

Determinants of Financial Performance of Companies Listed on the Indonesian Institute For Corporate Governance

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ARTICLEINFO	A B S T R A C T				
Keywords: Environmental	The aim of this study was to examine and analyze				
Management Accounting,	the impact of Environmental Management				
Environmental Performance, Financial Performance	Accounting and Environmental Performance on				
Thatear renominance.	Financial Performance. The study focused on				
Received : 12, June	companies that participated in the CGPI				
Revised : 15, July	program, using secondary data from the period				
Accepteu: 16, August	2018-2023. The sampling method employed was				
©2024 Luthfillah, Andriana, Bashir,	purposive sampling, with a total of 12 companies				
Susetyo, Mukhtaruddin (s): This is	and 72 data observations. The analysis was				
an open-access article distributed	conducted using quantitative methods and				
Commons Atribusi 4.0	Eviews panel data regression. The findings				
Internasional.	indicated that both Environmental Management				
	Accounting and Environmental Performance had				
	a significant positive effect on Financial				
	Performance.				

INTRODUCTION

The government seeks to improve the welfare of society through economic development. Accelerated economic growth is frequently associated with a rise in industrial and human activities, which can lead to both positive and negative effects. One of the negative impacts is the emergence of waste. As Li et al. (2022) highlighted the development of the global construction industry and urbanization which resulted in the amount of waste, construction and demolition gradually increasing. According to Ranjbari et al., (2023) during COVID-19 with the increase in human activities in the health sector there is an increase in waste such as masks, sanitary paper, and protective clothing.

In industrial activities, waste can come from the use of raw materials, energy, water or other materials needed in the production process. This condition can cause many indirect losses, besides inefficiency also causes waste, both liquid, solid and emission waste. These wastes cause pollution to land, water and air. Waste pollution will cause social impacts, such as health, aesthetics, and inconvenience in social life. Based on the data obtained, the amount of waste generation in Indonesia from 2019 to 2022 increased. In 2019, 27,168,401.19 tons of waste was generated. Then there was an increase in 2020 of 27,593,066.97 tons. In 2021 there was also an increase at 28,549,222.55 tons. Even in 2022 there was a drastic increase in waste generation of 37,432,870.12 tons. However, the data for 2023 at 23,733,245.04 tons is temporary because it is in the process of being calculated by SIPSN, this temporary figure still has the possibility of continuing to grow in 2023 (sipsn.menlhk.go.id, 2024).

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Companies that have good, superior, and competitive performance are companies that are able to manage resources efficiently and effectively. Excellent company performance is an attraction for all groups, including investors, consumers, government, and other parties. One measure of a company's performance is by looking at its financial performance, Financial performance reflects the company's financial condition during a certain period through various company activities. In addition, financial performance also allows analysis of financial data presented in financial statements or annual reports. (Ningrum and Sapari, 2021).

According to Carton and Parigot (2021), good financial performance can encourage the sustainability of the company, making it easier for the company to arrange, merge, and utilize sustainable resources. The Indonesian Institute for Corporate Governance (IICG) is an institution in Indonesia that analyzes the company's efforts to build strategies and systems that can support the company's readiness to face all challenges and dynamics of change in order to create performance that grows sustainably. In IICG there is also a company research and ranking program called the Corporate Governance Perception Index (CGPI). The CGPI institution is voluntary and does not force every company to participate in the program. During the implementation period from 2018 to 2023 there were 12 companies that consistently participated in CGPI. Figure 1 displays the EBIT of these consistent companies.



Figure 1. EBIT of CGPI Listed Companies **Source:** data processed by researchers, 2024

In Figure 1, it can be seen from the total EBIT of companies participating in the CGPI program for the 2019 - 2023 implementation year that they have a good level of profitability. Companies that have good profitability can be influenced by environmental management, because the environment is one indicator of the company's survival. Conversely, companies must also assess the environmental impact of their business activities and allocate costs related to revenues and savings derived from environmental activities. Then the company will use a new concept from accounting science, namely Environmental Management Accounting.

