

Carbon Emissions Disclosure and Environmental Performance on Company Value

(A Case Study of Sri-Kehati Index Companies in 2015-2020)

Bintang Berliana Sibarani ¹⁾; Widia Agustina ²⁾

¹⁾ sibaranim2017@gmail.com, Faculty of Economics and Business, Universitas Dirgantara Marsekal Suryadarma

²⁾ widiaagustina380@gmail.com, Faculty of Economics and Business, Universitas Dirgantara Marsekal Suryadarma

Article Information:

Keywords:

Carbon Emissions Exposure;
Environmental Performance;
Company Value;

Article History:

Received: February 23, 2023

Revised : March 2, 2023

Accepted: March 14, 2023

Cite This Article:

Sibarani, B., & Agustina, W. (2023). Carbon Emissions Disclosure and Environmental Performance on Company Value. *Indikator: Jurnal Ilmiah Manajemen dan Bisnis*, 7(2), 98 - 109.

doi:<http://dx.doi.org/10.22441/indikator.v7i2.19595>

Abstract

This study aims to identify the influence of carbon emissions and environmental performance disclosure on company value partially and simultaneously. The object of this research is a group of companies included in sustainable and responsible investment, the SRI-KEHATI Index in 2015-2020. The data analysis method is associative, using multiple linear regression analysis and partial and simultaneous hypothesis testing. The result indicates that carbon emissions disclosure has a partial and significant effect on enterprise value with the results of $t\text{-count } 2.074 > t\text{-table } 2.05183$ with a significance of $0.048 < 0.05$. Environmental performance has a partial and substantial effect on company value with the results of $t\text{-count } 4.624 > t\text{-table } 2.05183$ with a significance of $0.000 < 0.05$. Simultaneously, the carbon emissions and environmental performance disclosure have a significant effect on company value with the results of $F\text{-count } 13,217 > F\text{-table } 3.34$ with a significance of $0.000 < 0.05$. The determinant coefficient shows that the variables in the study affect at the rate of 49.5%.

INTRODUCTION

Companies work to generate profit and satisfy the stakeholders, which generally focus on increasing the company value. The company value is related to the stock price; Hery (2017: 2) stated that the company value is the investor's response to the success rate of the stock price; when the stock price increases, the company value will also surge. The increase in company value can prosper the shareholders, which generally becomes the company's purpose. Burgeoning company shareholders no longer pay attention to their finance, but it is now essential for companies to pay attention to their surrounding environment. To attract more investors, financial performance alone is less relevant nowadays. The company must report additional information (Dura, 2022:1-2). This addition includes environmental and social information, which several issuers have started embedding such facts in their annual reports.

Environmental and social reports become the business strategy to maintain or increase competitiveness in reputation and loyalty to products or company image. It will be a competitive advantage that is difficult for competitors to imitate (Labetubun, 2022:20). One of the ways for companies to preserve their value is to maintain a decent relationship with their stakeholders. Based on the theory of stakeholders, companies need to be beneficial to their stakeholders by providing information about the company condition and company responsibilities to the environment, as by informing financial and annual reports. Sustaining relationships with stakeholders and showing that the company has been responsible for its environment are possible through Corporate Social Responsibility (CSR) program.

One of the exposures in CSR is the disclosure of carbon emissions in the annual report under the International Financial Reporting Standard (IFRS) No. 1 paragraph 12 (2020). It

states that entities may also present, apart from financial statements, reports on the environment and value-added statements, especially for industries where environmental factors play an important role and for industries that consider employees as a group of noteworthy report users.

Disclosure of carbon emissions is an essential component of social and environmental responsibility. It is an effective instrument to show that the company is committed to carbon management and expects to build a positive image for readers (Saha, 2017:103). Disclosure of carbon emissions is necessary because it is a form of information transparency to stakeholders about the company's efforts addressing carbon emissions. Carbon emissions have become a concern for the world, as in the speech of the President of the Republic of Indonesia, Mr. Ir. H. Joko Widodo, at a high-level summit of world leaders on climate change or Conference of the Parties 26th (COP26) held in Glasgow, Scotland, on October 31 to November 12, 2021. The summit discussed the largest and most important matters related to climate on the planet. In his speech, he explained that with such great natural potential, Indonesia continues contributing to climate change management. The government makes efforts to reduce carbon emissions by establishing several policies, for example, Law no. 6 of 1994, which adopted the Kyoto Protocol. The key points are in Law no. 17 of 2004 as well as Presidential Regulation no. 61 of 2011 and Presidential Regulation no. 71 of 2011, which explains the national greenhouse gas (GHG) inventory, and Law no. 16 of 2016 based on the 2015 Paris Agreement which targets carbon emissions reduction of 29% to 41% by 2030.

