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The Impact of Green Accounting, Environmental Disclosure, and Material Flow Cost Accounting on Corporate Profitability

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Abstract: Environmental sustainability issues require companies—particularly those in the consumer sector that contribute to environmental degradation—to focus not only on financial performance but also on environmental impacts, thereby driving the adoption of green accounting, environmental disclosure, and MFCA as approaches to sustainability accounting. This study aims to empirically test the influence of green accounting, environmental disclosure, and Material Flow Cost Accounting (MFCA) on the profitability of consumer sector companies listed on the Indonesia Stock Exchange for the period 2019–2023. This study uses a quantitative approach with a sample of 40 companies (185 observations) selected through purposive sampling based on specific criteria. The research data consists of secondary data obtained from companies' annual reports and sustainability reports, which were then analyzed using SPSS through classical assumption tests, multiple linear regression, the coefficient of determination (R^2), as well as F-tests and t-tests to examine the simultaneous and partial effects of the independent variables on profitability. The research results indicate that Green Accounting does not have a significant effect on profitability ($t = 0.594$; $\text{sig} = 0.553$), whereas Environmental Disclosure ($t = -1.766$; $\text{sig} = 0.079$) and MFCA ($t = -5.097$; $\text{sig} = 0.001$) have a significant negative effect on ROA. These findings indicate that sustainability practices have not yet had a direct impact on improving profitability because they still incur short-term implementation costs, although they have the potential to improve long-term efficiency and performance.

Keywords: Green Accounting, Environmental Disclosure, Material Flow Cost Accounting, Profitability.

INTRODUCTION

Environmental sustainability issues have become a global agenda that has garnered increasing attention in recent decades, as pressure from various stakeholders on companies has grown to focus not only on financial performance but also on the ecological impacts of their operational activities. The concept of sustainable development, which integrates economic, environmental, and social dimensions, has now become the primary framework in modern

business practices (Landi et al., 2022). In this context, the consumer sector plays an ambivalent role: on one hand, it serves as a driving force of the economy; on the other hand, it contributes significantly to environmental degradation due to high volumes of production, consumption, and waste, particularly from packaging materials and single-use products (Bogusz et al., 2023; Zahrah et al., 2024).

In response to these challenges, various sustainability-based approaches have begun to be adopted in corporate accounting and management practices. Green accounting, for example, enables companies to incorporate environmental costs into their financial reporting systems, thereby promoting cost efficiency and more systematic management of environmental risks (Junior Sungloria & Meiden, 2022; Safitriana et al., 2025). On the other hand, environmental disclosure serves as a transparency mechanism reflecting corporate accountability for environmental impacts, while also signaling a positive message to investors within the Environmental, Social, and Governance (ESG) framework (Kirana et al., 2021; Nguyen et al., 2021; Nisa et al., 2023). Meanwhile, Material Flow Cost Accounting (MFCA) serves as a cost management approach focused on material flow efficiency and the reduction of production waste, thereby potentially enhancing a company's productivity and profitability (Leiva et al., 2025; Nishitani et al., 2022; Usul & Betul, 2025).

Theoretically, the integration of these practices aligns with the perspectives of legitimacy theory and stakeholder theory, which emphasize that companies need to secure social legitimacy and meet stakeholder expectations through responsible business practices (Endiana et al., 2020; Gunawan et al., 2025). Furthermore, the eco-efficiency approach also asserts that resource efficiency can create economic value while reducing environmental impacts (Nishitani et al., 2022). Thus, sustainability is no longer viewed as a cost burden but rather as a business strategy capable of enhancing a company's competitiveness and financial performance (Oliver, 2021).

However, previous empirical research results have shown inconsistent findings. Several studies found that green accounting and environmental disclosure have a positive effect on profitability (Asti, 2021; Oktadifa & Widajantie, 2023; Sidarta et al., 2023), while other research shows insignificant or even negative results (Susanti et al., 2023). On the other hand, MFCA is often found to have no direct effect on profitability, although it contributes to cost efficiency (Ilyas, 2024; Oktadifa & Widajantie, 2023). This inconsistency indicates an empirical gap that requires further testing.