Eco-efficiency is an indicator that can be used to evaluate the impact of Environmental Management Accounting on corporate sustainability (World Business Council For Sustainable Development, 2015). Eco-efficiency is also one of the concepts used to state that the entity deserves to be called an environmentally friendly entity. The concept of eco-efficiency and its connection to Financial Performance is a relatively new subject in developing countries, affecting both business and academic fields (Sudha, 2020). On the other hand, developed nations have concentrated on environmental public policies to protect corporate value and enhance market efficiency and business models (Bianchi et al., 2020; Pérez-Calderón et al., 2021; Scarpellini et al., 2020).

Research conducted by Agustia et al. (2019) with the scope of manufacturing companies and the main sectors listed on the IDX in 2012-2015 with a total of 277 companies. The results obtained from this study are Environmental Management Accounting has an influence on firm value. This study also reveals that competitive advantage due to having unique resources and the ability to mobilize existing resources efficiently so that companies in industrial competition can be superior to their competitors, especially in increasing the level of competitiveness and increasing company value can be created from companies with high eco-effciency.

Referring to the research of Broadstock et al. (2018); Busch and Friede (2018); Daud et al. (2023); Tam et al. (2019); Sabarani (2022) It is stated that ecoefficiency has a positive impact on the company. However, on the contrary Choi et al. (2020) with research findings indicating that strong environmental performance negatively affects stock prices and long-term financial returns. Research by Czerny and Letmathe (2017) concluded that adopting environmental strategies and proactively reducing GHGs is linked to better environmental and economic performance. However, they did not find a significant direct relationship between environmental performance and economic performance.

Environmental performance provides an indication of how much the company cares about the surrounding environment. If the company takes good care of the environment and its resources, the company's environmental performance will also be good (Tusiyati, 2019). Companies need to keep environmental performance always good to avoid demands from the community or stakeholders, so that the sustainability of the company will continue (Salsa and Tohir pohan, 2022). Hertati et al. (2022) states that environmental performance refers to the extent of impact and damage arising from the company's operational activities, as well as how the company manages, disposes, and treats waste to reduce environmental damage.

Environmental performance can increase the company's ability to face environmental challenges and increase the company's ability to improve financial performance. The results of research conducted by Jansson (2022); Rahayudi & Apriwandi (2023); Susanti et al. (2023) stated that environmental performance has a positive impact on financial performance.. Different results were expressed by Asjuwita & Agustin (2020); Ningtyas & Triyanto (2019) who found that environmental performance has no effect on financial performance, while Wijayanti (2021) stated that environmental performance has a negative effect on financial performance.

Based on previous research on Environmental Management Accounting and Environmental Performance on Financial Performance, there are mixed results. Researchers want to explore more deeply the Natural Resource Based-View (NRBV) theory related to financial performance, measured through Net Profit Margin; Environmental Management Accounting measured through Ecoefficiency; and environmental performance assessed based on PROPER.

LITERATURE REVIEW

A. Financial Performance

NRBV provides a comprehensive view of how a company's internal resources and capabilities can affect financial performance and sustainable competitive advantage (Adnan et al., 2018). Financial performance describes the company's financial condition during a certain period through its activities, and can be analyzed through financial data reported in financial reports or annual reports (Ningrum and Sapari, 2021). One indicator of financial performance is

Net Profit Margin (NPM), which measures the ratio between net profit after tax and total company revenue (Wang and Wu, 2020).

$$NPM = \frac{Net \ Profit \ After \ Tax}{Total \ Revenue}$$

B. Environmental Management Accounting

Environmental Management Accounting combines financial and cost accounting information to enhance efficiency, mitigate environmental risks, and lower environmental costs. Schaltegger et al. (2008) suggest that the ecoefficiency strategy is the most evident and aligned with Cleaner Production (CP). Indicators of eco-efficiency represent economic and environmental outcomes, which are mathematically defined (World Business Council For Sustainable Development, 2015):

$$Eco - Efficiency = \frac{product \ or \ service \ value}{environmental \ influence}$$

C. Environmental Performance

Environmental performance is the quantifiable outcome of an environmental management system., involving control and evaluation based on environmental policies, goals, and objectives. (ISO 14004). According to Dita and Ervina (2021), environmental performance is a performance that can be proven by industry players by showing the performance of related programs to the Ministry of Environment. Environmental performance can be measured through PROPER. PROPER assessment uses various color levels, namely 1 (Black). 2 (Red), 3 (Blue), 4 (Green), and 5 (Gold).

