CORPORATE ENVIRONMENTAL PRACTICES AND FIRM VALUE: EVIDENCE FROM ENERGY AND BASIC MATERIALS COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstract

This study aims to examine the effect of environmental performance, environmental costs, and carbon emission disclosure on firm value in energy and basic materials companies listed on the Indonesia Stock Exchange for the 2021–2025 period. This study uses legitimacy theory as its theoretical basis. The data used are secondary data obtained from annual reports, sustainability reports, and PROPER reports. The research sample was determined using a purposive sampling method, resulting in 27 companies with a total of 135 observations. Firm value is measured using Tobin's Q, environmental performance is measured based on the PROPER rating, environmental costs are measured through the ratio of environmental costs to net profit after tax, and carbon emission disclosure is measured using the Carbon Disclosure Project (CDP) index. Data analysis was performed using multiple linear regression with the help of SPSS. This study is expected to provide empirical evidence regarding the effect of environmental performance, environmental costs, and carbon emission disclosure on firm value and become a consideration for companies and investors in supporting sustainable business practices.

Keywords: Environmental Performance, Environmental Costs, Carbon Emission Disclosure, Firm Value.

INTRODUCTION

Company value is an indicator that reflects investors' perceptions of a company's ability to create value and generate profits in the future. The higher the company's value, the higher the level of prosperity received by shareholders (Ardila, 2017; Sawitri & Setiawan, 2017). In recent years, investor attention has focused not only on financial performance but also on a company's commitment to environmental aspects and business sustainability.

The increasing concerns about climate change and global warming have prompted companies to pay closer attention to the environmental impacts of their operational activities. The energy and basic materials sectors contribute significantly to carbon emissions and natural resource use, thus attracting the attention of various stakeholders. The energy sector has a significant impact on global climate change through emissions from fossil fuel use, while the basic materials sector faces challenges in reducing the environmental impacts stemming from high energy use and polluting production processes. Therefore, both sectors are required to implement better environmental management practices to support business sustainability and increase investor confidence. The phenomenon of changes in company value in the energy sector can be seen from the share price movements of several companies listed on the Indonesia Stock Exchange during the 2021–2025 period, as presented in Table 1.

Table 1. Stock Prices of Energy Sector Companies 2021-2025

Kode Saham	2021	2022	2023	2024	2025
ADRO	Rp 2.250	Rp 3.850	Rp 2.380	Rp 2.430	Rp 1.820
ITMG	Rp 20.400	Rp 39.025	Rp 25.650	Rp 26.700	RP 22.025
MEDC	Rp 466	Rp 1.015	Rp 1.155	Rp 1.100	Rp 1.450

PGAS	Rp 1.375	Rp 1.760	Rp 1.130	Rp 1.590	Rp 1.930
PTBA	Rp 2.710	Rp 3.690	Rp 2.440	Rp 2.750	Rp 2.320

Sumber: Data diolah (2025)

Based on Table 1, the stock prices of energy sector companies exhibited fluctuations during the observation period. ADRO experienced a stock price increase in 2022, but declined in the following years. PTBA also exhibited a similar pattern, experiencing an increase until 2023 before declining again in 2024 and 2025. These stock price fluctuations indicate changes in company value, which can be influenced by various factors, not only financial but also non-financial factors, such as environmental performance, environmental costs, and carbon emission disclosure.

From a legitimacy theory perspective, companies seek to gain public support and acceptance by demonstrating that their operational activities align with prevailing social values, norms, and expectations (Dowling & Pfeffer, 1975; Mousa & Hassan, 2015). One way to implement this is through improving environmental performance, allocating environmental costs, and transparently disclosing carbon emissions. Environmental performance reflects a company's ability to control and minimize the negative impacts of its operational activities on the environment (Clarkson et al., 2008). In Indonesia, corporate environmental performance can be assessed through the Corporate Performance Rating Program (PROPER) organized by the Ministry of Environment and Forestry (Sawitri & Setiawan, 2017).

