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THE SOCIAL LOGIC OF GREEN CAPITALISM: MARKET PERFORMANCE, GOVERNANCE, AND THE POLITICAL ECONOMY OF GREEN ACCOUNTING IN INDONESIA

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ABSTRACT

This study investigates the social logic of green capitalism by examining how market performance, firm performance, and corporate governance influence green accounting practices in Indonesia's energy and mining industries. Conducted on 40 companies listed on the Indonesia Stock Exchange from 2020 to 2024, this research adopts a purposive sampling method and employs panel data regression analysis using the EViews program. The findings reveal that corporate governance—measured through institutional ownership—has a positive and significant effect on green accounting, while market performance (measured by price to book value) and firm performance (measured by return on assets) show no significant influence. These results indicate that the adoption of green accounting in Indonesia's extractive sector is not primarily driven by market or profitability incentives, but rather by governance mechanisms and institutional legitimacy. The study contributes to the sociology of economy by situating green accounting within the political economy of sustainability, where corporate environmental responsibility emerges as a negotiated outcome between economic rationality and social expectations. The novelty of this research lies in revealing the institutional embeddedness of green capitalism in emerging economies, demonstrating that environmental accountability is shaped more by governance ethics than by market efficiency. The study recommends that future sociological inquiries expand the analysis to cross-sectoral contexts and incorporate global regulatory pressures in modeling the evolution of green corporate behavior.

Keywords: Corporate Governance, Environmental Accountability, Green Accounting, Market Performance, Political Economy

INTRODUCTION

Over the last decade, environmental, social, and governance (ESG) issues have become the most widely discussed topics in the business environment, particularly among public companies. The continued occurrence of environmental damage and social problems resulting from the business activities of many companies worldwide has highlighted environmental, social, and governance (ESG) issues as crucial factors in determining a company's reputation (Gherghina, 2024). According to Al Amosh et al. (2023), in the last five years, 70% of protected forests in countries in the South and Southeast Asia regions have been damaged, and some of the land has

been converted into factories and settlements. Irresponsible exploitation carried out by industry also harms communities around forest areas.

According to Respati & Djumena (2024) the urgency of sustainable accounting related to strategic opportunities, companies that adopt it tend to be more adaptive to changes in global markets and regulations, which are moving towards a green economy, therefore, the implementation of sustainable accounting It's not just a necessity, but a strategic step that must be taken immediately to maintain business relevance and sustainability. According to Deviana Sari and Muhammad Siregar, quoted in Indonesian media, "Sustainable accounting in Indonesia is now not just a matter of financial reporting, but a moral responsibility for the nation's future." Amidst the rapid global currents that increasingly emphasize the importance of sustainability, the economic sector in Indonesian business is a target that must be ready to adapt to new standards that are not only measured by profit, but also by social and environmental impact.

Sustainable accounting ensures that business activities not only see profits for the company, but the direction of sustainability accounting is aimed at sustainable development (SDGs). By implementing it, Indonesia will be better equipped to face global challenges, compete effectively, and achieve a milestone in more inclusive and environmentally friendly economic development, in line with the vision of a golden Indonesia 2045. This cannot happen without synergy; companies and business actors play a major role in integrating sustainability practices into their financial reports. However, the crucial aspect is that the government must support this effort through regulations and policies that encourage transparency and accountability regarding environmental, social, and governance (ESG) aspects.

Green-related phenomena accounting is also strengthened by news quoted from PWC.com (2023), which states that in Indonesia, the Sustainability Report has been mandatory for financial institutions and public companies since 2019 and for listed companies since 2020. Sustainability: The report is a crucial instrument in the ESG reporting approach for Indonesian companies, reflecting the company's strategy for addressing climate risks, engaging with stakeholders, and enhancing ESG performance. The report can illustrate the board's sustainability responsibilities, demonstrate efforts to improve sustainability skills, and enhance public credibility. Furthermore, it provides a form of public transparency through a sustainability report, aligning global standards and demonstrating the company's commitment to sustainability.

Support for the implementation of green accounting in Indonesia is also strengthened through a legal framework, one of which is Government Regulation Number 47 of 2012 concerning Social and Environmental Responsibility of Limited Liability Companies, which is a derivative of Law Number 40 of 2007 concerning Limited Liability Companies. This regulation requires every company, especially limited liability companies that carry out business activities in the field of or related to natural resources (natural resources-based companies) or whose activities impact the function of natural resource capabilities, to integrate social and environmental aspects into the company's business and operational strategies. This means that

this obligation is not limited to companies listed on the Indonesia Stock Exchange, but applies to all limited liability companies that meet these criteria, including those in the extractive sectors such as mining, energy, and forestry.

Furthermore, for companies listed on the Indonesia Stock Exchange, there are specific regulations governing the disclosure of sustainability information. Financial Services Authority (OJK) Regulation No. 51/POJK.03/2017, which implements Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies, requires the preparation of a Sustainability Report that contains environmental, social, and governance (ESG) performance information. This obligation has been implemented gradually since 2019 for the financial services sector and since 2020 for all issuers and public companies listed on the IDX. Furthermore, OJK Circular Letter No. 16/SEOJK.04/2021 provides technical guidance on preparing sustainability reports, including mandatory environmental indicators to be disclosed, such as energy use, waste management, and greenhouse gas emissions. Furthermore, the IDX also supports the implementation of sustainability principles through the IDX ESG Leaders program, which recognizes issuers that consistently demonstrate transparent sustainability reporting. This regulatory synergy aligns with the concept of green accounting, which integrates environmental costs and benefits into corporate performance reporting, thereby enabling a more comprehensive evaluation of a company's contribution to environmental and social sustainability, not just from a financial perspective.

Despite the enactment of various regulations, the implementation of green accounting in Indonesia continues to face significant challenges. Several studies and OJK reports indicate that not all companies are optimally utilizing these regulations, either due to limited resources, low awareness of long-term benefits, or a lack of integration of environmental aspects into their accounting systems (sikapiuangmu.ojk.go.id, 2024). Even among companies that have published sustainability reports, the quality and depth of environmental information often vary, making it challenging to assess the extent to which the application of green accounting principles effectively supports sustainability goals. This indicates a gap between regulatory obligations and actual practice, necessitating further study to understand the factors influencing the level of green accounting implementation in Indonesia.

