



# International Journal of Economics, Accounting, and Management

Vol. 2, No. 3, September 2025  
Page 255-262

E-ISSN: 3047-6798  
P-ISSN: 3047-678X

Site : <https://jurnal.intekom.id/index.php/ijeam>

## Green Accounting, Carbon Emission Disclosure And Its Impact On Company Value

Dyah Aruning Puspita <sup>1</sup>, Nadela Syahma <sup>2</sup>, Sugeng Hariadi<sup>3</sup>  
<sup>1,2,3</sup>Faculty of Accounting, STIE Malangkucecwara, Malang, Indonesia

### Article Info

#### Article history:

Received August 26, 2025  
Revised September 21, 2025  
Accepted September 30, 2025

#### Keywords:

Green Accounting,  
Carbon Emission Disclosure,  
Company Value

### ABSTRACT

A company's performance achievements, which raise the company's value through an increase in stock prices on the Indonesia Stock Exchange (IDX), indicate the degree of stakeholder faith in management.. This study tries to investigate the impact of carbon emission disclosure and green accounting on corporate value. The aims of study to ascertain the impact of carbon emission disclosure and green accounting on company value. Descriptive and verification research methods were used in this quantitative investigation. The population in this study is Palm Oil Issuer Companies listed on the Indonesia Stock Exchange (IDX) in the 2018-2022 period. And the sample used is 9 companies according to the selected criteria. Multiple regression and descriptive analysis are used in this study's analysis method. The study's findings suggest that green accounting significantly affects a company's value and that reporting carbon emissions has a significant impact on that value. This suggests that a company's worth will rise in tandem with its growing use of green accounting, and that disclosure of carbon emissions has a big impact on that value. Put another way, a company's worth tends to rise in proportion to the amount of information it discloses about its carbon emissions.

*This is an open access article under the [CC BY](#) license*



### Corresponding Author:

Dyah Aruning Puspita  
Faculty of Accounting, STIE Malangkucecwara,  
Malang, Indonesia  
Email : [dyahap70@stie-mce.ac.id](mailto:dyahap70@stie-mce.ac.id)

## 1. INTRODUCTION

In the investment process, company value is considered a key factor for investors to consider. Company value reflects the level of stakeholder trust in management, This is reflected in the company's performance, which enhances its worth by raising its share price on the Indonesia Stock Exchange (IDX). In this case, an increase in the market share price that exceeds the net book value reflects the company's success in managing its financial fundamentals and its sustainability by considering environmental and social factors [1]. Therefore, investors believe that a high company value will generate high returns. Conversely, a low company value will cause investors to lose confidence in the

potential returns on their investments [2]. Company value can be influenced by several factors. Previous research examining factors affecting company value included carbon emissions. The disclosure of carbon emissions is one revelation that may be good news for investors, indicating that investment risk in a company is low, resulting in a lower cost of equity. Stock prices or the company's worth will rise as a result of this reduction in the cost of equity.[3]. The results of the study conducted by [3] stated that carbon emission disclosure has a positive effect on company value, but this differs from the results of [4] which stated that carbon emission disclosure has no effect on company value.

According to data from the [www.ojk.go.id](http://www.ojk.go.id) page, In 2020, the company's stock price on the Jakarta Composite Index (IHSG) fell from 2019., but increased again in 2021. The change in the IHSG from 2019 to 2020 experienced a decrease of 6.79%, namely from 1.70% to 5.09% in 2020 which then increased in 2021 to 10.08% (Financial Services Authority, 2022). According to PSAK 1, companies are permitted to present additional reports such as sustainability reports that combine information about the company to stakeholders by combining financial reporting, social reporting, environmental reporting, and corporate governance into one comprehensive report [5]. The rapid development of the palm oil industry has made companies operating in this industry face new challenges, namely the issue of sustainability and environmental balance. Companies must continue to meet the market demand for palm oil while still paying attention to the management of the resources used and the environmental impacts they cause. Palm oil companies' activities are often considered to have negative impacts on the environment, such as the expansion of plantations that often result in forest fires, and palm oil processing activities, that are believed to be the most significant contributors to greenhouse emissions. Therefore, firms require a type of environmental responsibility., where companies voluntarily incur environmental costs as a form of concern. It is anticipated that the use of green accounting would lead to the implementation of environmentally friendly practices in the business's operational cycle by making efficient use of all available resources. Managing costs for environmental sustainability can be interpreted as a long-term investment for the company. This action can create a positive image that has an impact on the company's reputation in the future, even though it requires current expenses.[6]. Investor confidence in the operations of several palm oil companies has declined, as seen by the drop in their share prices after the forest fires. According to [7] According to legitimacy theory, firms will work to retain their reputation and ensure the long-term viability of their operations by aligning perceptions or assumptions that their actions are appropriate, desired, or consistent with social norms and values.[1]. CED can be used to show that the business is accountable for the results of its operations and to persuade investors and the general public that its activities are consistent with society norms and values.[2] and [8].

