



Green Accounting, Good Corporate Governance, and Sustainability Report Disclosure in Indonesian Energy Companies

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Abstract

Purpose: This study aims to analyze the influence of green accounting and good corporate governance on sustainability report disclosure among oil, gas, and coal subsector companies listed on the Indonesia Stock Exchange during the 2021–2024 period.

Method: This study employs a quantitative explanatory approach, drawing on secondary data from annual reports, sustainability reports, and corporate governance information. The sample was selected using purposive sampling, resulting in 26 companies and 104 firm-year observations. Sustainability report disclosure was measured using a GRI-based Sustainability Report Disclosure Index, green accounting using a content analysis index, and good corporate governance using a composite governance index. The data were analyzed using multiple linear regression with IBM SPSS.

Findings: This study employs a quantitative explanatory approach, drawing on secondary data from annual reports, sustainability reports, and corporate governance information. The sample was selected using purposive sampling, resulting in 26 companies and 104 firm-year observations. Sustainability report disclosure was measured using a GRI-based Sustainability Report Disclosure Index, green accounting was measured using a content analysis index, and good corporate governance was measured using a composite governance index. The data were analyzed using multiple linear regression with IBM SPSS.

Originality/Value: This study contributes to the sustainability accounting literature by showing that green accounting and governance mechanisms do not have equal explanatory power in environmentally sensitive energy subsectors. The findings indicate that legitimacy theory is not fully confirmed in explaining the relationship between green accounting and sustainability report disclosure when disclosure remains largely narrative, whereas stakeholder theory is supported in explaining the role of good corporate governance in improving sustainability disclosures.

Keywords: Green Accounting; Good Corporate Governance; Sustainability Report Disclosure; Energy Sector; Indonesia.

Paper Type: Research Paper.

1. Introduction

Sustainability reporting has become an increasingly important mechanism for companies to communicate their economic, social, and environmental responsibilities to stakeholders. The growing attention to climate change, environmental degradation, and corporate accountability has shifted the role of corporate reporting from merely presenting financial performance to demonstrating how companies manage the broader impacts of their business activities. Previous literature shows that sustainability reporting is influenced

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by various internal and external determinants, including company characteristics, industry sensitivity, stakeholder pressure, governance mechanisms, and regulatory environments (Ali et al., 2017; Hahn & Kuehnen, 2013). Therefore, sustainability reports are expected to provide credible, comparable, and transparent information regarding corporate contributions to sustainable development.

The development of sustainability reporting is also closely related to the increasing use of sustainability reporting tools, standards, and frameworks. Siew (2015) explains that corporate sustainability reporting tools serve as mechanisms to inform stakeholders about corporate progress toward sustainability goals, although the diversity of tools, criteria, and methodologies may create complexity for users. Among these reporting frameworks, the Global Reporting Initiative (GRI) Standards are widely used to guide organizations in reporting their impacts on the economy, environment, and people in a comparable and credible manner (GRI, 2021). However, the use of sustainability reporting frameworks does not automatically guarantee high-quality disclosure. Michelon et al. (2015) argue that sustainability reporting practices may represent either substantive accountability or symbolic actions intended to portray companies as socially and environmentally responsible.

In Indonesia, sustainability reporting has gained stronger regulatory relevance following the issuance of Financial Services Authority Regulation No. 51/POJK.03/2017 concerning the implementation of sustainable finance for financial service institutions, issuers, and public companies (OJK, 2017). This regulation reflects the increasing expectation that public companies should integrate sustainability principles into their governance, strategy, and reporting practices. Nevertheless, the existence of regulation does not automatically ensure that sustainability reports are prepared to a high standard. Prior studies suggest that sustainability reports may sometimes function as symbolic documents that emphasize positive corporate images while failing to fully represent actual environmental and social impacts (Boiral, 2013; Michelon et al., 2015). This issue is particularly relevant for environmentally sensitive industries, where the gap between reported sustainability commitment and actual environmental responsibility may become more visible.

More recent evidence suggests that the regulatory shift toward mandatory sustainability reporting does not automatically ensure the quality of substantive disclosure. Christensen et al. (2021) emphasize that the effectiveness of mandatory CSR and sustainability reporting depends on reporting standards, implementation mechanisms, enforcement, and firms' responses to disclosure requirements. In the Indonesian context, Gunawan et al. (2022) show that sustainability reporting practices have increased over time, although companies tend to disclose economic information more extensively than social and environmental information. Similarly, Wahyuningrum et al. (2025) found that the transition from voluntary to mandatory reporting increased the volume of sustainability reports, but the quality of environmental disclosure remained inconsistent, reflecting a tendency toward nominal compliance. These findings indicate that sustainability reporting should be examined not only in terms of reporting availability but also in terms of the extent and substance of the disclosed information.