Furthermore, most previous studies have focused on the manufacturing sector, while research on the consumer sector, which has distinct operational characteristics and environmental impacts, remains relatively limited. In fact, this sector makes a significant economic contribution to Indonesia's Gross Domestic Product (GDP), yet it is also one of the primary contributors to national waste generation with a still-low recycling rate (Zahrah et al., 2024). On the regulatory front, the Indonesian government, through POJK No. 51 of 2017, has encouraged companies to enhance transparency and accountability in sustainability reporting (Prihandono & Yuniarti, 2023). This situation further underscores the urgency of research examining the effectiveness of sustainability practices within the context of the consumer sector in Indonesia.

Based on this background, this study aims to empirically test the influence of green accounting, environmental disclosure, and Material Flow Cost Accounting (MFCA) on the profitability of consumer sector companies listed on the Indonesia Stock Exchange for the 2019–2023 period. In line with this objective, this study develops a conceptual framework as shown in Figure 1. More specifically, the hypotheses in this study are as follows:

H1: Green Accounting affects profitability

H2: Environmental Disclosure affects Profitability.

H3: Material Flow Cost Accounting affects Profitability.

Unlike previous studies, this research integrates these three sustainability variables into a single analytical model to provide a more comprehensive picture of the relationship between sustainability practices and financial performance. The contribution of this research lies in two main aspects. First, from an academic perspective, this study enriches the literature by providing empirical evidence regarding the simultaneous role of green accounting, environmental disclosure, and MFCA on profitability in the consumer sector, which has been rarely studied. Second, from a practical perspective, the results of this study are expected to provide insights for corporate management and regulators that sustainability practices serve not only as a form of compliance but also as a strategy with the potential to enhance operational efficiency and long-term profitability. Thus, this study aims to shift the paradigm that sustainability is a cost center into a value-creating strategy in modern business.

METHOD

Type of Research

This study uses a quantitative approach to test the influence of green accounting, environmental disclosure, and material flow cost accounting on corporate profitability. This approach was chosen because it allows for statistical hypothesis testing and yields findings that can be generalized.

Population and Sample

The study population consists of all companies in the consumer cyclicals and non-cyclicals sectors listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023. The sampling technique used purposive sampling with the following criteria: (1) companies consistently listed from 2019 to 2023, (2) consistently participating in the PROPER program, and (3) publishing annual reports and sustainability reports containing information on green accounting, environmental disclosure, and MFCA. Based on these criteria, 40 companies were identified with a 5-year observation period, resulting in a total of 185 observations for the study.

Operational Definitions and Measurement of Variables

Table 1. Operational Definitions and Measurement of Research Variables

No	Variable	Variable Definition	Measurement
1	Green Accounting	Green Accounting is an accounting system that integrates environmental aspects into financial reporting and corporate decision-making (Sundarasen et al., 2024).	Measured using the PROPER rating system with five color categories: 1. Gold = 5, 2. Green = 4, 3. Blue = 3, 4. Red = 2, 5. Black = 1
2	Environmental Disclosure	Environmental Disclosure refers to corporate transparency in reporting environmental activities, policies, and performance to stakeholders (Caputo et al., 2021).	Environmental Disclosure = Number of disclosed indicators / 36 GRI indicators
3	Material Flow Cost Accounting	Material Flow Cost Accounting (MFCA) is an environmental management accounting instrument developed to measure and manage material flows comprehensively within production processes (Walls et al., 2023).	$MFCA = \frac{\text{Total Output Yang Dihasilkan}}{\text{Total Biaya Output yang Dihasilkan}}$ Note: 1. Total output = material cost (raw materials) + system cost (labor, depreciation, transportation, maintenance) + energy cost (utilities). 2. Total cost = overall expenses (selling, general, and administrative expenses).