In addition to environmental performance, companies also need to allocate environmental costs as a form of responsibility for managing the environmental impacts generated by their operational activities. Environmental costs are expenses incurred by companies to prevent or address environmental damage caused by business activities (Hansen & Mowen, 2009). These expenses not only reflect a company's compliance with environmental regulations but can also enhance the company's image and investor confidence in its business sustainability (Pasaribu et al., 2023). Another aspect receiving increasing attention is carbon emissions disclosure. Carbon emissions disclosure is the process of providing information regarding the amount of carbon emissions a company produces and the efforts it has made to reduce them (Sari & Budiasih, 2022). Transparency in carbon emissions disclosure demonstrates a company's commitment to environmental sustainability and can be a positive signal for investors in assessing the company's future prospects (Hardiyansah & Agustini, 2021; Yuliandhari et al., 2023).

However, previous research has shown inconsistent results. Environmental performance was found to have a positive effect on firm value by Gunawan and Berliyanda (2024), but no effect by Sawitri & Setiawan (2017), and even a negative effect by Ericho & Amin (2024). Environmental costs were shown to have a positive effect on firm value in Pasaribu et al.'s (2023) research, but a negative effect by Hapsoro & Adyaksana (2020). Meanwhile, carbon emission disclosure was found to have a positive effect by Yuliandhari et al. (2023), no effect by Anggita & Nugroho (2022), and a negative effect by Hadiwibowo et al. (2023). These differences in results indicate a research gap that requires further testing. Furthermore, most previous studies have focused on the manufacturing, mining, or other sectors. Research that simultaneously examines the effect of environmental performance, environmental costs, and carbon emission disclosure on firm value in the energy and basic materials sectors is still relatively limited. Therefore, this study aims to examine the effect of environmental performance, environmental costs, and carbon emissions disclosure on firm value in energy and basic materials companies listed

on the Indonesia Stock Exchange for the 2021–2025 period. This research is expected to provide empirical contributions to the development of environmental accounting literature and serve as a reference for companies and investors in supporting sustainable business practices.

Theoretical Framework and Hypothesis Development

Legitimacy Theory

The legitimacy theory proposed by Dowling & Pfeffer (1975) explains that companies strive to gain and maintain legitimacy from society to ensure the sustainability of their businesses. Legitimacy is achieved when a company's activities and policies are perceived as being in line with prevailing values, norms, and expectations in the social environment. In an environmental context, companies are not only required to carry out responsible operational activities but also to disclose information related to environmental impacts as a form of accountability to stakeholders. According to Mousa and Hassan (2015), companies disclose environmental information to demonstrate that their operational activities are aligned with regulations and societal expectations. Therefore, good environmental performance, environmental cost management, and transparent disclosure of carbon emissions can be a means for companies to gain public legitimacy, increase investor confidence, and ultimately increase company value.

Environmental Performance

Environmental performance is a form of corporate responsibility in maintaining and creating a quality and sustainable environment (Tjahjono & Eko, 2013). Environmental performance reflects the results achieved by a company in controlling and minimizing the negative impacts of operational activities on the environment (Clarkson et al., 2008). In Indonesia, corporate environmental performance is measured through the Corporate Performance Rating Assessment Program (PROPER) organized by the Ministry of Environment and Forestry (KLHK). This program aims to encourage corporate compliance with environmental regulations and improve environmental management practices through the principles of transparency and accountability. The PROPER assessment uses a color-coded rating system ranging from gold, green, blue, red, to black, reflecting the level of corporate performance in environmental management. The assessment covers aspects of water and air pollution control, B3 waste management, AMDAL implementation, environmental management system implementation, and natural resource conservation (Sawitri & Setiawan, 2017).

Environmental Costs

Environmental costs are expenses incurred by a company to prevent, control, and address environmental impacts arising from its operational activities (Hansen & Mowen, 2009). These costs reflect the company's responsibility in managing environmental risks while meeting the demands of business sustainability. Pasaribu et al. (2023) stated that environmental costs arise as a consequence of company activities that have the potential to have a negative impact on the environment. Therefore, the allocation of environmental costs can be an indicator of a company's commitment to maintaining environmental sustainability and increasing stakeholder trust. According to Rini & Adhariani (2021), environmental costs are part of a company's operational costs, which include various expenses related to environmental management, such as environmental provisions, reclamation, and post-mining closure. In this study, environmental costs were measured using the ratio of total environmental costs to net profit after tax, as used by Hapsoro and Adyaksana (2020).