The energy sector warrants particular attention because its operations are closely tied to environmental risks, natural resource exploitation, carbon emissions, and public scrutiny. Companies in the oil, gas, and coal subsectors operate in industries with high environmental exposure, making sustainability disclosure an important tool for maintaining legitimacy and stakeholder trust. In the Indonesian context, environmental performance has been shown to be related to sustainability reporting, particularly when considered

alongside governance mechanisms such as audit committees, boards of directors, and governance committees, as well as industry type (Jati et al., 2023). Therefore, examining sustainability report disclosure in energy companies is important not only from a reporting perspective but also from a governance and environmental accountability perspective.

The focus on oil, gas, and coal companies is also important because environmentally sensitive industries tend to face stronger public pressure to justify their environmental responsibility. Although companies in these sectors may publish sustainability reports to comply with regulations and respond to stakeholder expectations, the substance of their environmental disclosure may vary depending on how environmental information is measured, governed, and integrated into corporate reporting practices. Therefore, the energy sector provides a relevant empirical setting for examining whether green accounting practices and good corporate governance mechanisms are associated with broader sustainability reporting disclosure.

One factor that may strengthen sustainability report disclosure is green accounting. Green accounting enables companies to identify, measure, record, and disclose environmental costs and activities as part of their accountability system. Through green accounting, companies can provide more transparent information about environmental management, resource efficiency, environmental investment, and pollution control. A meta-analytic study by Khan and Gupta (2024) found that corporate green accounting practices are associated with firm performance, particularly when environmental costs are measured and reported. In Indonesia, Rahmawati and Hamzah (2025) also found that green accounting and good corporate governance disclosures contribute to the quality of sustainability reporting, both directly and through environmental performance. These findings suggest that green accounting may support sustainability disclosure when implemented substantively, rather than merely as narrative environmental reporting.

In addition to green accounting, good corporate governance is also considered a key determinant of sustainability disclosure. Good corporate governance provides monitoring, accountability, and control mechanisms that encourage management to disclose relevant and reliable information to stakeholders. Corporate governance mechanisms, such as independent commissioners, audit committee meetings, managerial ownership, and board structure, may influence the quality of sustainability reports. Correa-Garcia et al. (2020) found that corporate governance affects the quality of sustainability reporting in Latin American business groups. In Indonesia, De Pazzi and Ardiana (2025) showed that the proportion of independent commissioners, the frequency of audit committee meetings, and managerial ownership positively affect the quality of sustainability reports in energy companies. Similarly, Sawitri and Ardhiani (2023) demonstrated that stakeholder pressure and good corporate governance are related to the quality of sustainability reports in Indonesian companies (Correa-Garcia et al., 2020; De Pazzi & Ardiana, 2025; Sawitri & Ardhiani, 2023).

Although previous studies have examined sustainability reporting, green accounting, and corporate governance, empirical findings remain inconsistent, and the research focus remains fragmented. International studies have emphasized the role of regulation, governance mechanisms, and reporting quality in sustainability disclosure (Christensen et al., 2021; Erin et al., 2022; Gerwing et al., 2022), while Indonesian studies have examined environmental performance, stakeholder pressure, corporate governance, and carbon-related disclosure in different contexts (Islamiyah et al., 2024; Jati et al., 2023; Setyawan et al., 2022). However, prior research has not sufficiently integrated green accounting and good corporate governance to explain GRI-based sustainability report disclosure among Indonesian oil, gas, and coal companies during the 2021-2024 period. This gap is important

because these subsectors face high environmental exposure and stronger legitimacy and stakeholder pressures, but the extent to which environmental accounting information and governance mechanisms explain sustainability disclosure remains unclear.

This study addresses the above gap by examining the effects of green accounting and good corporate governance on sustainability report disclosure among companies in Indonesia's oil, gas, and coal subsectors. Theoretically, this study contributes by testing whether legitimacy theory explains the relationship between green accounting and sustainability report disclosure and whether stakeholder theory explains the relationship between good corporate governance and sustainability report disclosure. In addition, this study contributes to the sustainability accounting literature by providing empirical evidence from environmentally sensitive energy subsectors and offers practical insights for companies, investors, and regulators regarding the need to strengthen measurable environmental accounting practices and governance oversight in sustainability reporting.

