^2 to draw statistical inference about the explanatory variables employed in this regression equation, shows that adjusted R-Squared value reveals that 80.85% of the systematic variations in the dependent variable (MVA) can be predicted by the independent variable (EMD, PCED, CD and EGMD) while 19.15% was explained by unknown variables that were not included in the model. The overall significance of the model (F-statistic=184.0687) is statistically significant at 5%.

MVA = 0.588513 + 0.044360EMD + 0.340180PCED + 0.006466CD + 0.469364EGMD

The implication is that for there to be a unit/one naira increase in MVA, there will be 4.44%, 3.40%, 0.01%, and 4.69% increase in EMD, PCED, CD, EGMD respectively.

Decision: Consequent upon the fact that the overall P-value of the test = 0.000000 is less than the critical value 0.05. In view of the rule of thumb, H_1 was accepted and H_0 rejected. Hence, it was concluded that environmental disclosure has a significant and positive effect on market value added of listed industrial goods firms in Nigeria.

4.2.1 Hypothesis One

H_{o1}: Emissions disclosure has no significant effect on market value added of listed industrial goods firms in Nigeria.

Table 2 above reveals that β_1= 0.044360 and p-value = 0.000033 which is less than 0.05. Consequent upon the fact that the overall p-value of the test = 0.000033 is less than the critical value 0.05, the alternate hypothesis is accepted, and this implies that emissions disclosure has a significant and positive effect on market value added of listed industrial goods firms in Nigeria at 5% level of significance.

4.2.2 Hypothesis Two

H_{o2}:   Pollution control equipment disclosure has no significant effect on market value added of listed industrial goods firms in Nigeria.

From Table 2, it could be seen that $\beta_1= 0.340180$ while p-value $= 0.015444$, which is less than 0.05. Consequent upon the fact that the overall p-value of the test $= 0.015444$ is less than the critical value 0.05, the alternate hypothesis is accepted, and this means pollution control equipment disclosure has a significant and positive effect on market value added of listed industrial goods firms in Nigeria at 5% level of significance.

4.2.3 Hypothesis Three

H_{o3}:   Compliance disclosure has no significant effect on market value added of listed industrial goods firms in Nigeria.

Looking at Table 2, it could be deduced that $\beta_1= 0.006466$ and the p-value $= 0.000000$), which is less than 0.05. Consequent upon the fact that the overall p-value of the test $= 0.000000$ is less than the critical value 0.05, the alternate hypothesis is accepted, and this implies that compliance disclosure has significant and positive effect on market value added of listed industrial goods firms in Nigeria.

4.2.4 Hypothesis Four

H_{o4}:   Environmental grievance mechanisms disclosure has no significant effect on market value added of listed industrial goods firms in Nigeria.

Table 2 shows that $\beta_1= 0.469364$; p-value $= 0.000000$, which is less than 0.05. Consequent upon the fact that the overall p-value of the test $= 0.000000$ is less than the critical value 0.05, the alternate hypothesis is accepted, and this means that environmental grievance mechanisms disclosure has significant and positive effect on market value added of listed industrial goods firms in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Data analysis revealed that a relationship exists between environmental disclosure and market value added of listed industrial goods firms. As disaggregated components; emissions disclosure ($\beta_1= 0.044360$; p-value $= 0.000033$), pollution control equipment disclosure ($\beta_2= 0.340180$; p-value $= 0.015444$), compliance disclosure ($\beta_3= 0.006466$; p-value $= 0.000000$), and environmental grievance mechanisms disclosure ($\beta_4= 0.469364$; p-value $= 0.000000$)

have a significant and positive effect on market value added of listed industrial goods firms in Nigeria at 5% level of significance respectively. The study concludes that the components of environmental disclosure considered in this study are important variables in explaining market value added of listed industrial goods firms in Nigeria.

The following recommendations were made in line with the findings and conclusion of this study:

i. Considering the positive relationship between emissions disclosure and market value added, corporate firms should as a business ethic implementation cultivate the habit of emission disclosure in order to improve the social trust of stakeholders, especially customers to use environmentally friendly products which improves firms' revenue and further increases firms' profitability.

ii. Sequel to the positive relationship between pollution control equipment disclosure and market value added, firms should take advantage of voluntary pollution control equipment disclosure and try to reduce their pollutions levels to reduce their cost of capital, leading to better environmental disclosures.

iii. Considering the positive relationship between compliance disclosure and market added valued, corporate organizations should ensure that they **g**et ahead of regulation by preparing their businesses for likely mandatory environmental reporting rules, thereby gaining competitive edge when it comes to performance on the stock market, access to capital and winning tenders.

iv. In a bid to sustain the positive relationship between environmental grievance mechanisms disclosure and market value added, firms should adopt well-functioning grievance mechanism that provide a predictable, transparent, and credible process to all parties, resulting in outcomes that are seen as fair, effective, and lasting

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APPENDIX A

Environmental Disclosures in GRI G4

Disclosure	Description	Aspect
G4-EN1	Materials used by weight or volume	Materials
G4-EN3	Energy consumption within the organization	Energy
G4-EN4	Energy consumption outside the organization	Energy
G4-EN5	Energy intensity	Energy
G4-EN6	Reduction in energy consumption	Energy
G4-EN7	Reductions in energy requirements of products and services	Energy
G4-EN8	Total water withdrawal by source	Water
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and the areas of high biodiversity value outside protected areas	Biodiversity
G4-EN12	Description of the significant impacts of activities, products, and services on biodiversity in protected areas and the areas of high biodiversity value outside protected areas	Biodiversity
G4-EN13	Habitats protected or restored	Biodiversity
G4-EN15	Direct greenhouse gas (ghg) emissions (scope 1)	Emissions
G4-EN16	Energy indirect greenhouse gas (ghg) emissions (scope 2)	Emissions
G4-EN17	Other indirect greenhouse gas (ghg) emissions (scope 3)	Emissions
G4-EN18	Greenhouse gas (ghg) emissions intensity	Emissions
G4-EN19	Reduction in greenhouse gas (ghg) emissions	Emissions
G4-EN22	Total water discharge by quality and destination	Effluents and Waste
G4-EN27	Extent of the impact mitigation of the environmental impacts of products and services	Products and Services
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and the transporting members of the workforce	Transport
G4-EN31	Total environmental protection expenditures and investments by type	Overall
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	Supplier Environmental Assessment
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	Supplier Environmental Assessment

Source: G4 Environmental Reporting Guidelines, Reporting Principles and Standard Disclosures, 2024.