Disclosure of Carbon Emissions

Carbon emission disclosure is the process of conveying information regarding the amount of carbon emissions produced by a company and the efforts made to manage and reduce them (Sari & Budiasih, 2022). This information is generally disclosed in sustainability reports as a form of corporate transparency to stakeholders (Alfayerds & Setiawan, 2021). According to Yuliandhari et al., (2023), carbon emission disclosure is a practice undertaken by companies to record and report carbon emissions generated from their operational activities as a form of environmental accountability. Transparent disclosure can increase investor confidence because it reflects a company's commitment to sustainability and environmental responsibility (Hardiyansah & Agustini, 2021). In this study, carbon emission disclosure was measured using the Carbon Disclosure Project (CDP) index, which consists of 18 disclosure items. Each disclosed item is given a score of 1, while items not disclosed are given a score of 0 (Damas et al., 2021).

Company Value

Company value reflects investors' perceptions of a company's ability to create value and generate profits in the future. High company value indicates investor confidence in the company's performance and prospects, thereby increasing shareholder prosperity (Ardila, 2017). In line with this, Sawitri and Setiawan (2017) stated that increasing company value is closely related to increasing shareholder welfare, which is reflected in the market's positive assessment of the company. According to (Silvia Indrarini, 2019), company value also reflects management's ability to effectively manage and optimize company resources to create added value for stakeholders. In this study, company value was measured using Tobin's Q because it reflects the market's assessment of the company's prospects by comprehensively considering assets, debt, and equity market value (Alamsyah et al., 2020). Furthermore, Tobin's Q can demonstrate management's ability to utilize economic resources and create market value that exceeds the company's asset value (Mohammed & Al Ani, 2020; Begenau et al., 2025).

The Influence of Environmental Performance on Company Value

Environmental performance is the results achieved by a company in controlling and minimizing the negative impacts of operational activities on the environment (Clarkson et al., 2008). In this study, environmental performance was measured using the Company Performance Rating Assessment Program (PROPER) organized by the Ministry of Environment and Forestry (KLHK). Through this program, companies are assessed based on their ability to manage environmental impacts and their compliance with applicable regulations. Companies with good environmental performance tend to have a positive image and increase stakeholder trust (Pertiwi & Januarti, 2025). Based on legitimacy theory, companies that implement sustainable environmental management practices strive to gain support and acceptance from the community. Trust granted by the community and regulators can improve the company's reputation and reduce the risk of sanctions and conflicts with stakeholders (Helfaya et al., 2023). This condition provides a positive signal to investors, ultimately potentially increasing value.

H1: Environmental Performance Affects Company Value

The Influence of Environmental Costs on Company Value

Environmental costs are expenses incurred by a company to prevent, control, and address environmental impacts arising from its operational activities (Hansen & Mowen, 2015). The allocation of environmental costs reflects a company's

commitment to environmental management and business sustainability, such as through waste control and emission reduction (Sambharakreshna, 2009). Although environmental costs are often viewed as an additional corporate burden, these expenses can provide long-term benefits by enhancing reputation and stakeholder trust (Santoso, 2012). Based on legitimacy theory, companies strive to gain public support by carrying out activities in accordance with prevailing social values and expectations. One way to implement this is through sound environmental management, including the allocation of environmental costs as a manifestation of social responsibility and a commitment to business sustainability (Lah & Kotnik, 2025). Adequate disclosure and management of environmental costs can enhance a company's image and strengthen investor confidence in the company's future prospects. Research by Savira (2021) and Pasaribu et al. (2023) shows that environmental costs have a positive and significant impact on company value. These findings indicate that companies that allocate environmental costs adequately tend to gain greater legitimacy from the public and investors, thereby increasing company value.
H2: Environmental Costs Affect Company Value

The Impact of Carbon Emission Disclosure on Company Value

Carbon emission disclosure is a company's activity of recording, measuring, and presenting information regarding carbon emissions generated from its operational activities to stakeholders (Bae Choi et al., 2013). Through transparent disclosure, companies demonstrate their commitment to environmental impact management and social responsibility. This information is crucial for investors and stakeholders in assessing the company's sustainability and future prospects. Based on legitimacy theory, companies strive to gain public acceptance and support by demonstrating their concern for environmental issues through transparent disclosures. Carbon emission disclosure is one form of environmental responsibility that can strengthen a company's legitimacy in the eyes of the public and investors (Soetardjo & Nurmawati, 2024). The more extensive carbon emission disclosures are, the higher the level of stakeholder trust in the company's commitment to achieving business sustainability. Research by Blesia et al. (2023) and Kurnia et al. (2021) shows that carbon emission disclosure has a positive effect on company value. These findings indicate that transparency in carbon emission information can enhance a company's reputation, create a competitive advantage, and strengthen investor confidence, thus increasing company value.
H3: Carbon Emission Disclosure Affects Firm Value

