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THE EFFECT OF CARBON EMISSION DISCLOSURE, ENVIRONMENTAL PERFORMANCE, AND PROFITABILITY ON FIRM VALUE WITH MEDIA EXPOSURE AS A MODERATING VARIABLE

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Abstract: This study aims to examine the effects of carbon emission disclosure, environmental performance, and profitability on firm value, as well as the moderating role of media exposure in Indonesian energy companies. The research uses secondary data from annual reports and sustainability reports of 20 energy companies listed on the Indonesia Stock Exchange for the 2020–2024 period. Data analysis is conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results show that carbon emission disclosure, environmental performance, and profitability significantly affect firm value. Media exposure strengthens the influence of carbon emission disclosure on firm value, but does not moderate the effects of environmental performance or profitability. In addition, media exposure itself does not directly affect firm value. These findings highlight the importance of transparent carbon emission disclosure and profitability in enhancing firm value, while media exposure is more effective when amplifying substantive environmental disclosure.

Keywords: Carbon Emission Disclosure, Environmental Performance, Profitability, Media Exposure, Firm Value

1. Introduction

In the era of globalization and digital transformation, the demands on corporate social and environmental responsibility are increasing. Businesses are no longer solely oriented toward financial profit but are also expected to address the challenges of climate change, preserve environmental sustainability, and meet the expectations of a society that is increasingly aware of sustainability issues. Liu et al., (2023) state that growing social pressure and stricter environmental regulations compel companies to adjust their strategies in order to maintain legitimacy and long-term value. Companies that fail to adapt risk facing tighter regulatory scrutiny, declining reputation, and weakening market confidence.

Indonesia is among the top ten countries with the highest carbon emissions in the world. In 2023, the country ranked sixth with a total of 704.4 million tons of CO_2 equivalent emissions, most of which originated from the energy sector, particularly coal combustion (Energy Institute, 2024). This condition underscores the significant responsibility of energy companies to not only maintain profitability but also increase transparency through carbon emission disclosure and environmental performance reporting. Firm value is often viewed as a key indicator of corporate success, as it reflects investor perceptions of long-term business prospects. One factor believed to influence firm value is carbon emission disclosure, which not only represents regulatory compliance but also serves as a means of communication with investors and the public. Studies by Hardiyansah & Agustini (2021) and Jeong-Hwan Lee (2023) found that carbon emission disclosure positively affects firm value, while Miah et al., (2021) and Rachmawati (2021) reported no significant effect.

In addition, environmental performance has also received considerable attention. The Corporate Performance Rating Program (PROPER) issued by the Indonesian Ministry of Environment and Forestry serves as an important instrument to evaluate corporate compliance and initiatives in environmental management. Rismayanti & Putri (2021) and Khanifah et al., (2020) found that good environmental performance can enhance firm value through positive reputation and regulatory compliance. However, Luthfiyah & Mardiana (2024) reported a negative influence, particularly in the basic materials sector, suggesting that strong environmental performance is not always positively appreciated by the market.

Equally important, profitability remains a classic factor considered by investors. Profitability reflects a company's ability to generate earnings, serving as a fundamental indicator of financial health. Studies by Bahriansyah & Lestari Ginting (2022), Lestari et al., (2022) and Mutiara et al., (2022) found that profitability has a positive impact on firm value, as it demonstrates financial strength that attracts investors. On the other hand, Komara et al., (2024) reported no significant effect, particularly when market attention shifts more toward sustainability issues than traditional financial indicators.

Furthermore, media exposure serves as an external factor that can either strengthen or weaken the influence of these three variables. Positive media coverage can amplify the effect of sustainability practices on firm value, while negative exposure can damage corporate reputation even when environmental disclosures are made (Ramadhan et al., 2023). This role of the media makes corporate sustainability issues increasingly complex and relevant to investigate.

Considering the inconsistencies in previous studies and the significant role of media exposure, this research aims to examine the effect of carbon emission disclosure, environmental performance, and profitability on firm value with media exposure as a moderating variable. The study focuses on energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period, given the sector's major contribution to carbon emissions and the high regulatory pressures it faces. This study is expected to provide empirical contributions to the accounting and sustainability literature, as well as practical benefits for companies, investors, and regulators in promoting more transparent and sustainable business practices.