Market performance increase is one of the challenges for the company, because it will certainly increase production/ firm performance to meet market needs. However, companies often overlook the environmental impact of increased production. This phenomenon is related to market demand. Performance, as quoted from Alinea.id news (2024), where the Fed lowered its target market interest rate in March 2024, further increased after a series of increases in US economic data, as well as other major economic indicators, such as those from Europe and the UK. "Investor expectations of the interest rate cut cycle by global central banks strongly support gold prices throughout 2024. With the rise in gold prices, revenue from Antam's gold sales will increase. Heri Yusuf, corporate secretary of Mind Id, is optimistic that the performance of the issuer listed on the Indonesian Stock Exchange (BEI) with the ticker ANTM will be positive in 2024,

especially since gold is a safe haven instrument, which is interesting, because investors will choose to collect gold if there are concerns in the political year.

Another phenomenon related to the market performance, according to news quoted from titaninfra.com (2023), the Indonesian government predicts that domestic coal needs (Domestic Market Obligation (DMO)) in 2024 will peak at 187 million tons, a significant increase of 35.5% compared to the 138 million tons absorbed in 2019. According to Ridwan Djamaluddin, Director General of Minerals and Coal at the Ministry of Energy and Mineral Resources, this projection is based on the increasing demand for coal in the domestic industrial sector. Several sectors, including coal-fired power plants (PLTU), the cement industry, and smelters, are expected to be key drivers of coal consumption growth.

With the increasing demand in the mining and energy sectors, this aligns with the need for increased production capacity (Firm performance) to meet market demands, but it has a significant impact on the environment. There are several environmental pollution phenomena due to exploitation in the mining and energy sectors. Trend campaigner Novita Indri stated that the environment in North Sulawesi is polluted by nickel mining waste, and the underwater scenery of Labengki Island is now murky due to the intersection with the nickel area in North Konawe Regency. The phenomenon, as quoted from timbal.com, shows that tin commodities play a role in supporting the national economy, contributing Rp. 1.51 trillion in taxes in 2022 and Rp888.729 billion in 2023 indicate that the high tax contribution of PT Timah Tbk is a result of its high productivity. This presents a dilemma for Indonesia, namely, on the one hand, increased productivity will result in higher taxes; in addition to that, high productivity also leads to a significant environmental impact. This is a responsibility that the company's management must bear in implementing corporate social responsibility. Good governance that brings sustainable solutions to this sector, such as commitments related to green accounting, ESG, or Sustainability reports.

PT Timah Tbk reported a net profit in the first half of 2024, 2,570% higher than the same period in the previous year. PT Timah Tbk posted a net profit of IDR 434.48 billion in the first half of 2024, compared to IDR 16.27 billion in the first half of 2023. PT Timah Tbk's Director of Finance and Risk Management, Fina Eliani, said that "this increase in profit is inseparable from the increase in tin ore production, the improvement in the average selling price of tin metal, and the efficiency implemented by the company in the first half of 2024. "The company is gradually improving the performance of production operations by increasing the number of inland mining units, opening new locations, the number of production suction vessels in operation, and remaining focused on sustainable efficiency programs across all of the company's business lines" (Bisnis.com, 2024).

Corporate Related Phenomena governance, quoted from News.energika.id (2024), Riyatono, Deputy for Investment Cooperation, Ministry of Investment/Investment Coordinating Board (BKPM) said that, "The government continues to encourage the development of a green economy to support the energy transition as well as national economic growth". The government

also maintains positive and real efforts, where there are several investment projects in renewable energy power plants in Indonesia in collaboration with the private sector, such as floating solar power plants in Cirata, wind power plants in Sidrap, Sulawesi, and solar PV in Likupan. PLN's main director, Darmawan Prasojo, stated that his party is fully committed to implementing the energy transition and supporting the government in achieving the Net Zero Emissions (NZE) target by 2060.

Another phenomenon, as quoted from the Energy Shift Institute (2024), is that PT Adaro Energy Indonesia, the largest coal producer in Indonesia, plans to sell its thermal coal mining unit for US\$2.5 billion, as part of its alignment with global trends. Ślusarczyńska (2024) reveals that green Accounting has become an important issue for companies. Corporate Sustainability Reporting Under the CSRD Directive (CSRD), adopted by the European Union, all large companies and small and medium-sized enterprises, except microenterprises, are required to report nonfinancial information. ESG reporting requirements encompass the collection of data on environmental issues, human rights, anti-corruption measures, and corporate governance practices. ESG reports must be submitted by listed companies and other companies that meet specific criteria, including company size, total assets, and net profit. Companies that fail to comply with the CSRD's non-financial reporting obligations will be subject to financial sanctions, the extent of which will be determined by each country's relevant authorities. In Poland, the details of the sanctions will be known within 18 months of the CSRD's implementation. Sustainability information will be included in management reports and treated similarly to financial information. Currently, failure to prepare a report or including unreliable data in the report is punishable by a fine, imprisonment of up to two years, or both. The Ministry of Finance plans to amend the provisions of the Accounting Act to include sanctions for violations of sustainability reporting.

According to Khan & Gupta (2023) green Accounting is a process of recognizing, measuring value, recording, summarizing, reporting, and disclosing integrated financial, social, and environmental objects, transactions, or events in the accounting process to produce complete, integrated, relevant, and useful financial, social, and environmental accounting information for stakeholders in making economic and non-economic decisions and management. However, the development of green Accounting in Indonesia has not been implemented as rapidly as in developed European countries. The concept of green accounting was popularized in Indonesia in the first semester of 2021 with the launch of the ESG-based index, the Kehati Index.

Kehati Index encourages the emergence of companies that focus their business activities more on value-oriented green accounting. Dwi & Aqamal Haq (2023) revealed the management awareness of every manufacturing company in Indonesia regarding the implementation of green accounting. Accounting disclosures have started to increase, but each company has different disclosure values. According to Sharma et al. (2020), the implementation of green accounting disclosures can be influenced by several variables, including market performance, profitability, business risk, and institutional ownership.

