



The Impact of Environmental Performance, Profitability, and Media Exposure on Carbon Emission Disclosure in Basic Materials Sector Companies on the Indonesia Stock Exchange from 2021 to 2023

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ABSTRACT

This study investigates the impact of environmental performance, profitability, and media exposure on carbon emission disclosure in basic materials sector companies listed on the Indonesia Stock Exchange from 2021 to 2023. A quantitative approach is applied, utilizing secondary data from www.idx.co.id and company reports. The research population includes 108 companies, and a purposive sampling method selects 72 observations. SPSS version 29 is used to perform multiple linear regression analysis. The results reveal that environmental performance, profitability, and media exposure collectively influence carbon emission disclosure. However, when examined individually, environmental performance and profitability do not show a significant impact, while media exposure significantly affects carbon emission disclosure.

INTRODUCTION

The growing concern over environmental sustainability, particularly the degradation of natural ecosystems, has gained global and local attention. Communities and corporations are prioritizing sustainable resource management as climate imbalance intensifies, driven by extreme weather caused by rising global temperatures (Mubarok, 2023). Industrial activities play a major role in this crisis, contributing to prolonged atmospheric pollution and substantial greenhouse gas (GHG) emissions drive the rapid advancement of global warming and climate change (Mutmainnah & Romadhon, 2023). The adverse effects of industrial activities, including climate change, natural disasters, and environmental pollution, continue to deteriorate ecological conditions. Hazardous waste and emissions contaminate air, water, and soil, escalating global environmental challenges. Addressing pollution within the business sector is crucial, as significant climate shifts highlight the need for stronger environmental responsibility. The integration of sustainable practices in industrial operations is vital for protecting ecosystems and ensuring long-term human well-being (Ainurrohmah & Sudarti, 2022).

Indonesia's dedication to lowering greenhouse gas emissions is reflected in its endorsement of global agreements focused on combating climate change, through its ratification of the Kyoto Protocol via Law No. 17 of 2004 and its active participation in global climate agreements (Iqbal & Ruhaeni, 2022). As one of the top ten global emitters, Indonesia has set a target to reduce emissions by 32% by 2030 through renewable energy adoption and improved energy efficiency (Soraya, 2023). Rising energy consumption, particularly from coal, natural gas, and electricity, continues to drive emissions, with the industrial sector accounting for the highest demand (Ministry of Energy and Mineral Resources, 2023).

The basic materials sector remains a significant contributor to emissions, intensifying climate challenges and prompting increased regulatory pressure (Rosmanidar dkk., 2024). Industries such as pulp and palm oil production face demands for stricter carbon disclosure and sustainability measures. Indonesia has ratified international carbon reduction agreements; however, disclosure remains optional, creating transparency challenges. The adoption of low-carbon technologies and stronger sustainability commitments is crucial to mitigating environmental risks (Pramudita & Widianingsih, 2024). Effective waste management, compliance, and technological advancements play a crucial role in ensuring public trust and long-term operational viability (Pratiwi & Nisa, 2023).

Companies with strong environmental performance tend to be more transparent in disclosing carbon emissions, as highlighted by Sativa (2024) and Mi'raz & Astuti (2024). However, conflicting findings exist, with Amelia Rendi & Prasetyo (2022) reporting no significant effect. Profitability also plays a role, with research by Gunawan & Aryati (2024) and Zahra & Aryati (2023) showing that financially strong companies invest in sustainability and face stakeholder pressure. On the other hand, Setiadi (2022) and Sapitri (2022) found no effect. Media exposure encourages disclosure by increasing public scrutiny and

attracting investors, as discussed by Haura & Yuliandhari (2024) and Sari & Sulfitri (2023), though Amelia Rendi & Prasetyo (2022) reported otherwise. This study expands prior research by incorporating media exposure, covering 2021-2023, and focusing on the high-carbon-emission basic materials sector, as explored by Maryono & Ermawati (2024).

