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DETERMINATION OF COMPANY VALUE IN THE ENERGY AND BASIC MATERIAL SECTOR

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Abstract

This research investigates the determinants of company value within the Energy and Basic Materials sectors listed on the Indonesia Stock Exchange (IDX) from 2021-2023. It examines the impact of Carbon Emission Disclosure (CES), Green Innovation (IH), Environmental, Social, and Governance (ESG), Eco-efficiency (EFI), and Environmental Performance (KL) on Tobin's Q as a measure of company value. The analysis, employing panel data regression with a Fixed Effect Model (FEM), reveals that while ESG, EFI, and KL positively influence company value, CES has a negative impact, and IH shows an insignificant effect. These findings provide insights for companies aiming to enhance their market value by prioritizing environmental and social responsibility.

Keywords: ***Company Value, Tobin's Q, Carbon Emission Disclosure, Green Innovation, Environmental Social Governance (ESG), Eco-Efficiency, Environmental Performance, Indonesia Stock Exchange***

Background

The energy sector is one of the industrial sectors that specifically influences the increase in company production and generally affects the national economy. According to the World Economic Forum (2019), economic growth is significantly influenced by the increase in energy consumption. In 2018, total primary energy production, consisting of petroleum, natural gas, coal, and renewable energy, reached 411.6 MTOE (Metric Ton Oil Equivalent). Total final energy consumption (excluding traditional biomass) in 2018 was approximately 114 MTOE (Metric Ton Oil Equivalent), consisting of the transportation sector (40%), industry (36%), household (16%), commercial (6%), and other sectors (2%) (Secretariat General of the National Energy Council, 2019). Energy sector companies include companies mining for petroleum, natural gas, coal, and alternative energy. Energy sector companies are market initiators on the IDX and also include one of the biggest opportunities in driving the national economy. The use of energy sector companies as research subjects because these companies experience additional companies from year to year, indicating that energy sector companies have good prospects for continued growth. In 2023, stocks in the energy sector recorded the best performance in 2022. However, it's important to understand that Climate Watch data from 2023 shows that the energy sector plays a significant role in greenhouse gas emissions. Greenhouse gas emissions have a negative impact on climate change (cnbcindonesia.com).

Issues in the Basic Materials and Energy sectors have had a significant impact on companies, particularly on their value. Market prices in these two sectors have declined in recent years, and this decline in performance in the Basic Materials and Energy sectors has had a negative impact on companies and their value. The increasing number of environmental pollution cases demonstrates that companies should not solely pursue profits but also consider their surroundings by implementing international environmental management standards to enhance their value.(Agustia et al., 2019). The problem of Carbon Emissions, Green Innovation, Environmental, Social, Governance (ESG), Eco-efficiency and environmental performance in Indonesia are aspects that must be considered by companies to ensure good company value and good company performance.(Damas et al., 2021)In general, a company operates not solely for profit, as this allows the company to maintain its existence (Almashhadani, 2022). One way to achieve this goal is by increasing the company's value (Deng and Zhao, 2022). Enterprise value is the actual value of the assets when the company is sold or the market value of the company's shares.(Sari & Husada, 2021)If stock prices rise, the company's value will increase, and shareholders will be more prosperous (Iskandar & Efita, 2016). Company value is an investor's perception of a company's success, which is closely related to stock prices. A high company value reflects good performance.(Rahmianingsih & Malau, 2022). Companies not only focus on profitability, but also

prioritize social and environmental responsibility. One of the company's goals is to increase corporate value so that shareholder wealth can be maximized.(Valencia & Sri, 2017).

Basic Materials companies have inconsistent company values, as reflected in the fluctuating or declining company values outlined in the graph above. Three companies consistently saw their values decline, namely CLPI, CTBN, and DKFT, all significantly below 0.1. A Tobin's Q value <1 indicates undervalued stocks. The ideal Tobin's Q value is 1, indicating the market has successfully valued the company fairly (Fahmi, 2016). However, DPNS's company value rose again in 2021-2023. This decline in value was caused by various internal and external factors, for example, external factors were caused by green innovation and poor environmental performance implemented by the company. As the company advances and technological developments become more rapid, the company will face many obstacles to progress and compete with competitors and increase its company value.