In addition to environmental responsibility through carbon emission disclosure reports, the company image can influence stakeholders' perceptions. One way to maintain a positive image is to participate in the company's performance rating assessment program (PROPER), which results from the company's environmental performance. The company has a responsibility to stakeholders to pay attention to the environmental performance, which will have an impact on the fluctuations in the stock price, which can also give confidence to stakeholders that the company can control its company well, which will affect the company's future.

The following is the initial data of PT. Semen Indonesia Tbk and PT. Timah Tbk as companies listed in the SRI-KEHATI Index, including the stock prices, disclosure of carbon emissions, and environmental performance.

Table 1

Company Value, Disclosure of Carbon Emissions, and Environmental Performance of PT. Semen Indonesia (Persero) Tbk and PT Timah Tbk

PT SEMEN INDONESIA PERSERO Tbk (SMGR)				PT TIMAH Tbk (TINS)			
<i>Year</i>	<i>Price</i>	<i>Disclosure of carbon emissions</i>	<i>Environmental performance (proper)</i>	<i>Year</i>	<i>Price</i>	<i>Disclosure of carbon emissions</i>	<i>Environmental performance (proper)</i>
2015	11.400	Yes	Green	2015	505	Yes	Blue
2016	9.175	Yes	Green	2016	1.075	Yes	Blue
2017	9.900	Yes	Green	2017	775	Yes	Blue
2018	11.500	Yes	Green	2018	755	Yes	Blue
2019	12.000	Yes	Green	2019	825	Yes	Green
2020	12.425	Yes	Green	2020	1.485	Yes	Green

The table shows that PT. Semen Indonesia Tbk always disclosed carbon emissions with a green rating yearly, and the stock price has increased yearly since 2016. In other words, the value of the company also increased. When the disclosure of carbon emissions and environmental performance fell into the blue category on PT. Timah Tbk, the company shares price declined. However, the stock price rose with the disclosure of carbon emissions, and environmental performance changed from the blue rating to the green. The surge indicated that the value of the company also upsurged. Rising stock prices attracted investors to buy the company shares, which can boost the company sources of funds. Falling stock prices might cause investor disappointment, making investors reconsider their decision to invest in the company and triggering investors to sell their shares, avoiding losses if the stock price drops continuously. The investors participating in the company capitalization resulted in a decrease in sources of funds.

Previous research conducted by Rusmana & Purnaman (2020) concluded that the disclosure of carbon emissions and environmental performance has a positive and significant effect on the company value, either partially or simultaneously. Furthermore, Rahmanita (2018) research revealed a significant relationship between carbon emission disclosure and the company value. There was a relational influence between environmental performance on company value. Moreover, research by Anggraeni (2015) settled that the disclosure of greenhouse gas emissions and environmental performance positively affected company value. Another research by Daromes (2020) exhibited that environmental performance affected company value directly and through environmental disclosure. Research by Alfayerds and Setiawan (2021) concluded a similar result that disclosure of carbon emissions had a positive effect on company value.

This study aimed to determine the effect of partial and simultaneous disclosure of carbon emissions on the value of companies included in the SRI-KEHATI index in 2015-2020.

LITERATURE REVIEW

The Value of a Company

According to Harmono (2016: 50), the value of a company can be measured through stock prices in the market. The formation of stock prices in the market reflects the public assessment of company performance in real terms. The factors influencing the value of a company, in this case using the stock price, according to Asllani (2020:38), are (1) internal factors, (2) external factors, and (3) the expectations of market participants.