2. Literature Review

2.1. Legitimacy Theory

Legitimacy theory explains that organizations seek to ensure that their activities are perceived as consistent with the values, norms, and expectations of the society in which they operate. Organizational legitimacy becomes important because companies do not operate in isolation, but within a social system that evaluates whether corporate actions are acceptable. [Dowling and Pfeffer \(1975\)](#) argue that organizational legitimacy is related to the congruence between organizational activities and social values. When a gap emerges between corporate activities and social expectations, companies may use disclosure strategies to reduce legitimacy pressures and maintain public acceptance.

[Suchman \(1995\)](#) further defines legitimacy as a generalized perception that an entity's actions are desirable or appropriate within a socially constructed system of norms, values, beliefs, and definitions. In social and environmental accounting research, legitimacy theory has been widely used to explain why companies disclose non-financial information. [Deegan \(2002\)](#) argues that organizations may use social and environmental disclosures to create, maintain, or repair legitimacy. Similarly, [Gray et al. \(1995\)](#) explain that corporate social and environmental reporting is closely related to broader accountability relationships between companies and society. These perspectives suggest that disclosure is not merely a technical reporting activity but also a social and political mechanism that companies use to justify their existence and activities.

From this perspective, sustainability report disclosure can be understood as a strategic mechanism companies use to communicate their environmental and social responsibility to external stakeholders. Companies operating in environmentally sensitive industries tend to face stronger legitimacy pressure because their activities are closely associated with ecological risks, resource exploitation, and public scrutiny. Therefore, sustainability reporting may serve as a medium through which companies demonstrate accountability and align their business activities with broader social expectations.

In the context of this study, legitimacy theory is relevant for explaining the relationship between green accounting and sustainability report disclosure. Green accounting reflects the company's effort to identify, measure, and report environmental costs and activities. When green accounting is implemented in a substantive manner, it can support the disclosure of environmental information in sustainability reports. However, when it is implemented only symbolically, green accounting may not necessarily improve

the quality or extent of sustainability disclosure. Thus, legitimacy theory provides a basis for understanding why companies disclose sustainability information and why such disclosure may vary across firms.

2.2. Stakeholder Theory

Stakeholder theory emphasizes that companies are responsible not only to shareholders but also to broader stakeholder groups, including employees, creditors, customers, government, local communities, investors, and the natural environment. [Freeman \(2010\)](#) explains that companies should be managed with consideration for the interests of stakeholders who can affect or are affected by corporate activities. In sustainability reporting, stakeholder theory suggests that disclosure is a form of corporate response to stakeholder demands for transparency, accountability, and responsible business conduct.

Sustainability report disclosure is particularly important because stakeholders increasingly require information beyond financial performance. Environmental impact, governance quality, resource management, community involvement, and social responsibility have become relevant information for evaluating corporate sustainability. Prior research shows that sustainability reporting is shaped by stakeholder pressure and corporate characteristics, including industry sensitivity and governance mechanisms ([Ali et al., 2017](#); [Hahn & Kuehnen, 2013](#)). Therefore, companies in environmentally sensitive sectors are expected to provide broader and more credible sustainability information because their operations have greater social and environmental consequences.

In this regard, good corporate governance plays an important role in ensuring that management provides credible and relevant information to stakeholders. Governance mechanisms such as board oversight, independent commissioners, audit committees, and managerial ownership can strengthen accountability and reduce information asymmetry between companies and stakeholders. This study uses stakeholder theory to explain the relationship between good corporate governance and sustainability report disclosure. Companies with stronger governance mechanisms are expected to disclose sustainability information more transparently because they are under better monitoring and are more responsive to stakeholder expectations.

2.3. Green Accounting and Sustainability Report Disclosure

Green accounting refers to the process of identifying, measuring, recording, and reporting environmental costs and environmental activities as part of corporate accounting practices. It extends conventional accounting by incorporating environmental aspects into corporate decision-making and reporting. Through green accounting, companies may disclose information about environmental costs, environmental investments, pollution control, waste management, energy efficiency, and other environmental initiatives.

In the context of sustainability reporting, green accounting should not be understood merely as narrative environmental disclosure, but as a reporting practice that provides measurable and verifiable environmental information. Environmental information becomes more useful when it is supported by quantitative indicators, environmental cost allocation, and systematic integration into sustainability reporting frameworks. [Gunawan et al. \(2022\)](#) show that sustainability reporting practices in Indonesia have increased over time, but the extent and focus of disclosure may vary across companies and industries. This indicates that the existence of sustainability reports does not necessarily reflect the same level of environmental accounting maturity among firms.