Several businesses that used CED still saw a drop in share values, which runs counter to the legitimacy theory. PT. Bakrie Sumatera Plantations Tbk's shares dropped 3.77 percent in a week, while PT. Salim Ivomas Pratama Tbk's shares dropped 1.16 percent. The usage of energy and electricity, primarily produced by industry, also triggers carbon emission disclosure in addition to combustion activities. Manufacturing businesses are known to use a lot of energy to run their operations. Furthermore, a significant portion of the carbon emissions released into the atmosphere are caused by the burning of fossil fuels, such as coal, natural gas, and petroleum, which are frequently utilised as fuel for manufacturing activities. [9]. One of palm oil issuers, PT. PP London Sumatera Indonesia Tbk, is ranked the 12th largest plantation company in Indonesia, with a land area of 245,629 hectares and a planted area of 134,290 hectares ([www.wikipedia.org](http://www.wikipedia.org)). According to the company's 2019 report, plantation land in South Sumatra reached 40,929 hectares, consisting of oil palm and rubber plantations. This land includes 23 plantation areas and 9 factories. Lonsum is also a green company, meaning it has an environmental commitment and strives to produce environmentally friendly products. To prevent and minimize environmental pollution and damage by Palm Oil Processing (PKS) companies, environmental laws and regulations and various environmental protection programs have been issued.

However, existing regulations and programs are not effective enough to maintain environmental quality and function. Therefore, it is necessary to find alternatives and instruments that can prevent environmental pollution and damage, one of which is PROPER. In order to improve business environmental management performance in compliance with laws and regulations, the government launched the PROPER program, which is one type of government policy. Another example of democratisation and openness in Indonesian environmental management is PROPER, which is overseen by the Ministry of Environment.

However, businesses' openness in disclosing their environmental performance has not kept pace with this PROPER program trend. For example, PT. Adaro Energy, in its 2016 report, had an operating branch company. The parent company received a gold rating in PROPER, while the other branches received green and blue ratings. However, the gold rating is listed in the annual environmental report. PT. Adaro Energy should report all environmental reports of its branches. Because there is currently little research on the subject and because carbon emission disclosure has a significant impact on the sustainability of society and the environment, this study brings up the subject of green accounting and carbon emission disclosure in palm oil issuing companies. From the problems mentioned previously, the researcher's desire arose to examine the factors that influence company value. So the question arises that can be formulated whether green accounting affects company value in palm oil issuers listed on the IDX and participating in the PROPER program for the 2018-2022 period and whether carbon emission disclosure affects company value in palm oil issuers listed on the IDX and participating in the PROPER program for the 2018-2022 period.

Legitimacy theory states that in conducting its business sustainably, an entity must ensure compliance with prevailing societal norms, and its activities must be accepted by external parties (legitimate). Therefore, the entity strives to obtain approval to avoid sanctions. Because the two parties—the business and the environment—have a reciprocal relationship, legitimacy is advantageous and could be a resource for the business's survival (going concern) [10]. As indicated by [11], Signaling Theory is a theory that links two parties: management and investors, with management acting as the signal provider and investors as the signal recipients. This theory also explains that this information will influence investment decisions. The level of company profits is crucial in signaling theory. High profits are deliberately disclosed in the hope that the market will be able to distinguish between good and bad company quality. The higher the company's profits, the higher the company's value, attracting investors [12]. The market worth of a corporation's debt and equity securities is represented by its company value. The firm's stock price reflects this; a high stock price denotes a high company value. If the stock price keeps rising, a high business value can maximise returns for owners. [13]. From the standpoint of an investor, the worth of the firm and the entire complexity of its actual risks—which include choices about financing, dividends, and investments—are reflected in the stock market price. The worth of the company increases with the stock price.