External factors, such as community factors, rumors, and the environment, lead to responses from companies in the form of social and environmental responsibilities, which are included as the internal factors. Those are an effort by the company regarding the impact caused by the company's activities, for example, carbon emissions. The disclosure of carbon emissions contains information about the company's efforts to reduce emissions under ISO 14001 on environmental management systems. It can be added value if the company gets ISO 14001 certification. The certification indicates that the company carries out international standards well. It is also an added value to the Public Disclosure Program for Environmental Compliance rating, known as PROPER in the Indonesian Ministry of Environment and Forestry. It is apparatus for measuring a company's environmental performance, which can add to its image because it is published and might boost its share price.

Legitimacy Theory

According to Utomo (2019:38), legitimacy theory focuses on the interaction relationship between organizations and society. According to Brulea in Firmansyah and Estutik (2021:13), legitimacy theory is a mechanism to support companies in implementing and

developing voluntary environmental disclosures in the hope of fulfilling social contracts so that companies can obtain recognition and guarantees for environmental sustainability. The legitimacy theory shows a connection between companies and the community so that voluntary environmental disclosures appear in the hope of adapting to the surrounding environment.

Carbon Emissions Disclosure

Disclosure of carbon emissions is part of CSR, which is included in IFSR No. 1 paragraph 12 (2020). The point states that entities may also present, apart from financial statements, reports on the environment and value-added statements, especially for industries where environmental factors play an important role and for industries that consider employees as a group of report users. Meanwhile, according to Saha (2017:103), disclosure of carbon emissions is voluntary, an essential component of social responsibility. Disclosure of carbon emissions is an effective tool for companies to signify a carbon-related commitment to readers of annual reports to build a positive image or influence the company's audience. In addition, the disclosure of carbon emissions has benefits, according to www.cdp.net/en, namely:

1. Can protect and enhance the company's reputation
2. Increase competitive advantage
3. Benchmarks of the company's progress in the environment
4. Disclosing risks and opportunities

Companies that disclose items as specified are given a score of 1. The score is totaled and divided by the maximum number of items that can be disclosed and multiplied by 100%. Thus, the carbon emission disclosure formula used in this study is as follows:

$$\text{Disclosure of Carbon Emissions: CED} = \frac{\sum di}{M} \times 100\% \dots\dots\dots (2.2)$$

Information:

- CED = carbon emission disclosure
- di = the total score of 1 obtained by the company
- M = maximum total items disclosed (18 items)

Environmental Performance

According to Firmansyah and Estutik (2021:18), environmental performance is the result of company actions related to the environment, such as environmental impacts on resource consumption, environmental effects on products and services, and company steps to restore and process products that comply with environmental requirements. Environmental performance reports will be more reliable after conducting an environmental audit. Environmental audits can be carried out using standards issued by International Organisation for Standardization (ISO). ISO in terms of environmental management is ISO 14001, measuring tools and efforts to minimize energy, emissions, waste, and others. Suppose the company gets certification from ISO related to environmental management. In that case, it can add the PROPER document. It will be an added value for the company because it cares about the environment by properly managing it.

PROPER is the result of a company's environmental performance and a form of government policy that aims to improve the company's environmental management performance following what has been stipulated in the laws and regulations. PROPER is a form of transparency and democracy in environmental management in Indonesia. This application is an attempt by the State Ministry of Environment and Forestry to apply some of the principles of good governance (transparency, justice, accountability, and community involvement) in environmental management. With this program, the company is expected to increase

compliance in environmental management and management because the results of this ranking will be announced to the public so that it can impact the company's reputation.

In this study, the environmental performance uses the results of the PROPER rating organized by the Ministry of Environment and Forestry. The PROPER performance rating system includes ranking companies in five colors, namely:

Table 2
PROPER Rating from the Ministry of Environment and Forestry

No	Colour	Score	Description
1	Gold	5	As a responsible business or activity that consistently demonstrates environmental excellence in the production and service process, it conducts an ethical and responsible business toward the community.
2	Green	4	A responsible business or activity that has carried out environmental management beyond compliance with the implementation of the environmental management system, efficient use of resources, and undertaking community empowerment efforts properly.
3	Blue	3	A responsible business or activity that has made efforts to manage the environment under the requirements as regulated in the Legislative Regulations.
4	Red	2	A responsible business or activity whose environmental management efforts are not per the requirements stipulated in the Legislative Regulations
5	Black	1	A responsible business or activity that intentionally commits an act or omission that results in pollution or damage to the environment and violates the laws and regulations, and does not carry out administrative sanctions.