The implementation of green accounting can strengthen sustainability reporting disclosure by providing measurable environmental information that can be included in sustainability reports. [Khan and Gupta \(2024\)](#), in a meta-analytic study published in the *Sustainability Accounting, Management and Policy Journal*, found that corporate green accounting is positively related to firm performance, particularly when environmental costs are measured and reported. [Rahmawati and Hamzah \(2025\)](#) also found that green accounting contributes to the quality of sustainability reporting when supported by environmental performance and governance disclosures. In the Indonesian context, [Iislamiyah et al. \(2024\)](#) show that environmental performance affects carbon emissions disclosure in energy sector companies, indicating that environmental accountability is relevant for disclosure practices in environmentally sensitive sectors.

However, the relationships among environmental accounting, environmental performance, and environmental disclosure are not always consistent. [Clarkson et al. \(2008\)](#) show that prior empirical evidence yields mixed results on the association between corporate environmental performance and environmental disclosure. This indicates that environmental information does not automatically lead to broader or better sustainability disclosure unless such information is systematically measured and reported. Moreover, disclosure quality depends not only on the existence of sustainability reports but also on the completeness, credibility, and substance of the disclosed information. [Michelon et al. \(2015\)](#) argue that CSR reporting practices may represent either substantive accountability or symbolic actions intended to portray companies as socially and environmentally responsible.

Recent evidence from Indonesia also supports the argument that environmental disclosure may increase in quantity without necessarily improving in quality. [Wahyuningrum et al. \(2025\)](#) found that the transition from voluntary to mandatory sustainability reporting increased the volume of sustainability report submissions, but did not automatically improve the quality of environmental disclosure. This condition suggests that environmental reporting may still reflect compliance-oriented disclosure rather than substantive environmental accountability. Therefore, green accounting practices are expected to contribute to sustainability report disclosure only when environmental information is disclosed in a measurable, consistent, and comprehensive manner.

Based on legitimacy theory, companies operating in environmentally sensitive sectors such as oil, gas, and coal are expected to disclose environmental accounting information to align corporate activities with social expectations and reduce legitimacy pressure. Green accounting is therefore expected to support sustainability reporting disclosure by ensuring that environmental costs, activities, and performance are disclosed in a measurable and credible manner. This expectation is supported by previous studies showing that green accounting, environmental performance, and carbon-related disclosure are associated with broader sustainability accountability ([Iislamiyah et al., 2024](#); [Khan and Gupta, 2024](#); [Rahmawati and Hamzah, 2025](#)). Thus, based on legitimacy theory and prior empirical findings, the first hypothesis is formulated as follows:

H₁: Green accounting has a positive effect on sustainability report disclosure.

2.4. Good Corporate Governance and Sustainability Report Disclosure

Good corporate governance refers to a set of mechanisms, structures, and principles that direct and control companies to operate transparently, accountably, responsibly, independently, and fairly. In the context of sustainability reporting, good corporate governance is expected to improve disclosure quality because governance

mechanisms can encourage management to provide more reliable and complete information to stakeholders.

Previous studies have shown that corporate governance is related to sustainability disclosure. [Jizi et al. \(2014\)](#) found that board-related governance mechanisms influence the quality of CSR disclosure. This finding indicates that board oversight can encourage companies to provide more accountable non-financial information. [Correa-Garcia et al. \(2020\)](#) also found that corporate governance affects the quality of sustainability reporting in Latin American business groups. Their findings suggest that governance mechanisms can influence how companies prepare and disclose sustainability information.

More recent studies also emphasize the importance of governance mechanisms in improving the quality of sustainability reporting. [Gerwing et al. \(2022\)](#) found that sustainable corporate governance mechanisms are associated with the quality of mandatory sustainability reporting, indicating that governance structures can support more credible sustainability disclosure. [Erin et al. \(2022\)](#) also show that board governance characteristics and audit committee attributes are significantly associated with the quality of sustainability reporting. These findings suggest that sustainability disclosure is influenced not only by the existence of sustainability-related activities but also by the effectiveness of corporate monitoring mechanisms in directing and controlling reporting practices.

In the Indonesian context, corporate governance has also been examined as a determinant of sustainability reporting disclosure. [Mujiani and Rohmawati \(2022\)](#) investigated the impact of good corporate governance on sustainability reporting disclosure in mining companies listed on the Indonesia Stock Exchange. [Oktapiani and Simatupang \(2024\)](#) further examined the effect of good corporate governance and firm size on sustainability report disclosure in energy sector companies listed on the Indonesia Stock Exchange during the 2020-2022 period. [Setyawan et al. \(2022\)](#) found that corporate governance is related to the disclosure of SDGs support in sustainability reporting, and their study emphasizes stakeholder theory as the basis for explaining stakeholder information needs in sustainability reporting ([Mujiani & Rohmawati, 2022](#); [Oktapiani & Simatupang, 2024](#)).