METHODOLOGY

This study utilizes secondary data sourced from annual reports and sustainability reports available on each company's official website. The sampling technique used is purposive sampling with the following criteria: a) Companies registered with The Indonesian Institute Corporate Governance (IICG) for the period 2018 - 2023, b) Companies that publish complete financial and sustainability reports in the 2018 - 2023 publication year on their official website, c) Companies that consistently register in CGPI membership during the 2018 - 2023 implementation year at IICG. In this study, 41 samples were obtained, but the sample became 12 companies after determining the research criteria. Each company was studied for 6 years so that the total observations obtained were 72 research data.

In this study, the data analysis methods employed include the Classical Assumption Test and Panel Data Regression, using Eviews software. The Classical Assumption Test is performed to evaluate the model's appropriateness by examining several classical assumptions: the normality test, multicollinearity degree, and heteroscedasticity test. Panel data combines time series and cross-sectional data. Time series data consists of one or more variables observed in a

single unit of observation over a specified time period. Meanwhile, cross section data is several observation units that will be observed at one point in time. According to Widarjono (2018), panel data has a combination of characteristics between several objects with several time periods.

This study uses data collected at specific time intervals, namely 2018-2023 which are time series. For cross section data, namely data in a certain period in several companies. The purpose of conducting panel data regression tests in this study is to determine the relationship between the independent variable, FP, and the dependent variables, EMA and EP, the following equation can be used based on the variables to be studied:

$$FP_{i,t} = \alpha + \beta_1 EMA_{i,t} + \beta_2 EP_{i,t} + \varepsilon_{i,t}$$

Description:

FP _{i,t}	= Financial Performance
α	= Constant
β	= Coefficient
EMA _{i,t}	<i>= Environmental Management Accounting</i>
EP _{i,t}	= Environmental Performance
$\mathcal{E}_{i,t}$	= Error

RESULTS

Descriptive Statistical Test

The panel data regression analysis research method uses Eviews 12 statistical software as a data processing tool. The following are the results of descriptive statistical analysis of dependent and independent variables and panel data regression analysis presented below:

I able 1. Descriptive Statistical Test						
	EMA	EP	FP			
Mean	15036,48	3,527778	0,233138			
Median	13445,89	4,000000	0,247200			
Maximum	42463,03	5,000000	0,399800			
Minimum	391,05	2,000000	0,051500			
Std. Dev.	13415,23	1,047764	0,083127			
Observations	72	72	72			

Source: data processed by researchers, 2024

Based on the descriptive statistical test results, EMA has a mean value of 15036.48, which is far from the maximum value. The Standard Deviation value of EMA is 13415.23, which is smaller than the mean, stating that the data applied is more accurate to the mean. EP has a mean of 3.52777 which is close to its maximum value. EP Standard Deviation value of 1.04776 which is smaller than the mean states that the data applied is more accurate to the mean. FP has a mean value of 0.233138 whose value is far from the maximum value. The standard deviation of FP is 0.083127 which is smaller than the mean which means that the data is more accurate to the mean.

Classical Assumption Test

The normality test applied is the Jarque-Bera test which has a significance value of 0.080051> 0.05 which indicates that the data is normally distributed. The degree of multicollinearity between the EMA and Environmental Performance variables is 0.2498. The value of the degree of multicollinearity <0.85, which means that there is no multicollinearity problem in each variable. The value of heteroscedasticity in the EMA variable was found to be 0.2622 and EP was 0.3067. Both independent variables have a probability value> 0.05 so it is concluded that heteroscedasticity does not occur.