4	Profitability	Profitability is defined as the company’s ability to generate profit within a certain period by optimally utilizing its resources (Ramlawati et al., 2022).	$ROA = \frac{\text{Laba Bersih Setelah Pajak}}{\text{Total Aset}} \times 100\%$
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Data Collection Method

This study uses secondary data obtained from annual reports and sustainability reports of companies in the consumer cyclicals and non-cyclicals sectors listed on the Indonesia Stock Exchange (IDX) for the period 2019–2023. All data were collected through direct access to the IDX’s official website and the official publications of each company. These reports were used to obtain information regarding the implementation of green accounting, environmental disclosure, material flow cost accounting, and the financial data required for measuring profitability. After the data was collected, it underwent identification, classification, and tabulation according to the research variables. Subsequently, the data was processed using SPSS software to support the statistical analysis and hypothesis testing.

Data Analysis Method

Data analysis in this study employs a quantitative approach using multiple linear regression to test the effects of green accounting, environmental disclosure, and material flow cost accounting on corporate profitability. Before conducting hypothesis testing, classical assumption tests were first performed to ensure the suitability of the regression model in producing valid estimates. Classical assumption tests include tests for normality, multicollinearity, heteroscedasticity, and autocorrelation. Overall, the results of the classical assumption tests indicate that the regression model in this study is suitable for use because there are no issues with multicollinearity, heteroscedasticity, or autocorrelation. Although the normality test showed that the residuals are not normally distributed, this can still be accommodated through the Central Limit Theorem (CLT) approach, ensuring the model remains valid for further analysis.

After all classical assumptions were met, the analysis continued with multiple linear regression to test the effect of each independent variable on profitability, both partially and simultaneously. This regression model was also used to determine the direction of the relationship between the research variables—whether positive or negative. Next, the model’s fit is assessed using the coefficient of determination (R²) to measure the extent to which the independent variables explain variations in firm profitability, where a higher R² value indicates a stronger ability of the model to explain the dependent variable. The final stage involves hypothesis testing using the F-test to examine the simultaneous effect of all independent variables, as well as the t-test to test the partial effect of each variable on profitability at a 10% significance level.

RESULTS AND DISCUSSION

Multiple Linear Regression Analysis Result

Table 2. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
1 (Constant)	962.642	655.751	
Green Accounting	129.202	217.329	0.046
Environmental Disclosure	-6.702	3.794	-0.135
Material Flow Cost Accounting	-0.593	0.116	-0.388

Based on the results of data processing in Table 2, the multiple linear regression equation model obtained in this study is as follows:

$$ROA = 962,642 + 129,202 GA - 6,702 ED - 0,593 MFCA + e$$

This equation can be interpreted to mean that the constant value of 962.642 indicates that when all independent variables, namely Green Accounting (GA), Environmental Disclosure (ED), and Material Flow Cost Accounting (MFCA), are held constant or set to zero, the profitability (ROA) is predicted to be 962.642. Furthermore, the Green Accounting (GA) variable has a positive coefficient of 129.202, indicating that a one-unit increase in GA will increase ROA by 129.202, assuming all other variables remain constant. This indicates a positive relationship between Green Accounting and profitability. Meanwhile, Environmental Disclosure (ED) has a negative coefficient of 6.702, meaning that a one-unit increase in ED will decrease ROA by 6.702, assuming all other variables remain constant. Similarly, Material Flow Cost Accounting (MFCA) also has a negative effect on ROA with a coefficient of 0.593, so that a one-unit increase in MFCA will decrease ROA by 0.593, ceteris paribus. Overall, these results show that only Green Accounting has a positive relationship with profitability, while Environmental Disclosure and MFCA show an inverse relationship with ROA.

Coefficient of Determination (R²) Test Results

Table 3. Results of the Coefficient of Determination (R²) Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.424 ^a	0.180	0.163	674.94908

Based on the results of the coefficient of determination test in Table 3, an Adjusted R-Square value of 0.163 was obtained. This value indicates that the independent variables, comprising Green Accounting (GA), Environmental Disclosure (ED), and Material Flow Cost Accounting (MFCA), collectively account for 16.3% of the variation in profitability (ROA). Meanwhile, the remaining 83.7% of the variation in ROA is explained by variables outside the research model that were not included in the analysis, such as internal company factors (e.g., operational efficiency, capital structure, and management policies) as well as external factors (e.g., macroeconomic conditions and industry dynamics). Thus, it can be concluded that the contribution of the independent variables in this model to profitability variation is relatively limited.