The goal of green accounting is to incorporate environmental considerations into company operations and finances. Businesses can invest in eco-friendly technologies, reduce expenses, enhance environmental performance, and encourage ecologically conscious production methods by using green accounting. Green accounting, also known as environmental accounting, offers chances to lower energy consumption, preserve natural resources, lessen hazards to the environment and public health, and improve a business's competitive edge. Businesses that have adopted green accounting will constantly work to avoid causing environmental harm via their operations, which will lower environmental expenses and allow them to make money without endangering the environment. One of the main causes of climate change is the release of carbon into the atmosphere, which is linked to greenhouse gas emissions. The operations of a business are one of the primary contributors to carbon emissions. Companies are currently obliged to provide information on the environmental impact of their operations in a more transparent manner. Companies demonstrate transparency and accountability by disclosing

information through their annual reports. One example of environmental disclosure is carbon emissions disclosure, which is part of a supplementary report required by law [13]. Thus, carbon emissions disclosure is an example of environmental disclosure that is part of a supplementary report stipulated in law. The following is the hypothesis model in this study;

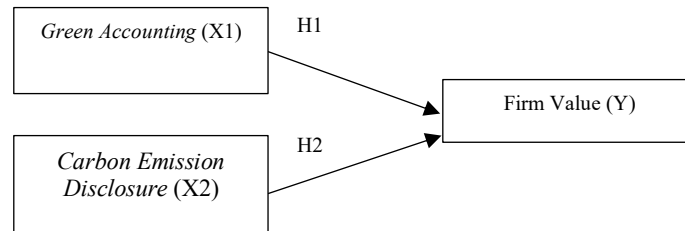


Figure 1. Hypothesis Model

## 2. METHOD

In order to determine the variables that can affect the financial performance of palm oil firms listed on the Indonesia Stock Exchange for the years 2018–2022, this study used quantitative methodologies and a descriptive and verification approach. They are used to study specific populations or samples. Data collection utilizes research instruments and quantitative or statistical data analysis, with the aim of describing and testing established hypotheses. This study's secondary data source is the financial and annual reports of all palm oil companies listed on the Indonesia Stock Exchange from 2018 to 2022.. The official websites of each palm oil company and the Indonesia Stock Exchange, [www.idx.co.id](http://www.idx.co.id), are the places to find the financial reports that were used.

The population in this study is Palm Oil Issuer Companies listed on the Indonesia Stock Exchange (IDX) for the period 2018-2022. Palm oil issuer companies were selected because these companies have experienced quite rapid development recently and are accompanied by the expansion of plantation areas, which will certainly impact the environment. Nine businesses represent the study's sample, however the researcher must fulfil a number of requirements. The secondary data utilised in this study came from the 2018–2022 Company Performance Rating Program in Environmental Management (PROPER) annual reports of companies listed on the Indonesia Stock Exchange. Descriptive analysis and multiple linear regression analysis are the analytical tools utilised in this study to indicate the direction of the relationship between the dependent and independent variables and to quantify the strength of the link between two or more variables.

### 2.1 Research Variable

#### 2.1.1. Dependent Variable

Firm Value (corporate value) is defined as investors' perception of a company's performance, which is related to its share price and can maximize shareholder wealth if the stock price improves. A high share price raises the company's value and boosts market confidence in both its current performance and its future prospects.. Value is created when a company provides returns to its investors exceeding the cost of capital. Firm value represents the present value of expected future earnings and serves as an indicator for the market in assessing the company as a whole. In this study, the researchers used the Tobin's Q formula to measure this [14].