This study investigates how ecological performance, financial profitability, and media coverage affect the disclosure of carbon emissions in companies within the basic materials sector that are publicly traded on the Indonesia Stock Exchange from 2021 to 2023. The research aims to determine whether these factors significantly impact carbon emission disclosure, both collectively and individually. The study specifically investigates the extent to which environmental performance, profitability, and media exposure contribute to transparency in reporting carbon emissions. The findings are essential for assessing corporate sustainability efforts and regulatory compliance within the industry.

THEORETICAL REVIEW

Legitimacy Theory

This theory suggests a strong social relationship between corporations and their surrounding communities (Dowling & Pfeffer, 1975). Legitimacy theory explains that companies disclose carbon emissions to meet social expectations and maintain public support. Strong environmental performance encourages greater disclosure, while high profitability may reduce the need for disclosure as companies feel more secure. Media pressure increases the demand for transparency, helping companies preserve their image and legitimacy in society (Dowling & Pfeffer, 1975).

Stakeholder Theory

Stakeholder theory highlights the significance of understanding various parties with interests in an organization (Freeman & McVea, 2005). Strong environmental performance planning is crucial for successfully implementing strategies that meet stakeholder expectations regarding sustainability. Profitability also influences disclosure, as investors seek a balance between financial returns and environmental responsibility. Media pressure further reinforces the need for transparency, helping companies maintain their image and trust among all involved parties. Effective stakeholder relationship management is essential for achieving sustainability and legitimacy (Freeman & McVea, 2005).

Environmental Performance

Environmental performance refers to a series of efforts undertaken by businesses to maintain a healthy surrounding atmosphere through environmentally friendly activities and materials (Atang & Herawat, 2021). Indonesia has introduced the Corporate Performance Rating Program in Environmental Management (PROPER), which has been in place since 2002. PROPER serves as a policy tool to encourage compliance among businesses

engaged in activities related to environmental regulations (Fuadah, 2020). The performance ratings are categorized into five color-coded levels, with gold and green indicating the highest compliance, followed by blue, red, and black as the lowest category (www.menlhk.go.id, n.d.)

Profitability

Profitability ratios encompass various indicators that assess a company's effectiveness in generating profit. Return on Assets (ROA) measures the effectiveness with which a company utilizes its resources to achieve net profit. A company's profitability is a key concern for stakeholders as it reflects overall performance success. These ratios estimate the extent to which a company generates profit from its operational activities. Profitability ratios serve as indicators to evaluate managerial effectiveness in running a business, as reflected in the level of profit generated from sales activities and investments (Fahmi, 2017).

Media Exposure

Media exposure refers to how companies utilize various media channels to communicate their identity and activities. Companies can inform the public about their operations, including carbon emission disclosures, through multiple communication platforms. Stakeholders can quickly grasp relevant environmental issues and respond accordingly based on the information they receive from media coverage. Media plays a crucial role as a watchdog over corporate activities. Companies must consider media presence in all operational aspects. Negative media coverage can lead to public criticism and potentially harm a company's value (Atang & Herawat, 2021).

Carbon Emission Disclosure

Emissions pertain to the discharge of gases into the air with carbon emissions specifically resulting from the release of carbon dioxide (CO₂) into the air (Pasaribu et al., 2023). Carbon emission reduction efforts primarily focus on industrial activities, necessitating clear disclosure of emission reduction information (Suyanto, 2023). The evaluation of carbon emission reporting is conducted using a disclosure index, with assessments ranging from a highest possible score of 18 to a lowest of 0. Each disclosed element that aligns with the indicators receives a score of 1. A company earns a score of 18 if it includes all elements in its report, with the total score calculated for each company (Bae Choi dkk., 2013).