Research Methods

Types and Techniques of Data Collection

This study uses a quantitative approach utilizing secondary data obtained from annual reports, sustainability reports, and the Company Performance Rating Program (PROPER) report for energy and basic materials companies listed on the Indonesia Stock Exchange (IDX) for the 2021–2025 period. The research data were collected using a documentation method, namely by accessing and collecting relevant information from the official website of the Indonesia Stock Exchange, the company's official website, and other related publications. The use of secondary data was chosen because it provides published and relevant information to measure environmental performance variables, environmental costs, carbon emission disclosure, and company value (Sugiyono, 2013).

Research Population and Sample

The population in this study was all energy and basic materials sector companies listed on the Indonesia Stock Exchange

(IDX) during the 2021–2025 period. Sample selection was carried out using a purposive sampling technique, namely a method of determining samples based on certain criteria in accordance with the research objectives. The sample criteria used included: (1) energy and basic materials sector companies that had conducted an Initial Public Offering (IPO) before or in 2020; (2) companies that consistently published annual reports and sustainability reports during the 2021–2025 period; and (3) companies that participated in the Company Performance Rating Assessment Program (PROPER) during the research period. Based on these criteria, 27 companies were obtained as research samples with a total of 135 observations.

Table 2. Operational Definitions of Variables

Variabel	Definisi	Pengukuran	Skala
Nilai Perusahaan (Y)	Nilai perusahaan merupakan indikator utama yang mencerminkan tingkat kinerja perusahaan, serta menjadi dasar dalam memahami bagaimana perusahaan dinilai dan diapresiasi dalam lingkungan bisnis (Fina *et al.*, 2024)	$= \frac{Tobin's\ Q}{\frac{MVE + DEBT}{Total\ Aset}}$	Rasio
Kinerja Lingkungan (X1)	Kinerja lingkungan merupakan kemampuan perusahaan dalam mencapai kinerja lingkungan yang optimal melalui pengelolaan dan menyatukan aspek lingkungan ke dalam aktivitas operasional perusahaan (Asyifa & Burhany, 2022)	Skor berdasarkan peringkat PROPER, yaitu: • Emas = 5 • Hijau = 4 • Biru = 3 • Merah = 2 • Hitam = 1	Ordial
Biaya Lingkungan (X2)	Biaya lingkungan merupakan pengeluaran yang timbul akibat penurunan kualitas lingkungan atau potensi penurunan kualitas lingkungan yang dapat terjadi di masa depan (Pasaribu *et al.*, 2023).	Biaya Lingkungan = $\frac{\text{Biaya Lingkungan}}{\text{Laba Bersih Setelah Paja}}$	Rasio
Pengungkapan Emisi Karbon (X3)	Pengungkapan emisi karbon merupakan aktivitas perusahaan yang meliputi proses pencatatan, pengakuan, pengungkapan, dan penyajian informasi terkait jumlah emisi karbon yang dihasilkan dari kegiatan operasional (Bae Choi *et al.*, 2013).	Pengungkapan Emisi Karbon = $\frac{Jumlah\ Item\ yang\ diun}{Total\ Item\ pengungka}$	Rasio

Source: Processed data (2025)

Results and Discussion

Descriptive Statistics

Table 3. Descriptive Statistics Results

	N	Minimum	Maximum	Mean	Std. Deviation
Environmental Performance	113	3,00	5,00	3,90	0,79
Environmental Costs	113	-0,23	0,28	0,03	0,11
Disclosure of Carbon Emissions	113	0,03	0,85	0,40	0,15
Company Value	113	0,02	1,06	0,46	0,23
Valid N (listwise)	113				

Based on the results of descriptive statistics, it shows that the company value has an average of 0.46 with a standard deviation of 0.23, which indicates that the company value in the sample is still relatively low with a small level of variation.

Environmental performance has an average of 3.90 and a standard deviation of 0.79, which indicates that most companies have good environmental performance based on the PROPER assessment. Environmental costs have an average of 0.03 with a standard deviation of 0.11, which indicates a fairly high variation in the allocation of environmental costs between companies. Meanwhile, carbon emission disclosure has an average of 0.40 and a standard deviation of 0.15, which indicates that the level of company carbon emission disclosure is still moderate with relatively low variation between companies in the sample.

