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THE EFFECT OF GREEN INVESTMENT ON THE DISCLOSURE OF CARBON EMISSIONS FROM SRI - KEHATI COMPANIES

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ABSTRAK

Penelitian ini mengkaji bagaimana investasi hijau mempengaruhi pengungkapan emisi karbon pada perusahaan yang terdaftar dalam indeks SRI-Kehati. Dengan menggunakan peringkat PROPER sebagai proksi investasi hijau, penelitian ini menerapkan metode kuantitatif dengan analisis regresi linier berganda pada data dari 25 perusahaan. Carbon Emission Disclosure Index (CED) digunakan untuk mengukur transparansi pelaporan emisi karbon, dengan ukuran perusahaan sebagai variabel kontrol. Hasil penelitian menunjukkan bahwa investasi hijau berpengaruh positif terhadap tingkat pengungkapan emisi karbon. Perusahaan dengan peringkat PROPER yang lebih tinggi cenderung lebih transparan dalam pelaporan emisi karbon mereka. Hal ini menegaskan bahwa investasi berkelanjutan dapat meningkatkan akuntabilitas lingkungan perusahaan. Implikasi penelitian ini menunjukkan bahwa kebijakan terkait peringkat PROPER dapat dijadikan acuan dalam meningkatkan standar pelaporan emisi karbon. Oleh karena itu, pemerintah dan regulator perlu mendorong perusahaan untuk berinvestasi dalam praktik yang lebih ramah lingkungan guna meningkatkan transparansi dan mendukung mitigasi perubahan iklim.

Kata kunci: Pengungkapan Emisi Karbon, Ukuran Perusahaan, Investasi Hijau, PROPER, SRI-Kehati

Abstract

This study examines how green investment affects carbon emission disclosure in companies listed on the SRI-Kehati index. Using the PROPER rating as a proxy for green investment, this research applies a quantitative approach with multiple linear regression analysis on data from 25 companies. The Carbon Emission Disclosure Index (CED) measures transparency in emissions reporting, with firm size as a control variable. The findings reveal a positive relationship between green investment and carbon emission disclosure. Companies with higher PROPER ratings tend to be more transparent in reporting their carbon emissions. This confirms that sustainable investment enhances corporate environmental accountability. The study's implications suggest that PROPER ratings can serve as a benchmark for improving carbon disclosure standards. Therefore, policymakers and regulators should encourage businesses to invest in environmentally friendly practices to enhance transparency and support climate change mitigation efforts.

Keywords: Carbon Emission Disclosure, Firm size, Green Investment, PROPER, SRI-Kehati.

INTRODUCTION

Green investment refers to business projects that use eco-innovation and waste management to combat climate change. Companies implement green investment by allocating funds for environmental initiatives, such as pollution reduction and sustainability programs, as supported by research from(Syabilla et al., 2021) which highlights the role of eco-innovation and waste management in improving environmental performance. In Indonesia, companies receive an award called the Public Disclosure Program for Environmental Compliance (PROPER), given by the Ministry of Environment and Forestry (KLHK) for demonstrating environmental commitment (Anugrah, 2023).

The government and the community now consider green investment to be a critical issue that often arise in government and surrounding environments. Based on a survey by Katadata, 66.1% of Indonesian companies engage in green investment, while 18.8% are unaware of such activities, and 15.1% choose not to participate. Despite government incentives, such as tax breaks for sustainable practices, the adoption of green investment remains limited (Humaira, 2022).