Carbon emission disclosure reflects corporate obligations toward environmental sustainability (Zahra & Aryati, 2023). Companies with high environmental performance demonstrate a strong commitment to minimizing their operational impact on the environment, enhancing stakeholder trust in their sustainability efforts. Profitability enables companies to manage sustainability issues and provide more comprehensive reporting, as financially stable firms have the resources to implement and transparently disclose sustainability initiatives. Media exposure pressures companies to maintain legitimacy through consistent carbon emission disclosure, as public scrutiny

driven by media coverage compels firms to meet societal expectations. These three factors collectively influence carbon emission disclosure, ultimately enhancing corporate value by strengthening reputation, increasing public trust, and attracting investors.

H1: Environmental Performance, Profitability, and Media Exposure influence Carbon Emission Disclosure in Basic Materials Sector Companies listed on the Indonesia Stock Exchange for the 2021–2023 period.

A company's environmental performance directly influences its likelihood of openly disclosing carbon emissions. This disclosure not only demonstrates the organization's dedication to ecological sustainability responsibility but also enhances its appeal to investors, who prefer companies with clear and measurable sustainability efforts. This finding aligns with studies by Wijanarko (2024), and Sativa (2024) which suggest that strong environmental performance positively impacts carbon emission disclosure. Companies with high environmental performance have a greater chance of gaining public and investor support, ultimately increasing their overall corporate value.

H2: Environmental Performance influences Carbon Emission Disclosure in Basic Materials Sector Companies listed on the Indonesia Stock Exchange for the 2021–2023 period.

Business entities with strong financial performance are driven to maintain and strengthen their social legitimacy through transparent disclosure of environmental impacts, as explained by legitimacy theory. Companies strive to meet societal and stakeholder expectations by demonstrating their commitment to environmental management by transparently reporting carbon emissions. This result is consistent with research by Zahra & Aryati (2023) and Widiyani (2022), which suggest that such disclosures generate positive signals for investors by enhancing corporate reputation and proving accountability. Profitability plays a key role in motivating companies to disclose carbon emissions, aiming to sustain legitimacy and attract investor interest.

H3: Profitability influences Carbon Emission Disclosure in Basic Materials Sector Companies listed on the Indonesia Stock Exchange for the 2021–2023 period.

Proper carbon emission disclosure reflects a company's environmental responsibility, strengthening its legitimacy in the public eye. Research conducted by Sari & Sulfitri (2023) and Hidayat dkk. (2022) supports this view, stating that transparency in carbon emission disclosure positively impacts corporate reputation and fosters stronger relationships with the community and investors. Clear and accountable disclosure is key to building a positive corporate image in an era increasingly concerned with environmental issues.

H4: Media Exposure influences Carbon Emission Disclosure in Basic Materials Sector Companies listed on the Indonesia Stock Exchange for the 2021–2023 period.

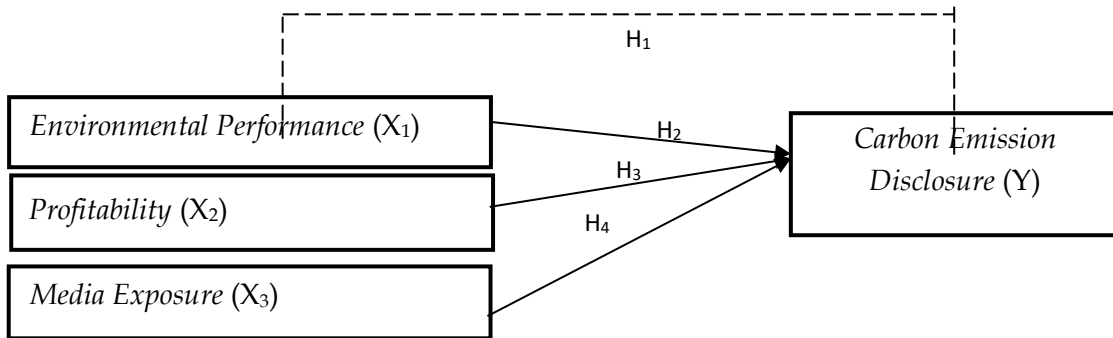


Figure 1. Conceptual Framework

METHODOLOGY

This research utilizes a quantitative approach with a causal design to examine the correlation between factors. The study relies on secondary data sourced from annual and sustainability reports of companies in the basic materials sector, publicly traded on the Indonesia Stock Exchange (IDX) from 2021 to 2023. Information is gathered through the official IDX platform and other pertinent references using a documentation-based method.