2. Literature Review

Legitimacy Theory

Legitimacy theory was first introduced by Dowling and Pfeffer in 1975 to explain that companies need to align their activities with societal values, norms, and expectations in order to maintain their continuity. Legitimacy serves as an important foundation for companies not only in generating profits but also in ensuring consistency with social and environmental aspects that are considered important by the public (Dian Marlina & Vinola Herawaty, 2024). In the context of this study, carbon emission disclosure is one of the implementations of legitimacy theory. Transparency through sustainability reporting can strengthen acceptance from society and stakeholders while maintaining the continuity of corporate operations Nisa (2023). This is highly relevant to the energy sector, which contributes significantly to carbon emissions, as environmental disclosure helps firms sustain legitimacy, build investor trust, and ultimately enhance firm value.

Stakeholder Theory

The stakeholder theory developed by Edward Freeman explains that companies have responsibilities not only to shareholders but also to other parties such as employees, government, society, consumers, suppliers, and the media. Companies are required to manage stakeholder expectations through the disclosure of relevant information, including environmental and social activities (Rahmanita, 2020). According to Iman, Moh Syuad, Novi Darmayanti (2022), fulfilling stakeholder expectations fosters support for corporate activities, which in turn can improve firm performance and value. This also highlights the importance of information transparency—both financial and non-financial—as a form of accountability (Maulidiavitasari & Yanthi, 2021). In the context of this study, stakeholder theory is used to explain that environmental performance reflects a company's commitment to meeting stakeholder expectations, thereby strengthening its reputation and enhancing firm value (Nisa, 2023).

Theory Signal

Signaling theory, proposed by Spence (1973), explains that information asymmetry between management and investors creates the need for companies to provide signals that reflect their conditions and business prospects. Such signals may take the form of financial or non-financial information, such as profitability, sustainability disclosure, and media exposure, with the purpose of building positive investor perceptions and ultimately increasing firm value (Purnomo, 2022).

According to Darmayanti et al., (2025), signals can be either positive or negative, depending on the information disclosed by the company. Positive signals, such as strong financial performance or compliance with sustainability principles, enhance market confidence, whereas negative signals raise doubts about the company's prospects. In this context, media exposure serves as an effective channel for transmitting signals, as it helps firms communicate transparency and sustainability practices to stakeholders (Saputri & Setyowati, 2024). Furthermore, profitability is also considered an important signal. Companies with higher earnings tend to disclose such information to demonstrate efficiency and financial health, thereby reinforcing investor confidence in their long-term prospects. Thus, signaling theory is relevant to explain the roles of carbon emission disclosure, environmental performance, profitability, and media exposure in shaping market perceptions and enhancing firm value(E. Lestari et al., 2022).

Carbon Emission Disclosure

Carbon emission disclosure is a form of corporate transparency in reporting the amount of greenhouse gas (GHG) emissions generated from its operations. Carbon emissions, originating from fossil fuel combustion and industrial activities, are among the major contributors to climate change (Hilmi et al., 2020). Through carbon accounting, firms are required to measure, record, and disclose their carbon footprint in sustainability reports or annual reports (Puspita Sari, 2022). In Indonesia, carbon emission disclosure remains voluntary, meaning that not all firms are obliged to report it. Nevertheless, such disclosure is considered essential in providing transparency to stakeholders, enhancing accountability, and strengthening corporate legitimacy (Nisa, 2023). For energy sector firms that significantly contribute to carbon emissions, disclosure serves as a strategy to safeguard reputation, build investor trust, and ultimately enhance firm value.

Environmental Performance

Environmental performance reflects the extent to which a company manages the environmental impacts of its operations and contributes to sustainability. Industrial activities often generate pollution, making it important for firms to demonstrate responsibility in environmental management. Strong performance signals corporate concern and commitment to sustainability (Sadira Ashia Priliana & Ermaya, 2023). In Indonesia, environmental performance is assessed through the PROPER program introduced by the Ministry of Environment and Forestry (KLHK). The program evaluates key aspects such as air pollution control, water quality, and waste management, with results classified into color-coded ratings that are publicly disclosed (Suhendra et al., 2022). A higher PROPER rating not only indicates regulatory compliance but also enhances corporate reputation, builds investor trust, and ultimately contributes to firm value.