Previous studies have explored the impact of green investment on carbon emission disclosure but have yielded inconclusive results, especially in emerging economies. This study seeks to bridge this gap by examining the relationship between green investment and carbon emission disclosure among SRI-Kehati-listed firms, using PROPER ratings as a proxy (Syabilla et al., 2021). With a focus on the PROPER rating as a gauge of environmental performance, this study attempts to close this gap by investigating the connection between green investments and carbon emission disclosure among SRI-Kehati-listed firms. Although previous studies have examined the relationship between green investment and carbon emission disclosure, findings remain inconclusive, particularly in emerging economies. This study seeks to address this gap by focusing on SRI-Kehati-listed firms and utilizing PROPER ratings as a proxy for green investment to provide empirical evidence on its impact on carbon transparency. Despite extensive research on green investment and carbon emission disclosure, findings remain inconclusive, particularly in emerging economies. This study addresses this gap by focusing on SRI-Kehati-listed companies, emphasizing the role of PROPER ratings as a measure of green investment and its influence on carbon transparency. This can be one of the triggers regarding some unexpected natural events, and global warming especially in Indonesia. Therefore, the Indonesian government has provided policies and provided efforts in green accounting activities. For instance, the government has introduced the Carbon Economic Value (NEK) policy, which sets emission standards to prevent excessive air pollution (Butarbutar et al., 2024). However, as the policy was implemented recently, its effectiveness in mitigating carbon emissions remains under evaluation, requiring further studies to assess its long-term impact.. In addition, the government provides tax incentives for electric vehicle users to promote environmentally friendly transportation and invests in improving charging infrastructure (Butarbutar et al., 2024). While these policies aim to reduce emissions and encourage sustainable practices, they highlight the critical need for green investment by companies to complement government efforts. Without significant corporate initiatives, such as green investment, these policies alone may not achieve the desired impact on carbon emission reduction and environmental sustainability. Making green investments in the company will have a good positive impact on the company. This has been proven from the research of Krisnamurti & Santosa Adiwibowo (2016) which has shown that environmental information has been considered as positive information from the company which can also increase the value of the company for investors to invest. These findings suggest that companies with higher green investment ratings are likely to gain better public trust and investor confidence. This is because green investment demonstrates a company's commitment to environmental responsibility, aligning with societal and investor expectations for sustainable practices. As a result, companies with strong green investment initiatives can enhance their corporate reputation, which not only attracts investors but also positively influences their market valuation. This reinforces the importance of green investment as a strategic approach for companies to secure long-term sustainability and financial growth.

In Indonesia, there is also a company organization that has contributed to the role in preserving the environment in Indonesia. SRI-Kehati is an organization that contains companies that are classified as having an interest in maintaining health and greening the environment. In this study, the source companies that will be used are companies sourced from the SRI-Kehati organization, part of the community of a foundation which was launched by the Indonesian stock exchange launched Kehati as part of the foundation community for companies that implement corporate social responsibility practices or abbreviated as CSR (Citraningrum et al., 2014). CSR is an idea that combines business and social elements with the aim of ensuring that the company can achieve welfare for society and its stakeholders so that the company can achieve maximum profit (Pondrinal, 2021). Companies listed in SRI-Kehati consist of companies from several different sectors, ranging from industry, food, and banks. In addition, companies listed in SRI-Kehati have different levels of company size, and this can affect how companies disclose carbon emissions.

Currently, Indonesia is ranked as the 7th country with the highest level of carbon emissions in the world (Annur, 2023). Carbon emissions have become one of the factors that have the greatest impact in causing global warming. It has been proven that globally, carbon dioxide has become one of the most influential gases in the global greenhouse. Based on data from the United States Environmental Protection Agency (2024), carbon dioxide has affected global emissions by

65% when compared to other emission gases, and companies that produce the largest carbon dioxide are companies engaged in the energy-producing sector.

Energy-producing companies have the highest level of carbon fumes when compared to other companies, of which electricity-producing companies still have a higher percentage than companies in the land and mining sectors. Electricity-producing companies have been estimated that by 2050 they will reach 651 million tons of carbon if green transition is not carried out, or in other words, implementing green investment to be a system in the company (Pusparisa, 2020). In addition, if this continues, energy-producing companies will have an increasingly severe impact, and continue to increase every year. It has been proven that if energy-producing companies do not make a green transition, it is predicted that by 2070 it will affect up to 65%. Meanwhile, when viewed from mining sector companies, one of which is coal, it is predicted that it will have an influence of 25% in 2030, and will have a smaller influence in the coming year (Arif, 2023).

