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**THE IMPACT OF GREEN ACCOUNTING AND CORPORATE
 SOCIAL RESPONSIBILITY ON FIRM VALUE**

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Abstract:

The purpose of this study is to evaluate the role of green accounting implementation and corporate social responsibility disclosure in influencing firm value in energy sector companies listed on the Indonesia Stock Exchange during the 2022-2024 period. The study examines whether these two variables have a significant effect on firm value. This study employs a quantitative approach using secondary data obtained from annual reports and sustainability reports. The sample was selected using the purposive sampling method, resulting in 11 companies with a total of 33 observation units. Data processing and analysis were conducted using panel data regression with the assistance of the EViews application. The results indicate that the implementation of green accounting has a positive and significant effect on firm value, reflecting that transparency related to environmental costs and activities can enhance investor confidence. In contrast, corporate social responsibility shows a negative and significant effect on firm value, suggesting that CSR disclosure has not yet been fully perceived as providing direct economic benefits by investors in the energy sector. These findings contribute to environmental accounting research and inform sustainability-related decisions by companies and investors.

Keywords: Green Accounting; Corporate Social Responsibility; Firm Value; Energy Sector

INTRODUCTION

Company value is a crucial measure reflecting investors' assessment of a company's performance and future prospects, which is generally reflected in stock price movements in the capital market (Sari & Sedana, 2020). High company value indicates investor confidence in management's ability to effectively manage resources, generate profits, and maintain the company's operational sustainability, thus positively impacting the ease of obtaining funding and investment attractiveness (Wulandari et al., 2020). This research is based on Signaling Theory introduced by Spence (1973), which states that companies can send signals to investors by providing information about the company's performance and prospects. The implementation of sustainability practices, such as green accounting and Corporate Social Responsibility (CSR) disclosure, can serve as positive signals reflecting the company's commitment to transparency, social responsibility, and environmental management. These signals have the potential to influence investor perceptions and ultimately impact company value (Mevelia et al., 2024).

Companies operating in the energy sector currently face significant challenges in balancing economic performance with environmental concerns. Data from the Meteorology, Climatology, and Geophysics Agency (BMKG, 2024) shows an increase in greenhouse gas concentrations during the 2022-2024 period, indicating a significant contribution of industrial and energy activities to environmental degradation. This situation has increased public and investor attention to sustainability issues, particularly for energy companies whose operational activities risk causing air and water pollution and ecosystem damage. Investor awareness of environmental and social aspects is reflected in the share price dynamics of energy companies listed on the Indonesia Stock Exchange during 2022-2024. Several environmental pollution cases involving energy companies such as PT Medco Energi Internasional Tbk and PT Bayan Resources Tbk demonstrate that environmental issues can impact a company's reputation and market perception, which in turn impacts its value. In response to these challenges, the implementation of green accounting is seen as an approach capable of integrating economic interests with environmental conservation efforts (Hartiah & Pertiwi, 2022). Several studies have shown that green accounting has a positive impact on company value by increasing credibility and investor confidence (Astuti et al., 2023; Lestari & Restuningdiah, 2021). However, other studies have found different results, where environmental cost disclosure is still perceived as an additional burden and therefore has not significantly impacted company value (Fernando et al., 2024; Sapulette & Limba, 2021).

Corporate Social Responsibility (CSR) also plays a crucial role in shaping corporate value through its contribution to sustainable development and its relationship with the community (Rahmawati, 2021). Numerous studies have shown that CSR disclosure can enhance corporate image and investor confidence, thus positively impacting corporate value (Meha & Hariadi, 2021; Riyadh et al., 2022). However, other findings indicate that CSR is not always perceived as providing direct economic benefits to investors (Adiputra & Hermawan, 2020; Irmalasari et al., 2022). This relates to Signaling Theory, first proposed by Spence (1973) and later developed by Ross (1977), which explains the existence of information asymmetry between internal parties (insiders), such as management, and external parties (outsiders), particularly investors. Internal parties possess more complete information regarding the company's condition and can convey this to investors through the disclosure of financial and non-financial information. In the context of sustainability, the implementation of green accounting and CSR disclosure can be viewed as positive signals demonstrating a company's commitment to environmental and social aspects. These signals have the potential to increase investor confidence and impact company value (Handika et al., 2021; Apriani & Khairani, 2022). Given the high environmental pressures facing the energy sector and the discrepancies in previous research findings, this study aims to analyze the effect of green accounting and Corporate Social Responsibility (CSR) implementation on company value in energy sector companies listed on the Indonesia Stock Exchange during the 2022-2024 period. This research is expected to provide an empirical contribution to the development of accounting and sustainability literature, as well as provide consideration for management and investors in assessing the importance of sustainability practices as signals in increasing company value.