Energy sector companies also experienced declines or fluctuations. Significant declines occurred in SOCI companies with company values below 1. Companies in SGER, SHIP, SMMT, and TCPI experienced fluctuations, while companies in TPMA (Indonesian National Societies) had company values above 1 in 2022. This decline in company value is common and frequently occurs, especially in the energy sector. This is due to several factors, such as unstable and transparent disclosure of carbon emissions or inefficient ESG disclosure. Other factors that contribute to fluctuating company values include managerial ownership, dividend policy, investment decisions, capital structure, company size, and profitability. Integrating environmental and social factors into business strategy can increase company value through increased transparency, image, and investor confidence (Chen & Xie, 2022). Therefore, companies must actively disclose environmental information, including carbon emissions, and invest in green innovation and operational optimization to substantially increase their company value (Cossu et al., 2020).

Carbon emission disclosure is the process of recording, acknowledging, disclosing, and measuring by companies the level of carbon emissions they produce, which come from the combustion of carbon-containing compounds such as (CO2), fossil fuels, and other fuels.(Hardianti & Mulyani, 2023). Greenhouse gases is a term used to describe gases that can cause the greenhouse effect, such as carbon dioxide (CO2), ozone (O3), water vapor (H2O), methane (CH4), chlorofluorocarbons (CFCs), dinitrooxide (N2O), and others.(Saka & Oshika, 2014). The annual increase in global temperatures is caused by the greenhouse gas effect (Vistinasari et al., 2022). Massive emissions of toxic and hazardous gases originating from various human activities on Earth are released into the atmosphere, causing solar energy to be trapped and damaging the atmosphere (Anggraeni, 2015; Cossu et al., 2020; Li et al., 2020). Greenhouse gas emissions are seen as a major risk to nature and humans because increased emissions affect the Earth's ecosystem (Giannarakis et al., 2017).

Carbon emissions consistently increased from 2016 to 2019. However, they decreased in 2020, and then increased sharply from 2021 to 2022. This increase was caused by the increased use of fossil fuels, gas, and coal (Ritchie & Roser, 2020). Industrial activities from companies are one of the main causes of environmental pollution (Panggau & Septiani, 2017). Previous research has found (Sunarto, 2024;Rahmianingsih & Malau, 2022; Putri & Agustin, 2023; Yuliandhari et al., 2023; Khatib et al., 2023)The research results explain that carbon emission disclosure has a positive and significant effect on company value.

Green Innovation is an innovation concept that is not much different from the concept of conventional innovation, however, Green Innovation prioritizes innovation that not only generates economic benefits, but also creates competitive advantages accompanied by reduced environmental impacts (Agustia et al., 2019). Green innovation is used in company operations in the form of environmentally friendly processes and products to increase company competitiveness, including innovations in technology, such as energy savings, pollution prevention, recycling management, and waste management (Tang et al., 2017). Empirical research on the impact of green innovation on CFP has not reached a consensus (Duque-Grisales et al., 2020; Asni and Agustia, 2021). The results of previous studies found (Amalo & Husen, 2024;Zhang et al., 2019;Ramadhan & Widiastuty, 2023; Yuliandhari et al., 2023; Xie et al., 2022; Yuniarti et al., 2022; Ulfah et al., 2024)stated that green innovation has a positive and significant effect on company value. This means that the higher the green innovation value, the higher the company value. The results of this study contradict the results of the previous study.(Ayu Wijayanti & Yoseph Agus Bagus Budi N., 2024; Silaban & Dewi, 2023; Nada, 2024)found that Green Innovation negatively impacts company value. This indicates that higher Green Innovation levels will decrease company value.