Population and Research

This research examines firms in the basic materials sector listed on the Indonesia Stock Exchange (IDX) from 2021 to 2023, comprising a total population of 108 companies. The sample is determined through purposive sampling, following specific selection criteria:

1. Companies must be registered on the Indonesia Stock Exchange (IDX) for the entire 2021–2023 period.
2. Companies must participate in the PROPER program and maintain consistent rankings.
3. Companies must publish complete and consistent annual and sustainability reports.
4. Companies are required to transparently report carbon emissions, ensuring that at least one related disclosure is made over a three-year period.

Operational Definition

Environmental Performance

Environmental performance reflects various measures taken by companies to preserve the environment. The implementation of the Corporate Performance Rating Program in Environmental Management (PROPER) includes five color categories that indicate company performance levels (www.menlhk.go.id, n.d.):

- Gold (5): Indicates an excellent rating.
- Green (4): Reflects a very good rating.
- Blue (3): Indicates a good rating.
- Red (2): Signifies a poor rating.
- Black (1): Represents a very poor rating.

Profitability

Return on Assets (ROA) evaluates how effectively a company leverages its assets to produce earnings. A higher ROA indicates better performance, with values above 2% considered profitable. The formula for ROA is as follows (Harahap, 2018):

$$ROA = \frac{\text{Net Profit Before Tax}}{\text{Total Assets}} \times 100\%$$

Media Exposure

Media serves as a communication platform for companies and stakeholders, allowing them to share information about their activities, both positive and negative impacts. Media exposure is assessed through a binary variable, where companies that disclose carbon emissions in their sustainability reports, financial reports, or websites receive a score of "1". Companies that remain silent on carbon emissions receive a score of "0" (Atang & Herawat, 2021).

Carbon Emission Disclosure

The extent of carbon emission disclosure is evaluated using specific measurement criteria, typically in a checklist format that refers to the data details required by the Carbon Disclosure Project (CDP) and carbon emission reduction measures. A total of 18 elements are categorized into five main areas focusing on climate change and carbon emissions: climate change impact and potential (2 elements), greenhouse gas emissions (7 elements), energy consumption (3 elements), greenhouse gas emission reduction and costs (4 elements), and carbon emission responsibility (2 elements) (Bae Choi dkk., 2013).

$$CED = \frac{\text{Total Items Disclosed}}{\text{Total CED}} \times 100\%$$

RESEARCH RESULT

Descriptive Statistics

Descriptive statistics serve to provide a comprehensive explanation of the obtained data.

Table 1. Descriptive Statistics Result

Descriptive Statistics					
	N	Minimu m	Maximu m	Mean	Std. Deviation
<i>Environmental Performance</i>	72	2.00	5.00	3.0694	.63526
<i>Profitability</i>	72	-.16	.20	.0424	.05786

<i>Media Exposure</i>	72	.00	1.00	.4722	.50273
<i>Carbon Emission Disclosure</i>	72	.03	.09	.0553	.01613
Valid N (listwise)	72				

Source: IBM SPSS version 29 output for Windows

The table displays information on four variables, comprising three independent variables—environmental performance, profitability, and media exposure—and one dependent variable, carbon emission disclosure, based on 72 observations. Descriptive statistical analysis reveals that carbon emission disclosure ranges from a minimum of 0.03 to a maximum of 0.09, with a mean of 0.0553 and a standard deviation of 0.01613, indicating relatively consistent data. Environmental performance has values ranging from 2.00 to 5.00, with an average of 3.0694 and a standard deviation of 0.63526, suggesting data uniformity. Profitability varies between -0.16 and 0.20, with a mean of 0.0424 and a standard deviation of 0.05786, reflecting notable differences across observations. Media exposure, assessed through a dummy variable with values of 0 or 1, has an average of 0.4722 and a standard deviation of 0.50273, signifying substantial variation in the dataset.