METHODS

This study applies a quantitative approach with a causal research design that aims to examine the causal relationship between green accounting and Corporate Social Responsibility on firm value. The research focuses on energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2022-2024 period. All energy sector companies listed on the IDX serve as the study population. The sample was determined using a nonprobability sampling method with a purposive sampling technique, yielding 11 eligible companies and 33 firm-year observations. The study uses secondary data sourced from the companies' annual reports and sustainability reports, obtained through the official website of the Indonesia Stock Exchange and the official websites of each company. The research model was designed to analyze the influence of the independent variables of green accounting and Corporate Social Responsibility on the dependent variable of firm value. Data analysis was performed using panel data regression with the assistance of EViews software version 13.0.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 1. Results of Descriptive Statistical Tests

	<i>Tobin's Q(Y)</i>	<i>Green Accounting (X1)</i>	<i>Corporate Social Responsibility(X2)</i>
Average	1.047168	20.96212	0.633636
Maximum	1.581486	24.27000	0.970000
Minimum	0.639234	13.98000	0.330000
Standard Deviation	0.264209	2.816196	0.194049
Number of Data (N)	33	33	33

Source: Processed data, 2026

Based on the results of the descriptive statistical tests in Table 1, the dataset comprised 33 observations. The following is a summary of the descriptive statistics for each variable:

Company Value (Y)

The average value recorded was 1.0471, with a range of 0.64-1.58 and a standard deviation of 0.2642, which indicates moderate data variation and a tendency for relatively high company values.

Green Accounting (X1)

The average value recorded was 20.9621 with a range of 13.98-24.27 and a standard deviation of 2.8162, indicating the highest level of data diversity among the research variables.

Corporate Social Responsibility (X2)

With an average value of 0.6336, a range of 0.33-0.97 and a standard deviation of 0.1940, which shows relatively homogeneous data with the lowest level of spread.

Panel Data Regression Model Selection

Chow Test

Table 2. Chow Test Results

Effect Test	Statistics	df	Prob.
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Cross-section F	13.713838	-10.2	0.0000
Cross-section Chi-square	68.026019	10	0.0000

Source: Processed data, 2025

Based on the results of the Chow test, the cross-section probability F value is 0.0000, which is <0.05 . This means that the best model in the Chow test is the Fixed Effect Model.

Hausman test

Table 3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Random cross-section	17.274422	2	0.0002

Source: Processed data, 2025

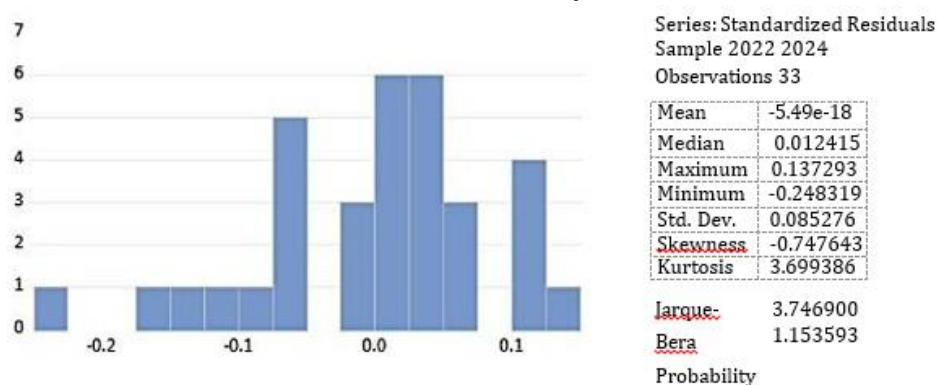
The Hausman test in the table yields a random cross-section probability of 0.0002, which is less than 0.05. Therefore, the most appropriate model according to the Hausman test is the Fixed Effect Model.

The Chow and Hausman tests indicate that the Fixed Effect Model (FEM) is the most appropriate panel data regression model for this study. Therefore, the next stage of analysis was conducted using the Fixed Effect Model.

Classical Assumption Test

Normality Test

Table 4. Normality Test Results



Source: Processed data, 2025

The normality assessment should be interpreted using the Jarque-Bera probability value; the reported value of 1.1535 requires verification because a probability cannot exceed 1.

Multicollinearity Test

Table 5. Multicollinearity Test Results

Y	1,000,000	0.189612	0.425780
X1	0.189612	1,000,000	0.413689
X2	0.425780	0.413689	1,000,000

Source: Processed data, 2025

The multicollinearity test states that the correlation value between independent variables is $0.4136 < 0.90$, which indicates that there is no multicollinearity.

Autocorrelation Test

Table 6. Autocorrelation Test Results

F-statistic	2.236734	Prob. F(4,26)	0.0926
Obs*R-squared	8.448492	Chi-Square Prob.(4)	0.0765

Source: Processed data, 2025

The autocorrelation test with Breusch–Godfrey produces a probability value of Obs*R-squared

is $0.0765 > 0.05$, so the model is free from autocorrelation.