Environmental, Social, Governance (ESG). ESG is a standard designed to evaluate and regulate a company's environmental, social, and governance performance.(Sadiq et al., 2023)The increasing number of sustainability report disclosures indicates that companies believe ESG performance is a key consideration in investor decision-making, as evidenced by the growing investor interest in ESG-based financial instruments (IN Sari, 2021). A survey conducted by the Mandiri Institute on the challenges faced by Indonesian companies in implementing ESG, along with the Indonesia Business Council for Sustainable Development (IBCSD), also reported that 40% of Indonesian companies still lack an understanding of the importance of ESG implementation (Defitri, 2023).

*Eco-Efficiency*Philosophically, Eco-Efficiency management is a business activity that generates economic benefits while simultaneously improving the environment, enabling companies to be more environmentally responsible and reduce their impacts (Aviyanti & Isbanah, 2019). Previous research (Dianti Chia Audri, 2024;Damas et al., 2021; Syfa & Sofie, 2023; Rodríguez-García et al., 2022;Nila Wandasari and Deni Darmawati (2023) found that eco-efficiency has a positive and significant effect on company value. This indicates that higher eco-efficiency values increase company value. Green innovation directly contributes to increased company value because it demonstrates a company's ability to develop more environmentally friendly solutions, which are positively responded to by the market. However, this differs from the research findings found in(Rahelliamelinda & Handoko, 2024; Amalo & Husen, 2024;(Silaban & Dewi, 2023; Yuliandhari et al., 2023; Ulfah et al., 2024)states that Eco-Efficiency has a negative and significant effect on company value. This means that higher company value will decrease the company's value.

Environmental Performance. Environmental performance in the environmental protection and management law No. 32 of 2009, Environmental Performance involves systematic and integrated efforts to preserve environmental functions and prevent damage or pollution.(Nisa, 2023)Environmental performance, often referred to as environmental performance, is the measurable outcome of an environmental management system related to the control of its environmental aspects (Zhang et al., 2022; Singh et al., 2019). The Ministry of Environment and Forestry (KLHK) recorded five oil and gas companies and six mining companies carrying out activities with side effects in the form of environmental degradation during 2017-2018 (Amelia, 2019). In 2021, one upstream oil and gas company was sued by the Indonesian Forest Destruction Monitoring Agency (LPPHI) for alleged pollution of community gardens due to an oil spill (Syukur, 2021). These cases demonstrate that not all oil and gas and mining companies have good environmental performance, thus questioning the legitimacy of these companies from environmental observers and the general public (Meiyana & Aisyah, 2019).

LITERATURE REVIEW

The Effect of Carbon Emission Disclosure (CES) on Company Value (Tobin's Q)

Carbon Emission Disclosure (CES) is the process by which companies record, acknowledge, and measure the level of carbon emissions they produce, which come from the combustion of carbon-containing compounds such as (CO2), fossil fuels, and other fuels.(Hardianti & Mulyani, 2023).

The Influence of Green Innovation (IH) on Firm Value (Tobin's Q)

Green innovation is an idea that aims to provide sustainable solutions for effective production processes by using raw materials and energy efficiently so as to reduce production costs.(R. Dewi & Rahmianingsih, 2020)Green innovation has a positive and significant impact on company value. This means that the higher the green innovation value, the higher the company value.(Dianti Chika Audri & Puspitasari, 2024; Amalo & Husen, 2024; Zhang et al., 2019; Ramadhan & Widiastuty, 2023; Yuliandhari et al., 2023; Ulfah et al., 2024)This indicates that consistent investment and development of green innovation can provide significant benefits to companies, particularly in increasing their market value and competitiveness.

The Influence of Environmental, Social, Governance (ESG) on Company Value (Tobin's Q)

ESG disclosure is the process by which a company communicates its business practices, which are based on ESG principles, namely environmental, social, and corporate governance, when conducting its operations. ESG is a standard of corporate investment practices that incorporates and implements company policies in accordance with consistent environmental, social, and governance principles.(Ghazali & Zulmaita, 2020)Previous research has found that Environmental, Social, and Governance (ESG) has a positive and significant impact on company value. This means that higher ESG levels will increase company value.(Rahelliamelinda & Handoko, 2024),Zhang et al., 2019;Husnah, 2023;Ramadhan & Widiastuty, 2023; Nurdiati et al., 2023)This indicates that companies that excel in environmental, social, and governance (ESG) sustainability factors have a greater opportunity to increase their attractiveness to investors, strengthen their reputation, and achieve better financial performance.