Profitability

Profitability refers to a company's ability to utilize its assets or working capital to generate earnings (Tirta Wangi & Aziz, 2024). This ratio reflects net income after deducting all operational and financing expenses, making it a key indicator of managerial effectiveness in creating maximum profits for the company.In this study, profitability is proxied by Return on Assets (ROA), as it shows the extent to which a firm can generate net income from its total assets. ROA indicates how efficiently a company manages its assets to produce profits. A higher ROA signals stronger financial performance, providing a positive signal to investors about the firm's long-term prospects and contributing to higher firm value in the market.

Firm Value

According to Mangngalla & Kartini (2022), firm value reflects the achievements of a business entity throughout its operations and represents the level of public trust in the company. It is often understood as investors' perception of future prospects, which is reflected in stock prices. A higher stock price indicates strong investor confidence in the firm's performance and sustainability, whereas a lower stock price may signal doubts regarding its profitability (Noor & Ginting, 2022). This study employs Price to Book Value (PBV) as a proxy for firm value, calculated as the ratio of a stock's market price to its book value per share. PBV is considered a relatively stable indicator that captures the extent to which a firm creates value for shareholders (Kusumaningrum & Iswara, 2022). A higher PBV suggests stronger investor perception, better growth prospects, and greater investment attractiveness, ultimately indicating a higher firm value.

Media Exposure

Media exposure refers to the degree of attention or coverage a company receives from mass media. Firms that are frequently highlighted by the media tend to be more cautious in making strategic and operational decisions. Media attention also raises public awareness of corporate activities, placing companies under greater societal scrutiny (Dinda Nurhasanah, 2024). Moreover, media exposure can be viewed as part of external stakeholder engagement, where the media acts as an evaluator of corporate performance beyond financial aspects (Solikhah & Maulina, 2021). Increasing media coverage of environmental issues encourages firms to disclose more sustainability information as a form of accountability. The intensity and reach of media exposure play an important role in strengthening transparency, enhancing public legitimacy, and influencing corporate reputation, which ultimately contributes to firm value (Alfariz & Widiastuti, 2021).

Hypothesis

Carbon emission disclosure is a form of corporate responsibility in presenting non-financial information related to environmental impacts. Such transparency is an important strategy to gain legitimacy from the public and regulators, particularly for energy sector firms that contribute significantly to carbon emissions (Liu et al., 2023). This disclosure can enhance corporate reputation and strengthen investor confidence. Prior studies show consistent results: Hardiyansah & Agustin (2021) and Jeong-Hwan Lee (2023) found that carbon emission disclosure has a positive effect on firm value. Similarly, Desy Maharani, Inggrite Puspita (2021) in Indonesia reported that carbon information transparency increases firm value as it reflects compliance and good governance.

H1: Carbon emission disclosure has a positive effect on firm value.

Environmental performance reflects a company's ability to manage the negative impacts of its operations, such as waste treatment, energy efficiency, and regulatory compliance. Firms with strong environmental performance tend to gain trust from both society and investors, as they are perceived not only as profit-oriented but also as committed to sustainability Wahyuni (2024). From the perspective of stakeholder theory, effective environmental management fulfills stakeholder expectations, thereby enhancing social legitimacy and strengthening the company's market position. Prior studies also support this view: Khanifah et al. (2020) found that positive environmental reputation significantly improves firm value; Rismayanti & Putri(2021) reported that firms with higher PROPER ratings achieve greater firm value; and Asyifa & Burhany (2022) demonstrated that environmental commitment positively influences firm value as it is increasingly recognized by investors.

H2: Environmental performance has a positive effect on firm value.

Profitability describes a company's ability to generate profits from its resources, which in this study is proxied by Return on Assets (ROA). A higher ROA indicates stronger investment attractiveness, as it reflects the firm's efficiency in utilizing assets to create earnings (Fatehah, 2023). Based on signaling theory, higher profitability provides a positive signal to investors about future business prospects, thereby strengthening trust, increasing stock demand, and ultimately raising firm value (M. D. Lestari et al., 2022). Prior studies also confirm this positive relationship: Firmike Lidyatami Radja (2020) showed that profitability enhances investor confidence; Inne (2021) reported that higher earnings act as positive signals for the market; and Mutiara (2022) demonstrated that strong profitability attracts investors and contributes to higher firm value.

H3: Profitability has a positive effect on firm value.