Classical Assumption Test

Normality Test

An effective equation model requires a data distribution that is approximately normal. The Kolmogorov-Smirnov assessment is conducted to determine whether the dataset follows a standard distribution pattern distribution to normality by comparing the cumulative distribution of the observed data with a normal distribution.

Table 2. One-Sample Kolmogorov-Smirnov Test Results

		Unstandardized Residual
N		72
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.01402939
Most Extreme Differences	Absolute	.071
	Positive	.071
	Negative	-.062

Test Statistic			.071
Asymp. Sig. (2-tailed) ^c			.200 ^d
Monte Carlo Sig. (2-tailed) ^e	Sig.		.491
	99% Confidence Interval	Lower Bound	.478
		Upper Bound	.503

Source: IBM SPSS version 29 output for Windows

The Kolmogorov-Smirnov test results in this research indicate that the data follows a normal distribution. The obtained value of 0.200 exceeds the threshold of 0.05, confirming that the normality assumption is met.

Multicollinearity Test

Multicollinearity analysis is performed to determine if there exists an excessively strong or absolute correlation among the independent variables.

Table 3. Multicollinearity Test Result

Model	Collinearity Statistics	
	Tolerance	VIF
1 <i>Environmental Performance</i>	.968	1.033
<i>Profitability</i>	.919	1.088
<i>Media Exposure</i>	.946	1.057

Source: IBM SPSS version 29 output for Windows

Environmental performance (0.968 > 0.1), profitability (0.919 > 0.1), and media exposure (0.946 > 0.1). The Variance Inflation Factor (VIF) values for all independent variables are less than 10, specifically environmental performance (1.033 < 10), profitability (1.088 < 10), and media exposure (1.057 < 10). In conclusion, this suggests the absence of a strong correlation among the independent variables.

Autocorrelation Test

This assessment is applied in linear regression analysis to determine the connection between variables disturbance errors in t and the previous disturbance errors.

Table 4. Autocorrelation Test Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.439 ^a	.192	.156	.01269	1.791

Source: IBM SPSS version 29 output for Windows

The output information displayed in the table illustrates a dW value of 1.791. This figure is evaluated against the reference table values at a 5% (0.05) confidence level for a sample size of $n = 72$, with three independent variables and one dependent variable. The obtained values are $dL = 1.532$ and $dU = 1.705$, resulting in a calculation of $4 - dU = 2.945$. The obtained value, $1.705 < 1.791 < 2.945$, indicating that the null hypothesis (H_0) remains valid. The conclusion from this result is that there are no issues in the relationships between variables in this model.

Heteroscedasticity Test

Any significant relationship between the variables under study, a difference in the residual variability between one measurement and another in the regression relationship pattern.

Table 5. Heteroscedasticity Test Result

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	.018	.005		3.587	<.001
<i>Environmental Performance</i>	-.002	.002	-.138	-1.134	.261
<i>Profitability</i>	-.005	.017	-.039	-.311	.757
<i>Media Exposure</i>	-.001	.002	-.072	-.585	.561

Source: IBM SPSS version 29 output for Windows

The following findings show that the significance value for the environmental performance variable is 0.261, profitability is 0.757, and media exposure is 0.561, all of which are greater than 0.05. In summary, there is no indication of heteroscedasticity in this regression relationship pattern. All significance levels are higher than 0.05, indicating that there are no irregularities in the residual variability of the applied model.

Multiple Linear Regression Analysis

The impact of independent variables is examined through multiple linear regression analysis. The ensuing description outlines the results from the data analysis.

