

## THE INFLUENCE OF GREEN ACCOUNTING, CORPORATE EMISSION DISCLOSURE AND CORPORATE ENVIRONMENTAL GOVERNANCE AS A MODERATOR

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### Abstract

This study aims to determine and find empirical evidence regarding the Influence of Green Accounting, Corporate Emission Disclosure and Corporate Environmental Performance on Financial Performance with Corporate Governance as a Moderator. This study uses secondary data with data collection techniques using financial and annual reports of energy sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2021-2023. This study uses a purposive sampling technique with a total sample of 96 from 32 companies. Data testing in this study uses multiple linear regression analysis. The results of the study indicate that Green accounting has a negative and significant effect on financial performance. Carbon emission disclosure has a positive and significant effect on financial performance. Corporate environmental performance does not have a significant effect on financial performance. Corporate governance weakens the effect of green accounting on financial performance, Corporate governance strengthens the effect of carbon emission disclosure on financial performance. Corporate governance is unable to moderate the effect of corporate environmental performance on financial performance, Corporate Governance of the company is unable to moderate the effect of Corporate environmental on financial performance.

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### INTRODUCTION

The main objective of the company is to maximize value, profit and shareholder welfare. This can be achieved by improving the company's financial performance. Measurement of company performance can also be seen in financial reports using several financial ratios. Financial ratios are one of the financial analysis methods used as an indicator for assessing company development.(Kasmir, 2017). According toThe Greatest Showman (2020)There are several financial ratios such as solvency, activity, liquidity and profitability that have their respective functions. Back to the company's goals, one of which is optimizing the company's profit, then to measure it, the profitability ratio is used.

Profitability is a ratio that describes a company's ability to optimize profits.(Farizki & Masitoh, 2021). High profitability level shows the effectiveness of company management. Companies will be encouraged to start improving their company performance in order to obtain optimal profit amidst tight business competition. Companies that are able to generate large and stable profits will attract investors.

**Table 1.**  
Return On Assets (ROA) Ratio of Energy Sector Companies for the Period  
2021-2023

Company	2021	2022	2023
PT. Bumi Resources Tbk	7.94	7.56	5.49
PT. Bukit Asam Tbk	8.41	6.73	4.71
PT. Elnusa Tbk	7.25	4.99	4.51
PT. TBS Energi Utama Tbk	2.75	2.58	3.58
PT. Bayan Resources Tbk	9.05	7.42	3.51
PT. Medco Energi Internasional Tbk	3.50	4.22	3.41
PT. Golden Energy Mines Tbk	5.45	4.29	3.01
PT. Adaro Energy Indonesia Tbk	8.72	6.01	6.65
PT. National Gas Company Tbk	4.54	6.49	4.44
PT. Transcoal Pacific Tbk	2.88	2.31	2.01

Source: Idx.co.id, 2024

2023 will be a challenging time for a number of issuers in the mining and energy sector in Indonesia due to declining performance. Based on table 1.1, it can be seen that almost all companies experienced a decline in ROA in 2023. PT Bumi Resources Tbk in 2023 experienced a loss of IDR 487 billion, resulting in a decrease in ROA of 2.07%. Likewise, PT Bukit Asam Tbk reported a loss of IDR 6.48 trillion, resulting in a decrease in ROA of 2.02%. A similar thing happened to PT Elnusa Tbk, which experienced a loss of IDR 3.07 trillion with a decrease in ROA of 0.48% compared to the previous year.

Public trust in a company will increase if the company carries out environmentally friendly business activities with good corporate governance (Corporate Governance). Corporate Governance is a corporate governance that explains the bonds and relationships between various participants in the company that ensure the direction of the company's performance.(Maraya & Yendrawati, 2016). Good corporate governance certainly implements green accounting and disclosure of carbon emission gases and has good environmental performance. This condition will create a new ecosystem for the company, where the company will prioritize environmental impacts. That way the company will have high legitimacy from the community, so that it will also increase demand from consumers



and capital from investors.

The energy sector is the object of this research because according to data from the International Energy Agency, the energy sector is the largest contributor to GHG emissions globally (IEA, 2022). According to the PricewaterhouseCoopers Indonesia report in 2022, sustainability reporting has been mandatory in Indonesia since 2019. In 2022, 88% of listed companies in Indonesia had submitted their sustainability reports. (PWC, 2023).