This ratio allows values from 0 to 1 or greater than 1. The higher the Tobin's Q value, the greater the company's value. A Tobin's Q value greater than one suggests that investors place more value on the company. The formula for applying Tobin's Q ratio is as follows:

$$\text{Tobins'Q} = \frac{MVS + D}{TA}$$

### 2.1.1 Independent Variable

Green accounting is a new development in the field of accounting that demonstrates that the accounting process focuses not only on financial objects, transactions, and events, but also on environmental and social issues. Green accounting can help to enhance environmental performance, reduce expenses, Invest in ecologically friendly technologies and encourage eco-friendly product processes.. Green accounting variables can be measured using content analysis. Green accounting indicators consist of environmental preventive costs, environmental detection costs, internal environmental failure costs, and external environmental failure costs. Each indicator in the yearly report is assigned a score of one, yielding a total score of four. If the yearly report contains no environmental cost component, the score is zero. Once the score is established, the disclosure level is determined as follows:

$$\text{Disclosure Level} = \frac{\text{Total Score Met}}{\text{maximum score}}$$

Carbon emission disclosure is a voluntary disclosure meant to enhance environmental awareness by implementing accountability through disclosure of the company's carbon emissions. Carbon emission disclosure can be measured through the carbon emission disclosure index in annual reports or through sustainability reports, which are usually separate. There are 18 factors in the carbon emission disclosure index, which is divided into five categories: climate change, greenhouse gas emission calculations, energy consumption, greenhouse gas emission costs and reductions, and carbon accountability.

$$\text{CED} = \frac{\text{Total Score revealed}}{\text{maximum total score}}$$

Because the observational data contained no ineligible factors, a model fit test was performed, which included a coefficient of determination test and a t-test. The coefficient of determination test measures how well the independent factors explain the variation in the dependent variable.

Table 1. Determination Test Result (R<sup>2</sup>)

R	R-Square	Adjusted R Square	Durbin Watson
,375 <sup>a</sup>	,341	,100	2,101
Predictors: (Constant), Carbon Emission Disclosure, Green Accounting			
Dependent Variable: Nilai Perusahaan			

Based on the coefficient of determination test findings in the table above, the R-square value is 0.341, which represents 34.1%. This test result is not particularly high, indicating that the influence of the independent variables green accounting and carbon emission disclosure on the dependent variable, namely company value, can only be explained by 34.1%. The remaining 65.9% can be explained by variables not considered in this study. Multiple linear regression analysis examines the relationship between the dependent variable (Y) and the independent variables (X1 and X2). The multiple linear regression analysis in this investigation yielded the following results.

Table 2. Results of Multiple Regression Analysis

Variabel	Unstandardized Coefficients (B)	t	Sig
(Constant)	2,591	2,570	,001
Green Accounting	,533	2,394	,000
Carbon Emission Disclosure	,628	2,127	,000
Dependent Variable: Nilai Perusahaan			

According to the results of the multiple linear regression analysis in the table above, the constant value suggests a positive parameter of 2.591, implying a unidirectional influence between the variables. The T-test calculates the independent variable's partial influence on the dependent variable. To accept a hypothesis with a t-test, the regression coefficient must be positive and the significance level must be less than 0.05.

Table 3. t Test Result

Variabel	Unstandardized Coefficients (B)	t	Sig
(Constant)	2,591	2,570	,001
Green Accounting → Nilai Perusahaan	,533	2,394	,000
Carbon Emission Disclosure → Nilai Perusahaan	,628	2,127	,000
T-Tabel : 1,679			

### 3. RESULTS AND DISCUSSION

#### 3.1. Results

##### 3.1.1. H1: Green Accounting has a significant impact on Company Value

The table above shows a hypothesis test, and the significance level for the link between variables X1 (green accounting) and Y (firm value) is 0.000, which is less than 0.05. Furthermore, the calculated t-value is higher than the t-table, at 2.394 versus 1.679. These findings suggest that variable X1 (green accounting) has a considerable influence on variable Y (firm value). As a result, H1, which states that green accounting has a considerable impact on firm value, can be accepted.