Source: Report of the Work Rating Program for Companies in Environmental Management (PROPER), 2019, Ministry of Environment and Forestry.

Framework

Disclosure of carbon emissions and environmental performance affects the company's value because it increases the company's reputation with information transparency. The positive image of companies can increase sales of products and services, at the same time reducing environmental costs. Being responsible for the environment and consistently demonstrating environmental excellence in the production process by making these efforts will increase the community's and stakeholders' excellent judgment, especially investors. The increase in the company's value likely makes investors more interested in participating in the company. The following is the framework of the research, namely the disclosure of carbon emissions (X1) and environmental performance (X2) as independent variables and company value (Y) as the dependent variable.

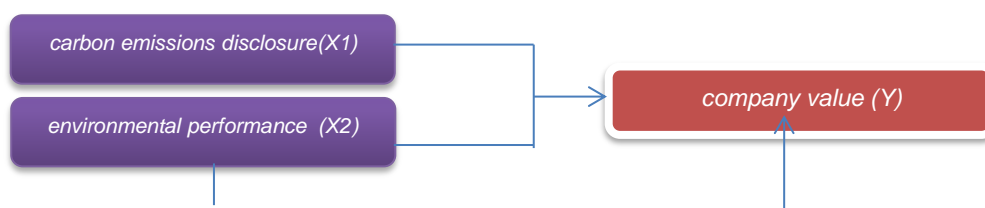


Figure 1. Framework

METHOD

Population and Sample

The population in this study are public companies included in the SRI-KEHATI Index in 2015-2020, with as many as 25 companies. The sampling technique in this study is purposive sampling, which is a technique for determining samples with specific criteria resulting in the selected data sample in this study of 5 companies with six years of reporting so that as many as 30 entries were obtained.

Data Types and Sources

The data type in this research is quantitative, while the source used is secondary data. Secondary data sources are obtained from the publications of the Indonesia Stock Exchange website, the official websites of each company, and the PROPER website. The data are in the form of Annual Reports, Sustainability Reports, Reports on Finance, and PROPER rating decisions for companies.

Research variable

The independent variables of this study are Disclosure of Carbon Emissions (X1) and Environmental Performance (X2), while the dependent variable is Company Value (Y).

Data Collection Method and Data Analysis

The data collection method in this research uses a documentation study. The activities consist of recording or retrieving existing data in documents or archives in financial reports, annual reports, sustainability reports, and PROPER rating decisions that companies in Indonesia have published. Data are also seen from the IDX website, company websites, PROPER website, and SRI-KEHATI Index website. While the data analysis method used is associative with statistical analysis. Associative research aims to determine the relationship between two or more variables. The analysis used is multiple linear regression.

RESULTS AND DISCUSSION

Results

Normality test result:

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Predicted Value
N		30
Normal Parameters ^{a, b}	Mean	1,3213000
	Std. Deviation	,21648820
Most Extreme Differences	Absolute	,128
	Positive	,128
	Negative	-,117
Test Statistic		,128
Asymp. Sig. (2-tailed)		,200 ^{c, d}

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Linearity Test Results X1 with Y:

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Nilai Perusahaan * Kinerja Lingkungan	Between Groups	(Combined)	1,198	2	,599	10,444	,000
		Linearity	1,138	1	1,138	19,835	,000
		Deviation from Linearity	,060	1	,060	1,053	,314
	Within Groups		1,549	27	,057		
Total			2,747	29			

Linearity Test Results X2 with Y:

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Nilai Perusahaan * Pengungkapan Emisi Karbon	Between Groups	(Combined)	1,298	10	,130	1,703	,153
		Linearity	,260	1	,260	3,409	,080
		Deviation from Linearity	1,038	9	,115	1,513	,214
	Within Groups		1,449	19	,076		
	Total		2,747	29			

Multiple Linear Regression Analysis Test Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,184	,296		-,622	,539
	Pengungkapan Emisi Karbon	,536	,258	,284	2,074	,048
	Kinerja Lingkungan	,346	,075	,633	4,624	,000

a. Dependent Variable: Nilai Perusahaan

Based on table 4.6 above, the results of the multiple linear regression equation between disclosure of carbon emissions, environmental performance and firm value are as follows:

$$Y = -0.184 + 0.536X1 + 0.346X2$$

Based on the equation formula above, it can be explained as follows:

1. The constant value is -0.184, indicating that if the independent variables, namely disclosure of carbon emissions, environmental performance and other variables, are worth 0, then the value of the company has a fixed value of -0.184
2. The regression coefficient of the variable disclosure of carbon emissions (X1) is 0.536 indicating the effect on firm value. If the disclosure of carbon emissions increases by one unit, it will cause an increase in company value by 0.536. Conversely, if the disclosure of carbon emissions decreases by one unit, it will cause a decrease in company value of 0.536. Assuming the other independent variables are constant.
3. The regression coefficient of the environmental performance variable (X2) is 0.346 indicating the effect on firm value. If environmental performance increases by one unit, it will cause an increase in company value by 0.346. Conversely, if the environmental performance decreases by one unit, it will cause a decrease in the value of the company by 0.346. Assuming the other independent variables are constant.

Multicollinearity Test Results

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	Pengungkapan Emisi Karbon	,889	1,001
	Kinerja Lingkungan	,889	1,001

a. Dependent Variable: Nilai Perusahaan

Heteroscedasticity Test Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,117	,176		,663	,513
	Pengungkapan Emisi Karbon	,112	,154	,139	,730	,472
	Kinerja Lingkungan	,000	,045	,001	,005	,996

a. Dependent Variable: ABS_RES1

Autocorrelation Test Results

Runs Test

	Unstandardized Residual
Test Value ^a	-.05336
Cases < Test Value	15
Cases >= Test Value	15
Total Cases	30
Number of Runs	15
Z	-.186
Asymp. Sig. (2-tailed)	,853

a. Median

Partial Hypothesis Test (T Test)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,184	,296		-,622	,539
	Pengungkapan Emisi Karbon	,536	,258	,284	2,074	,048
	Kinerja Lingkungan	,346	,075	,633	4,624	,000

a. Dependent Variable: Nilai Perusahaan

Discussion

The Effect of Carbon Emissions Disclosure on Company Value

The analysis of disclosure of carbon emissions (X1) on company value (Y) obtained through the t-test produces a t-count of 2.074 with a sig value of 0.048. It means that the variable of carbon emission disclosure has a partial and significant effect on the value of companies included in the SRI-KEHATI Index in 2015-2020. Disclosure of carbon emissions as an essential component of corporate social responsibility benefits companies, such as improving the company's reputation through transparency of information about carbon emissions in annual reports and other benefits. Pay attention to carbon emissions in the company and additional information in the annual report. The complete disclosure of carbon emissions indicates that the company cares about the possibility of pollution as a result of operating activities in the company, which will attract stakeholders because the company's image increases and indicate the company's value also increases.

The Effect of Environmental Performance on Company Value

The analysis of environmental performance (X2) on company value (Y) obtained through the t-test produces a t-count of 4.624 with a sig value of 0.000. Based on these results, t-count > t-table (4.624 > 2.05183), it can be inferred that the environmental performance variable has a partial and significant effect on the firm value of companies included in the SRI-KEHATI Index in 2015-2020. Environmental performance through PROPER assessment is published to the public has benefits for companies such as obtaining significant social benefits such as benefits for human health which will improve the company's image and can increase the ability to sell products/services in the company. The circumstance is an impetus for companies to improve environmental performance. Environmental performance can affect the company's value, so companies need to keep improving their environmental performance to get a GOLD rating. This rating is the highest in PROPER, which indicates consistency in demonstrating environmental excellence in the production or service process and conducting ethical and responsible business toward the public. The increase in PROPER is also good news for stakeholders, especially investors, because the company image will increase, and increasing the share price also means an increase in the company's value.