Table 6. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	.043	.009		4.979	<.001
<i>Environmental Performance</i>	.001	.003	.050	.470	.640
<i>Profitability</i>	.015	.031	.053	.483	.631
<i>Media Exposure</i>	.016	.003	.503	4.638	<.001

Source: IBM SPSS version 29 output for Windows

The findings from the analysis show that the constant value (α) is 0.043. The coefficient for the environmental performance variable (β) is 0.001. The coefficient for the profitability variable (β) is 0.015. The coefficient for the media exposure variable (β) is 0.016. The multiple linear regression equation derived is as follows:

$$Y = 0,043 + 0,01X1 + 0,015X2 + 0,016X3 + e$$

Conclusions based on the equation above are:

1. The constant term of 0.043 means that if environmental performance, profitability, and media exposure are all at zero, the carbon emission disclosure will be 0.043, equivalent to 4.3%.
2. The value of the environmental performance coefficient (X1) is 0.001, suggesting that a 1% rise in environmental performance will cause a 0.001 (or 0.1%) increase in carbon emission disclosure. A 1% drop in environmental performance will cause a reduction of 0.001 (or 0.1%) in carbon emission disclosure.
3. The profitability coefficient (X2) is 0.015, meaning that a 1% increase in profitability leads to a 0.015 (or 1.5%) higher level of carbon emission disclosure. On the other hand, a 1% reduction in profitability causes a 0.015 (or 1.5%) decrease in disclosure.
4. The media exposure coefficient (X3) of 0.016 suggests that a 1% increase in media exposure results in a 0.016 (or 1.6%) increase in carbon emission disclosure, while a 1% reduction in media exposure results in a 0.016 (or 1.6%) decline in carbon emission disclosure.

Hypothesis Testing

Coefficient of Determination Test (R²)

This evaluation measures the extent to which the independent variables explain fluctuations in the dependent variable within the regression framework.

Table 7. Results of the Coefficient of Determination Test (R²)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.439 ^a	.192	.156	.01269	1.791

Source: IBM SPSS version 29 output for Windows

The adjusted R² value in the table above is 0.156, equivalent to 15.6%. This finding indicates that the independent variables – environmental performance, profitability, and media exposure – can explain 15.6% of the variation in the dependent variable, carbon emission disclosure. The remaining 84.4% is explained by other factors beyond environmental performance, profitability, and media exposure, which may involve other variables or external aspects.

F-Test (Simultaneous)

The goodness-of-fit test is used in regression analysis to assess the degree of compatibility between the constructed model and the available data.

Table 8. Results of the F-Test (Simultaneous)

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.005	3	.002	7.306	<.001 ^b
Residual	.014	68	.000		
Total	.018	72			

Source: IBM SPSS version 29 output for Windows

The calculation to determine the F-table value is:

$$F (4; 72-4) = F (4; 68) = 2.51.$$

The table results demonstrate that the significance value supports the impact of all variables on Y. The significance level is below 0.001 < 0.05, and the F-calculated value of 7.306 exceeds the F-table value of 2.51, confirming this effect. Consequently, it can be concluded that environmental performance, profitability, and media exposure collectively influence carbon emission disclosure (**H₀ is rejected, while H₁ is accepted**).

t-Test (Partial)

This test aims to measure the significance level of the relationship between each factor affecting the dependent variable separately, considering the t-significance value.

Table 9. Results of the t-Test (Partial)

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	.043	.009		4.979	<,001
<i>Environmental Performance</i>	.001	.003	.050	.470	.640
<i>Profitability</i>	.015	.031	.053	.483	.631
<i>Media Exposure</i>	.016	.003	.503	4.638	<,001

Source: IBM SPSS version 29 output for Windows

The calculation to determine the t-table value is as follows: $t(0.05/2; 72-4) = 0.025 : 68 = 1.99547$. The table and the above calculations indicate that the environmental performance variable has a significance value of $0.640 > 0.05$, meaning that environmental performance does not partially affect carbon emission disclosure (**H₀ is accepted, while H₂ is rejected**). The profitability variable also has a significance value much greater than 0.05, specifically $0.631 > 0.05$, indicating that profitability does not partially affect carbon emission disclosure (**H₀ is accepted, while H₃ is rejected**). The media exposure variable has a significance value significantly lower than 0.05, specifically $0.001 < 0.05$, with a t-calculated value greater than the t-table value, $4.638 > 1.99547$, meaning that media exposure partially affects carbon emission disclosure (**H₀ is rejected, while H₄ is accepted**).