The Effect of Eco-Efficiency (EFI) on Firm Value (Tobin's Q)

Eco-efficiency is a business strategy that aims to reduce environmental damage by optimizing resource use and increasing economic profitability.(Agustia et al., 2019)Previous research findings indicate that eco-efficiency has a positive and significant impact on company value. This indicates that higher eco-efficiency values increase company value (Dianti Chika Audri & Puspitasari, 2024;Damas et al., 2021; Syfa & Sofie, 2023; Rodríguez-García et al., 2022;Nila Wandasari & Deni Darmawati, 2023). Companies that become more efficient in using natural resources and reducing their environmental impact have a greater opportunity to increase their market value and competitiveness.

The Influence of Environmental Performance (KL) on Company Value (Tobin's Q)

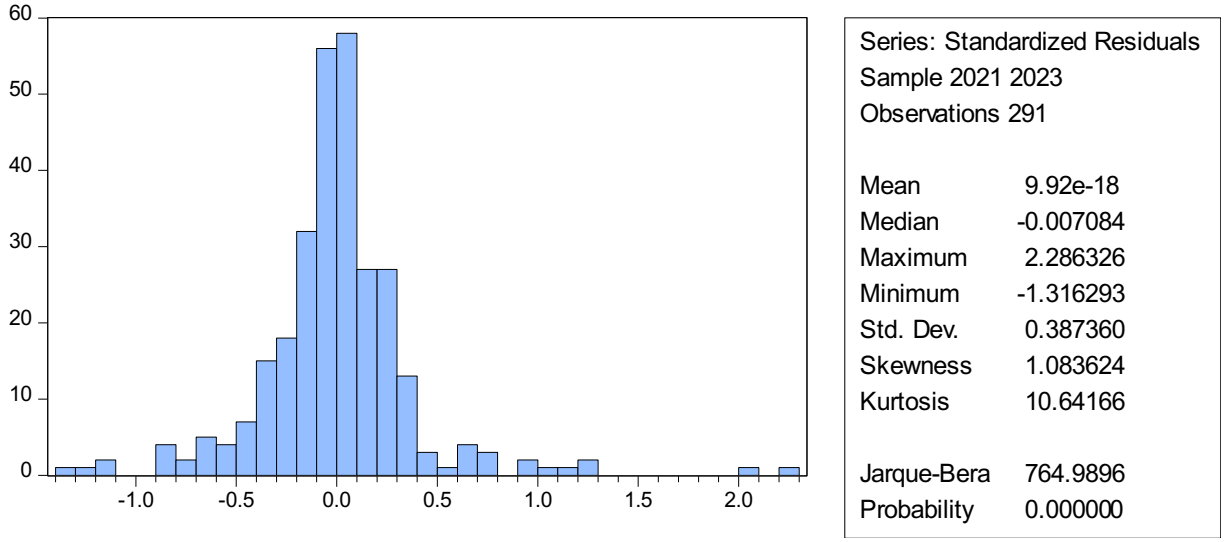
Environmental performance refers to the evaluation and measurement of the impact of an entity's activities, such as a company or organization, on its surrounding environment. This encompasses a number of factors, such as greenhouse gas emissions, natural resource utilization, and impacts on air quality, water quality, and biodiversity.(Agustia et al., 2019). Environmental performance aims to identify and manage risks associated with human activities, and also to ensure sustainability in the interactions between industrial activities and ecosystems.(Subires et al., 2019)Environmental performance has a positive and significant impact on company value. This means that the higher the environmental performance, the higher the company's value.(Syfa & Sofie, 2023; L. Dewi, Eliza, & Rifan, 2023; Soedjatmiko et al., 2021; Noor & Ginting, 2022; Khanifah et al., 2020)This shows that companies with good environmental performance tend to be more valued by investors, consumers, and other stakeholders, thereby increasing their market value.