Normality Test

Based on the normality test, the Monte Carlo Sig. (2-tailed) value was obtained at 0.361. Based on the resulting value, the significance level is more than (α) = 5% or 0.05, so it can be concluded that the data in all variables have been normally distributed.

Multicollinearity Test

Based on the test results, all independent variables have a tolerance value above 0.10 and a VIF value below 10. Thus, it can be concluded that the regression model is free from multicollinearity problems.

Heteroscedasticity Test

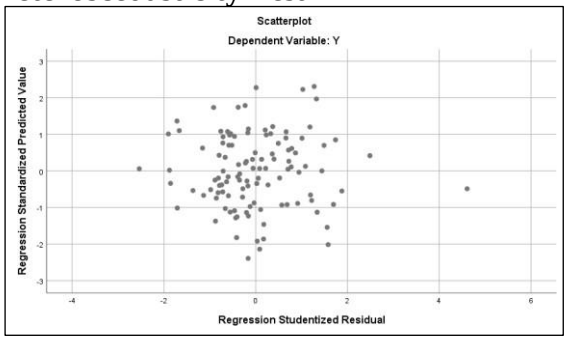


Figure 1. Heteroscedasticity Test Results

Based on the figure, the residual points are randomly distributed and do not form a specific pattern. Thus, the regression model is free from the problem of heteroscedasticity.

Autocorrelation Test

The autocorrelation test results obtained a Durbin-Watson value of 1.805. This value is between the upper limit (dU) and (4 -dU), namely 1.7480 < 1.805 < 2.2520. Thus, it can be concluded that the regression model does not experience autocorrelation.

Multiple Linear Regression Analysis

Y = 0.277 – 0.17KL – 1.120BL + 0.702PEK + e

Based on the results of the regression analysis, a constant value of 0.277 was obtained, indicating that if environmental performance, environmental costs, and carbon emission disclosure were held constant, the firm value would be 0.277. The environmental performance variable had a regression coefficient of -0.017, indicating that an increase in environmental performance tends to decrease firm value by 0.017, assuming other variables remain constant. The environmental costs variable had a regression coefficient of -1.120, indicating that an increase in environmental costs tends to decrease firm value by 1.120. Meanwhile, the carbon emission disclosure variable had a regression coefficient of 0.702, indicating that an increase in carbon emission disclosure tends to increase firm value by 0.702.

Simultaneous Test (F)

Table 4. Simultaneous Test Results

F	Sig.
48,419	0,000[b]

The results of the F test in Table 4 show a significance value of 0.000 < 0.05, so

it can be concluded that environmental performance, environmental costs, and carbon emission disclosure simultaneously influence company value.

Partial Test (t-Test)

Coefficients[a]					
	Unstandardized Coefficients	Standardized Coefficients			
Model	B	Std. Error	Beta	t	Sig.
(Constant)	0.277	0.079		3.498	0.001
Kinerja Lingkungan	-0.017	0.018	-0.060	-0.956	0.341
Biaya Lingkungan	-1.120	0.131	-0.541	-8.519	0.000
Pengungkapan Emisi Karbon	0.702	0.096	0.464	7.327	0.000

Based on the t-test results in Table 9, the environmental performance variable has a significance value of 0.341 > 0.05, indicating no significant effect on firm value. The environmental costs variable has a significance value of 0.000 < 0.05 with a negative coefficient, indicating that environmental costs have a significant negative effect on firm value. Meanwhile, the carbon emissions disclosure variable has a significance value of 0.000 < 0.05 with a positive coefficient, indicating a significant positive effect on firm value.

Coefficient of Determination (R2) Test

The coefficient of determination test yielded an R-square value of 0.560. These results indicate that environmental performance, environmental costs, and carbon emissions disclosure explain 56% of the variation in firm value, while the remaining 44% is explained by factors outside the research model. Furthermore, the correlation coefficient (R2) of 0.756 indicates a strong relationship between the independent and dependent variables.