DISCUSSION

The Influence of Environmental Performance, Profitability, and Media Exposure on Carbon Emission Disclosure

The study illustrates that environmental performance, profitability, and media exposure simultaneously influence carbon emission disclosure. The significance values in the table indicate that all three independent variables have significance levels lower than 0.05 ($0.001 < 0.05$). The F-calculated value is recorded at 7.306, which is higher than the F-table value of 2.51. This finding reinforces that environmental performance, profitability, and media exposure influence carbon emission disclosure, leading to the rejection of H₀ and the acceptance of H₁. These results highlight that both internal and external factors of companies, particularly in the basic materials sector, significantly impact their decision to disclose environmental impact information, especially

regarding carbon emissions. The stakeholder theory suggests that companies must consider all entities involved, including investors, employees, consumers, local communities, and government authorities. These stakeholders have expectations regarding corporate social responsibility, especially regarding ecological sustainability. Organizations that transparently report their ecological footprint, including greenhouse gas emissions, can strengthen their credibility among stakeholders. Such transparency is essential, as it signifies a commitment not only to financial success but also to social and environmental responsibility. This approach helps companies strengthen their reputation and build public trust, ultimately leading to long-term benefits, especially in the basic materials sector.

The legitimacy theory explains that companies strive to maintain or gain legitimacy within the social and market environment in which they operate. Providing detailed carbon emission disclosures is one way for companies in the basic materials sector to meet evolving social expectations, particularly concerning sustainability and climate change. By disclosing this information, companies demonstrate that they are not solely profit-driven but also concerned about the environmental impact of their operations. This transparency enables companies to reinforce their market position, establish strong relationships with stakeholders, and gain greater legitimacy in the eyes of society.

The Influence of Environmental Performance on Carbon Emission Disclosure

The research results reveal that the significance level for the environmental performance variable is 0.640, exceeding the threshold of 0.05 ($0.640 > 0.05$). This outcome demonstrates that environmental performance does not have a notable impact on carbon emission disclosure. The rejection of the proposed hypothesis further confirms that environmental performance does not play a crucial role in encouraging companies to enhance transparency in reporting their carbon emissions.

The sampled companies in this study illustrate that environmental performance – reflected in corporate efforts to enhance environmental quality – has not been optimally utilized as a strategy to build stakeholder trust. Legitimacy theory asserts that businesses must align their operations with societal expectations and standards, legal requirements, and public expectations to gain positive social legitimacy. Social legitimacy is a crucial element for businesses when establishing relationships with society and other stakeholders. Companies with strong environmental performance should ideally attract public attention and gain greater social support. However, this study suggests that society and stakeholders have not yet fully recognized environmental performance as a key indicator in assessing corporate transparency.

The Effect of Profitability on Carbon Emission Disclosure

The study findings indicate that profitability has a significance value of 0.631, which is greater than 0.05 ($0.631 > 0.05$). This clearly suggests that financial performance does not substantially impact the disclosure of carbon emissions. The study concludes that H0 is accepted, while H3 is rejected,

indicating that profitability does not contribute meaningfully to encouraging businesses to be more transparent in disclosing carbon emissions.

These findings do not support stakeholder or legitimacy theory. Companies with high profitability theoretically have more resources to enhance transparency in carbon emission disclosure, yet this does not happen in practice. High profitability should drive greater transparency and fulfill stakeholder expectations regarding sustainability. However, in reality, it does not sufficiently encourage improved carbon emission. While profitable companies may perform well financially, neglecting social and environmental responsibilities could damage their reputation and reduce the social legitimacy needed to build strong stakeholder relationships.