Simultaneous Hypothesis Test (Test F)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,359	2	,680	13,217	,000 ^b
	Residual	1,388	27	,051		
	Total	2,747	29			

a. Dependent Variable: Nilai Perusahaan

b. Predictors: (Constant), Kinerja Lingkungan, Pengungkapan Emisi Karbon

The Effect of Carbon Emissions Disclosure and Environmental Performance on Company Value

The results of the tests that have been carried out and the analysis on the disclosure of carbon emissions (X1) and environmental performance (X2) on company value (Y) obtained through the F test show an F-count of 13.217 > 3.34 with a sig value of 0.000 < 0.05. It means that the X1 variable and the X2 variable have a significant simultaneous effect on firm value in the Y variable. Disclosure of carbon emissions and environmental performance affects the company's value through benefits in increasing the company's reputation with information transparency and increasing positive perception. These factors can increase sales of products and services in the company and can reduce environmental costs. Being responsible for the environment and consistently showing environmental excellence in the production process will increase the proper assessment of the community and stakeholders, especially investors. The positively growing value of the company will affect investors, which will likely make them invest more in the company through stocks or other forms of investment.

Determination Coefficient Test Results

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,703 ^a	,495	,457	,22675

a. Predictors: (Constant), Kinerja Lingkungan, Pengungkapan Emisi Karbon

Based on table 4.12 above, the value (R²) is 0.495 or 49.5%. This shows that disclosure of carbon emissions and environmental performance has an influence of 49.5% on company value while the remaining 52.5% is influenced by other variables not included in this study.

CONCLUSION

This study examines the effect of the disclosure of carbon emissions and environmental performance on the company value of companies listed in the SRI-KEHATI Index in 2015-2020. There are some conclusion points taken from the analysis as follows:

1. Disclosure of carbon emissions has a partial effect on company value. The t-count of 2.074 with a significant value of 0.048 and a t-table of 2.05183 resulting in t-count $2.074 > t\text{-table } 2.05183$ with a significance of $0.048 < 0.05$ confirmed the relation of the X1 variable to Y variable. The companies listed in the SRI-KEHATI Index in 2015-2020 performed identical rises in the share price. Disclosure of carbon emissions is beneficial in protecting and enhancing reputation and giving a competitive advantage to the company. The disclosure can also reveal risks and opportunities that arise from environmental neglect and inform companies' strategies for managing the environment. With these benefits, companies need to increase their carbon emission disclosures. Complete disclosure of carbon emissions indicates that the company is aware of the possibility of pollution due to operating activities in the company. A company's positive performance will satisfy stakeholders. When the company's reputation is excellent, the increasing stock prices indicate higher company value.
2. Environmental performance has a partial effect on company value. It is seen from the t-count of 4.624 with a sig value of 0.000 and a t-table of 2.05183. The t-count of $4.624 > t\text{-table } 2.05183$ with a significance of $0.000 < 0.05$. means the X2 variable has a partial and significant effect on the Y variable. Environmental performance helps companies get external benefits, improving company image, which increases the ability to sell products and services in the company. Besides, it can motivate managers to make innovations and new opportunities and create a competitive advantage due to cost reduction. Companies need to improve their environmental performance by consistently carrying out environmental excellence in the production or service process, conducting ethical and responsible business to the community, informing their carbon emissions regularly, and so on. This environmental performance can influence company value and will attract stakeholders to invest more in the company.
3. Disclosure of carbon emissions and environmental performance have a simultaneous effect on company value, as shown in the F-count of 13,217 with a sig value of 0.000 and an F-table of 3.34. The F-count is $13,217 > F\text{-table } 3.34$ with a sig value of $0.000 < 0.05$. means that the X1 variable and X2 variable have a significant simultaneous effect on the Y variable in companies included in the SRI-KEHATI index in 2015-2020. Disclosure of carbon emissions has benefits such as improving the company's reputation and environmental performance that improves the company's image, which will increase the company's ability to produce and service the company's products and services. Companies need to increase the

disclosure of their carbon emissions and environmental performance. The efforts will add a good assessment of the community and stakeholders, especially investors. The positive image of the company will increase the company's value so that investors will be more interested in having a share in companies that are included in the SRI-KEHATI Index because they have good company values.