F Test Result

Table 4. F-Statistic Test

Model	F	Sig.
1 Regression Residual	10.511	1

Based on the results of the F-test in Table 4, the calculated F-value is 10.511 with a significance level of 0.000. This significance value is smaller than the significance level of 0.10 (0.000 < 0.10), so it can be concluded that Green Accounting (GA), Environmental Disclosure (ED), and Material Flow Cost Accounting (MFCA) simultaneously have a significant effect on profitability (ROA). These results indicate that the regression model used is appropriate (fits) to explain the relationships among the variables in this study.

T Test Result

Table 5. T-Statistic Test

Model	t	Sig.	Keterangan
1 Green Accounting	0.594	0.553	Not Significant
Environmental Disclosure	-1.766	0.079	Significant
Material Flow Cost Accounting	-5.097	0.001	Significant

Based on the results of the t-test in Table 5, the effect of each independent variable on profitability (ROA) is as follows:

1. Green Accounting (GA) has a significance value of 0.553 (> 0.10), so it has no significant partial effect on ROA. Thus, H1 is rejected.
2. Environmental Disclosure (ED) has a significance value of 0.079 (< 0.10), so it has a partial significant effect on ROA. Thus, H2 is accepted
3. Material Flow Cost Accounting (MFCAs) has a significance value of 0.001 (< 0.10), so it has a significant partial effect on ROA.

Thus, H3 is accepted. Overall, these results indicate that not all independent variables have an individual effect on profitability, but the model simultaneously still shows a significant effect.

The Effect of Environmental Disclosure on Profitability

Based on the t-test results, the Green Accounting (GA) variable obtained a significance value of 0.553 (> 0.10), so H1 is rejected. This indicates that Green Accounting does not have a significant effect on profitability (ROA), suggesting that its implementation has not yet had a direct impact on the company's financial performance during the study period.

The lack of impact of green accounting on profitability may be attributed to the high environmental costs that companies must bear in the short term, such as waste treatment costs, investments in environmentally friendly technology, environmental audits, and the preparation of sustainability reports. These costs directly reduce the company's net profit, so the economic benefits are not yet visible in the short term. This aligns with findings that green accounting can negatively impact profitability due to increased environmental costs (Iraningrum et al., 2026), as well as research showing that green accounting does not significantly affect ROA because its benefits are more long-term in nature (Seviana & Sumarta, 2025).

Furthermore, the phenomenon of greenwashing and the suboptimal implementation standards for green accounting in Indonesia also weaken its impact on profitability (Setianingsih et al., 2025). From the perspective of Legitimation Theory, the adoption of green accounting is more oriented toward gaining social legitimacy than toward improving short-term financial performance. Therefore, its benefits tend to be indirect. In line with this, research indicates that green accounting does not have a significant effect on profitability, with company growth playing a more dominant role in influencing financial performance (Iraningrum et al., 2026). These results are also consistent with (Seviana & Sumarta, 2025) and (Iraningrum et al., 2026), who state that green accounting has not yet had a significant impact on ROA in several industrial sectors on the IDX.

The Effect of Material Flow Cost Accounting on Profitability

The t-test results indicate that Environmental Disclosure (ED) has a significant effect on profitability with a significance value of 0.079 (< 0.10), thus H2 is accepted. However, the regression coefficient is negative (-6.702), meaning that an increase in Environmental Disclosure is actually followed by a decrease in ROA, indicating a negative relationship between the two. This negative relationship can be explained by the trade-off between the costs

and benefits of environmental disclosure activities. Environmental Disclosure generally reflects tangible costs such as investments in environmentally friendly technology, waste management, and compliance with environmental regulations. These costs can reduce a company's profits in the short term. This aligns with findings that environmental disclosure can negatively impact profitability due to high implementation costs (Ulvy & Herianti, 2026), and is supported by research showing the negative impact of environmental disclosure on profitability in certain sectors (I Komang Bayu Arta Jaya & I. P. H. M., 2024).