The same point was also made by Cahyani (2023), who stated that market performance, changes in business risk, and the presence of control, in the form of institutional ownership, within a company, will increase the implementation of green disclosure. Accounting within a company.

According to Brealey et al. (2020), market performance refers to a company's performance in the market compared to its competitors, measured through indicators such as stock price, trading volume, market capitalization, and the market's perception of the company. This performance is influenced by both internal and external factors, including macroeconomic conditions and the company's strategy for responding to market dynamics.

According to Daft et al. (2021), firm performance measures a company's operational effectiveness in achieving strategic and long-term competitive financial and non-financial goals, as well as fostering innovation and adaptation to changes in the business environment. Performance also refers to an evaluation tool to observe a company's ability to utilize limited resources to encourage an increase in a company's financial performance, which can be observed from the increase in sales value, profit growth, and assets owned by the company within a certain period (Lyngdoh et al., 2023).

Good Corporate Governance (GCG) is a structure intended (1) to ensure that the right questions are asked and (2) that there are checks and balances to ensure that the answers reflect what is best for the creation of long-term, sustainable, renewable value (Monks & Minow, 2021). Another definition of corporate governance (Good Corporate Governance) is an environment of trust, ethics, moral values, and confidence, as a synergistic effort of all constituent parts, namely, stakeholders, including government, the general public, professionals, service providers, and the corporate sector (Crowther & Seifi, 2011).

Several previous studies have examined the market performance in relation to green accounting. Research conducted by Kabderian Dreyer et al. (2023) found that the market performance has a positive influence on the implementation of green accounting. As the company's market (stock) performance improves, company management is increasingly aware of the importance of implementing green accounting. Accounting in the form of increasing ESG disclosure scores. A similar statement was made by Bifulco et al. (2023), who noted that changes in market performance will align with the increasing number of ESG disclosure scores. However, Sharma et al. (2020) found different results, who found that market performance does not have a significant effect on green implementation accounting. Further research results, conducted by Gillan et al. (2021), stated that market performance does not affect a company's commitment to green disclosure accounting.

According to Sharma et al. (2020) the implementation of green disclosure accounting can be influenced by a number of variables including market performance, profitability, business risk, and institutional ownership. According to Sharma et al. (2020), the implementation of green disclosure accounting can be influenced by several variables, including market performance, profitability, business risk, and institutional ownership. Cahyani (2023) supports this view, finding

that market performance, changes in business risk, and the presence of control mechanisms—such as institutional ownership—positively affect the extent of green disclosure implementation within companies.

Cahyani's study examined the influence of environmental performance, environmental costs, public shareholding, green accounting, and capital structure on financial performance. The population consisted of companies in the Basic and Chemical Industry, Miscellaneous Industry, and Consumer Goods Industry listed on the Indonesia Stock Exchange (IDX) between 2017 and 2021. Using purposive sampling, the study obtained a total of 246 unbalanced samples and employed multiple linear regression analysis. The results showed that (1) environmental performance and public shareholding have a positive effect on financial performance, whereas (2) environmental costs, green accounting, and capital structure have no significant effect. Cahyani (2023) concludes that these findings may help the government improve the quality of financial reporting, provide valuable insights for regulators in decision-making, increase investor confidence, and serve as a reference for future research in the field of accounting.

The research results Kabderian Dreyer et al. (2023) found that market performance has a positive influence on the implementation of green accounting. As the company's market (stock) performance improves, company management is increasingly aware of the importance of implementing green accounting. Accounting in the form of increasing ESG disclosure scores. A similar statement was made by Bifulco et al. (2023), who noted that changes in market performance will align with the increasing number of ESG disclosure scores. However, Sharma et al. (2020) found different results, who found that market performance does not have a significant effect on green implementation accounting. Further research results, conducted by Gillan et al. (2021), stated that market performance does not affect a company's commitment to green disclosure accounting.

Each company is certain to have different capabilities in implementing green accounting, so one factor that can influence changes in disclosure is company profitability (Aydoğmuş et al., 2022). Profitability indicates a company's ability to generate profits and the composition of its assets or equity (Brigham & Houston, 2017). When a company experiences increasing profitability, it will generate excess profits that are not distributed to shareholders and will be used to support the company's operational activities and implement green business practices. Accounting.

The research results of Sharma et al. (2020) found that profitability had a positive and significant effect on the implementation of green disclosure. Accounting. Consistency of research results was also obtained by Dewi & Wardani (2022); Lusiana et al. (2021) found that the higher a company's ability to generate profits, as measured by returns on assets (ROA), the greater the increase in the implementation or execution of green accounting. Furthermore, different research results were obtained by Al Amosh et al. (2023) and Rahman et al. (2023), who found that profitability had no significant effect on the implementation of green accounting in a company.

Sharma et al. (2020) stated that the existence of control instruments, such as institutional ownership, will help improve the quality of green implementation. Accounting. The controller will ensure that the company truly implements green accounting, as evidenced by the increasing value of their ESG disclosure (Govindan et al., 2021). The results of research by Liu et al. (2022) found that institutional ownership has a positive and significant effect on the implementation of green accounting. The same finding was also reported by Gillan et al. (2021), who stated that a consistent and strict monitoring process by institutional investors encourages the increased implementation of green accounting by Al Amosh et al. obtained different results, finding that institutions did not have an effect on the implementation of green accounting in a company.

In accordance with the description of the phenomenon and a number of studies that can be seen from the differences in the results of previous studies, this has encouraged researchers to be interested in conducting further research that tries to analyze and discuss a number of variables that can influence the implementation of green accounting in Indonesia, especially in manufacturing companies. Researchers believe that research discussing the implementation of green accounting remains highly popular and relevant, warranting further investigation. This is the primary novelty the researchers aim to offer in this research.

RESEARCH METHOD

The current research is quantitative, where researchers attempt to validate the hypothesis using statistical testing tools, specifically panel data regression analysis processed through eViews. The type of data used is secondary data, obtained from the official website of the Indonesia Stock Exchange and the official websites of each issuer selected as a sample. The data used spans the years 2020 to 2024. In our research, we used two categories of variables: dependent variables and dependent variables.