REFERENCE

- Alfayerds, W. D., & Setiawan, M. A. (2021). Pengaruh Pengungkapan Emisi Karbon dan Annual Report Readability terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan Peringkat PROPER yang Terdaftar di BEI Tahun 2016-2018). *Jurnal Eksplorasi Akuntansi*, 3(2), 349–363.
- Anggraeni, D. Y. (2015). Pengungkapan Emisi Gas Rumah Kaca, Kinerja Lingkungan, dan Nilai Perusahaan (Greenhouse Gas Emission Disclosure, Environmental Performance, and Firm Value). *Jurnal Akuntansi dan Keuangan Indonesia*, 12(2), 188–209.
- Ariyanto, S. (2022). *Akuntansi Keuangan Syariah, Dasar hukum, Standar Akuntansi dan Study Kasus*. Bandung: Media Sains Indonesia.
- Asllani, G., et.al. (2020). *Uncertainty and Challenges in Contemporary Economic Behaviour*. Great Britain: Emerald Publishing Limited.
- Boeger, N., et.al. (2020). *Legal Perspectives on Sustainability*. Great Britain: Bristol University Press.
- Daromes, F. E. (2020). Peran Mediasi Pengungkapan Lingkungan Pada Pengaruh Kinerja Lingkungan Terhadap Nilai Perusahaan. *Jurnal Akuntansi*, 14(1), 77–101. <https://doi.org/10.25170/jak.v14i1.1263>
- Djaali, H. (2020). *Metodologi Penelitian Kuantitatif*. Jakarta: Bumi Aksara.
- Dura, J. (2022). *Pengungkapan Kinerja Ekonomi, Sosial, Lingkungan Pada Financial Performance Perusahaan Manufaktur*. Bandung: Media Sains Indonesia.
- Fadillah. (2017). Pengaruh Profitabilitas dan Kinerja Lingkungan Terhadap Nilai Perusahaan Dengan Csr Sebagai Moderasi. *Proceedings Progress Conference*, 2(July 2019), 10–23.
- Fahmi, I. (2017). *Analisis Laporan Keuangan*. Bandung: Alfabeta.
- Farida, D. N. (2016). Akuntansi Lingkungan : Kajian Penerapan Dalam Perspektif Islam (Studi Kasus Pada Perusahaan Yang Tercatat Di Jakarta Islamic Index (Jii)). *Syariah Paper Accounting FEB UMS*, 82–98.
- Fauziah, F. (2017). *Kesehatan Bank, Kebijakan Dividen dan Nilai Perusahaan Teori dan Kajian Empiris*. Samarinda: Pustaka Horizon.
- Firmansyah and Estutik, R. S. (2021). *Kajian Akuntansi Keuangan : Peran Tata Kelola Perusahaan Dalam Kinerja Tanggung Jawab Lingkungan, Pengungkapan Tanggung Jawab Sosial, Agresivitas Pajak*. Indramayu: Penerbit Adab.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 (9 ed.)*. Semarang: Badan Penerbit Universitas Diponegoro.
- Haeruddin and Jamali, H. (2021). *Pengantar Akuntansi (Proses Akuntansi Jasa, Dagang, Manufaktur) Dilengkapi Contoh Kasus dan Penyelesaiannya serta Soal Praktik*. Yogyakarta: Deepublish.
- Harmono. (2016). *Manajemen Keuangan Berbasis Balance Score Card Pendekatan Teori, Kasus dan Riset Bisnis*. Jakarta: Bumi Aksara.
- Hery. (2017). *Riset Akuntansi*. Jakarta: Gramedia Widiasarana Indonesia.
- Huwaida, H. (2019). *Statistika Deskriptif*. Banjarmasin: Poliban Press.
- Indrarini, S. (2019). *Nilai Perusahaan Melalui Kualitas Laba: (Good Governance dan Kebijakan Perusahaan)*. (N. Azizah, Ed.). Surabaya: Scopindo Media Pustaka.
- Kartikahadi, H., et.al. (2016). *Akuntansi Keuangan: Berdasarkan SAK Berbasis IFRS*. Sleman: Ikatan Akuntan Indonesia.
- Labetubun, et al. (2022). *CSR Perusahaan “Teori Dan Praktis Untuk Manajemen Yang Bertanggung Jawab*. Bandung: Penerbit Widina.