Media exposure plays an important role in broadening the reach of corporate information to the public and investors. From the perspective of legitimacy theory, media exposure reinforces the legitimacy sought by companies through carbon emission disclosure (Asyari & Hernawati, 2023), while signaling theory views the media as a channel to convey positive signals regarding environmental commitment (Bahriansyah & Lestari Ginting, 2022). Empirical findings by Asyari & Hernawati (2023) show that media exposure strengthens the relationship between carbon emission disclosure and investor reactions, which represent firm value.

H4: Media exposure moderates the effect of carbon emission disclosure on firm value.

Environmental performance reflects a company's commitment to environmental sustainability, which can enhance stakeholder trust and firm value. Based on stakeholder theory, firms are obliged to meet stakeholder interests through environmentally responsible practices Nisa (2023). Signaling theory further suggests that media exposure amplifies the transmission of positive signals regarding environmental performance to the public (Puspita Sari, 2022). Supporting this, Asyari & Hernawati (2023) found that media exposure strengthens the link between environmental performance and investor reactions.
H5: Media exposure moderates the effect of environmental performance on firm value

Profitability reflects a company's ability to generate earnings, which serves as a positive signal to investors about its financial health and future prospects. According to signaling theory, higher profitability builds market confidence, and media exposure reinforces the transmission of these signals, thereby increasing its impact on firm value (Puspita Sari, 2022). Similarly, Ghita (2019) demonstrated that media exposure enhances the relationship between profitability and firm value by improving transparency and investor trust.
H6: Media exposure moderates the effect of profitability on firm value.

Media exposure refers to the degree of coverage a company receives in mass media, which shapes investor perceptions of its prospects. From a signaling perspective, media exposure reduces information asymmetry by communicating positive signals about corporate activities to the public (Puspita Sari, 2022). Prior research also confirms that media exposure positively affects firm value by fostering transparency and investor confidence.
H7: Media exposure has a positive effect on firm value.

3. Method

This research is a quantitative study using secondary data obtained from annual reports, sustainability reports, official company websites, and external media coverage accessible online. The research objects are energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. Out of 91 companies in the population, 20 firms were selected as the sample using purposive sampling. The sampling criteria include energy companies consistently listed on the IDX from 2020 to 2024, companies that consecutively published annual reports and sustainability reports during the period, companies that disclosed carbon emissions based on GRI 305 indicators, and companies that received PROPER ratings from the Ministry of Environment and Forestry (KLHK) between 2020 and 2024. With a five-year observation period, the total number of firm-year observations obtained was 100.

The operational definitions of variables in this study include independent, dependent, and moderating variables. The independent variables consist of carbon emission disclosure, environmental performance, and profitability. The dependent variable is firm value, while the moderating variable is media exposure. Each variable is measured using specific indicators as summarized in Table 1. below:

Table 1. Operational Definition of Research Variables

Variabel	Formula	Scale
CED	CED = Total Company Score / 7	Ratio
Environmental Performance	PROPER Rating: Gold = 5, Green = 4, Blue = 3, Red = 2, Black = 1	Nominal

Variabel	Formula	Scale
Profitability	ROA = Net Profit / Total Assets	Ratio
Firm Value	PBV = Stock Price / Book Value	Ratio
Media Exposure	Dummy Variable: 1 = disclosed in media (website, sustainability report, mass media), 0 = not disclosed	Nominal

Source: Processed (2025)

4. Result and Discussion

Based on the results of descriptive statistics in Table 2, this study provides an overview of the variables used, namely carbon emission disclosure (X_1), environmental performance (X_2), profitability (X_3), firm value (Y), and media exposure (Z). The descriptive statistics present information regarding the minimum, maximum, mean, median, and standard deviation of each variable. The research sample consists of 20 energy sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2020–2024, with a total of 100 firm-year observations.