Furthermore, the effectiveness of Environmental Disclosure is also influenced by the quality of the disclosure. If the disclosure remains limited or merely symbolic, the benefits of reducing information asymmetry are not optimized, thus failing to offset the costs incurred. This is confirmed by research showing that Environmental Disclosure has a significant impact on ROA, yet the direction and magnitude of this impact are highly dependent on its implementation (Rano Wijaya et al., 2025). From the perspective of Legitimation Theory, Environmental Disclosure is conducted to obtain social legitimacy (I Komang Bayu Arta Jaya & I. P. H. M., 2024), so its impact on profitability is indirect. Nevertheless, in the long term, environmental disclosure can enhance investor confidence and financial performance (Tegar Muzaki Ritonga, 2025).

The Effect of Material Flow Cost Accounting on Profitability

The t-test results indicate that MFCA has a significant effect on profitability with a significance value of 0.001 (< 0.10), thus H3 is accepted. However, the regression coefficient is negative (-0.593), indicating that an increase in MFCA is actually followed by a decrease in the company's ROA.

Conceptually, MFCA is an environmental management accounting method aimed at improving resource efficiency by identifying waste of materials, energy, and waste disposal costs. The literature indicates that MFCA helps identify material waste and improve production cost efficiency (Diny, 2026). However, in practice, the implementation of MFCA requires high initial costs, such as system development, human resource training, and adjustments to production processes, which in the short term actually burden profitability. These findings are consistent with research indicating that MFCA can have a negative impact on corporate sustainability due to trade-offs between efficiency and implementation costs (Angelin & Ulfah, 2024), as well as research showing MFCA's negative impact on the circular economy (Maulana & Tatariyanto, 2026). In Indonesia itself, the implementation of MFCA is still in the development stage and faces limitations in human resources and system support (Pernando, 2025). From the perspective of Legitimation Theory, MFCA is more oriented toward sustainability and meeting stakeholder expectations, rather than short-term profit growth. This is further supported by findings that MFCA is not significantly associated with profitability when analyzed individually, although it is significantly associated when analyzed simultaneously with other variables (Asti, 2021). However, in the long term, MFCA has the potential to increase efficiency and profitability through resource optimization (Permatasari et al., 2024).

CONCLUSION

The results of the study indicate that, when considered simultaneously, all three variables have a significant effect on profitability; however, when considered individually, only environmental disclosure and MFCA have a significant effect, while green accounting does not have a significant effect. Sustainability accounting practices have not yet fully contributed directly to increased profitability, primarily due to ongoing implementation costs and companies' short-term focus on environmental expenses. Nevertheless, the presence of a simultaneous effect indicates that the integration of sustainability practices remains relevant in

explaining financial performance, even though its contribution is still limited compared to other factors.

Academically, this study enriches the literature on sustainability accounting by integrating three key instruments into a single empirical model within the consumer sector in Indonesia. Practically, these results imply that the implementation of green accounting, environmental disclosure, and MFCA should be positioned as long-term strategies focused on efficiency and value creation, rather than merely short-term profit increases. Therefore, companies need to optimize implementation so that it is not merely compliance-oriented but also supports operational efficiency. For future research, it is recommended to expand the research variables by incorporating other internal and external company factors, as well as using a more comprehensive methodological approach, such as moderation or mediation variables. Additionally, the development of more specific indicators regarding the quality of sustainability practice implementation is necessary so that research results can more accurately reflect empirical conditions.