Hypothesis Test Results T-test

Table 2. Panel Data Regression

Dependent Variable: FP Method: Panel Least Squares Date: 07/01/24 Time: 21:18 Sample: 2018 2023 Periods included: 6 Cross-sections included: 12 Total panel (balanced) observations: 72

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.080094	0.027752	2.886085	0.0052
EMA	2.14E-06	6.07E-07	3.524640	0.0008
EP	0.034270	0.007766	4.412708	0.0000
Root MSE	0.064992	R-squared		0.380104
Mean dependent var	0.233138	Adjusted R-squared		0.362136
S.D. dependent var	0.083127	S.E. of regression		0.066390
Akaike info criterion	-2.545762	Sum squared resid		0.304128
Schwarz criterion	-2.450901	Log likelihood		94.64743
Hannan-Quinn criter.	-2.507998	F-statistic		21.15451
Durbin-Watson stat	1.724299	Prob(F-statistic	2)	0.000000

Source: Data Processed by Researchers, 2024

Based on the panel data regression results in Table 2, the t-Statistic of EMA is 3.5246 and EP is 4.412708. In addition, EMA has a significance of 0.0008 and EP of 0.0000.

DISCUSSION

Effect of Enviromental Management Accounting on Financial Performance partially

Table 2 shows that EMA has a t-Statistic of 3.5246 with a probability value of 0.0008, which meets the significance requirement of less than 0.05. Therefore, it can be concluded that EMA has a significant positive impact on FP, meaning that higher EMA values are associated with greater FP. According to NRBV theory, companies can attain a sustainable competitive advantage by minimizing the negative environmental effects of their operations through the adoption of proactive strategies (Daud et al., 2023). Proactive strategies, particularly those aimed at reducing waste production, can enhance a company's competitive advantage and improve its financial performance. Besides boosting economic value, greater eco-efficiency can also help mitigate adverse environmental impacts (Suh et al., 2014).

The findings of this study are consistent with the research by Broadstock et al. (2018); Busch and Friede (2018); Daud et al. (2023); Tam et al. (2019); and Sabarani (2022), which indicates that eco-efficiency positively impacts the company. However, this differs from the results of Choi et al. (2020), which reveal that positive environmental performance negatively affects stock prices and long-term financial returns.

The effect of Environmental Performance on Financial Performance partially

Table 2 explains that EP has a t-statistic of 4.4127 with a probability value of 0.0000 which meets the significance requirement of less than 0.05. So it can be interpreted that EP has a significant positive effect on FP. As if the value of EP is higher, FP will also increase. The positive impact of EP on FP aligns with NRBV theory, which asserts that companies can secure a sustainable competitive advantage by mitigating the negative environmental effects of their operations through proactive strategies (Daud et al., 2023). Companies that have a proactive strategy will provide a good image of the company so that it can gain the trust of interested parties (Gangi et al., 2020; Mungai Muthoni & Muigai Kinyua, 2020).

The results of this study are consistent with the research of Jansson (2022); Rahayudi & Apriwandi (2023); Susanti et al. (2023a) which state that environmental performance has a positive influence on the company. However, it is not in line with the results of Asjuwita & Agustin (2020); Ningtyas & Triyanto (2019) which state that environmental performance has no effect on financial performance.

F test

Based on the panel data regression results in Table 2, the F-statistic is 21.15451 and the significance is 0.000. The probability value <0.05 so it is concluded that simultaneously EMA and EP have a positive and significant effect on FP. The increase in EMA and EP together will increase FP. The NRBV theory explains that EMA is getting higher due to efficient company operations such as reducing company waste and increasing the number of company products and services (Pratiwi et al., 2020). According to Appannan et al. (2023), one of the

NRBV strategies is to eliminate product waste from the production process, which can increase productivity by reducing the use of raw materials, simplifying procedures, and reducing compliance and liability costs. Then coupled with high Environmental Performance can help companies develop better sustainability strategies, especially care for the environment (Susanti et al., 2023b). This enables the company to develop a competitive edge, which can enhance its financial performance.