Discussion

The Effect of Environmental Performance on Company Value

Based on the partial test results, the environmental performance variable has a significance value of 0.341 > 0.05, indicating no effect on company value. This result indicates that achieving good environmental performance does not necessarily lead to increased company value. Investors tend to place greater weight on financial information directly related to profitability, risk, and potential returns on investment than on information regarding environmental performance, the economic benefits of which are more difficult to measure and experience in the long term. This study's findings align with those of Fangbethia et al. (2025), who found that environmental performance had no effect on company value. These findings indicate that sustainability practices are not yet a primary factor in investors' assessments of companies. However, this study differs from Gunawan and Berliyanda (2024), who found a positive effect, and Ericho & Amin (2024), who found a negative effect between environmental performance and company value. These findings also do not support legitimacy theory, which states that companies can gain public support through good environmental practices (Dowling & Pfeffer, 1975). In this study, environmental performance, as measured by the PROPER rating, was unable to influence company value. This indicates that the information reflected in the PROPER rating is not yet fully perceived by investors as providing direct economic benefits, and therefore has not become a primary consideration in investment decision-making (Uy & Hendrawati, 2020).

The Effect of Environmental Costs on Firm Value

Based on the partial test results, the environmental costs variable has a significance value of 0.000 < 0.05 with a negative regression coefficient, thus having a significant negative effect on firm value. These results indicate that the greater the environmental costs incurred by a company, the lower its value tends to be. This occurs because environmental costs constitute additional operational expenses that can

reduce a company's net profit and cash flow, such as costs for waste management, pollution control, and compliance with environmental regulations. Consequently, investors tend to view these expenses as factors that can depress a company's profitability, thus impacting its value. These results align with those of Pertiwi and Januarti (2025), who found that environmental costs have a significant negative effect on firm value. However, these results contradict the findings of Pasaribu et al. (2023), who showed that environmental costs have a positive effect on firm value. These differences indicate that the market can respond differently to environmental spending depending on investors' perceptions of the resulting economic benefits. These findings do not support legitimacy theory, which states that environmental spending can enhance a company's legitimacy and image in the eyes of the public. In this study, investors tended to prioritize short-term financial impacts over the long-term benefits of environmental management. Therefore, companies need to manage environmental costs efficiently to ensure regulatory compliance and sustainability commitments are achieved without compromising their ability to create shareholder value.

The Effect of Carbon Emission Disclosure on Company Value

Based on the partial test results, the carbon emission disclosure variable has a significance value of 0.000 < 0.05 with a positive regression coefficient. These results indicate that carbon emission disclosure has a significant positive effect on company value. Therefore, the third hypothesis (H3), which states that carbon emission disclosure has a positive effect on company value, is accepted. This finding indicates that the more extensive and transparent a company's carbon emission disclosure, the higher the company's value, as reflected in investor assessments. This study's results align with those of Alfayerds and Setiawan (2021) and Anggraeni (2015), which found that carbon emission disclosure has a positive effect on company value. Transparency in carbon emission disclosure provides investors with more complete information regarding the company's commitment to environmental management and business sustainability, thereby increasing investor confidence in the company's future prospects. This finding also supports legitimacy theory, which states that companies strive to gain and maintain social acceptance by disclosing information that aligns with public expectations. Carbon emission disclosure reflects a company's transparency and accountability in managing its environmental impacts, thereby reducing information asymmetry between management and investors. This condition encourages increased investor confidence and ultimately contributes to increasing company value.

Conclusion

This study examines the effect of Environmental Performance, Environmental Costs, and Carbon Emission Disclosure on firm value in Energy and Basic Materials Sector Companies listed on the Indonesia Stock Exchange for the 2021–2025 period. The study sample consisted of 27 companies selected using purposive sampling with specific criteria. The data used were the financial reports of each company, which were then processed using SPSS 25 software. Based on the test results, it was concluded that Environmental Performance did not have a significant effect on firm value, indicating that sustainability practices have not been a primary consideration for investors in making investment decisions. Environmental Costs had a significant negative effect on firm value, indicating that environmental costs are viewed as an operational expense that can reduce profits, thus impacting firm value, despite being an effort to maintain the company's image and social legitimacy. Carbon Emission Disclosure had a positive effect on firm value, indicating that higher

carbon emission disclosures increase firm value through information transparency. Simultaneously, Environmental Performance, Environmental Costs, and Carbon Emission Disclosure affected firm value in Energy and Basic Materials sector companies listed on the IDX for the 2021–2025 period.

Bibliography

Alamsyah, A. R., Subroto, B., Aisjah, S., & Djazuli, A. (2020). The effect of ownership structure, capital structure, and investment opportunity set on firm values mediated by a dividend policy. *International Journal of Innovation, Creativity and Change*, *12*(6), 459–483.