The Effect of Media Exposure on Carbon Emission Disclosure

The study confirms that media exposure has a significant influence on carbon emission disclosure. The significance value for the media exposure variable is less than $0.001 < 0.05$, with a t-count value of $4.638 > 1.945$, which clearly indicates that media exposure significantly affects carbon emission disclosure. This study rejects H_0 and accepts H_4 , demonstrating the influence of media exposure on carbon emission disclosure. The research is consistent with stakeholder theory, highlighting the necessity for companies to account for stakeholder expectations and requirements in their strategic planning. The pressure exerted by the media, as a form of stakeholder influence, encourages companies to be more proactive in disclosing sustainability information in greater detail, including carbon emission disclosure.

Companies feel the need to respond to these expectations with more concrete steps, as reflected in the increased transparency of their carbon emission disclosures. This finding also reinforces legitimacy theory, which states that companies need to demonstrate their commitment to social norms and societal expectations to gain positive social legitimacy. Media exposure serves as a tool to strengthen a company's social legitimacy. Extensive media coverage exerts pressure on companies to demonstrate their commitment to sustainability and better environmental management. The increased disclosure of carbon emission disclosure enables companies to enhance their credibility and gain stronger credibility in the perception of society and interested parties.

CONCLUSIONS AND RECOMMENDATIONS

Based on the analytical findings, the researcher determines that environmental performance does not impact carbon emission disclosure. The transparency in reporting carbon emissions is not significantly impacted by a company's environmental performance. The lack of emphasis on carbon emission reporting within the company's strategic decisions means that even companies with strong environmental performance may not reflect this in their carbon emission disclosure reports. Profitability also does not affect carbon emission disclosure. Even with high profitability, companies are not necessarily more open in disclosing carbon emissions information.

The focus for many companies remains on short-term financial gains, often overlooking environmental considerations. As a result, good profitability does not always lead to greater transparency regarding the environmental consequences of their operations. Media exposure, in contrast, has a considerable influence on carbon emission disclosure. Companies receiving greater media attention are more likely to disclose their carbon emissions. The media is key in pushing companies to take action so meet public expectations and improve their relationships with stakeholders. Media exposure acts as a key motivator, prompting companies to be more proactive in addressing environmental concerns and voluntarily sharing carbon emission data. Finally, the combined effects of environmental performance, profitability, and media exposure collectively shape carbon emission disclosure. This study concludes that these three factors together significantly influence the transparency of carbon emission disclosure. Companies that exhibit good environmental performance, strong profitability, and substantial media visibility have a higher tendency to report their carbon emissions.

FURTHER STUDY

This research has certain constraints. The sample focuses solely on companies within the basic materials sector listed on the Indonesia Stock Exchange from 2021 to 2023, potentially limiting the applicability of the results to other sectors. The research period is also confined to 2021–2023, excluding longer-term trends or newer developments. Additionally, the study relies on sustainability reports, which may not always provide the most detailed or up-to-date information. Other potentially influential factors, such as company policies and government regulations, were not considered, which could further impact carbon emission disclosure practices. Given these limitations, this study offers several recommendations.

Future researchers should expand the sample to include multiple industries, expanding the research timeframe and including more independent variables, such as government regulations, company scale, and environmental policies, could provide a more comprehensive analysis and enhance the study's robustness. Including mediating variables could improve the model's accuracy and provide a more in-depth understanding of the dynamics of carbon emission disclosure. Academics can leverage these findings to enhance sector-based literature and refine theories related to corporate environmental responsibility. From a practical perspective, companies should enhance their carbon emission disclosure and environmental performance to strengthen their reputation and attract sustainability-focused investors. Investors should consider carbon emission disclosure as a key factor when assessing corporate environmental responsibility, as it is an increasingly important aspect of ethical investment decisions. Governments should play a proactive role by enforcing stricter carbon emission disclosure regulations, incentivizing companies with strong environmental performance, and imposing penalties on those that fail to comply.

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