The SRI-Kehati index serves as a platform for presenting companies across various sectors, emphasizing the role of green investment—a corporate initiative to address environmental issues—in shaping how companies disclose their environmental performance. Therefore, this study focuses on investigating the connection between green investment and carbon emission disclosure among SRI-Kehati-listed firms, aiming to provide empirical evidence to address the research gap identified in prior studies.

Reducing carbon emissions from companies certainly uses legitimacy theory, which legitimacy theory itself has the main objective of realizing the interactions that occur between a business entity and society socially. Green investment theory explains that corporate financial decisions should integrate environmental concerns to promote sustainability (Liu et al., 2022). In this context, companies engaging in green investment are expected to disclose their carbon emissions transparently as a means of demonstrating accountability and maintaining legitimacy (Dani & Harto, 2022).Legitimacy theory emphasizes the importance of aligning corporate practices with societal norms to maintain public trust. Green investment and carbon emission disclosure serve as tools to enhance corporate legitimacy by demonstrating accountability and environmental responsibility (Dani & Harto, 2022; Syabilla et al., 2021). Legitimacy theory can be a potential, resource and can provide benefits so that the company can run smoothly because of the reciprocal relationship that exists between two entities, namely the company and the social environment (Aeni & Murwaningsari, 2023). Legitimacy theory describes how businesses uphold social acceptance by acting in an open and ecologically conscious manner. Businesses can improve their reputation and cultivate enduring trust among stakeholders by bringing their business practices into line with social norms. Carbon emission disclosure and green investment serve as tools to strengthen business legitimacy in this regard. In addition, the company also has a social responsibility by showing a good attitude of transparency with the aim of gaining support from the community, and can prevent company problems that can occur. Legitimacy theory relates to green investment and carbon emission disclosure as both variables emphasize corporate transparency to achieve higher PROPER ratings and improved CED scores. This study adopts legitimacy theory, supported by previous research (Dani & Harto, 2022; Syabilla et al., 2021) which highlights that enhanced transparency and adherence to societal norms through green investment positively influence corporate legitimacy and environmental accountability.

Green investment measurement will be carried out based on calculations made by Yesiani et al. (2023) and Syabilla et al. (2021), namely by using the PROPER rating given from the Ministry of Environment to companies that have concerns about activities related to maintaining health and preserving the environment. Defined as corporate activities aimed at environmental preservation, green investment is commonly reported in sustainability reports to showcase the processes and outcomes achieved through these initiatives. In connection with the reporting carried out by companies in sustainability reports, therefore green investment itself is not much different from legitimacy theory, and this is because so that companies can fulfill corporate legitimacy to realize a transparent attitude towards society. Green investment uses the PROPER rating, and this is because it has been proven that the PROPER rating itself has shown the level of company interest in investing from company revenue funds in issues related to environmental management and health (Rosyid & Mulatsih, 2024).

CED itself is used to show the company's ability to be transparent to the public and society so that the theory related to the disclosure of

carbon emissions is to use legitimacy theory, this is because the disclosure of carbon emissions is an agreement or contract to social that occurs because of the relationship between society and the company. This agreement is one example that shows that legitimacy theory is related to carbon emission disclosure because companies must be able to follow a given system to improve the company's reputation (Selviana & Ratmono, 2019).