Alfayerds, W. D., & Setiawan, M. A. (2021). Pengaruh pengungkapan emisi karbon dan annual report readability terhadap nilai perusahaan. *Jurnal Eksplorasi Akuntansi*, *3*(2), 349–363.

Anggita, W., & Nugroho, A. A. (2022). Carbon emission disclosure and green accounting practices on the firm value. *Jurnal Akuntansi*, *26*(3), 464–481.

Anggraeni, D. Y. (2015). Pengungkapan Emisi Gas Rumah Kaca, Kinerja Lingkungan, Dan Nilai Perusahaan. *Jurnal Akuntansi Dan Keuangan Indonesia*, *12*(2), 188–209. https://doi.org/10.21002/jaki.2015.11

Ardila, I. (2017). Pengaruh Profitabilitas dan Kinerja Lingkungan terhadap Nilai Perusahaan. *Jurnal Riset Finansial Bisnis*, *1*(1).

Asyifa, D. A., & Burhany, D. I. (2022). Carbon emission disclosure and environmental performance effect on firm value. *Carbon*, *5*(7).

Bae Choi, B., Lee, D., & Psaros, J. (2013). An analysis of Australian company carbon emission disclosures. *Pacific Accounting Review*, *25*(1), 58–79.

Begenau, J., Bigio, S., Majerovitz, J., & Vieyra, M. (2025). A q-theory of banks. *Review of Economic Studies*, rdaf035.

Blesia, J. U., Trapen, E., & Arunglamba, R. S. (2023). The Moderate Effect of Good Corporate Governance on Carbon Emission Disclosure and Company Value. *The Indonesian Journal of Accounting Research*, *26*(1), 151–182.

Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, *33*(4–5), 303–327.

Damas, D., El Maghviroh, R., & Indreswari, M. (2021). Pengaruh eco-efficiency, green innovation dan carbon emission disclosure terhadap nilai perusahaan dengan kinerja lingkungan sebagai moderasi. *Jurnal Magister Akuntansi Trisakti Vol*, *8*(2).

Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review*, *18*(1), 122–136.

Ericho, M. F., & Amin, M. N. (2024). The Influence of Carbon Emission Disclosure Green Intellectual Capital and Environmental Performance on Firm Value With Moderation of Firm Size. *Quantitative Economics and Management Studies*, *5*(4), 752–761.

Fangbethia, B., Desmiyawati, D., & Supriono, S. (2025). Pengaruh Good Corporate Governance, Kinerja Lingkungan Dan Enterprise Risk Management Terhadap Nilai Perusahaan. *Jurnal Kajian Akuntansi Dan Auditing*, *21*(1), 70–84.

Fina, F., Maulidia, R., & Mustika, I. G. (2024). The effect of green accounting, carbon emission disclosure and profitability on company value. *Jurnal Ilmiah Akuntansi Kesatuan*, *12*(5), 685–694.

Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25*.

Hadiwibowo, I., Limarty, D., & Azis, M. T. (2023). Pengungkapan emisi karbon,

penerapan green accounting dan kinerja lingkungan pada nilai perusahaan. *Jurnal Riset Akuntansi Mercu Buana*, *9*(2).

Hansen, D. R., & Mowen, M. M. (2009). Managerial accounting: Akuntansi manajerial. *Jakarta: Salemba Empat*, *60*.

Hansen, D. R., & Mowen, M. M. (2015). Cornerstones of cost management. *(No Title)*.

Hapsoro, D., & Adyaksana, R. I. (2020). Apakah Pengungkapan Informasi Lingkungan Memoderasi Pengaruh Kinerja Lingkungan Dan Biaya Lingkungan Terhadap Nilai Perusahaan? *Jurnal Riset Akuntansi Dan Keuangan*, *8*(1), 41–52.

Hardiyansah, M., & Agustini, A. T. (2021). Carbon emissions disclosure and firm value: does environmental performance moderate this relationship. *Jurnal Ekonomi Dan Bisnis Islam (Journal of Islamic Economics and Business)*, *7*(1), 51.

Helfaya, A., Aboud, A., & Amin, E. (2023). An examination of corporate environmental goals disclosure, sustainability performance and firm value–An Egyptian evidence. *Journal of International Accounting, Auditing and Taxation*, *52*, 100561.