REFERENCES

- Angelin, N., & Ulfah, Y. (2024). The Effect of Material Flow Cost Accounting on Company Sustainability: Moderating Role of Green Accounting in Consumer Goods Industry Companies. *International Journal of Advances in Social Sciences and Humanities*, 3(1), 27–43. <https://doi.org/10.56225/ijassh.v3i1.303>
- Asti. (2021). Pengaruh Penerapan Green Accounting, Pengungkapan Lingkungan dan Material Flow Cost Accounting (MFCA) terhadap Profitabilitas Perusahaan. *Jurnal Sistem Informasi, Akuntansi Dan Manajemen*, 1(1), 17–26.
- Bogusz, M., Matysik-Pejas, R., Krasnodębski, A., & Dziekański, P. (2023). Sustainable Consumption of Households According to the Zero Waste Concept. *Energies*, 16(18). <https://doi.org/10.3390/en16186516>
- Diny, N. R. (2026). Review Literatur Implementasi Material Flow Cost Accounting dalam Peningkatan Efisiensi Sumber Daya dan Pengendalian Biaya Lingkungan. *SINTAMA: Jurnal Sistem Informasi, Akuntansi Dan Manajemen*, 6(1), 175–188.
- Endiana, I. D. M., Dicriyani, N. L. G. M., Adiyadnya, M. S. P., & Putra, I. P. M. J. S. (2020). The Effect of Green Accounting on Corporate Sustainability and Financial Performance. *Journal of Asian Finance, Economics and Business*, 7(12), 731–738. <https://doi.org/10.13106/jafeb.2020.vol7.no12.731>
- Gunawan, E. K., Ng, S., & Asri, M. (2025). Financial Reporting Quality, Green Accounting, and Firm Value in Emerging Markets: Evidence from Indonesia. *International Journal of Social Science Humanity & Management Research*, 04(09), 1594–1599. <https://doi.org/10.58806/ijsshmr.2025.v4i9n01>
- I Komang Bayu Arta Jaya & I. P. H. M. (2024). Pengaruh Pengungkapan Environmental, Social, and Governance (ESG) Terhadap Profitabilitas. *Vokasi: Jurnal Riset Akuntansi*, 13(2), 1–9. <https://doi.org/10.33508/jima.v13i1.5025>
- Ilyas, M. (2024). *Pengaruh Environmental Cost, Environmental Performance dan Material Flow Cost Accounting Terhadap Profitabilitas Dalam Perspektif Fiqh Lingkungan*. 1–84.
- Iraningrum, M., Awalina, P., & Agustin, B. H. (2026). The Impact of Green Accounting, Company Size, and Company Value on Profitability Moderated by Firm Age. *Al-Kharaj: Journal of Islamic Economic and Business*, 8(2), 2927–2940.
- Junior Sungloria, C. R., & Meiden, C. (2022). Analisis Materialitas Laporan Keberlanjutan Pada Perusahaan Go Public Consumer Goods 2020. *Portofolio: Jurnal Ekonomi, Bisnis, Manajemen, Dan Akuntansi*, 19(2), 1–18. <https://doi.org/10.26874/portofolio.v19i2.259>