CONCLUSIONS AND RECOMMENDATIONS

This study aims to assess and analyze the effects of Environmental Management Accounting and Environmental Performance on Financial Performance. The samples were selected from companies involved in the CGPI program from 2018 to 2023, organized by the IICG institution. From the data analysis and discussions, the following conclusions can be drawn:

- 1. Environmental Management Accounting, measured through Eco-Efficiency, significantly positively influences Financial Performance.
- 2. Environmental Performance, evaluated using PROPER, has a significant positive effect on Financial Performance.
- 3. Both Environmental Management Accounting and Environmental Performance together have a significant positive impact on Financial Performance.

REFERENCES

- Adnan, M., Abdulhamid, T., & Sohail, B. (2018). Predicting Firm Performance through Resource Based Framework. *European Journal of Business and Management*, 10(1), 31–40. http://www.raosoft.com
- Agustia, D., Sawarjuwono, T., & Dianawati, W. (2019). The mediating effect of environmental management accounting on green innovation - Firm value relationship. *International Journal of Energy Economics and Policy*, 9(2), 299– 306. https://doi.org/10.32479/ijeep.7438
- Al-Najjar, B., & Anfimiadou, A. (2012). Environmental Policies and Firm Value. Business Strategy and the Environment, 21(1), 49–59. https://doi.org/10.1002/bse.713
- Appannan, J. S., Mohd Said, R., Ong, T. S., & Senik, R. (2023). Promoting sustainable development through strategies, environmental management accounting and environmental performance. *Business Strategy and the Environment*, 32(4), 1914–1930. https://doi.org/10.1002/bse.3227
- Asjuwita, M., & Agustin, H. (2020). Pengaruh Kinerja Lingkungan Dan Biaya Lingkungan Terhadap Profitabilitas Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2014-2018. *JURNAL EKSPLORASI AKUNTANSI*, 2(3), 3327–3345. https://doi.org/10.24036/jea.v2i3.285
- Bianchi, M., Valle, I. del, & Tapia, C. (2020). Measuring eco-efficiency in European regions: Evidence from a territorial perspective. *Journal of Cleaner Production*, 276, 123246. https://doi.org/10.1016/j.jclepro.2020.123246
- Broadstock, D. C., Collins, A., Hunt, L. C., & Vergos, K. (2018). Voluntary disclosure, greenhouse gas emissions and business performance: Assessing the first decade of reporting. *The British Accounting Review*, 50(1), 48–59. https://doi.org/10.1016/j.bar.2017.02.002
- Busch, T., & Friede, G. (2018). The Robustness of the Corporate Social and Financial Performance Relation: A Second-Order Meta-Analysis. Corporate Social Responsibility and Environmental Management, 25(4), 583–608. https://doi.org/10.1002/csr.1480
- Carton, G., & Parigot, J. (2021). Resource-based view and natural Resources: Propositions for Sustainability. XXXème Conférence de l'AIMS, 1–18.
- Choi, H., Han, I., & Lee, J. (2020). Value Relevance of Corporate Environmental Performance: A Comprehensive Analysis of Performance Indicators Using Korean Data. *Sustainability*, 12(17), 7209. https://doi.org/10.3390/su12177209