In this research, the dependent variable is green accounting, measured in the form of disclosure. The disclosure instrument was adopted from Chang et al. (2024), using the following formula:

$$ESGD = \frac{\Sigma \text{ Company Disclosures}}{\Sigma \text{ Total Disclosures}} \times 100\%$$
 (1)

The second variable that forms the panel data regression equation in this research is the independent variable, namely market performance, which is measured using Price to Book Value (PBV). This refers to the research of Sharma et al. (2020). To obtain PBV, it is searched using the formula:

$$PBV = \frac{Market \ Value \ of \ Common \ Stock}{Book \ Value \ of \ Common \ Stock}$$
 (2)

Firm performance is the second independent variable. Return on assets (ROA) is used to measure firm performance, adopting a proxy used in Price to Book Value (PBV) research. This refers to the research by Sharma et al. (2020). To obtain the return on assets value, the following

formula is used:

$$ROA = \frac{Net \, Profit}{Total \, Assets} \times 100\% \tag{3}$$

Corporate governance is the third independent variable in our research, using institutional ownership as a proxy, as used in Sharma et al.'s (2020) research. To find institutional ownership, use the following formula:

$$Insow = \frac{Total Institutional Ownership}{Total Company Ownership} \times 100\%$$
 (4)

The data analysis technique used to answer the hypotheses proposed in our research is panel data regression analysis. The data processing was performed using Eviews. The data processing stage begins with descriptive statistical analysis, followed by classical assumption testing, which includes normality testing, multicollinearity testing, and heteroscedasticity testing. After these analysis stages are completed, panel regression effect selection testing is performed using the Chow, Hausman, or Lagrange Multiplier (LM) tests. In general, the panel data regression equation model used in our research is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \tag{5}$$

After conducting panel data regression analysis, the hypothesis is tested using the t-statistic. The hypothesis test results will be accepted if the calculated t-value is above the t-table value or if the P-value is <0.05, indicating significant test results.

RESULTS AND DISCUSSION

Descriptive Statistics

Before conducting the hypothesis testing stage, a general overview of the research variables is narrated, as depicted in Table 1 in the data appendix. Based on the analysis results, the number of processed data was identified as 200 observations (40 companies x 5 years). When observed from 2020 to 2024, the lowest green accounting implementation value was 70.59%, while the highest green accounting implementation value among the selected companies was 90.32%. When observed comprehensively from 2020 to 2024, the average green accounting implementation among energy and mining sector companies listed on the Indonesia Stock Exchange reached 81.91%, with a standard deviation of 5.28. Referring to the statistical average value indicates that energy and mining sector companies on the Indonesia Stock Exchange have a high commitment to implementing green accounting.

Market data identification performance proxied by price to book value (PBV) is found in the market value. The lowest performance was 0.09 times, namely PT Sumber Energi Andalan Tbk (ITMA) in 2020, while the market position was. The highest performance was 32.62 times achieved by the issuer PT Transcoal Pacific Tbk (TCPI) in 2024. If observed comprehensively, the average market position of mining and energy companies on the Indonesia Stock Exchange from

2020 to 2024 was 2.08 times, with a standard deviation of 3.79 times. The performance of mining and energy sector companies indicates that the share prices of these companies on the Indonesia Stock Exchange are relatively affordable.

The success of a company in implementing green accounting is certainly inseparable from the firm's improved performance. In line with the identification of data from mining and energy sector companies selected as samples, the position of the firm was found to have the lowest performance by PT Indo Straits Tbk (PTIS) in 2020, with a financial value performance of 0.01% of the firm's total value. The highest performance was achieved by PT Golden Energi Mines Tbk (GEMS) in 2022 at 61.76%. A comprehensive analysis reveals the average position of the firm. The performance of mining and energy companies on the Indonesia Stock Exchange from 2020 to 2024 was 9.58%, with a standard deviation of 11.65%. Based on the statistical average obtained, it can be concluded that the ability of mining and energy companies to manage their financial performance is relatively poor.

Every party involved in the company wants to establish good governance, so the presence of institutional ownership is crucial. Upon examining the data obtained, we identified a corporate value. The lowest governance value is 7% while the corporate value is 100%. Upon examining the overall implementation of corporate governance in mining and energy sector companies listed on the Indonesia Stock Exchange, we find an average level of implementation. Governance, as measured by institutional ownership, was 17.70%, with a standard deviation of only 9.89%. Observing the statistical average data, it can be concluded that the percentage of corporate governance is 17.70%. Governance in energy and mining sector companies on the Indonesia Stock Exchange is relatively small.

Normality Test Results

The normality test conducted in our research utilized a graphical normality test with a residual approach. The test results are shown in Figure 1 below:

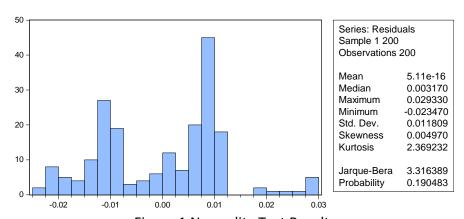


Figure 1 Normality Test Results

Source: Analysis data by authors, 2025

Based on the results of the residual normality test, the probability value obtained was 0.190. This value is above 0.05, indicating that all research variables used were normally distributed; therefore, further data processing stages can be carried out immediately.

Multicollinearity Test Results

In our research, a multicollinearity analysis was conducted by calculating the Variance Inflation Factor (VIF) value. The test results are shown in Table 1 below:

Table 1 Multicollinearity Test Results

	VIF	Cut Off	Results
Market performance	1,075	≤ 5	Not occur
Firm performance	1,131	≤ 5	Not occur
Corporate Governance	1,117	≤ 5	Not occur

Source: Analysis data by authors, 2025

Based on the results of the multicollinearity test, it was found that each independent variable used in this research had a Variance Influence Factor (VIF) value below 5. Therefore, it can be concluded that each independent variable did not experience multicollinearity deviations, and that further data processing stages can be carried out immediately.