As shown in Table 2, the carbon emission disclosure variable (X_1), measured using GRI 305 indicators, has a minimum value of 0.142857 and a maximum of 1. The mean score of 0.7814, with a median of 0.857143 and a standard deviation of 0.2381, indicates that most companies disclosed a relatively high level of carbon emissions, as the average value approaches the maximum. The environmental performance variable (X_2), measured by the PROPER rating issued by the Ministry of Environment and Forestry, shows a minimum value of 3 and a maximum of 5. The mean score is 3.92 with a median of 4 and a standard deviation of 0.7743. These results suggest that the majority of companies obtained good environmental performance ratings with low variation across samples. Profitability (X_3), proxied by Return on Assets (ROA), shows a minimum of –0.0983 and a maximum of 0.6163. The mean of 0.1345, median of 0.0897, and standard deviation of 0.1431 indicate that, on average, companies achieved a positive and relatively stable profitability level, although some firms recorded negative ROA. Firm value (Y), measured using Price to Book Value (PBV), ranges from a minimum of 0.2523 to a maximum of 22.3016. The mean is 2.0686, median 1.0342, and standard deviation 3.6725. This demonstrates wide variation in firm value, with some companies showing very high PBV compared to others. Lastly, the moderating variable media exposure (Z), measured with a dummy (1 = disclosed in external media/website/sustainability report, 0 = not disclosed), has a mean of 0.54, median of 1, minimum of 0, maximum of 1, and a standard deviation of 0.5009. This indicates that more than half of the companies in the sample were exposed in the media regarding their environmental activities.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Median	Std. Deviasi
X1	100	0,142857	1	0,78142865	0,857143	0,2380563
X2	100	3	5	3,92	4	0,774335818
X3	100	-0,098394638	0,61634591	0,134503993	0,089666649	0,143140388
Y	100	0,252271804	22,30157759	2,068598813	1,034160461	3,672473823
Z	100	0	1	0,54	1	0,500908266

Source: Processed data (2025)

Coefficient of Determination (R^2)

The coefficient of determination (R^2) measures the ability of independent variables to explain the dependent variable. Based on the test results presented in Table 3, the R^2 value of firm value (Y) is 0.398 with an adjusted R^2 of 0.352, indicating that 39.8% of the variation in firm value can be explained by carbon emission disclosure, environmental performance, profitability, and media exposure, while the remaining 60.2% is influenced by other factors outside the model. According to the classification, this value falls into the **moderate category**, which is adequate for hypothesis testing.

Table 3. Coefficient of Determination (R^2)

	R-square	R-Square Adjusted
Nilai Perusahaan (Y)	0.398	0.352

Source: Processed data (2025)

Hypothesis Testing

Table 4. Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
X1 -> Y	0,214	0,205	0,080	2,675	0,008
X2 -> Y	-0,169	-0,169	0,073	2,308	0,021
X3 -> Y	0,475	0,469	0,097	4,876	0,000
Z -> Y	0,033	0,023	0,081	0,411	0,681
X1*Z -> Y	0,181	0,169	0,080	2,260	0,024
X2*Z -> Y	-0,034	-0,021	0,085	0,395	0,693
X3*Z -> Y	0,247	0,219	0,135	1,831	0,067

Source: Processed Data, 2025

The Effect of Carbon Emission Disclosure on Firm Value

Based on the results of hypothesis testing, the parameter coefficient value is 0.214, the T-statistics value is 2.675, and the P-value is 0.008. Since the T-statistics value is greater than the T-table (1.985) and the P-value is less than 0.05, H1 is accepted. Thus, carbon emission disclosure has a significant effect on firm value. This finding indicates that the better the intensity and quality of carbon emission disclosure, the higher the market's perception of the company. In the context of the energy sector, which is highly vulnerable to environmental issues, transparency in carbon emission disclosure becomes a crucial factor in building reputation and maintaining investor confidence.

This result is in line with Legitimacy Theory, which states that companies must operate in accordance with societal values and norms to gain recognition from the community (Dian Marlina & Vinola Herawaty, 2024). From the perspective of Signaling Theory, carbon emission disclosure can also be seen as a positive signal of a company's commitment to sustainability and risk management (Liu et al., 2023). Previous studies by Hardiyansah et al., (2021), Jeong-Hwan Lee (2023), and Desy Maharani, Inggrite Puspita (2021)support these findings, showing that environmental disclosure increases investor trust and significantly

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affects firm value. Therefore, transparency in carbon emission disclosure not only functions as a form of compliance but also as a strategic tool to strengthen corporate reputation and create long-term economic value.

The Effect of Environmental Performance on Firm Value

Based on the results of hypothesis testing, the parameter coefficient value is -0.169, the T-statistics value is 2.308, and the P-value is 0.021. Since the T-statistics value is greater than the T-table (1.985) and the P-value is less than 0.05, H2 is accepted. Thus, environmental performance has a significant effect on firm value. This result indicates that companies with strong environmental performance tend to receive positive responses from both investors and the market. Commitments to emission reduction, waste management, energy efficiency, and the adoption of environmentally friendly technologies reflect corporate social responsibility that goes beyond short-term profits, highlighting long-term sustainability. In this study, environmental performance was measured using the PROPER rating system, which serves as an objective evaluation tool for compliance and environmental management performance (Rismayanti & Putri, 2021).