- Czerny, A., & Letmathe, P. (2017). Eco-efficiency: GHG reduction related environmental and economic performance. The case of the companies participating in the EU Emissions Trading Scheme. *Business Strategy and the Environment*, 26(6), 791–806. https://doi.org/10.1002/bse.1951
- Daud, R., Meutia, I., & Yuniarti, E. (2023). Eco-Efficiency And Financial Performance: An Evidence From Indonesian Listed Company (Using The Emissions Intensity Approach). Jurnal Reviu Akuntansi Dan Keuangan, 13(1). https://doi.org/10.22219/jrak.v13i1.23337
- Dita, E. M. A., & Ervina, D. (2021). Pengaruh Green Accounting, Kinerja Lingkungan dan Ukuran Perusahaan Terhadap Financial performance. *JFAS: Journal of Finance and Accounting Studies*, 3(2), 72–84.
- Gangi, F., Daniele, L. M., & Varrone, N. (2020). How do corporate environmental policy and corporate reputation affect risk-adjusted financial performance? *Business Strategy and the Environment*, 29(5), 1975–1991. https://doi.org/10.1002/bse.2482
- Jansson, C. (2022). Can green producers achieve strong profitability without engaging in high-risk activities? *Management Decision*, 60(13), 92–104. https://doi.org/10.1108/MD-08-2021-1090
- Kementerian Lingkungan Hidup dan Kehutanan. (2024). *Peringatan HPSN 2024: Atasi Sampah Plastik Dengan Cara Produktif*. PPID Kementerian Lingkungan Hidup Dan Kehutanan. https://ppid.menlhk.go.id/berita/siaranpers/7610/peringatan-hpsn-2024-atasi-sampah-plastik-dengan-caraproduktif
- Li, Y., Li, M., & Sang, P. (2022). A bibliometric review of studies on construction and demolition waste management by using CiteSpace. *Energy and Buildings*, 258, 111822. https://doi.org/10.1016/j.enbuild.2021.111822
- Mungai Muthoni, D., & Muigai Kinyua, G. (2020). Corporate Reputation and Firm Performance: An Empirical Analysis of Motor Vehicle Assemblers in Nairobi City County, Kenya. *Journal of Business and Economic Development*, 5(2), 73. https://doi.org/10.11648/j.jbed.20200502.13
- Ningrum, O. W. S., & Sapari. (2021). Pengaruh Intellectual Capital, Kinerja Keuangan Dan Good Corporate Governance Terhadap Nilai Perusahaan. 1, 10(8), 1–23.

- Ningtyas, A. A., & Triyanto, D. N. (2019). Pengaruh Kinerja Lingkungan dan Pengungkapan Lingkungan Terhadap Profitabilitas Perusahaan. JASa (Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi, 3(1).
- Undang-Undang (UU) Nomor 23 Tahun 1997 Tentang Pengelolaan Lingkungan Hidup, (1997). https://www.bphn.go.id/data/documents/97uu023.pdf
- Peraturan Pemerintah (PP) Nomor 101 Tahun 2014 tentang Pengelolaan Limbah Bahan Berbahaya Dan Beracun, (2014). https://peraturan.bpk.go.id/Details/5555/pp-no-101-tahun-2014
- Pérez-Calderón, E., Pache-Durán, M., & Milanés-Montero, P. (2021). Inversión ecoeficiente: efectos sobre el desempeño económico y financiero de los grupos empresariales del Dow Jones Sustainability World Index. *Revista de Contabilidad*, 24(2), 220–230. https://doi.org/10.6018/rcsar.403061
- Pratiwi, Y. N., Meutia, I., & Syamsurijal, S. (2020). The Effect of Environmental Management Accounting on Corporate Sustainability. *Binus Business Review*, 11(1), 43–49. https://doi.org/10.21512/bbr.v11i1.6028
- Rahayudi, A. M. P., & Apriwandi, A. (2023). Kinerja Lingkungan, Biaya Lingkungan dan Kinerja Keuangan. *Owner*, 7(1), 774–786. https://doi.org/10.33395/owner.v7i1.1334
- Ranjbari, M., Shams Esfandabadi, Z., Gautam, S., Ferraris, A., & Scagnelli, S. D. (2023). Waste management beyond the COVID-19 pandemic: Bibliometric and text mining analyses. *Gondwana Research*, 114, 124–137. https://doi.org/10.1016/j.gr.2021.12.015
- Sabarani, V. F. (2022). Analisis Pengaruh Struktur Kepemilikan Institusional, Struktur Modal, dan Kinerja Keuangan Terhadap Nilai Perusahaan dengan Kebijakan Dividen Sebagai Variabel Intervening Pada Perusahaan Sub Sektor Property dan Real Estate di Bursa Efek Indonesia. *Bisma*.
- Salsa, S. K., & Tohir pohan, H. (2022). PENGARUH PENGUNGKAPAN EMISI KARBON, KINERJA LINGKUNGAN DAN BIAYA LINGKUNGAN TERHADAP KINERJA KEUANGAN PERUSAHAAN. Jurnal Ekonomi Trisakti, 2(2), 283–292. https://doi.org/10.25105/jet.v2i2.14144
- Scarpellini, S., Marín-Vinuesa, L. M., Aranda-Usón, A., & Portillo-Tarragona, P. (2020). Dynamic capabilities and environmental accounting for the circular economy in businesses. *Sustainability Accounting, Management and Policy Journal*, 11(7), 1129–1158. https://doi.org/10.1108/SAMPJ-04-2019-0150
- Schaltegger, S., Bennett, M., Burritt, R. L., & Jasch, C. (2008). Environmental Management Accounting (EMA) as a Support for Cleaner Production. In