##### 3.1.2 H2 : Carbon Emission Disclosure has a significant impact on Company Value

The table above demonstrates a hypothesis test, and the significance value for the relationship between variable X2 (carbon emission disclosure) and variable Y (firm value) is 0.000, less than 0.05. Furthermore, the calculated t-value is greater than the t-table, at  $2.127 > 1.679$ . These findings show that variable X2 (carbon emission disclosure) has a considerable influence on variable Y (firm valuation). As a result, H2, which states that Carbon Emission Disclosure has a large impact on Firm Value, is accepted.

#### 3.2. Discussions

##### 3.2.1 The impact of green accounting on company value in palm oil issuers listed on the Indonesia Stock Exchange (IDX) participating in the PROPER program for the 2018-2022 period.

Green accounting assists management in disclosing costs, thereby controlling environmental costs and improving company performance. In addition to cost control, green accounting can also help companies avoid environmental obligations, thereby minimizing risks to stakeholders. Both of these factors contribute to stakeholder support. This is critical because stakeholders play an important role in

boosting company value. A rise in a company's stock price suggests an increase in its value. According to the Environmental Accounting Guidelines proposed by the Minister of Environment, there is a significant relationship between green accounting and company value. Green accounting is a quantitative assessment of the costs and effectiveness of environmental protection, and companies must keep records and reports on environmental activities in order to increase company value and achieve sustainable development. This aligns with recent research by [9], which states that green accounting has a significant impact on firm value. These findings also align with subsequent research [6], which states that green accounting has a positive effect on firm value. This contrasts with the research by [12] which states that green accounting has no significant effect on firm value. Variability in the findings of this study is common due to the various differentiating factors within the research findings.

### **3.2.2. The influence of carbon emission disclosure on company value in palm oil issuers listed on the Indonesia Stock Exchange (IDX) participating in the PROPER program for the 2018-2022 period.**

Companies that provide more complete and comprehensive carbon emission disclosures can increase their value in the eyes of investors or shareholders, as this has become a concern for investors and potential investors, as it directly relates to the company's future sustainability. This is because investors perceive management as capable of managing the environmental impacts of its operations. Carbon emission disclosures give a foundation for stakeholders, particularly investors, to be more attracted to enterprises that disclose their environmental factors. Research by [8] revealed that carbon emission disclosure had a favorable and considerable influence on the firm value. These results also align with subsequent research by [11] which indicated that disclosing carbon emissions increases corporate value. This contradicts with research by [12] It discovered that disclosing carbon emissions did not have a substantial influence on company value. Variability in the study's findings is widespread because the research results contain a variety of differentiating elements.

## **3. CONCLUSION**

Based on the analysis of nine palm oil companies listed on the Indonesia Stock Exchange (IDX) participating in the PROPER program for the 2018-2022 period, with the aim of identifying and analyzing the impact of green accounting and carbon emission disclosure on company value, we are able to draw the following conclusions:

Green accounting has a substantial impact on business value. This suggests that as a company's use of green accounting grows, so does its value. This relationship is significant because it has a significant impact. By providing a healthy environment, the corporation has fulfilled its social commitment with the society. No party is damaged because the corporation, as the operating party, has made all reasonable steps to safeguard the environment in which it lives, and the community is not required to suffer the consequences of the company's environmental damage.

Carbon emission disclosure significantly impacts company value. In other words, the more information a company discloses regarding carbon emissions, the more likely it is to increase its value. This supports the narrative that management will provide relevant information to shareholders and the public through its annual report, thereby minimizing information asymmetry related to the company's sustainability. Disclosure of information through carbon emission disclosures offers a foundation for stakeholders, particularly investors, to be more drawn to enterprises that report environmental considerations.