Heteroscedasticity Test Results

Heteroscedasticity testing was carried out using the Glejser test. According to the data processing that had been carried out, the results were described as shown in Table 2 below:

Table 2 Heteroscedasticity Test Results

	Prob	Cut Off	Results
Market performance	0.5469	0.05	Not occur
Firm performance	0.9101	0.05	Not occur
Corporate Governance	0.3051	0.05	Not occur

Source: Analysis data by authors, 2025

Based on the results of heteroscedasticity testing using the Glejser approach, it was found that each independent variable that had been regressed with ARESID (Absolute Residual) had a probability value above 0.05, so it can be concluded that all research variables used in this research were free from heteroscedasticity deviations, so that further data processing stages can be carried out immediately.

Chow Test Results

The Chow test is used to ensure that the panel data regression model used as an analysis tool is a Fixed Effect Model (FEM) or, more preferably, a Common Effect Model (CEM). The test

results are shown in Table 3 below:

Table 3 Chow Test Results

Effects Test	Statistics	Prob.	Effect
Cross-section F	21.551493	0.0000	
Cross-section Chi-square	74.173275	0.0000	FEM

Source: Analysis data by authors, 2025

According to the results of the Chow test, the cross-section F probability value was obtained at 0.0000. The data processing was carried out using an error rate of 0.05. Therefore, the decision is that Ho is rejected, and Ha is accepted; thus, it can be concluded that the Fixed Effect Model (FEM) is superior to the Common Effect Model (CEM).

Hausman Test Results

The Hausman test is designed to determine whether the best panel regression model is the Random Effects Model (REM) or the Fixed Effects Model (FEM). According to the data processing stages, the results are obtained in the following table 4:

Table 4: Hausman Test Results

Effects Test	Statistics	Prob.	Effect
Random period	2.359082	0.5013	BRAKE

Source: Analysis data by authors, 2025

At the Hausman testing stage, the value of Period F can be seen to produce a probability value of 0.5013 above 0.05, so the decision is that Ho is accepted and Ha is rejected or random effect model (REM) is a better panel regression effect than fixed effect model or common effect mode, so that further data processing stages can be carried out immediately.

Lagrange Test Results Multiplier

In this research, the researcher also used the Lagrange test. Multiplier, this analysis is used to ensure whether the panel data regression effect used is random. Effect Model or Fixed Effect Model. In accordance with the data processing stages that have been carried out, the results obtained are shown in the following table 5:

Table 5 Lagrange Test Results Multiplier

Null (No Rand Effect)	Cross Section One Sides	Period One- Sides	Both	Results
Honda	3.412192	18.10530	13.09384	FEM
Honda	(0.0001)	(0.0000)	(0.0000)	FEIVI

Source: Analysis data by authors, 2025

At the Langrange testing stage, the multiplier visible cross value section probability is 0.0001, followed by a one-sided probability of 0.000 and a probability value. Both are consistently below 0.05; thus, Ho is rejected and Ha is accepted, so it can be concluded that the best panel data regression effect that can be used in this research is the Fixed Effect Model.

Hypothesis Testing Results

After all testing procedures are fulfilled, Fixed is used. Effect Model (FEM) as an analysis tool. A summary of the results of panel data regression testing using the FEM approach is shown in Table 6 below:

Table 6 Hypothesis Testing Results

	Regression Coefficient	t-statistic	Prob
Constanta	1,941	575.38	0.0000
Market performance	-0.006	-0.495	0.6209
Firm performance	0.000	0.002	0.4795
Corporate Governance	0.012	3,363	0.0009
	F- Prob	0.000	
	Adjusted R2	0.326	
	R ²	0.349	

Source: Analysis data by authors, 2025

In the F-statistic testing stage, a probability value of 0.000 was obtained. Data processing was carried out using an error rate of 0.05. The results obtained showed a P value <0.05, so it can be concluded that market performance, financial performance, and corporate governance are the right variables to influence changes that occur in green accounting disclosures in mining and energy sector companies on the Indonesia Stock Exchange.

In the summary of the results of the hypothesis testing, a coefficient of determination of 0.349 was found, this finding shows that Market performance, financial performance, and corporate governance are able to influence changes in green accounting disclosure in mining and energy companies on the Indonesia Stock Exchange by 32.60%. In comparison, the remaining 67.40 % of other contributions are influenced by other variables not used in this research.

In the first hypothesis test, the market was found to have a negative regression coefficient of 0.0006 and a probability value of 0.6209. The testing procedure was conducted with an error rate of 0.05. The results obtained show P > 0.05, indicating that the market performance has a negative and insignificant effect on the implementation of green accounting in energy and mining sector companies listed on the Indonesia Stock Exchange. The first hypothesis is rejected.

In testing the second hypothesis, the firm variable was found to have a positive regression coefficient of 0.0001, a finding supported by a probability value of 0.4795. The testing procedure was conducted using an error rate of 0.05. The results obtained showed P > 0.05, so

it can be concluded that the firm performance has a positive and insignificant effect on the implementation of green accounting in energy and mining sector companies on the Indonesia Stock Exchange. The second hypothesis is rejected.

Furthermore, in testing the third hypothesis, it was found that corporate governance has a positive regression coefficient of 0.0125. Statistically, this finding is strengthened by the value of the probability reaching 0.0009. The data processing procedure was carried out using an error rate of 0.05. The results showed P < 0.05, so it can be concluded that corporate governance has a positive and significant influence on the implementation of green accounting in energy and mining sector companies on the Indonesia Stock Exchange. The third hypothesis is accepted.

Market Performance Has No Significant Impact on Green Accounting

According to the results of testing the first hypothesis, it can be demonstrated that the market performance has no significant effect on green accounting for energy and mining sector companies listed on the Indonesia Stock Exchange. These findings suggest that a company's performance increase or decrease does not impact the implementation of green accounting within the organization.

The results obtained indicate that when a company's market performance improves, it is not accompanied by a corresponding increase in management commitment to consistently implementing green accounting. Increasing market performance which is indicated by the increase in the company's share price, it turns out that it does not provide a positive market response to the environmental accounting policies implemented by the company.

For companies, this condition suggests that improving market performance does not automatically encourage them to maintain their reputation by publicizing their green initiatives. Accounting in the form of sustainability, Green accounting in the energy and mining sectors tends to be regulatory, rather than responsive to market movements. The Indonesian government, through the Financial Services Authority (OJK) and the Ministry of Environment and Forestry (KLHK), has encouraged companies in these sectors to report environmental aspects in their financial reports. Therefore, companies implement green accounting more out of compliance demands than market incentives.