### RESEARCH METHODS

In this study, the design used is a clause relationship, where the relationship is causal (Sugiyono, 2016). So, here there are independent variables (variables that influence) dependent variables (variables that are influenced). The clause relationship aims to test how much influence the independent variable has on the dependent variable. The dependent variable used is financial performance, while the independent variables used are Green Accounting, Carbon Emission Disclosure and Environmental Corporate Performance. And using a moderating variable to test the indirect relationship between the independent variable and the dependent variable, namely Corporate Governance.

Population is the entire collection of research or objects to be studied. The population in this study is the energy sector companies listed on the Indonesia Stock Exchange (IDX) in the period 2021-2023 ([www.idx.co.id](http://www.idx.co.id)). Sample selection uses purposive sampling technique, which is a sampling technique with certain considerations (Sugiyono, 2016). So that companies that do not meet the criteria determined by the study will be excluded from the sample. The population in this study is energy sector companies listed on the Indonesia Stock Exchange during 2021-2023.

### RESULTS AND DISCUSSION

#### Uji Coefficient of Determination (Adjusted- R Square)

This test is conducted to measure how far the independent variable's ability to explain the dependent variable. The table will present the results of the determination coefficient test (Adjusted-R Square) in this study.

**Table 2**  
Results of the Determination Coefficient Test (Adjusted- R Square)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.428a	.183	.156	1.97357

a. Predictors: (Constant), Corporate Environmental Performance, Carbon Emission Disclosure, Green Accounting

Source: SPSS Output, 2024

Table 1.2 above explains that the tax avoidance variable can be explained by other variables, such as Green Accounting, Carbon Emission Disclosure and Corporate Environmental Performance by 0.156 or around 15.6%. While the remaining 84.4% is explained by other factors not explained in this study, such as company size, transparency, profit growth, company value and others.

#### F Statistic Test

The F statistical test was conducted to test whether the model used in this study was significant. If the significance value is <0.05, then this model can be declared significant. Table 1.3 presents the results of the F statistical test in this study.

**Table 3**  
F Statistic Test Results  
ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	80,192	3	26,731	6,863	.000b
	Residual	358,339	92	3.895		
	Total	438,531	95			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Corporate Environmental Performance, Carbon Emission Disclosure, Green Accounting

Source: SPSS Output, 2024

Based on table 1.3 above, it shows that the calculated F value is 6.863 with a probability of 0.000. Because the probability value is less than 0.05 and  $F_{count} (8.245) > F_{table} (3.09)$  ( $df_1 = 102 - 3$ ;  $df_2 = 3-1$ ), it can be said that carbon emission disclosure and corporate environmental performance have a simultaneous effect on financial performance.

### Significance Test of Individual Parameters (t-Statistic Test)

The t-statistic test is basically to show how far the influence of one independent/explanatory variable individually in explaining the variation of the dependent variable. If the significance value is more than 0.05, it is stated that there is an influence on the relationship.(Sugiyono, 2015). The following are the results of the t-statistic test presented in table 1.3.

**Table 4**  
Results of Individual Parameter Significance Test (t Statistic Test)  
Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.496	.951		3,677	.000
<i>Green Accounting</i>	-.167	.051	-.309	-3.264	.002
<i>Carbon Emission Disclosure</i>	7,404	2.404	.290	3,080	.003
<i>Corporate Environmental Performance</i>	.092	.227	.038	.406	.686

a. Dependent Variable: Financial Performance

Source: SPSS Output, 2024

From table 1.4 above, it can be seen the influence between the independent variable and the dependent variable partially, with an alpha value of 0.05 and a t table value of 1.986 ( $df = 96 - 3 - 1$ ; 0.05), the following is the explanation:

- Green Accounting Variables  
(Sig = 0.002 & tcount = 3.264)  
Sig Value (0.002 < 0.05)  
The calculated t value (3,264 > 1,986)

Based on this, it can be concluded that the coefficient of the green accounting variable partially has a significant influence on the financial performance variable.

- Variable Carbon Emission Disclosure  
(Sig = 0.003 & tcount = 7.404)  
Sig Value (0.003 < 0.05)  
The calculated t value (7,404 > 1,986)



Based on this, it can be concluded that the coefficient of the carbon emission disclosure variable partially has a significant influence on the financial performance variable.

### 3. Corporate Environmental Performance Variable

(Sig = 0.686 & tcount = 0.406)

Sig Value (0.686 > 0.05)

The calculated t value (0,406 < 1,986)

Based on this, it can be concluded that the coefficient of the corporate environmental performance variable partially has no influence on the financial performance variable.