[De Pazzi and Ardiana \(2025\)](#) found that independent commissioners, audit committee meeting frequency, and managerial ownership positively affect the quality of sustainability reports in energy companies listed on the Indonesia Stock Exchange. Similarly, [Sawitri and Ardhiani \(2023\)](#) demonstrated that stakeholder pressure and good corporate governance are related to the quality of sustainability reports in Indonesian companies. These findings are consistent with stakeholder theory, which argues that companies with stronger governance are more likely to respond to stakeholder demands for accountability and transparency.

Institutional ownership may also strengthen sustainability disclosure because institutional investors have the capacity and incentive to monitor corporate reporting practices. [Wicaksono et al. \(2024\)](#) found that institutional ownership characteristics are associated with environmental disclosure in Indonesian listed companies. This evidence supports the view that ownership structure can function as an external governance mechanism that encourages more transparent environmental and sustainability-related disclosure.

Based on stakeholder theory, good corporate governance is expected to influence sustainability report disclosure because governance structures provide monitoring and accountability mechanisms that help management respond to stakeholder information needs. Companies with stronger governance mechanisms are expected to disclose sustainability information more transparently, completely, and reliably. This expectation is

supported by previous studies showing that board governance, audit committee attributes, ownership structure, and sustainability governance are associated with the quality and disclosure of sustainability reporting (Erin et al., 2022; Gerwing et al., 2022; Setyawan et al., 2022; Wicaksono et al., 2024). Thus, based on stakeholder theory and prior empirical findings, the second hypothesis is formulated as follows:

H₂: Good corporate governance positively affects sustainability report disclosure.

3. Research Method

3.1. Research Design

This study uses a quantitative explanatory research design to examine the effect of green accounting and good corporate governance on sustainability report disclosure. A quantitative explanatory approach is appropriate because the study tests relationships among measured variables using numerical secondary data and statistical analysis (Sekaran & Bougie, 2016). The model is designed to test the partial effect of each independent variable on sustainability report disclosure using multiple linear regression.

3.2. Population and Sample

The population of this study consists of companies in the oil, gas, and coal subsectors listed on the Indonesia Stock Exchange. These subsectors were selected because their operations are directly related to environmental risk, natural resource extraction, emissions, and public scrutiny, making sustainability report disclosure highly relevant. The 2021-2024 period was selected because it represents a recent observation period following the strengthening of sustainability reporting practices in Indonesia and provides sufficient firm-year data to examine disclosure consistency.

The sample was selected using purposive sampling because not all companies consistently published annual reports, sustainability reports, and complete governance information during the observation period. The criteria required companies to be listed in the oil, gas, and coal subsectors, publish annual and sustainability reports during the observation period, disclose sustainability information assessable using GRI-based indicators, and provide complete data for measuring green accounting, good corporate governance, and sustainability report disclosure.

Based on these criteria, the final sample consists of 26 companies. With a four-year observation period, the study uses 104 firm-year observations.

Table 1. Sample Selection Criteria

Criteria	Number of Companies
Initial population of oil, gas, and coal subsector companies listed on the Indonesia Stock Exchange	49
Companies that did not publish annual reports and sustainability reports	(2)
Companies that did not disclose sustainability reports based on GRI-related indicators during the 2021–2024 period	(21)
Final sample	26
Observation period	4 years
Total firm-year observations	104

Source(s): Authors' Own Work

3.3. Data Sources and Data Collection Technique

This study uses secondary data obtained from annual reports, sustainability reports, and corporate governance information published by the sample companies. The data were collected from the official websites of the Indonesian Stock Exchange and each company. Secondary data are appropriate for this study because the variables are measured based on publicly available corporate disclosures.

The data collection technique used in this study is documentation. Annual and sustainability reports were reviewed to identify the information needed to measure disclosure in sustainability reports, green accounting, and good corporate governance. Content analysis was applied because the variables are based on the presence, extent, and form of environmental and sustainability-related disclosure in corporate reports.

The use of sustainability report indicators in this study refers to the GRI Standards, which are designed to help organizations report their impacts on the economy, environment, and people in a comparable and credible manner (GRI, 2021). The use of sustainability reporting is also relevant to the Indonesian regulatory context, as POJK No. 51/POJK.03/2017 regulates the implementation of sustainable finance for financial service institutions, issuers, and public companies (OJK, 2017).