This finding suggests that, based on stakeholder theory, companies have not fully considered the needs and expectations of stakeholders, such as the government, society, consumers, and institutional investors, as the basis for decision-making. Market performance is insignificant in relation to green accounting, which suggests that although investors respond through share prices, companies have not responded by strengthening their accountability and transparency practices, one of which is the implementation of green practices. This is done to ensure the company maintains legitimacy among stakeholders who expect it to operate sustainably and responsibly towards the environment.

Furthermore, from a legitimacy theory perspective, these results also suggest that companies in the energy and mining sectors continue to face challenges in gaining social

acceptance. Increased share prices are inconsistent with green practices accounting. This indicates that the company's legitimacy has not been optimally established. In other words, the company remains solely focused on achieving profit without demonstrating genuine concern for the environment, so it should publish environmentally friendly information. Accounting through sustainability reporting has not been used as the main instrument to maintain the legitimacy of the community and other stakeholders.

Theoretically, market performance (Good performance should encourage companies to implement green practices). Logically, a company with a share price higher than its book value increases its equity, allowing it to allocate resources to environmental reporting, environmentally friendly investments, and social responsibility activities. Legitimacy theory and stakeholder theory also assume that well-performing companies will be more proactive in maintaining public legitimacy by transparently reporting environmental impacts. However, the empirical testing results in this study indicate that market performance does not have a positive and significant effect on green accounting. This finding weakens or even contradicts the theory because the reality in the energy and mining sectors in Indonesia differs from the theory's predictions. Thus, this gap between theory and empirical results confirms that in the Indonesian context, particularly in the energy and mining sectors, the motivation for implementing green accounting is not solely driven by high market performance, but is more influenced by external factors such as regulations and global market pressure.

In addition, the findings obtained in this research also support the results of research by Sharma et al. (2020), which found that the market performance does not have a significant effect on green implementation accounting. While market performance improves, management does not show increased awareness of the importance of implementing green accounting. Accounting, as reflected in the low ESG disclosure score. The results of this study are also supported by Gillan et al (2021), who stated that market performance does not affect the company's commitment to green disclosure accounting. However, these findings are not in line with the research of Kabderian Dreyer et al. (2023), who found that market performance has a positive influence on the implementation of green accounting. The same research results were also obtained by Bifulco et al. (2023), who stated that changes in market performance will be in line with the increasing number of ESG disclosure scores.

Firm Performance Has No Significant Effect on Green Accounting

Based on the results of testing the second hypothesis, it was found that the firm performance does not have a significant effect on green accounting in energy and mining companies on the Indonesia Stock Exchange.

Firm performance is not a primary determinant of green accounting implementation. In other words, both high- and low-performing companies tend to have relatively similar environmental accounting disclosure patterns.

Statistical data shows that the average firm. The performance of energy and mining companies listed on the IDX from 2020 to 2024 was 9.58% with a standard deviation of 11.65%. This value indicates that the companies' overall ability to manage their financial performance is considered good. However, despite variations in financial performance between companies, the results of this study indicate that high or low company financial performance does not significantly impact the implementation of green energy. Accounting. This strengthens the evidence that the implementation of green Accounting in the energy and mining sector is not solely determined by the company's performance capabilities, but rather by regulatory demands, stakeholder pressure, and the company's need to maintain long-term social legitimacy.

The finding that the firm performance No has a significant impact on green accounting can be explained through stakeholder theory. Energy and mining sector companies have a greater capacity to meet the demands of various stakeholders, including the government, local communities, institutional investors, and financial institutions. These groups have significant influence and demand that companies continue implementing green practices. Accounting as a form of environmental responsibility. According to stakeholder theory, a company's sustainability is determined not only by its profit or financial performance, but also by its ability to meet the expectations of stakeholders, including the government, the public, environmental NGOs, and institutional investors. Therefore, the implementation of green accounting in energy and mining companies is driven more by demands for legitimacy and accountability to stakeholders, rather than by internal financial performance.

This finding can also be explained through the lens of legitimacy theory. From the perspective of legitimacy theory, energy and mining companies implement green accounting as a mechanism to maintain social acceptance and reputation, so that the Company's internal financial performance does not directly influence these decisions.

Theoretically, the performance of the company (firm). Good performance should encourage companies to implement green practices in accounting. Logically, companies with high profitability or strong financial efficiency have a greater capacity to allocate resources to environmental reporting activities, green investments, and social responsibility. Legitimacy theory and stakeholder theory. The theory also assumes that well-performing companies will be more proactive in maintaining public legitimacy by transparently reporting their environmental impacts. Thus, the alignment between theory and empirical results confirms that in the Indonesian context, particularly in the energy and mining sectors, the motivation for implementing green Accounting is not solely determined by company performance, but is more influenced by external factors such as regulations, global market pressures, or social demands.

Corporate Governance Has a Positive Influence on Green Accounting

Based on the results of testing the third hypothesis, it was found that corporate governance, as measured by institutional ownership, has a positive and significant effect on green accounting in energy and mining sector companies on the Indonesia Stock Exchange. The

findings show that the implementation of good corporate governance is improving. A company's governance will increase its commitment to implementing green accounting.

The results of this study suggest that institutional ownership is a key element of effective corporate governance. Corporate governance plays a crucial role in promoting the adoption of green Accounting. The presence of institutional investors serves as an effective external oversight mechanism, as they not only demand short-term financial performance but also ensure that management practices are transparent, accountable, and sustainability-oriented. This role suppresses the potential for opportunistic management behavior and encourages increased disclosure of environmental information to stakeholders. This provides an incentive for companies to adopt green practices. Accounting consistently, so that it not only strengthens legitimacy but also improves the company's reputation and competitiveness in the long term.

Statistical data shows that the average corporate governance of energy and mining companies listed on the IDX from 2020 to 2024 was quite good, at 17%. In other words, the average company has implemented good corporate governance. Corporate governance is quite good. The company can implement a check and balance mechanism, thereby maximizing management performance, ensuring effective supervision, and reducing costs due to management ineffectiveness and inefficiency.