METHODOLOGY

The objects of this study are Carbon Emission Disclosure (CE), Green Innovation (IH), Environment, Social, Governance (ESG), Eco-efficiency (EFI), and Environmental Performance (KL) on company value (Tobin's Q) in the Basic Material and Energy sector listed on the Indonesia Stock Exchange for the 2021-2024 period. The research location was conducted at companies in the Basic Material and Energy sector listed on the Indonesia Stock Exchange for the 2021-2023 period by accessing the official website.www.idx.co.id The population used in this study includes all companies listed on the Indonesian Stock Exchange in the Basic Materials and Energy sectors. The total population of companies in the Basic Materials and Energy sectors is 193, with 106 companies in the Basic Materials sector and 87 companies in the Energy sector. The sample is a subset of the population taken and considered representative of the characteristics of that population for analysis.(Sonia & Nazir, 2022)The method used for sampling in this study was purposive sampling. The purposive sampling method is a technique where certain criteria are set in selecting a sample. (Sonia & Nazir, 2022). The data used in this study were collected from annual financial reports and sustainability reports submitted by companies in the Basic Material and Energy sectors listed on the Indonesia Stock Exchange from 2021 to 2024. Information can be found. The data collection technique implemented in this study was the documentation method. This method involved collecting data from the annual financial reports and sustainability reports of companies in the raw materials and energy sectors listed on the Indonesia Stock Exchange during the 2021-2023 research period through access to their official websites.www.idx.co.idor the websites of each company sampled in this study.

RESULTS AND DISCUSSION

Normality Test



The results of the normality test show that the probability value is 0.0000, which is less than 0.05. Therefore, it can be concluded that the data in this study is not normally distributed. This research data is in panel form, so each cross-section has a different data trend each year, so the assumption of normality can be ignored (Gujarati & Porter, 2012).

Multicollinearity Test

The results of the multicollinearity test show that all cells between independent variables in this study have correlation values below 0.8. Therefore, it can be concluded that the data in this study does not exhibit symptoms of multicollinearity. This means that all independent variables in this study—carbon emission disclosure (PEK), Green Innovation (IH), Environmental, Social, Governance (ESG), Eco-efficiency (EFI), and Environmental Performance (KL)—have no relationship or no correlation symptoms.

Heteroscedasticity Test

Variables	t-Statistic	Prob.
C	2.3335	0.0203
PEK	-5.0470	0.0000
IH	-2.9065	0.0039
ESG	-0.9959	0.3201
EFI	2.0867	0.0378
KL	3.5508	0.0004

The results of the heteroscedasticity test show that not all independent variables with the Glejser test have a value above 0.05, so it can be concluded that the data in this study exhibits symptoms of heteroscedasticity.

Autocorrelation Test

R-squared	0.3487	Mean dependent variable	2.5116
Adjusted R-squared	0.3255	SD dependent var	1.0167
SE of regression	0.8350	Akaike info criterion	2.5144
F-statistic	14,996	Durbin-Watson stat	1.9303
Prob(F-statistic)	0.0000		

The results of the heteroscedasticity test can be seen from the Durbin Watson value. In this study, the Durbin Watson value is1.930374, this value is between the tolerance values of the autocorrelation test, namely -2 and 2. Based on the autocorrelation test criteria, it can be concluded that the data in this study does not show symptoms of autocorrelation.

Model Selection Techniques
Chow Test

Effects Test	Statistics	df	Prob.
Cross-section F	11.4124	(96,186)	0.0000
Cross-section Chi-square	561.6623	96	0.0000

The results of the Chow Test can be seen that the probability value in the Chi-Square row is 0.0000. The Chi-Square value is below the standard tolerance value of 0.05, so it can be concluded that the best model from the results of the Chow test is the Fixed Effect Model (FEM) so it must be continued by conducting a Hausman test to see the best model between the Fixed Effect Model (FEM) and the Random Effect Model (REM).