Kehutanan, K. L. H. (2022). *Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup (PROPER): Pedoman dan Kriteria Penilaian*. Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia.

Kurnia, P., Nur, D. P., & Putra, A. A. (2021). Carbon emission disclosure and firm value: A study of manufacturing firms in Indonesia and Australia. *International Journal of Energy Economics and Policy*, *11*(2), 83–87.

Lah, L. M., & Kotnik, Ž. (2025). Drivers of environmental regulation costs and their perception by firms: Evidence from Slovenia. *Journal of Cleaner Production*, *501*, 145274.

Mohammed, Z. O., & Al Ani, M. K. (2020). The effect of intangible assets, financial performance and financial policies on the firm value: Evidence from Omani industrial sector. *Contemporary Economics*, 379–391.

Mousa, G., & Hassan, N. T. (2015). Legitimacy theory and environmental practices: Short notes. *International Journal of Business and Statistical Analysis*, *2*(01).

Pasaribu, A., Simamora, L., & Diarsyad, M. I. (2023). PENGARUH BIAYA LINGKUNGAN TERHADAP NILAI PERUSAHAAN DENGAN KINERJA LINGKUNGAN SEBAGAI VARIABEL MODERASI-SUB SEKTOR PERTAMBANGAN DIBURSAEFEK INDONESIA TAHUN 2019-2021. *JEMBA: Jurnal Ekonomi Pembangunan, Manajemen & Bisnis, Akuntansi*, *3*(1), 69–77.

Pertiwi, R. A., & Januarti, I. (2025). Kinerja Lingkungan dan Biaya Lingkungan: Faktor Penentu Nilai Perusahaan di Era Keberlanjutan. *Owner: Riset Dan Jurnal Akuntansi*, *9*(2).

Rini, R. K., & Adhariani, D. (2021). Does Financial Performance Drive Environmental Disclosure and Environmental Cost? Evidence from Indonesia. *Jurnal Ilmiah Akuntansi Dan Bisnis*, *16*(2), 317.

Sambharakreshna, Y. (2009). Akuntansi lingkungan dan akuntansi manajemen lingkungan: Suatu komponen dasar strategi bisnis. *InFestasi*, *5*(1), 1–21.

Santoso, H. F. (2012). Akuntansi lingkungan tinjauan terhadap sistem informasi akuntansi manajemen atas biaya lingkungan. *Jurnal Akuntansi*.

Sari, K. H. V., & Budiasih, I. (2022). Carbon Emission Disclosure dan Nilai Perusahaan. *E-Jurnal Akuntansi*, *32*(1).

Savira, W. (2021). *Pengaruh Biaya Lingkungan, Kinerja Lingkungan dan*

Pengungkapan Lingkungan Terhadap Nilai Perusahaan pada Perusahaan Sektor Bahan Baku yang Terdaftar di Bursa Efek Indonesia Tahun 2017-2019. Podomoro University.

Sawitri, A. P., & Setiawan, N. (2017). Analisis pengaruh pengungkapan sustainability report, kinerja keuangan, dan kinerja lingkungan terhadap nilai perusahaan. *Journal of Business & Banking*, *7*(2), 207–214.

Silvia Indrarini, M. M. (2019). *Nilai perusahaan melalui kualitas laba:(Good Governance dan Kebijakan Perusahaan)*. Scopindo Media Pustaka.

Soetardjo, M. N., & Nurmawati, S. (2024). Pengaruh Tax Planning and Carbon Emission Disclosure Terhadap Nilai Perusahaan Dengan Komisaris Independen Sebagai Pemoderasi. *Media Riset Akuntansi, Auditing & Informasi*, *24*(1), 131–150.

Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*.

Tjahjono, S., & Eko, M. (2013). Pengaruh kinerja lingkungan terhadap nilai perusahaan dan kinerja keuangan. *Jurnal Ekonomi Universitas Esa Unggul*, *4*(1), 17905.

Uy, W. S., & Hendrawati, E. (2020). Pengaruh Corporate Social Responsibility Dan Kinerja Lingkungan Terhadap Nilai Perusahaan. Liability, 2(2), 87–108.

Yuliandhari, W. S., Saraswati, R. S., & Safari, Z. M. R. (2023). Pengaruh carbon emission disclosure, eco-efficiency dan green innovation terhadap nilai perusahaan. *Owner: Riset Dan Jurnal Akuntansi*, *7*(2), 1526–1539.