Eco-Efficiency in Industry and Science (pp. 3–26). https://doi.org/10.1007/978-1-4020-8913-8_1

- Sistem Informasi Pengelolaan Sampah Nasional (SIPSN) Kementerian Lingkungan Hidup dan Kehutanan (KLHK). (2023). *Timbulan Sampah*. SIPSN KLHK. https://sipsn.menlhk.go.id/sipsn/public/data/timbulan
- Sudha, S. (2020). Corporate environmental performance-financial performance relationship in India using eco-efficiency metrics. *Management of Environmental Quality: An International Journal*, 31(6), 1497–1514. https://doi.org/10.1108/MEQ-01-2020-0011
- Suh, Y., Seol, H., Bae, H., & Park, Y. (2014). Eco-efficiency Based on Social Performance and its Relationship with Financial Performance. *Journal of Industrial Ecology*, 18(6), 909–919. https://doi.org/10.1111/jiec.12167
- Susanti, I. D., Hertati, L., & Putri, A. U. (2023a). the Effect of Green Accounting and Environmental Performance on Company Profitability. *Cashflow : Current Advanced Research on Sharia Finance and Economic Worldwide*, 2(2), 320–331. https://doi.org/10.55047/cashflow.v2i2.552
- Susanti, I. D., Hertati, L., & Putri, A. U. (2023b). THE EFFECT OF GREEN ACCOUNTING AND ENVIRONMENTAL PERFORMANCE ON COMPANY PROFITABILITY. CASHFLOW: CURRENT ADVANCED RESEARCH ON SHARIA FINANCE AND ECONOMIC WORLDWIDE, 2(2), 320–331. https://doi.org/10.55047/cashflow.v2i2.552
- Tam, L., Thi Mai Anh, N., & Kam Hien, P. (2019). Environmental Management Accounting and Performance Efficiency in the Vietnamese Construction Material Industry – A Managerial Implication for Sustainable Development. Sustainability, 11(19), 5152. https://doi.org/10.3390/su11195152
- Tusiyati, T. (2019). ANALISIS PENGARUH KINERJA LINGKUNGAN DAN KINERJA KEUANGAN TERHADAP PENGUNGKAPAN LAPORAN KEBERLANJUTAN PADA PERUSAHAAN NONKEUANGAN YANG TERDAFTAR DI BURSA EFEK INDONESIA. Jurnal Bina Akuntansi, 6(2), 66–85. https://doi.org/10.52859/jba.v6i2.62
- Wang, R., & Wu, C. (2020). Politician as venture capitalist: Politically-connected VCs and IPO activity in China. *Journal of Corporate Finance*, 64, 101632. https://doi.org/10.1016/j.jcorpfin.2020.101632
- Widarjono, A. (2018). Ekonometrika Pengantar dan Aplikasinya Disertai Panduan Eviews (UPP STIM YKPN (ed.); 5th ed.).

- Wijayanti, M. (2021). Likuiditas, Kinerja Lingkungan, dan Pengungkapan Lingkungan terhadap Profitabilitas (Studi empiris Pada Perusahaan Manufaktur yang Terdaftar di BEI Tahun 2015-2019). Business and Economics Conference in Utilization of Modern Technology, 509–523. www.idx.co.id
- World Business Council For Sustainable Development. (2015). Environmental and Sustainability Management Accounting Network, International Sustainability Accounting Symposium Measuring sustainability performance: bridging corporate and academic contributiions. In S. P. Irwin, Rodney, & Schaltegger (Eds.), The Environmental and sustainability Management Accounting Network (EMAN) and the centre for Sustainability Management (CSM) World (pp. 1–124). World Business Council For Sustainable Development (WBSCD). WBSCD.org