Hausman test

Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Random cross-section	30.3582	8	0.0002

The Chow test results show a probability value of 0.0002, which is below 0.05. Therefore, it can be concluded that the Hausman test results select the best model, the Fixed Effect Model (FEM). Therefore, the estimation included in this study to test the hypothesis is panel data regression with the Fixed Effect Model (FEM).

Panel Data Regression Estimation

Table 1 Panel Data Regression Estimation with Fixed Effect Model (FEM)

Variables	Coefficient	t-Statistic
C	14.4933	3.9836
PEK	-1.3730	-2.7266(***)
IH	0.0281	0.0924
ESG	2.2849	3.1844(***)
EFI	0.2430	1.7418(*)
KL	0.1245	2.2641(**)
R-squared		0.9413
Adjusted R-squared		0.9085
F-statistic		28,7017
Prob(F-statistic)		0.0000

Source: Processed Data, 2025
Note: the level of significance is marked with (***), (**) and (*), significance at the 1%, 5% and 10% levels.

Discussion
The Effect of Carbon Emission Disclosure (CES) on Company Value (Tobin's Q)

Disclosure of Carbon Emissions (PEK) has a negative and significant effect on company value (Tobin's Q) at the 1% level with a coefficient value of-1.3730and the probability value is0.0070. Therefore, it can be concluded that Carbon Emission Disclosure (CES) has a negative and significant effect on company value (Tobin's Q) in Basic Material and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. This indicates that H1 in this study is rejected, meaning the findings in this study do not support the hypothesis. This means that the higher the Carbon Emission Disclosure (CES), the lower the company value (Tobin's Q). High carbon emission disclosure can be interpreted by the market as a negative signal about the company's sustainability, thus reducing the company's value. These findings are in line with the results of the study.(Dianti Chika Audri & Puspitasari, 2024; Kurnia et al., 2020; Primanandari & Budiasih, 2021)stated that Carbon Emission Disclosure (CES) has a negative and significant effect on company value (Tobin's Q). However, the results of this study are in the

opposite direction to the research conducted by(Nisa, 2023; Putri & Agustin, 2023; L. Dewi, Eliza, & Rifan, 2023; Yuliandhari et al., 2023; Khatib et al., 2023)with the finding that Carbon Emission Disclosure (CES) has a positive and significant effect on company value (Tobin's Q).

The Influence of Green Innovation (IH) on Firm Value (Tobin's Q)

Green Innovation (IH) has a positive but insignificant effect on company value (Tobin's Q) at the 10% level with a coefficient value of0.0281and the probability value is0.9264. Therefore, it can be concluded that Green Innovation (IH) has a positive but insignificant effect on firm value (Tobin's Q) in Basic Materials and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. This indicates that H1 in this study is not accepted, meaning the findings in this study support the hypothesis. This means that a higher Green Innovation (IH) value will increase firm value (Tobin's Q). This indicates that consistent investment and development of green innovation can provide significant benefits for companies, especially in increasing market value and competitiveness. The results of this study are in line with the findings of(Dianti Chika Audri & Puspitasari, 2024; Amalo & Husen, 2024; Zhang et al., 2019; Ramadhan & Widiastuty, 2023; Yuliandhari et al., 2023; Ulfah et al., 2024)The results state that Green Innovation (IH) has a positive and significant effect on company value (Tobin's Q). However, this finding differs from the results of the previous study.(Putri & Agustin, 2023; Silaban & Dewi, 2023)which states that Green Innovation (IH) has no effect on company value (Tobin's Q).