## Discussion

### The Influence of Green Accounting on Financial Performance

The results of this study indicate that the higher the environmental costs incurred by the company will have an impact on the company's profitability (ROA). Environmental costs are costs incurred by the company to fulfill the company's social and environmental responsibilities. Environmental costs can have a negative impact on profitability because the benefits of incurring environmental costs are not felt directly, while in recording environmental costs become a burden in the period. This environmental cost is viewed negatively by management because these costs reduce the company's profits.

### The Impact of Carbon Emission Disclosure on Financial Performance

The results of this study indicate that the higher the disclosure of carbon emission disclosure will increase financial performance. This is because the high disclosure of the company on carbon emitted from the company's operations is a form of transparency and accountability of the company. This transparency effort is certainly considered good by the community and other stakeholders because it is considered that the company has good sustainability. This will also provide capital from investors and increased sales from the image created.

The results of this study also support the legitimacy theory, because companies with high profitability have good legitimacy in society and its investors. These results can also be in accordance with stakeholder theory where companies with high profitability have strategic capabilities in managing their finances. This includes activities to disclose social and environmental information that aims to improve its sustainability. By disclosing its carbon emissions, the company will be accepted by the surrounding community and will be viewed well by its investors.

### The Influence of Corporate Environmental Performance on Financial Performance

The results of this study indicate that good or bad environmental performance carried out by the company does not affect the increase in profitability. This is because the company feels that assessing environmental performance will not provide benefits. Where the environmental performance assessment with the PROPER predicate only consists of large companies, not companies with high profitability.

The reason for rejecting this hypothesis is because although on average the company has obtained a green rating which means the company is making efforts to manage the environment according to the law. However, the results of environmental performance can be said to be sufficient to guarantee that the company's profitability will increase. From the results of the study, information that has been issued by the Ministry of Environment regarding environmental performance cannot affect profitability.

### The Influence of Corporate Governance in Moderating Green Accounting on Financial Performance

The results of this study indicate that the better corporate governance will increase environmental



costs, although it will reduce financial performance. The application of green accounting is an environmental and social accounting system that is a form of corporate governance. In environmental cost accounting, green accounting is a burden that will reduce profits. In addition, the benefits or effects of green accounting are not felt directly. Even so, companies consider environmental costs to be future investments with the aim of corporate sustainability.

### **The Influence of Corporate Governance in Moderating Carbon Emission Disclosure on Financial Performance**

The results of this study indicate that the higher the carbon emission disclosure will improve corporate governance, thus improving financial performance. This is because carbon emission disclosure is one form of implementing the principles of good corporate governance, namely transparency and accountability. The company considers that providing information to investors and the public regarding the company's activities is its responsibility. In addition, by disclosing its carbon emissions, the company is considered to be concerned about its sustainability. With these factors, it can be a consideration for funding from investors and public interest in buying its products.

### **The Influence of Corporate Governance in Moderating Corporate Environmental Performance on Financial Performance**

The inability of corporate governance to moderate because to get a good PROPER predicate must meet many standards and requires a lot of costs. This makes the company's management reluctant to optimize it. In addition, investors are also more interested in the company's environmental and social disclosures in the annual and sustainability reports. According to investors, both reports have more detailed and actual data for decision-making materials. In addition, compared to pursuing the PROPER predicate, the reporting is considered more effective and efficient.

## **CONCLUSION AND SUGGESTIONS**

This study aims to obtain strong evidence regarding the influence of green accounting, carbon emission disclosure and corporate environmental performance on financial performance with corporate governance as a moderating variable. The population in the study were energy sector companies listed on the IDX in the period 2021-2023, and a sample of 32 companies was obtained using the purposive sampling technique. Based on the data patterns that have been collected and the results of tests that have been carried out using SPSS 23, the following conclusions can be drawn:

1. *Green accounting* has a negative and significant effect on financial performance.
2. *Carbon emission disclosure* has a positive and significant effect on financial performance.
3. *Corporate environmental performance* has a significant impact on financial performance.
4. *Corporate governance* weakening the influence of green accounting on financial performance
5. *Corporate governance* strengthening the influence of carbon emission disclosure on financial performance.
6. *Corporate governance* unable to moderate the influence of corporate environmental performance on financial performance

The author realizes that the author's knowledge and experience both theoretically and practically are still limited. The author hopes that future research can present better quality research results with several inputs, including:

1. Further research is expected to use proxies from corporate environmental performance and corporate governance more broadly. As well as testing several financial ratios such as liquidity, leverage and solvency.



2. Further research is suggested to expand the research population to include infrastructure, utilities and transportation sectors which are considered to be the largest contributors to carbon emissions.
3. Further researchers are expected to add other determinant factors as independent or moderating variables such as corporate social responsibility, company value, company size and so on.

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