## **REFERENCE**

- [1] D. Gustinya, SE., M.Ak., "Pengaruh Penerapan Green Accounting Terhadap Nilai Perusahaan Manufaktur Peserta Proper Yang Listing Di Bursa Efek Indonesia Tahun 2017 - 2019," *J. Akunt.*

- dan Bisnis Krisnadwipayana*, vol. 9, no. 2, p. 759, 2022, doi: 10.35137/jabk.v9i2.688.
- [2] T. R. Almaeda, A. V. D. Pramuda, and D. Setiawan, "Perkembangan Penelitian Carbon Disclosure di Indonesia," *Reviu Akunt. dan Bisnis Indones.*, vol. 7, no. 1, pp. 109–133, 2023, doi: 10.18196/rabin.v7i1.17607.
- [3] R. I. Bahriansyah and Y. Lestari Ginting, "Pengungkapan Emisi Karbon Terhadap Nilai Perusahaan dengan Media Exposure Sebagai Variabel Moderasi," *J. Ris. Akunt. Perpajak.*, vol. 9, no. 02, pp. 249–260, 2022, doi: 10.35838/jrap.2022.009.02.21.
- [4] W. K. Cholida, "Analisis Pengaruh Kinerja Keuangan, Kinerja Operasional, Biaya Ekuitas Dalam Pengungkapan Emisi Karbon Untuk Menciptakan Nilai Perusahaan," *Diponegoro J. Account.*, vol. 9, no. 2, pp. 1–11, 2020.
- [5] E. Febriyanti and L. Ike Purnomo, "Pengaruh Audit Complexity, Financial Distress, Dan Jenis Industri Terhadap Audit Delay," *Sakuntala*, vol. 1, no. 1, pp. 645–663, 2021.
- [6] M. Kholmi and S. A. Nafiza, "Pengaruh Penerapan Green Accounting dan Corporate Social Responsibility Terhadap Profitabilitas (Studi Pada Perusahaan Manufaktur Yang Terdaftar di BEI Tahun 2018-2019 )," *Reviu Akunt. dan Bisnis Indones.*, vol. 6, no. 1, pp. 143–155, 2022, doi: 10.18196/rabin.v6i1.12998.
- [7] B. Effendi, "The Impact of Environmental Performance on Firm Value: Evidence from Indonesia," *Proc. 7th Reg. Account. Conf. (KRA 2020)*, vol. 173, no. Kra 2020, pp. 155–161, 2021, doi: 10.2991/aebmr.k.210416.021.
- [8] C. Salsabilla, F. Adrianto, and M. F. Alfarisi, "Carbon Emissions Disclosure: Study of Companies Classified as Carbon-Intensive Industries on the Indonesian Stock Exchange," *J. Inform. Ekon. Bisnis*, vol. 6, pp. 388–393, 2024, doi: 10.37034/infneb.v6i2.874.
- [9] Ambarwati and D. Hapsoro, "Relationship Analysis of Eco-Control, Company Age, Company Size, Carbon Emission Disclosure, and Economic Consequences," *Indones. J. Account. Res.*, vol. 23, no. 2, pp. 203–324, 2020.
- [10] N. Banjari, "Pengaruh Green Accounting Dan Carbon Emission Disclosure terhadap Nilai Perusahaan Melalui Maqashid Syariah," *J. Ris. Akunt. Politala*, vol. 6, no. 2, pp. 386–403, 2023, [Online].
- [11] P. Kurnia, D. P. Emrinaldi Nur, and A. A. Putra, "Carbon emission disclosure and firm value: A study of manufacturing firms in Indonesia and Australia," *Int. J. Energy Econ. Policy*, vol. 11, no. 2, pp. 83–87, 2021, doi: 10.32479/ijeep.10730.
- [12] Yastynda, "Pengaruh Penerapan Green Accounting dan Kinerja Lingkungan terhadap Nilai Perusahaan pada Perusahaan Sektor Basic Material yang Terdaftar di Bursa Efek ...," *Repository.Unej.Ac.Id*, vol. 2, no. 16–100, p. 100, 2022.
- [13] M. Septa, N. Gunawan, and E. Andhaniwati, "Kontribusi Green Investment dan Good Corporate Governance Terhadap Pengungkapan Emisi Karbon," vol. 20, pp. 123–136, 2024.
- [14] N. Ilmi and T. A. Setiyaningsih, "Pengaruh Kinerja Lingkungan dan Biaya Lingkungan terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Intervening," *Innov. J. Soc. Sci. Res.*, vol. 5, no. 1, pp. 955–966, 2025.