3.4. Data Sources and Data Collection Technique

This study uses one dependent variable and two independent variables. The dependent variable is sustainability report disclosure, while the independent variables are green accounting and good corporate governance. The measurement approach was selected because all variables can be observed from publicly available annual reports, sustainability reports, and governance disclosures. Sustainability report disclosure is measured using the Sustainability Report Disclosure Index (SRDI), calculated as the number of disclosed items divided by the total number of required disclosure items. The SRDI is based on the GRI Standards because GRI provides a widely used framework for assessing organizational impacts on the economy, environment, and people (GRI, 2021). This index is appropriate because it enables the extent of disclosure to be compared across companies and years. In this study, the SRDI focuses on the extent of disclosure rather than narrative quality. This measurement is consistent with the objective of examining the breadth of companies' disclosure of sustainability information in their sustainability reports.

Green accounting is measured using a content analysis index based on the level of environmental accounting disclosure in annual reports and sustainability reports. The score captures whether companies disclose environmental information only narratively, support it with a visual or tabular presentation, and disclose financial allocation related to environmental activities. The final green accounting value is normalized as an index so that the score can be compared across observations. This measurement is used because green accounting is expected to reflect not only environmental narratives but also measurable environmental activities and environmental cost information. A higher index indicates more comprehensive green accounting disclosure, particularly when environmental information is supported by quantitative or financial allocation data.

Good corporate governance is measured by a composite governance index comprising institutional ownership, an independent board of commissioners, and audit committee indicators. These indicators were selected because they represent key monitoring mechanisms that may influence transparency and accountability in sustainability reporting. The composite index captures governance mechanisms more comprehensively than a single governance proxy. Institutional ownership reflects external monitoring,

independent commissioners represent internal oversight, and audit committee indicators reflect the monitoring function related to reporting reliability. Therefore, the composite governance index is relevant for examining how governance mechanisms affect sustainability report disclosure.

Table 2. Variable Measurement

Variable	Symbol	Measurement
Sustainability Report Disclosure	Y	SRDI = disclosed items / required disclosure items
Green Accounting	X1	Green accounting index = obtained disclosure score / maximum disclosure score based on content analysis
Good Corporate Governance	X2	GCG = composite index of institutional ownership, independent commissioners, and audit committee indicators

Source(s): Authors' Own Work

3.5. Data Analysis Technique

The data were analyzed using multiple linear regression with IBM SPSS. The analysis was conducted in several stages: descriptive statistics, classical assumption testing, regression analysis, partial hypothesis testing using the t-test, model feasibility testing using the F-test, and coefficient of determination analysis. These procedures are appropriate for examining the effect of independent variables on a dependent variable in a quantitative explanatory model (Ghozali, 2018). Classical assumption tests included tests for normality, multicollinearity, heteroscedasticity, and autocorrelation. These tests were conducted to ensure that the regression model met the assumptions required for reliable interpretation. After the classical assumption tests were completed, a multiple linear regression analysis was conducted to examine the effects of green accounting and good corporate governance on sustainability report disclosure. The regression model used in this study is formulated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \dots\dots\dots (1)$$

Where:

Y = Sustainability Report Disclosure

α = Constant

X_1 = Green Accounting

X_2 = Good Corporate Governance

β_1, β_2 = Regression coefficients

ε = Error term

4. Results and Discussion

4.1. Descriptive Statistics

Descriptive statistics provide an overview of the characteristics of the research variables. The variables analyzed in this study include green accounting, good corporate governance, and sustainability report disclosure. The descriptive statistics consist of the number of observations, minimum value, maximum value, mean, and standard deviation.

Table 3. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Green Accounting	104	0.25	0.50	0.3834	0.08755
Good Corporate Governance	104	0.44	1.03	0.7044	0.12971
Sustainability Report Disclosure	104	0.53	1.00	0.7819	0.12455

Source(s): Authors' Own Work

Table 3 shows that sustainability report disclosure ranges from 0.53 to 1.00, with a mean of 0.7819. This indicates that, on average, the sample companies disclosed approximately 78.19% of the sustainability disclosure items used in this study. The standard deviation of 0.12455 suggests that the variation in sustainability report disclosure among the sample companies is relatively moderate. The maximum value of 1.00 indicates that some companies disclosed all required items, while the minimum value of 0.53 indicates that other companies disclosed only slightly more than half of the required items.

Green accounting has a minimum value of 0.25, a maximum of 0.50, a mean of 0.3834, and a standard deviation of 0.08755. This result suggests that the implementation of green accounting among the sample companies is still moderate. Most companies have disclosed environmental information, but such disclosures tend to remain limited and have not consistently included comprehensive quantitative environmental cost information. This condition is relevant for companies in the energy sector because their business activities are closely associated with environmental impacts and therefore require stronger environmental accountability.