Green investment is one of the necessary corporate activities. According to Liu et al. (2022) green investment is said to be an investment activity carried out with the aim of reducing greenhouse gas (GHG) emissions, which include carbon emissions, and air pollution by not unduly affecting the results derived from the production and consumption of goods in a non-energy manner (Syabilla et al., 2021). However, there are still studies that show that green investment itself does not have a significant effect on the disclosure of carbon emissions (Yesiani et al., 2023). Until now there are still many companies that have not made green investments and this has become a problem in greening the environment (Humaira, 2022). In accordance with research from (Syabilla et al. 2021), the results obtained are that green investment has a significant effect on the disclosure of carbon emissions. It is reported that higher PROPER ratings indicate that businesses have become better at disclosing carbon emissions. This means that PROPER ratings can also have an effect on how companies behave in disclosing carbon emissions generated from the company. However, there are still research results that say that green investment has an influence that is still uncertain. This has been proven by research from Dani & Harto (2022) and Yesiani et al. (2023) have said that green investments that have been made by companies that focus on how companies can help preserve the environment have attracted attention for regulators and industry, The impact of green investments on environmental and social sustainability remains inconclusive. Additionally, some studies suggest that carbon emissions do not significantly influence legitimacy theory. These findings indicate the need for further research, as prior studies, including those by (Dani & Harto, 2022; Yesiani et al., 2023), and additional research such as (Afni et al., 2018; Syabilla et al., 2021), highlight inconsistencies in the impact of green investment on carbon emission disclosure and environmental sustainability. The unresolved discrepancies emphasize the importance of continued exploration to address these gaps. The hypothesis in this study primarily focuses on the influence of green investment on carbon emission disclosure, with firm size as the sole control variable examined.

H1: Green investment has a significant effect on Carbon Emissions Disclosure

METHOD

This study adopts a quantitative research approach, utilizing statistical analysis methods to process data obtained through purposive sampling from companies listed on the SRI-Kehati index, where the data used in this study can be taken from sustainability report data on companies listed on SRI-Kehati, Collecting data on carbon emission disclosures as measured by the CED index and on PROPER ratings based on information provided in each company's Sustainability Report.. For this study, the data analysis method that will be used is to use 75 observation data derived from a sample of 25 companies listed on SRI-Kehati from 2020 to 2022. However, in this study, the amount of observation data that will be used as the object of research is reduced to 70 observation data due to problems related to outliers obtained when conducting normality tests. Values in a data set that are very different or deviate from most other values are called outliers. To ensure the validity of the analysis, outliers were identified during the normality test and excluded as they could skew the results. Heteroscedasticity issues, identified through the Breusch-Pagan test, were addressed using the VCE Robust formula, which corrects standard errors without altering the regression coefficients. Heteroscedasticity problems are resolved by applying the VCE Robust formula, which guarantees accurate coefficient estimates. This method improves the results' validity, especially considering how different firms' PROPER ratings and CED scores are. Outlier values are identified as data points that deviate significantly from the majority of the dataset. In this study, outliers were detected through a normality test, revealing data points that did not align with the expected distribution. These outliers may arise due to measurement errors or sectoral differences among the sampled companies. Their presence was addressed by excluding them to ensure the robustness of the analysis and to prevent distortions in interpreting the relationship between variables. By removing outliers, the study ensures that the dataset meets the assumptions required for classical tests, including normality, multicollinearity, and heteroscedasticity.

Green Investment

Green investment will be measured through the PROPER rating which consists of 5 color ratings (Gold, Green, Blue, Red, Black). Each color has its own value, namely the gold award shows number 5, the green award shows number 4, the blue award shows number 3, the red award shows number 2, the black award shows number 1, and the company contained in SRI-Kehati and there is still no PROPER rating shows number 0. In accordance with the level of investment expenditure of the company, which means that the higher the PROPER rating obtained by the company, it will show that the company is getting better at making green investments for environmental conservation.