Heteroscedasticity Test

Table 7. Results of Heteroscedasticity Test (Glejser Test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.030172	0.051840	-0.582018	0.5671
X1	0.003136	0.003035	1.033239	0.3138
X2	-0.023143	0.029952	-0.772675	0.4488

Source: Processed data, 2025

The Glejser test shows that the probability value of variable X_1 is 0.3138 and X_2 is 0.4488, and the Prob(F-statistic) is 0.1757. All of these values exceed 0.05, so it can be concluded that there is no heteroscedasticity.

Panel Data Regression Analysis

Table 8

Panel Data Regression Analysis FEM Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.227706	0.360405	-3.406457	0.0028
X1	0.124041	0.021103	5.877971	0.0000
X2	-0.513385	0.208232	-2.465442	0.0229

Source: Processed data, 2025

Based on panel data regression analysis using the panel least squares method with cross-section fixed effect specifications, the following regression model was obtained:

$$Y = -1.227706 + 0.124041X_1 - 0.513385X_2$$

The explanation of the panel data regression equation is as follows:

Constant

The constant value of -1.227706 indicates that if green accounting and CSR are zero, the company value is at -1.227706.

Green Accounting

The coefficient of 0.124041 indicates that green accounting has a positive influence on company value, where every one unit increase in green accounting will increase the company value by 0.124041.

Corporate Social Responsibility(CSR)

The coefficient of -0.513385 indicates that CSR has a negative influence on company value, where an increase of one unit of CSR decreases company value by 0.513385.

Table 9. T-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.227706	0.360405	-3.406457	0.0028
X1	0.124041	0.021103	5.877971	0.0000
X2	-0.513385	0.208232	-2.465442	0.0229

Source: Processed data, 2025

The t-test presented in the table shows that:

1) Hypothesis Testing (H1)

The green accounting variable (X_1) obtained a regression coefficient of 0.124041 with a significance level of 0.0000, which is below the 0.05 limit. This finding indicates that green accounting has a positive and significant influence on company value, so the first hypothesis (H_1) is accepted.

2) Hypothesis Testing (H2)

The Corporate Social Responsibility (CSR) variable (X_2) obtained a regression coefficient of -0.513385 with a significance level of 0.0229 which is below 0.05. These results indicate that CSR has a negative and significant influence on company value, so the second hypothesis (H_2) is rejected.

Table 10. F Test Results

R-squared	0.895825	Mean dependent variable	1.047168
Adjusted R-squared	0.833320	SD dependent var	0.264209
SE of regression	0.107867	Akaike info criterion	-1.328732
Sum squared residual	0.232706	Schwarz criterion	-0.739199
Log likelihood	34.92408	Hannan-Quinn criter.	-1.130372
F-statistic	14.33210	Durbin-Watson stat	2,599,407
Prob(F-statistic)	0.000000		

Source: Processed data, 2025

The test results show that the Prob (F-statistic) figure is at a value of $0.000000 < 0.05$, so that the regression model is declared feasible, and variables X_1 and X_2 together have a significant influence on variable Y. R-squared of 0.895825 shows that 89.58% of the variation in Y can be explained by X_1 and X_2 used in the model, while the other 10.42% is explained by other factors not included in this study.

The research findings show that the implementation of green accounting has a positive and significant impact on increasing company value in the energy sector. This indicates that the management and reporting of environmental costs can strengthen investor confidence and shape more positive market assessments. Green accounting practices also reflect a company's commitment to implementing sustainability principles and environmental responsibility, thus serving as a positive signal to investors, as explained in signaling theory. These findings support previous research by Lestari and Restuningdiah (2021) and Astuti et al. (2023), which emphasized the role of green accounting in increasing company value.

Conversely, research results show that Corporate Social Responsibility (CSR) has a negative and significant impact on company value. This suggests that CSR information has not been fully translated into economic benefits by investors. CSR activities tend to be perceived as additional costs, especially when their implementation is not optimally integrated with the company's business strategy. From a signaling theory perspective, this situation has the potential to send negative signals to the market, ultimately depressing company value, in line with the findings of Choi and Yoo (2022).

CONCLUSION

This study analyzes the influence of green accounting and Corporate Social Responsibility (CSR) on firm value in energy sector companies listed on the Indonesia Stock Exchange. The results show that green accounting has a positive and significant impact on firm value, indicating that environmental cost disclosure can increase investor confidence and market perception. Conversely, CSR has a negative and significant impact on firm value, indicating that CSR disclosure is not fully perceived as providing economic benefits if it is not integrated with the company's business strategy.

This study still has several limitations, including the limited scope of the research sector, the measurement of green accounting and CSR which is only based on report disclosure, the relatively short observation period, and the use of Tobin's Q as the sole indicator of company value. Based on these findings, it is recommended that the management of energy sector companies improve the consistent implementation of green accounting and integrate CSR with the company's business strategy. Furthermore, future research is expected to cover a wider range of industrial sectors and a longer observation period, as well as adding other variables and indicators of company value to obtain more comprehensive results.

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