Good corporate governance ranges from 0.44 to 1.03, with a mean of 0.7044 and a standard deviation of 0.12971. The mean value indicates that governance mechanisms in the sample companies are generally implemented at a moderate to high level. However, variation across companies indicates that governance structures differ in strength, which may influence the extent to which they disclose sustainability information.

4.2. Classical Assumption Test Results

Before conducting multiple linear regression analysis, this study tested the classical assumptions. The Kolmogorov-Smirnov significance value was 0.080, indicating normally distributed residuals. The tolerance values for green accounting and good corporate governance were 0.997, and the VIF values were 1.003, indicating no multicollinearity. The Durbin-Watson value was 1.937, indicating no autocorrelation problem. The significance values for the heteroscedasticity test for green accounting and good corporate governance were 0.738 and 0.142, respectively, indicating no heteroscedasticity. Overall, the regression model met the classical assumption requirements.

4.3. Multiple Linear Regression Results

Multiple linear regression analysis was used to examine the effect of green accounting and good corporate governance on sustainability report disclosure. The regression results are presented in Table 4.

Table 4. Multiple Linear Regression Results

Variable	Coefficient	t-statistic	Sig.	Conclusion
Constant	0.524	-	-	-
Green Accounting	0.248	1.839	0.069	Not significant
Good Corporate Governance	0.231	2.531	0.013	Significant

Source(s): Authors' Own Work

Based on Table 4, the multiple linear regression equation can be written as follows:

$$Y = 0.524 + 0.248GA + 0.231GCG + e \dots\dots\dots(1)$$

The constant value of 0.524 indicates that, when green accounting and good corporate governance are held constant, the sustainability report disclosure score is 0.524. The coefficient of green accounting is 0.248, indicating a positive direction. However, its significance value is 0.069, which is higher than 0.05. This means that green accounting does not have a statistically significant effect on sustainability report disclosure. The coefficient of good corporate governance is 0.231 with a significance value of 0.013, which is lower than 0.05. This indicates that good corporate governance has a positive and significant effect on sustainability report disclosure.

4.4. Model Fit and Coefficient of Determination

The model fit test was conducted using the F-test, while the coefficient of determination was used to determine the extent to which green accounting and good corporate governance explain sustainability report disclosure. The results are presented in Table 5.

Table 5. Model Fit and Coefficient of Determination

Model Indicator	Value	Interpretation
F-test significance	0.007	The regression model is significant
Adjusted R-Square	0.075	The model explains 7.5% of the sustainability report disclosure

Source(s): Authors' Own Work

Table 5 shows that the F-test significance value is 0.007, which is lower than 0.05. This indicates that the regression model is statistically valid and that green accounting and good corporate governance jointly provide a significant explanatory model for sustainability report disclosure. Therefore, the F-test is interpreted as a model feasibility test, not as a separate simultaneous hypothesis.

The adjusted R-squared value is 0.075, indicating that green accounting and good corporate governance explain 7.5% of the variation in sustainability report disclosure. Meanwhile, the remaining 92.5% is explained by other variables outside the model. This relatively low explanatory power indicates that sustainability report disclosure is influenced by many other factors, such as firm size, profitability, leverage, environmental performance, stakeholder pressure, ownership structure, sustainability assurance, and media exposure.

4.5. Hypothesis Testing Summary

The hypothesis testing results are summarized in Table 6. The results show that H_1 is rejected and H_2 is accepted.

Table 6. Hypothesis Testing Summary

Hypothesis	Statement	Result	Decision
H1	Green accounting positively affects sustainability report disclosure.	Not significant	Rejected
H2	Good corporate governance positively affects sustainability report disclosure.	Positive and significant	Accepted

Source(s): Authors' Own Work

4.6. The Effect of Green Accounting on Sustainability Report Disclosure Hypothesis Testing Summary

The results show that green accounting has a positive but insignificant effect on sustainability report disclosure. Therefore, H1 is rejected. This finding indicates that green accounting disclosure by Indonesian oil, gas, and coal companies has not significantly increased the extent of sustainability reporting disclosure.

From the perspective of legitimacy theory, this result indicates that the theory is not fully supported in explaining the effect of green accounting on sustainability report disclosure. Although companies may disclose environmental information to maintain legitimacy, the disclosure may still be symbolic or compliance-oriented when it is not supported by measurable environmental cost allocation, quantitative environmental indicators, and systematic integration into sustainability reports.