Carbon Emissions Disclosure

Carbon emission measurement can be measured using a checklist carbon emission disclosure index as used by research from Choi et al. (2013) The CED index table contains 18 disclosure items which are then used in calculating the company's index score in disclosing carbon emissions. The 18 items in the CED Checklist Index consist of five categories. These five categories will be the determinants for the data numbers and form as many as 18 indicators that will be used as a result of the index calculation

Table 1. Carbon Emission Disclosure Checklist

Category	Item	Description
Climate change: risks and opportunities	CC1	Assessment/description of risks (specific and general regulations) related to climate change and actions taken to manage these risks.
	CC2	Assessment/description of current (and future) financial, business and opportunity implications of climate change.
Greenhouse Gas (GHG) Emissions	GHG1	Description of the methodology used to calculate greenhouse gas emissions (e.g. GHG protocol or ISO).
	GHG2	The existence of external verification of the calculation of the quantity of GHG emissions by whom and on what basis.
	GHG3	Total greenhouse gas emissions (metric tons CO2-e) generated.
	GHG4	Disclosure of scope 1 and 2, or 3 direct GHG emissions.
	GHG5	Disclosure of GHG emissions by origin or source (e.g. coal, electricity, etc.).
	GHG6	Disclosure of GHG emissions by facility or segment level.
	GHG7	Comparison of GHG emissions with previous years.
Energy Consumption (EC)	EC1	The amount of energy consumed (e.g. tera-joules or Peta-joules).
	EC2	Calculation of energy used from renewable resources.
	EC3	Disclosure by type, facility or segment.
Greenhouse Gas Reduction and Cost (RC/Reduction and Cost)	RC1	Details of the plan or strategy to reduce GHG emissions.
	RC2	Breakdown of current GHG emission reduction target levels and emission reduction targets.
	RC3	Emission reductions and the costs or savings achieved to date as a result of the emission reduction plan.
	RC4	Future emission costs that are taken into account in capital expenditure planning.
Accountability of Emission Carbon (AEC/Accountability of Emission Carbon)	ACC1	Indication that the board (or other executive body) has responsibility for actions related to climate change.
	ACC2	Description of the mechanism by which the board (or other executive body) reviews the company's progress with regard to climate change.

Source: Choi et al. (2013)

Company Size (Control Variable)

Company size shows how much the company will affect carbon emission expenditure (Dani & Harto, 2022; Eka Dewayani & Ratnadi, 2021). Company size is one of the control variables that can be measured by looking at the ownership

assets of a company. According to Holly et al. (2022) *firm size* or company size is one of the clues for investors in calculating and looking for company performance in the past and in the future. Companies with larger, more stable assets tend to manage operations effectively. Therefore, this can be one of the influences on the size of carbon emission expenditure and PROPER level. Large or small operational activities will affect the level of carbon emission expenditure to be used as an argument in the disclosure of carbon emissions.

Methods for Analyzing Data

The initial step in data analysis involves conducting a descriptive statistical test. This test aims to determine the data's average, standard deviation, range of variance, and maximum and minimum values. These measures provide a comprehensive overview of the dataset. The second step is a normality test, which determines whether the data distribution is suitable for observation and hypothesis testing. Subsequently, a multicollinearity test is performed using the Variance Inflation Factor (VIF) to detect high correlations among independent variables in the regression model. Additionally, a heteroscedasticity test is conducted to identify any violations of classical assumptions, such as unequal variances across data points (Nengtias & Oktaviani, 2024). After ensuring the data meets these conditions, an F-test is performed to assess the overall model's suitability for hypothesis testing. The hypothesis is then tested using multiple linear regression analysis to evaluate the relationship between variables. This regression approach examines how independent variables, such as green investment and company size, influence the dependent variable, which in this case is carbon emission disclosure. The research model for multiple linear regression is as follows:

$$\mathbf{Y} = \boldsymbol{\alpha} + \boldsymbol{\beta 1 X 1} + \boldsymbol{\beta 2 X 2} + \boldsymbol{\epsilon}$$

Description:

Y = Carbon Emissions Disclosure
X_1 = Green Investment
X_2 = Company size

RESULTS AND DISCUSSION

Descriptive Statistics Test

Table 2. Descriptive Statistics Results

Variable	Obs	Mean	Std. Dev.	Min	Max
CED	70	0.754	0.165	0.17	0.94
CED (After transformation)	70	0.483	0.204	0.004	0.83
Green Investment	70	2.106	1.956	0	5
Firm size	70	31.49	2.528	24.05	40.56
Firm size rupiah (in billion rupiah)	70	6,150,000	49,400,000	27.8	413,296,999

Source: Data Processed (2024)

Based on the research results with the total sample used, table 1 has shown that CED as the dependent variable has shown that the average of the companies studied has shown a relatively high number, which means that most of the companies studied have a fairly good level of CED because they are above 75%. This means that the company has provided 75% CED and means that the company under study has a transparent nature towards the public regarding CED. From the result of 75% as the average of CED, the average company discloses 13 out of 18 indicators in the carbon emission disclosure index contained in the carbon emission disclosure index have become the average amount disclosed by companies. The data to be analysed has varied data, this is due to the level of standard deviation that is quite far from the mean, due to sectoral differences among the 25 companies studied. It was found that the best score obtained was 94% of CED disclosure, and there were companies that disclosed 17%. The cubic transformation was applied to address residual normality issues identified through skewness and kurtosis tests. This ensured compliance with regression assumptions..

Based on the results of research totalling 70 research samples, table 2 has shown that green investment as an independent variable shows that green investment produces the lowest value of 0 because for companies that still have no PROPER level, and gives the highest max number of 5 as the highest PROPER rating. The mean of the green investment variable shows a number of 2.106. The standard deviation value or standard deviation of the green investment variable shows a number of 1.956. The average company studied still has

PROPER rank 2, namely red, which means that on average the company still has a poor green investment score. The maximum score obtained by the company studied also received the maximum PROPER rating, namely the gold rating, so this can be interpreted that this company makes excellent green investments. The descriptive data show that there is variation in the amount of green investment, with most businesses receiving ratings lower than the blue PROPER. This emphasizes how more incentives and legislative backing are required to promote sustainable investment. So it can be concluded that the company studied still has a PROPER level that is below the blue rank.

The company size control variable has shown the results that the dominant company studied has a size of 6,150 trillion rupiah, The company size control variable indicates that the dominant companies in this study have assets valued at 6,150 trillion rupiah, reflecting a substantial variation in company sizes among the sample, but there are still companies that are below the average size of 27.8 billion rupiah, and this means that the size of the company is smaller when compared to the size of other companies. The company size data analyzed has a fairly varied nature because of the standard deviation lift which is quite different from the mean, and this means that there are still differences in company size that are quite different from one another.

Normality Test

Table 3. Normality Test Results

Variable	Obs	Pr (Skewness)	Pr (Kurtosis)	Adj chi2 (2)	Prob>chi2
res	70	0.154	0.0392	5.94	0.514

Source: Data Processed (2024)

Based on the normality test results obtained from above, The results of the skewness and kurtosis test (sktest) indicate that the residual data are normally distributed, with a p-value above 0.05, specifically 0.0514. Therefore, the data are deemed normal and appropriate for further analysis.. This is because the sktest test shows results above 0.05, which this study obtained normality test results of 0.0514, this means that the data errors collected in this study are valid and normal so that they can be used in this study.

Multicollinearity Test

Table 4. Multicollinearity Test Results

Variable	VIF	1/VIF
Green Investment	1.13	0.887
Company Size	1.13	0.887
Mean VIF	1.13	

Source: Data Processed (2024)

The multicollinearity test has the aim of being able to conduct a multicollinearity test on the data to be analyzed. According to previous research from Susanti & Saumi (2022) that the multicollinearity test itself is a test conducted to determine the existence of a linear relationship that is perfect or that can show less or almost perfect results on all independent variables. The VIF test is recommended to get results below 10 (Ghozali, 2016). Based on the data contained above, it can be concluded that the calculation for each variable has data results that are below 10, therefore it can be interpreted that the data used as the object of analysis in this study do not have problems in the multicollinearity test.