This finding is consistent with Stakeholder Theory, which emphasizes that companies are accountable not only to shareholders but also to other stakeholders, including government, society, and environmental organizations. Improved environmental performance strengthens social legitimacy and enhances corporate reputation in the eyes of the public, ultimately driving firm value (Asyifa & Burhany, 2022). These results are supported by previous studies Khanifah et al., (2020); Rismayanti & Putri (2021); Asyifa & Burhany (2022), which confirm that a positive environmental reputation contributes to increased investor confidence and market valuation. Therefore, environmental performance is an essential factor in corporate strategy to build reputation, strengthen stakeholder relations, and create sustainable firm value, particularly in the energy sector, which faces high environmental risks.

The Effect of Profitability on Firm Value

Based on the results of hypothesis testing, the parameter coefficient value is 0.475, the T-statistics value is 4.876, and the P-value is 0.000. Since the T-statistics value is greater than the T-table (1.985) and the P-value is less than 0.05, H3 is accepted. Thus, profitability has a significant effect on firm value. This finding indicates that the higher the profitability level of a company, the greater the increase in its firm value. In this study, profitability is measured using Return on Assets (ROA), which reflects the efficiency of a company in managing its assets to generate profits. A high ROA demonstrates that a company is able to optimize its resources, thereby attracting investor attention and increasing firm value (Fatehah, 2023).

This effect can be explained through Signaling Theory, which states that financial information, including profits, functions as a signal to investors regarding a company's condition and future prospects. High profitability serves as a positive signal of strong operational performance, sound corporate governance, and promising growth potential (M. D. Lestari et al., 2022). These findings are consistent with prior studies Firmike Lidyatami Radja (2020); Inne et al., (2021); Mutiara et al., (2022), which emphasize that profitability plays an essential role in shaping market perceptions, enhancing investment attractiveness, and strengthening firm value. Therefore, profitability can be considered a key factor in maintaining investor confidence and creating sustainable economic value, particularly in the energy sector, which faces significant market pressures and operational risks.

Media Exposure Moderates the Effect of Carbon Emission Disclosure on Firm Value

Based on the results of hypothesis testing, the parameter coefficient value is 0.181, the T-statistics value is 2.260, and the P-value is 0.024. Since the T-statistics value is greater than the T-table (1.985) and the P-value is less than 0.05, H4 is accepted. This indicates that media exposure significantly moderates the effect of carbon emission disclosure on firm value. The coefficient value of 0.181 demonstrates that the presence of media exposure strengthens the relationship between carbon emission disclosure and the increase in firm value.

This finding is consistent with Legitimacy Theory, which posits that media exposure reinforces social legitimacy as media coverage makes corporate environmental activities more visible to the public (Asyari & Hernawati, 2023). From the perspective of Signaling Theory, media exposure amplifies the positive signals sent by companies regarding their commitment to sustainability (Bahriansyah & Lestari Ginting, 2022). This result is also in line with previous studies Asyari & Hernawati (2023) and (Ulupui et al., 2020), which show that firms with higher media exposure tend to receive greater public acceptance and improved firm value. Therefore, media exposure can be considered a crucial factor in enhancing the effect of carbon emission disclosure and strengthening the sustainability image of the company

Media Exposure Moderates the Effect of Environmental Performance on Firm Value

Based on the results of hypothesis testing, the parameter coefficient value is -0.034, the T-statistics value is 0.395, and the P-value is 0.693. Since the T-statistics value is smaller than the T-table (1.985) and the P-value is greater than 0.05, H5 is rejected. This indicates that media exposure does not moderate the effect of environmental performance on firm value. The findings suggest that the presence of media exposure has not been able to strengthen the relationship between environmental performance and firm value. Although companies may engage in various sustainability initiatives, such as emission control, waste management, and energy efficiency, these efforts do not significantly enhance investor perception unless they are effectively communicated through media channels.