This finding can be explained through stakeholder theory, which emphasizes that companies are not only responsible to shareholders but also to other stakeholders, including society and the environment. The presence of institutional investors demonstrates a strong oversight role of shareholders over the direction of company policy, thereby making companies increasingly aware that they are not only oriented towards internal interests but also must consider the interests of broader external parties. Institutional investors play a crucial role in strengthening control mechanisms, enabling companies to be more responsive to the needs of their stakeholders, through increased transparency of environmental reporting.

Furthermore, this finding aligns with legitimacy theory, which states that social acceptance strongly influences corporate sustainability. By implementing green accounting under the oversight of institutional investors, companies can demonstrate compliance with societal values, norms, and expectations, thereby maintaining social legitimacy. Consequently, institutional ownership serves not only as a financial oversight but also as a key driver in encouraging companies to adopt environmentally friendly accounting practices. This strengthens reputations, maintains legitimacy, and promotes corporate sustainability amid growing public concern about environmental issues.

Theoretically, good corporate governance should encourage companies to implement green practices in accounting. Logically, the larger the institutional ownership in a company, the stronger the oversight mechanism for management. Institutional investors typically have long-term interests, thus encouraging company management to be more transparent, accountable, and sustainability-oriented. This aligns with stakeholder theory, which assumes that good corporate governance will pay more attention to the needs and expectations of institutional

shareholders, the government, and the public. Within the framework of legitimacy theory, institutional ownership is also seen as encouraging management to maintain public legitimacy through consistent reporting of environmental impacts. The empirical testing results in this study strengthen the framework of stakeholder theory and legitimacy theory by demonstrating that corporate governance is more responsive to the needs and expectations of institutional shareholders, the government, and the public, with institutional ownership proxy having a positive and significant effect on green accounting in energy and mining companies in Indonesia. Thus, the alignment between theory and empirical results confirms that, in the Indonesian context, particularly in the energy and mining sectors, institutional ownership is a crucial factor encouraging companies to adopt and strengthen green practices. Accounting. Pressure and expectations from institutional investors have proven to be an effective control mechanism, ensuring that companies not only pursue profits but also prioritize sustainability and social legitimacy in the eyes of stakeholders.

In addition, the findings obtainesd are also supported by the research results of Sharma et al. (2020), who found that profitability has a positive and significant effect on the implementation of green disclosure accounting. Consistency of research results was also obtained by Dewi & Wardani (2022) and Lusiana et al. (2021) found that the higher a company's ability to generate profits as measured by returns on assets (ROA) will further increase the implementation or execution of green accounting. Furthermore, different research results were obtained by Al Amosh et al. (2023) and Rahman et al. (2023) found that profitability had no significant effect on the implementation of green accounting in a company.

CONCLUSION

This study concludes that the logic of green capitalism in Indonesia's energy and mining sectors is shaped less by market incentives or firm profitability than by the institutional ethics embedded within corporate governance structures. The significant role of governance, particularly institutional ownership, demonstrates that environmental accountability in emerging economies is not an automatic consequence of market performance but rather a socially mediated process grounded in organizational legitimacy and compliance with evolving sustainability norms. These findings confirm that green accounting serves not merely as a financial disclosure mechanism but as a sociological expression of how corporations negotiate between economic rationality and social responsibility within the broader political economy of sustainability. The novelty of this research lies in uncovering the institutional embeddedness of green corporate behavior in non-Western contexts, emphasizing that the advancement of green capitalism depends on ethical governance frameworks rather than market efficiency alone. Consequently, the study reinforces the relevance of economic sociology in explaining the social foundations of corporate environmental practices and suggests that future inquiries should integrate transnational policy dynamics and cross-sectoral variations to deepen the

understanding of how social structures sustain or constrain sustainable economic transformation.

ETHICAL STATEMENT AND DISCLOSURE

This study was conducted in accordance with established ethical principles, including informed consent, protection of informants' confidentiality, and respect for local cultural values. Special consideration was given to participants from vulnerable groups to ensure their safety, comfort, and equal rights to participate. No external funding was received, and the authors declare no conflict of interest. All data and information presented were collected through valid research methods and have been verified to ensure their accuracy and reliability. The use of artificial intelligence (AI) was limited to technical assistance for writing and language editing, without influencing the scientific substance of the work. The authors express their gratitude to the informants for their valuable insights, and to the anonymous reviewers for their constructive feedback on an earlier version of this manuscript. The authors take full responsibility for the content and conclusions of this article.

REFERENCES

- Al Amosh, H., Khatib, SFA, & Ananzeh, H. (2023). Environmental, social and governance impact on financial performance: evidence from the Levant countries. *Corporate Governance: The International Journal of Business in Society, 23* (3), 493–513. https://doi.org/10.1108/CG-03-2022-0105
- Anitasari, DS (2025). Examining Environmental Damage Caused by Tin Mining. 1–2. https://news.detik.com/kolom/d-7304555/menelisik-kerusakan-lingkungan-akibat-tambang-timah
- Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, *22*, S119–S127. https://doi.org/10.1016/j.bir.2022.11.006
- Bifulco, G.M., Savio, R., Paolone, F., & Tiscini, R. (2023). The CSR committee as moderator for the ESG score and market value. *Corporate Social Responsibility and Environmental Management, June,* 1–11. https://doi.org/10.1002/csr.2549
- Bissoondoyal-Bheenick, E., Brooks, R., & Do, H. X. (2023). ESG and firm performance: The role of size and media channels. *Economic Modeling*, 121 (December 2021), 106203. https://doi.org/10.1016/j.econmod.2023.106203
- Brealey, R.A., Myers, S.C., & Allen, F. (2023). *Principles of Corporate Finance, 14th Edition* (14th ed.). McGraw Hill Higher Education.
- Brigham, E.F., & Houston, J.F. (2017). *Fundamentals of Financial Management* (10 Edition). Ptentice-Hall. https://doi.org/10.1017/CBO9781107415324.004
- Cahyani, RSA (2023). The influence of environmental performance, environmental costs, and public share ownership. *Trisakti Accounting Journal*, *0832* (September), 189–208. https://doi.org/10.25105/jat.v10i2.17846