- Lentera Akademika Nusantara (Lekantara). (2021). *LePALISSHE 2021 Proceedings of the First Lekantara Annual Conference on Public Administration, Literature, Social Sciences, Humanities, and Education*. Malang: EAI Publishing.
- Matsumura, E. M. (2015). *Firm-Value Effects of Carbon Emissions and Carbon Disclosures*. New York: SSRN.
- Mukhlis. (2020). *Buku Ajar Hukum Lingkungan*. Surabaya: Scopindo Media Pustaka.
- Mukono, H. J. (2020). *Analisis Kesehatan Lingkungan Akibat Pemanasan Global*. Surabaya: Airlangga University Press.
- Nur, S. W. (2020). *Akuntansi Dasar: Teori dan Teknik Penyusunan Laporan Keuangan*. Makassar: Cendekia Publisher.
- Pernyataan Standar Akuntansi Keuangan PSAK Nomor 1 tentang Laporan Keuangan. (2020). Jakarta: reprinted by Ikatan Akuntansi Indonesia.
- Rahmanita, S. A. (2018). Pengaruh Carbon Emission Disclosure terhadap Nilai Perusahaan dengan Kinerja Lingkungan sebagai variabel moderasi. *Jurnal Akuntansi Integratif*, 6(1), 53–70.
- Rahmawati. (2020). *Corporate social responsibility berbasis kearifan lokal: perspektif Kedatuan Luwu*. Malang: Penerbit peneleh.
- Risman, A., Ali, A. J., Soelton, M., & Siswanti, I. (2023). The Behavioral finance of MSMEs in the advancement of financial inclusion and financial technology (Fintech). *The Indonesian Accounting Review*, 13(1), 91-101. doi:<http://dx.doi.org/10.14414/tiar.v13i1.3213>
- Rusmana, O., & Purnaman, S. M. N. (2020). Pengaruh Pengungkapan Emisi Karbon dan Kinerja Lingkungan terhadap Nilai Perusahaan. *Jurnal Ekonomi, Bisnis dan Akuntansi*, 22(1), 42–52.
- Saha, A. K. (2017). *Carbon Emission Disclosures by Higher Education Institutions in the UK*. Great Britain: Durham University.
- Setiani, P. (2020). *Sains Perubahan Iklim*. Jakarta: Bumi Aksara.
- Setiawan, T. (2021). Pengaruh etika terhadap profitabilitas: mediasi image dan CSR : studi perusahaan tambang, minyak, dan gas - Jejak Pustaka. Yogyakarta: Jejak Pusaka.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- Sugiyono, & Susanto, A. (2015). *Cara Mudah Belajar Spss & Lisler (Pertama)*. Bandung: Alfabeta.
- Sujarweni, V. W. (2019). *Metodologi Penelitian Bisnis & Ekonomi*. Yogyakarta: Pustaka Baru Press.
- Sukaharsono and Andayani. (2021). *Akuntansi Keberlanjutan*. Malang: Universitas Brawijaya Press.
- Sulandjari, Kuswarini., et.al. (2021). *Ekonomi Lingkungan*. Bandung: Media Sains Indonesia.
- Sultoni, H. (2020). *Corporate Social Responsibility (Kajian Korelasi Program CSR terhadap Citra Perusahaan)*. Bangkes: Duta Media Publishing.
- Syairozi, M. I. (2019). *Pengungkapan CSR pada Perusahaan Manufaktur dan Perbankan*. Magelang: Tidar Media.
- Tamrin, M., & M. (2019). *Penerapan Konsep Good Corporate Governance Dalam Industri Manufaktur di Indonesia*. Bogor: IPB Press Printing.
- Tarjo. (2019). *Metode Penelitian (Pertama)*. Yogyakarta: Deepublish.
- Tenriwaru. (2021). *Kesejahteraan tanpa sekat : sebuah kritik terhadap akuntansi (CSR)*. Makassar: Tohar Media.
- Umar, S. (2021). *Manajemen Hutan Sistem Redd+*. Yogyakarta: Absolute Media.
- Utomo. (2019). *Ramah Lingkungan dan Nilai Perusahaan*. Surabaya: Jakad Media Publishing.
- Wicaksono, I. D. (2021). *#MulaidariETF: Dasar Investasi Reksa Dana Gaya Baru*. Jakarta: PT Elex Media Komputindo.
- Yuniarsih, N. (2018). *Buku Ajar Akuntansi Keuangan Menengah*. Surabaya: Jakad Media Publishing..