From the perspective of Stakeholder Theory, strong environmental performance should ideally improve social legitimacy and public trust; however, without adequate media support, such achievements are not widely recognized and therefore do not directly affect firm value (Nisa, 2023). Similarly, according to Signaling Theory, media exposure is expected to act as a medium for transmitting positive signals regarding environmental performance, yet this study reveals that such a function has not been fully realized (Puspita Sari, 2022). This result is consistent with previous studies (Mubarok & Rosyadi, 2025) which found that media exposure does not significantly moderate this relationship. Hence, in this research context, media exposure does not serve as an external factor capable of strengthening the link between environmental performance and firm value.

Media Exposure Moderates the Effect of Profitability on Firm Value

Based on the results of hypothesis testing, the parameter coefficient value is 0.247, the T-statistics value is 1.831, and the P-value is 0.067. Since the T-statistics value is lower than the T-table (1.985) and the P-value is greater than 0.05, H6 is rejected. This indicates that media exposure does not moderate the effect of profitability on firm value. These findings suggest that although higher profitability serves as a positive signal regarding a company’s financial condition, the presence of media exposure has not significantly strengthened this relationship. From the perspective of Signaling Theory, profitability should function as an important indicator for investors regarding a firm’s growth prospects, while media exposure is expected to reinforce this signal by disseminating broader information (Puspita Sari, 2022). However, the results of this study reveal that the role of media exposure has not been fully effective, which may be attributed to the low intensity of coverage or the lack of media focus on profitability issues. This result is consistent with the findings of Murni & Fitriyah (2022), who reported that media exposure does not strengthen the relationship between profitability and firm value, but differs from Ghita (2019), who argued that media exposure enhances profit transparency and strengthens investor trust. Therefore, it can be concluded that although profitability remains a fundamental factor in determining firm value, media exposure in this study has not effectively functioned as a moderating variable.

The Effect of Media Exposure on Firm Value

Based on the hypothesis testing results, the parameter coefficient value is 0.247, the T-statistics value is 1.831, and the P-value is 0.067. Since the T-statistics value is lower than the T-table (1.985) and the P-value is greater than 0.05, H7 is rejected. This indicates that media exposure does not significantly affect firm value. Although companies may actively communicate through the media, such exposure will not substantially influence investor perception if the information delivered is not strategic, relevant, or able to attract stakeholders' attention.

From the perspective of Signaling Theory, media exposure should ideally strengthen the transmission of positive signals such as corporate reputation, transparency, and sustainability commitment. However, the findings of this study suggest that the role of media exposure has not been effective in shaping firm value, possibly due to low intensity of coverage or limited relevance of the content to investors. This result is consistent with studies by Kurniansyah et al., (2021), Sitohang et al., (2023), and Anggraeni & Fitriyah (2025), which found that media exposure does not have a significant impact on firm value. Thus, although media exposure has the potential to serve as a strategic communication tool, its role in enhancing firm value within the energy sector has not been fully optimized. For media exposure to be effective, companies must improve the quality and credibility of the information they disseminate and select appropriate communication channels to reach investors more effectively.

5. Conclusions

This study aims to examine the effect of carbon emission disclosure, environmental performance, and profitability on firm value with media exposure as a moderating variable in energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. Based on the results of the analysis, several important findings were obtained. First, carbon emission disclosure has a significant effect on firm value, indicating that the greater the transparency of information related to carbon emissions, the higher the positive perception of investors toward the company. Second, environmental performance also significantly affects firm value, showing that compliance with regulations and the implementation of sustainability programs enhance corporate reputation and legitimacy in the market. Third, profitability, proxied by Return on Assets (ROA), has a significant effect on firm value, meaning that companies that efficiently utilize their assets to generate profits tend to achieve higher firm value in the capital market.

Furthermore, the findings reveal that media exposure moderates the relationship between carbon emission disclosure and firm value, strengthening the positive impact of disclosure on market perception. However, media exposure does not moderate the relationship between environmental performance and profitability with firm value. This implies that although companies may demonstrate strong environmental performance and high profitability, media coverage does not significantly enhance their impact on firm value. In addition, media exposure has no direct effect on firm value. This indicates that the mere existence of media coverage is insufficient to influence firm value, particularly if the content lacks strategic quality, relevance, or the ability to attract investor attention. Therefore, this study highlights that fundamental factors such as carbon emission disclosure, environmental performance, and profitability remain the key determinants of firm value, while the role of media exposure can only be effective when supported by a well-structured and high-quality communication strategy.

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