- Kirana, G., Shinta, N., & Rahmasari, W. (2021). Pengaruh Tata Kelola Perusahaan, Ukuran Perusahaan, dan Keterbukaan Massa Terhadap Pengungkapan Informasi Lingkungan. *InFestasi*, 17(1), 45–54.
- Landi, G. C., Iandolo, F., Renzi, A., & Rey, A. (2022). Embedding Sustainability in Risk Management: The Impact of ESG Ratings on Corporate Financial Risk. *Corporate Social Responsibility and Environmental Management*, 29(4), 1096–1107. <https://doi.org/10.1002/csr.2256>
- Leiva, H., Julian, I., Ventura, L., Wallin, E., Vendt, M., Fornell, R., Galindo Paniagua, F., Ascaso, S., & Gomez-Perez, M. (2025). Advancing Sustainability Through Industrial Symbiosis: A Technoeconomic Approach Using MFCA and Cost–Benefit Analysis. *Sustainability*, 17(6). <https://doi.org/10.3390/su17062730>
- Maulana, I., & Tatariyanto, F. (2026). Analysis of the Impact of Material Flow Cost Accounting (MFCA) on the Circular Economy: The Mediating Role of Sustainable Financial Strategies. *Al-Kharaj: Journal of Islamic Economics and Business*, 8(1), 1300–1310.
- Nguyen, T. H., Vu, Q. T., Nguyen, D. M., & Le, H. L. (2021). Factors influencing corporate social responsibility disclosure and its impact on financial performance: The case of Vietnam. *Sustainability*, 13(15), 1–16. <https://doi.org/10.3390/su13158197>
- Nisa, A. Z., Titisari, K. H., & Masitoh, E. (2023). Pengaruh Pengungkapan ESG terhadap Kinerja Perusahaan. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 5(5), 2400–2411. <https://doi.org/10.47467/alkharaj.v5i5.3410>
- Nishitani, K., Kokubu, K., Wu, Q., Kitada, H., Guenther, E., & Guenther, T. (2022). Material flow cost accounting (MFCA) for the circular economy: An empirical study of MFCA and corporate performance. *Journal of Environmental Management*, 303. <https://doi.org/10.1016/j.jenvman.2021.114219>
- Oktadifa, R. M., & Widajantie, T. D. (2023). Pengaruh Penerapan Green Accounting, MFCA, dan Environmental Performance terhadap Profitabilitas Perusahaan. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 6(3), 2896–2909. <https://doi.org/10.47467/alkharaj.v6i3.4743>
- Oliver, R. (2021). *Pengaruh Profitabilitas, Likuiditas, Pertumbuhan Penjualan terhadap Struktur Modal*. 2013–2015.
- Permatasari, L., Liliana, O. V., Saribu, A. D., Sinaga, R. A. E., Sinthya, G., & Nababan, M. E. S. (2024). Pengaruh MFCA dan Green Accounting terhadap Profitabilitas Perusahaan: Review. *Journal of Social Science Research*, 4(3), 16374–16386.
- Pernando, O. R. (2025). Material Flow Cost Accounting: Sebuah Review Literatur Atas Konsep Dan Relevansinya Dalam Era Keberlanjutan. *Jurnal Media Akademik (JMA)*, 3(12).
- Prihandono, I., & Yuniarti, D. S. (2023). *Indonesia's Sustainability Reporting Standard: What Needs to be Improved?* 7(1), 1–23.
- Rano Wijaya, Hifni, S., Saprudin, Isnawati, & Nordiansyah, M. (2025). Pengaruh ESG Disclosure Terhadap Profitabilitas Perusahaan. *JWM: Jurnal Wawasan Manajemen*, 13(1), 81–93. <https://doi.org/10.20527/jwm.v13i1.361>
- Safitriana, A. V., F, N. C. P., Maisyaroh, S., & P, M. Y. (2025). Pengaruh Green Accounting untuk Mengoptimalkan Pengelolaan Pajak Karbon. *Jurnal Mutiara Ilmu Akuntansi*, 3, 298–305. <https://doi.org/10.55606/jumia.v3i1.3589>
- Setianingsih, N. A., Asmoro, W. K., Putranti, E., & Andari, A. T. (2025). Pengaruh Profitabilitas, Carbon Emission Disclosure, dan Green Accounting terhadap Nilai Perusahaan. *Gorontalo Accounting Journal*, 8(2), 435–441. <https://doi.org/10.32662/gaj.v8i2.4473>

- Seviana, M. F., & Sumarta, N. H. (2025). Pengaruh Green Accounting dan Green Innovation terhadap Kinerja Keuangan Perusahaan Sektor Energi. *Indonesian Journal of Economics*, 2(6), 1896–1905.
- Sidarta, A. L., Sukoharsono, E. G., & Laily, A. N. R. (2023). The Influence of Green Accounting on The Company Profitability. *Revista de Gestão e Secretariado*, 14(6), 9829–9841. <https://doi.org/10.7769/gesec.v14i6.2343>
- Susanti, I. D., Hertati, L., & Putri, A. U. (2023). 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>
- Tegar Muzaki Ritonga, N. M. M. (2025). Peran Kualitas Audit Dalam Memoderasi Pengaruh Pengungkapan ESG Terhadap Nilai Perusahaan. *Jurnal Media Akademik*, 3(12).
- Ulvy, Z., & Herianti, E. (2026). Kualitas Audit sebagai Pemoderasi: Pengaruh ESG terhadap Kinerja Keuangan Perusahaan Migas di ASEAN. *Owner: Riset & Jurnal Akuntansi*, 10(1), 343–358.
- Usul, H., & Betul, E. (2025). An Analysis of Material Flow Cost Accounting in Companies Using Different Cost Accounting Systems. *Heliyon*, 11(4). <https://doi.org/10.1016/j.heliyon.2025.e42555>
- Zahrah, Y., Yu, J., & Liu, X. (2024). How Indonesia's Cities Are Grappling with Plastic Waste: Sustainable Waste Management. *Sustainability*, 16(10). <https://doi.org/10.3390/su16103921>