The Influence of Environmental, Social, Governance (ESG) on Company Value (Tobin's Q)

*Environmental, Social, Governance (ESG)*has a positive and significant effect on company value (Tobin's Q) at the 1% level with a coefficient value of2.2849and the probability value is0.0017. Therefore, it can be concluded that Environmental, Social, and Governance (ESG) has a positive and significant effect on company value (Tobin's Q) in Basic Materials and Energy companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. This indicates that H1 in this study is accepted, meaning the findings in this study support the hypothesis. This means that the higher the Environmental, Social, and Governance (ESG) level, the higher the company's value. This indicates that companies that excel in environmental, social, and governance (ESG) sustainability factors have a greater opportunity to increase their attractiveness to investors, strengthen their reputation, and achieve better financial performance. The findings of this study are in line with the results of other research.(Rahelliamelinda & Handoko, 2024),Zhang et al., 2019;Husnah, 2023;Ramadhan & Widiastuty, 2023; Nurdiati et al., 2023)suggested that Environmental, Social, and Governance (ESG) had a positive and significant effect on company value (Tobin's Q). However, the results of this study contradicted these findings.(Ningwati et al., 2022)which states that Environmental, Social, Governance (ESG) has a negative and significant effect on company value (Tobin's Q)

The Effect of Eco-Efficiency (EFI) on Firm Value (Tobin's Q)

Eco-efficiency (EFI) has a positive and significant effect on company value (Tobin's Q) at the 10% level with a coefficient value of0.2430and the probability value is0.0832. Therefore, it can be concluded that Eco-efficiency (EFI) has a positive and significant effect on firm value (Tobin's Q) in Basic Material and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. This indicates that H1 in this study is accepted, meaning the findings in this study support the hypothesis. This indicates that companies that disclose Eco-efficiency (EFI) will have an increased firm value (Tobin's Q), but this is different from companies that do not implement eco-efficiency, whose firm value tends to be low. Companies that are increasingly efficient in using natural resources and reducing their environmental impact have a greater opportunity to increase their market value and competitiveness. This finding is in line with the results of research.(Dianti Chika Audri & Puspitasari, 2024; Damas et al., 2021; Syfa & Sofie, 2023; Rodríguez-García et al., 2022) found that Eco-efficiency (EFI) has a positive and significant effect on company value (Tobin's Q). However, these findings differ from the results of the previous study.(Rahmianingsih & Malau, 2022; Ulfah et al., 2024)said that Eco-efficiency (EFI) has no effect on company value (Tobin's Q).

The Influence of Environmental Performance (KL) on Company Value (Tobin's Q)

Environmental Performance (KL) has a positive and significant effect on company value (Tobin's Q) at the 5% level with a coefficient value of0.1245and the probability value is0.0247. Therefore, it can be concluded that Environmental Performance (EPS) has a significant influence on company value (Tobin's Q) in Basic Materials and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. This indicates that H1 in this study is accepted, meaning the findings in this study support the hypothesis. This means that the higher the Environmental Performance (EPS) value, the higher the company value (Tobin's Q). This indicates that companies with good environmental performance tend to be more valued by investors, consumers, and other stakeholders, thereby increasing company value. Environmental performance is no longer just a social obligation, but a strategic

advantage. Environmentally conscious companies are not only greener but also more valuable and competitive in the market. The results of this study are in line with the findings of(Syfa & Sofie, 2023; L. Dewi, Eliza, & Rifan, 2023; Soedjatmiko et al., 2021; Noor & Ginting, 2022; Khanifah et al., 2020)stated that Environmental Performance (EPS) has a positive and significant effect on company value (Tobin's Q). However, the results of this study differ from the findings of(L. Dewi, Eliza, & Rifan, 2023; Dianti Chika Audri & Puspitasari, 2024)which states that Environmental Performance (KL) does not affect company value (Tobin's Q).

Conclusion

1. Carbon Emission Disclosure (CES) has a negative and significant effect on company value (Tobin's Q) in Basic Material and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period.
2. Green Innovation (IH) has a positive but insignificant effect on company value (Tobin's Q) in Basic Material and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period.
3. Environmental, Social, Governance (ESG) has a positive and significant effect on company value (Tobin's Q) in Basic Material and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period.
4. Eco-efficiency (EFI) has a positive and significant effect on firm value (Tobin's Q) in Basic Material and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period.
5. Environmental Performance (EPS) has a positive and significant effect on company value (Tobin's Q) in Basic Material and Energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period.

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