This finding is consistent with [Clarkson et al. \(2008\)](#) and [Michelon et al. \(2015\)](#), who suggest that environmental disclosure does not always represent substantive accountability. It is also consistent with recent Indonesian evidence indicating that increased reporting volume does not automatically improve the quality of environmental disclosure ([Wahyuningrum et al., 2025](#)). In the JAA context, [Islamiyah et al. \(2024\)](#) show that environmental performance is relevant to carbon emissions disclosure in energy companies, reinforcing the importance of substantive environmental performance rather than merely narrative environmental disclosure.

The result differs from [Khan and Gupta \(2024\)](#) and [Rahmawati and Hamzah \(2025\)](#), who found that green accounting contributes positively when environmental costs and environmental performance are measured more substantively. This difference suggests that the effect of green accounting depends on measurement maturity, the availability of environmental cost data, and the extent to which environmental accounting is integrated into sustainability reporting. Thus, this study weakens the assumption that green accounting automatically improves sustainability report disclosure. For green accounting to play a stronger role, companies need to move beyond narrative disclosure and present measurable environmental activities, environmental costs, and financial allocations related to environmental responsibility.

4.7. The Effect of Good Corporate Governance on Sustainability Report Disclosure

The results show that good corporate governance has a positive and significant effect on sustainability report disclosure. Therefore, H2 is accepted. This finding indicates that companies with stronger governance mechanisms tend to disclose sustainability information more extensively. This result supports stakeholder theory, as governance mechanisms encourage management to respond to stakeholder demands for transparent, relevant, and reliable sustainability information. Independent commissioners, institutional ownership, and audit committee mechanisms can strengthen monitoring, reduce information asymmetry, and improve reporting discipline.

The finding is consistent with international studies showing that governance mechanisms are associated with the quality of sustainability reporting. [Erin et al. \(2022\)](#) found that board governance and audit committee attributes are related to the quality of sustainability reporting, while [Gerwing et al. \(2022\)](#) showed that sustainable corporate governance supports the quality of mandatory sustainability reporting. [Correa-Garcia et al. \(2020\)](#) and [Jizi et al. \(2014\)](#) also support the view that governance affects the quality of non-financial disclosure.

In the Indonesian context, this finding strengthens previous studies showing that good corporate governance is relevant to sustainability disclosure in mining and energy companies (Mujiani & Rohmawati, 2022; Oktapiani & Simatupang, 2024; De Pazzi & Ardiana, 2025). It also extends Setyawan et al. (2022), who found that corporate governance is related to the disclosure of support for the SDGs in sustainability reporting. Therefore, this study strengthens the position that governance mechanisms are important in meeting stakeholder information needs.

Overall, the findings indicate that good corporate governance plays a more consistent role than green accounting in explaining sustainability report disclosure. This does not mean that green accounting is unimportant; rather, governance mechanisms appear to be more effective in encouraging transparency when environmental accounting practices are not yet sufficiently mature.

5. Conclusion

This study examines the effects of green accounting and good corporate governance on sustainability report disclosure among companies in the oil, gas, and coal subsectors listed on the Indonesia Stock Exchange during the 2021-2024 period. The results show that green accounting has a positive but insignificant effect on sustainability report disclosure, whereas good corporate governance has a positive and significant effect.

Theoretically, the insignificant effect of green accounting indicates that legitimacy theory is not fully confirmed when environmental disclosure remains narrative and is not supported by measurable environmental cost information. In contrast, the significant effect of good corporate governance supports stakeholder theory, as governance mechanisms encourage companies to provide broader and more accountable sustainability information to stakeholders.

This study contributes to sustainability accounting literature by showing that environmental accounting practices and governance mechanisms have different explanatory strengths in environmentally sensitive energy subsectors. The findings add evidence that governance mechanisms may play a stronger role than green accounting in explaining sustainability report disclosure when environmental accounting practices are not yet substantively implemented.

Practically, companies should strengthen green accounting by disclosing environmental costs, quantitative environmental indicators, and financial allocations for environmental activities. Commissioners, independent commissioners, and audit committees should also actively supervise the preparation of sustainability reports to ensure that disclosures are complete, credible, and useful to stakeholders. Regulators may use these findings to strengthen technical guidance and monitoring related to environmental cost disclosure and sustainability reporting quality.

This study has limitations. The sample is limited to oil, gas, and coal subsector companies, the observation period covers only 2021-2024, and the model includes only green accounting and good corporate governance. The adjusted R-square of 7.5% also indicates that many other factors explain sustainability report disclosure. Future studies are encouraged to include variables such as firm size, profitability, leverage, environmental performance, stakeholder pressure, ownership structure, sustainability assurance, media exposure, and industry sensitivity, and to apply panel data regression or mixed-method approaches.

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