- Chang, G., Osei Agyemang, A., Faruk Saeed, U., & Adam, I. (2024). Assessing the impact of financing decisions and ownership structure on green accounting disclosure: Evidence from developing economies. *Heliyon*, 10 (5), e26672. https://doi.org/10.1016/j.heliyon.2024.e26672
- Crowther, D., & Seifi, S. (2011). David Crowther; Shahla Seifi Corporate Governance and International Business.
- Daft, R.L., Kendrick, M., & Vershinina, N. (2021). *Management: Global and Entrepreneurial Perspectives*. Cengage Learning EMEA.
- Deegan, C. M. (2019). Legitimacy theory: Despite its enduring popularity and contribution, time is right for a necessary makeover. *Accounting, Auditing and Accountability Journal, 32* (8), 2307–2329. https://doi.org/10.1108/AAAJ-08-2018-3638
- Dewi, PP, & Wardani, W. (2022). Green Accounting, Corporate Social Responsibility Disclosure, and Manufacturing Company Profitability. *E-Journal of Accounting*, *32* (5), 1117. https://doi.org/10.24843/eja.2022.v32.i05.p01
- Dwi, A., & Aqamal Haq. (2023). The Influence of Green Accounting, Good Corporate Governance, and Company Size on Financial Performance. *Trisakti Journal of Economics*, 3 (1), 663–676. https://doi.org/10.25105/jet.v3i1.15464
- Gherghina, Ştefan C. (2024). Corporate Finance and Environmental, Social, and Governance (ESG) Practices. *Journal of Risk and Financial Management, 17* (7). https://doi.org/10.3390/jrfm17070308
- Gillan, S. L., Koch, A., & Starks, L. T. (2021a). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, *66* (September 2019). https://doi.org/10.1016/j.jcorpfin.2021.101889
- Gillan, S. L., Koch, A., & Starks, L. T. (2021b). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, *66* (September 2019), 101889. https://doi.org/10.1016/j.jcorpfin.2021.101889
- Govindan, K., Kilic, M., Uyar, A., & Karaman, A.S. (2021). Drivers and value-relevance of CSR performance in the logistics sector: A cross-country firm-level investigation. *International Journal of Production Economics*, 231 (November 2019), 107835. https://doi.org/10.1016/j.ijpe.2020.107835
- Irsyad, S. (2025). Raja Ampat Nickel Mines Are Busy, Tourism Ministry Takes These Three Steps. *Tempo*, 1–3. https://www.tempo.co/hiburan/ramai-tambang-nikel-raja-ampat-kemenpar-lakukan-tiga-langkah-ini-1672822
- Kabderian Dreyer, J., Moreira, M., Smith, W.T., & Sharma, V. (2023). Do environmental, social and governance practices affect portfolio returns? Evidence from the US stock market from 2002 to 2020. *Review of Accounting and Finance, 22* (1), 37–61. https://doi.org/10.1108/RAF-02-2022-0046
- Khan, S., & Gupta, S. (2023). The interplay of sustainability, corporate green accounting and firm financial performance: a meta-analytical investigation. *Sustainability Accounting, Management and Policy Journal*. https://doi.org/10.1108/SAMPJ-01-2022-0016
- Khan, S., & Gupta, S. (2025). Boosting the efficacy of green accounting for better firm performance: artificial intelligence and accounting quality as moderators. *Meditari Accountancy Research*, 33 (2), 472–496. https://doi.org/10.1108/MEDAR-02-2024-2379

- Komath, MAC, Doğan, M., & Sayılır, Ö. (2023). Impact of corporate governance and related controversies on the market value of banks. *Research in International Business and Finance,* 65 (May). https://doi.org/10.1016/j.ribaf.2023.101985
- Liu, Y., Kim, CY, Lee, E. H., & Yoo, J. W. (2022). Relationship between Sustainable Management Activities and Financial Performance: Mediating Effects of Non-Financial Performance and Moderating Effects of Institutional Environment. *Sustainability (Switzerland), 14* (3). https://doi.org/10.3390/su14031168
- Lusiana, M., Haat, MHC, Saputra, J., Yusliza, MY, Muhammad, Z., & Bon, AT (2021). A review of green accounting, corporate social responsibility disclosure, financial performance and firm value literature. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 5622–5640. https://doi.org/10.46254/AN11.20210952
- Lyngdoh, T., Chefor, E., & Lussier, B. (2023). Exploring the influence of supervisor and family work support on salespeople's engagement and unethical behavior. *Journal of Business and Industrial Marketing*, 38 (9), 1880–1898. https://doi.org/10.1108/JBIM-05-2021-0243
- Maryanti, El (2025). Green Accounting Practices and Firm Performance: A Meta-Analysis. *Open Access Indonesian Journal of Social Sciences, 8* (1), 1980–1994. https://doi.org/10.37275/oaijss.v8i1.286
- Monks, R.A.G., & Minow, N. (2021). *Corporate Governance Fifth Edition* (5th ed.). John Wiley & Sons.
- Putra, DG, Saputra, SE, Setiawan, P., Susanti, N., & Syamra, Y. (2023). Board of Commissioners and Corporate Social Responsibility Disclosure: The Role of Corporate Performance as Moderation. *Maksimum*, 13 (1), 85. https://doi.org/10.26714/mki.13.1.2023.85-96
- Rahman, HU, Zahid, M., & Al-Faryan, MAS (2023). ESG and firm performance: The rarely explored moderation of sustainability strategy and top management commitment. *Journal of Cleaner Production*, 404 (December 2022), 136859. https://doi.org/10.1016/j.jclepro.2023.136859
- Respati, RA, & Djumena, E. (2024, September 25). A Series of Challenges in Implementing Green Finance in Indonesia. *Kompas Online*, 1–2. https://money.kompas.com/read/2024/09/25/201200426/sederet-tantangan-penerapan-keuangan-hijau-di-indonesia
- Sharma, P., Panday, P., & Dangwal, R. C. (2020). Determinants of environmental, social and corporate governance (ESG) disclosure: a study of Indian companies. *International Journal of Disclosure and Governance*, 17 (4), 208–217. https://doi.org/10.1057/s41310-020-00085-y