Heteroscedasticity Test

Table 5. Heteroscedasticity Test Results

Variables: Green Investment	
chi2 (1)	5,04
Prob > chi2	0,0341

Source: Data Processed (2024)

The heteroscedasticity test in this study was conducted using the Breusch-Pagan/Cook-Weisberg approach, which recommends a significance level above 0.05 to confirm the absence of heteroscedasticity (Ghozali, 2016). The test results, however, showed a significance level below 0.05, indicating the presence of heteroscedasticity. To address this issue, the VCE Robust formula was applied to ensure valid regression and hypothesis analysis.

Analysis of Hypothesis Results and Regression Analysis

Table 6. Results of the f test

Linear Regression		Number of obs =	70
		Prob > F =	0.033
		R-squared =	0.1570

Source: Data Processed (2024)

The regression results indicate that the data are normally distributed, with some variables showing significant influence while others do not. The regression analysis begins by examining the F-test results, which indicate a significance level below 0.05. This suggests that the data meet the criteria for further analysis and are appropriate for use in this research. The R-squared showed a result of 15.7% shows that green investment variable and company size explain the CED variable. Meanwhile, the remaining 84.3% is attributed to variables outside the scope of this study.

6. Hypothesis Test

Table 7. Hypothesis Testing Results

CED	Coef.	Robust Std. Err.	P > t
Green Investment	0.037	0.012	0.003
Company Size	-0.006	0.009	0.521
_cons	0.593	0.305	0.057

Source: Data Processed (2024)

Based on the research results obtained, it can be concluded that green investment has a significant positive effect on the disclosure of carbon emissions. The better the PROPER rating owned by a company will have a better CED level. Based on the data obtained, it can be concluded that H1 has been accepted and proven that green investment has a significant influence on the disclosure of carbon emissions, therefore H1 of this study is accepted. For the control variable itself, it has been proven that company size has no relationship to CED. It means that the size of the company will not affect the company's willingness to be transparent to the public in terms of providing carbon emission disclosure.

DISCUSSION

The findings of this study support legitimacy theory, which states that companies seek social acceptance by demonstrating environmental responsibility. Companies with higher PROPER ratings tend to disclose more detailed carbon emission reports, reinforcing their accountability and stakeholder trust. This suggests that green investment is not only an environmental initiative but also a strategic tool for strengthening corporate legitimacy (Syabilla et al., 2021). Furthermore, these findings highlight that companies actively engaging in green investments enhance their corporate image and attract investors who prioritize sustainability. However, this study also finds that firm size does not significantly influence carbon emission disclosure, suggesting that regulatory pressures and sustainability commitments play a more decisive role than company size. \n\nPolicy Implications: Given that firm size is not a primary determinant of carbon disclosure, policymakers should focus on enforcing stricter mandatory reporting requirements for environmental accountability, regardless of company size. Encouraging all firms—regardless of scale—to invest in green initiatives could lead to more consistent and transparent sustainability reporting practices. There is evidence that environmental change and damage is largely the result of human activity, and the main factor is the burning of fossil fuels which increases greenhouse gas emissions. As part of their environmental responsibility, companies disclose carbon emissions to increase transparency regarding their greenhouse gas outputs. However, carbon emission disclosure itself is not a direct solution to reducing greenhouse gas emissions but serves as a step towards accountability and fostering efforts for mitigation with the intention of reducing the level of carbon emission gas expenditure. The results are consistent with earlier studies (Afni et al., 2018) which demonstrate that green investment positively influences carbon transparency by encouraging companies to adopt environmentally responsible practices and disclose their efforts. However, it is important to note that while carbon transparency reflects a company's accountability, it does not directly equate to a reduction in carbon emissions, as the models focus on disclosure rather than actual emission levels. The findings indicate that the effectiveness of Carbon Emission Disclosure (CED) improvements is influenced more by external incentives, such as regulatory pressures, than by internal factors like firm size. This aligns with the observation that firm size, as a control variable in this study, does not show a significant impact on CED. Policymakers should focus on creating frameworks that encourage all companies, not just large corporations, to adhere to environmental standards and implement sustainable practices.

The hypothesis test confirms that green investment positively influences carbon emission disclosure (CED), as evidenced by the significant relationship between higher PROPER ratings and increased levels of CED. This aligns with prior studies by (Luo et al., 2021; Shen et al., 2021), which demonstrate that green investment enhances a company’s environmental transparency. These findings highlight the critical role of sustainable investment practices in driving

corporate accountability and improving the quality of carbon emission reporting. This study focuses on the impact of Green Investment on Carbon Emission Disclosure (CED); therefore, discussions about the effects of CED on other variables fall outside the scope of this research and have been omitted to maintain alignment with the research objectives. Corporate reputation plays a critical role in attracting foreign investment, as demonstrated by Widianingsih & Kohardinata (2024), who found that the level of Carbon Emission Disclosure (CED) influences foreign investors' decisions. Additionally, Ramadhan et al. (2021) highlight that CED can enhance corporate reputation, providing a competitive edge in the market. These insights emphasize the broader significance of CED beyond environmental transparency.

The findings of this study reveal that the Company Size control variable does not have an impact on the fluctuations in the level of Carbon Emission Disclosure (CED) in a company, therefore this provides evidence that the control variable used in this study shows no significant effect of Company Size on the increase or decrease in the level of Carbon Emission Disclosure (CED). This indicates that Company Size is not a determining factor in the transparency of carbon emission disclosures. Consequently, this variable cannot be effectively utilized as a control variable in this research context. These findings align with prior studies (Dani & Harto, 2022), which suggest that firm size does not consistently influence corporate transparency in carbon emission reporting.. This can be because the larger and smaller the company will not have an influence on the company's desire to be transparent to the public. The results obtained align with prior studies by Dani & Harto (2022), which suggest that firm size does not significantly influence a company's inclination to disclose carbon emissions. This indicates that firm size may not always serve as a reliable control variable in examining CED-related transparency.

Legitimacy theory underpins the disclosure of carbon emissions, as it addresses the challenges arising from greenhouse gas emissions and emphasizes the importance of aligning corporate activities with societal expectations. This study's findings, which demonstrate a positive effect of green investment on Carbon Emission Disclosure (CED), further validate legitimacy theory as a framework for explaining corporate transparency in environmental reporting. The results indicate that companies utilizing green investment to enhance their environmental performance are effectively meeting societal norms, thereby strengthening their legitimacy.

CONCLUSION

This study concludes that green investment, as measured by PROPER ratings, significantly enhances corporate carbon emission disclosure (CED). Companies that allocate resources toward sustainability initiatives demonstrate greater transparency in reporting their carbon emissions. These findings underscore the role of sustainable investment in fostering corporate environmental accountability and reinforcing legitimacy. \n\nHowever, the study finds that firm size does not significantly influence CED, implying that regulatory policies and corporate sustainability commitments have a stronger impact than company scale. This highlights the importance of government regulations and incentives in promoting sustainability reporting across all industries. Policymakers should encourage firms to adopt green investment practices by providing tax incentives, regulatory support, and stricter compliance measures. Companies should recognize the long-term benefits of transparency in environmental reporting, not just as a compliance requirement but as a strategic advantage in attracting investors and maintaining social legitimacy. Limitations and Future Research: This study is limited by its small sample size and reliance on SRI-Kehati-listed companies, which may not represent all industries. Future research should explore longitudinal data and incorporate additional variables, such as corporate governance factors and industry-specific sustainability initiatives. Expanding the sample to non-SRI-Kehati companies would provide a more comprehensive perspective on the influence of green investment on corporate transparency.

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