

Sustainability Disclosure as a Mediation between Green Accounting and Corporate Performance

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ABSTRACT

This study examines the effect of green accounting on company performance, considering sustainability disclosure as a mediating variable. Green accounting practices refer to companies' efforts to integrate environmental aspects into financial reporting systems and strategic decision-making processes. However, previous studies have shown mixed results regarding the direct effect of green accounting on company performance. Therefore, sustainability disclosure is considered important in strengthening this relationship because it communicates corporate responsibility to stakeholders. This study uses a quantitative approach with secondary data from the annual and sustainability reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023. The analysis technique is structural equation modeling (SEM) based on partial least squares (PLS). Green accounting variables are measured based on environmental cost, environmental investment, and energy efficiency indicators. Sustainability disclosure uses GRI (Global Reporting Initiative) standards, and company performance is measured using ROA (return on assets), ROE (return on equity), and company value (Tobin's Q) indicators. The results indicate that green accounting significantly positively affects sustainability disclosure, which significantly mediates the relationship between green accounting and corporate performance. These findings suggest that sustainability disclosure can enhance the value of green accounting practices and positively impact overall performance. These findings have practical implications, suggesting that companies should improve the quality of their sustainability reports as part of their long-term business strategy.

Keywords: Green Accounting, Sustainability Disclosure, Company Performance.

ABSTRAK

Penelitian ini bertujuan untuk menguji pengaruh akuntansi hijau terhadap kinerja perusahaan dengan pengungkapan keberlanjutan sebagai variabel mediasi. Praktik akuntansi hijau merupakan upaya perusahaan dalam mengintegrasikan aspek lingkungan ke dalam sistem pelaporan keuangan dan pengambilan keputusan strategis. Namun, pengaruh langsung dari akuntansi hijau terhadap kinerja perusahaan masih menunjukkan hasil yang bervariasi dalam penelitian sebelumnya. Oleh karena itu, pengungkapan keberlanjutan dinilai berperan penting dalam memperkuat hubungan tersebut, karena berfungsi sebagai sarana komunikasi tanggung jawab perusahaan kepada pemangku kepentingan. Penelitian ini menggunakan pendekatan kuantitatif dengan data sekunder yang diperoleh dari laporan tahunan dan laporan keberlanjutan perusahaan sektor manufaktur yang terdaftar di Bursa Efek Indonesia (BEI) tahun 2019–2023. Teknik analisis yang digunakan adalah Structural Equation Modeling (SEM) berbasis Partial Least Square (PLS). Variabel akuntansi hijau diukur berdasarkan indikator biaya lingkungan, investasi lingkungan, dan efisiensi energi; pengungkapan keberlanjutan menggunakan standar GRI (Global Reporting Initiative), sedangkan kinerja perusahaan diukur dengan indikator Return on Assets (ROA), Return on Equity (ROE), dan nilai perusahaan (Tobin's Q). Hasil penelitian menunjukkan bahwa akuntansi hijau berpengaruh positif signifikan terhadap pengungkapan keberlanjutan, dan pengungkapan keberlanjutan secara signifikan memediasi hubungan antara akuntansi hijau dan kinerja perusahaan. Hal ini menunjukkan bahwa pengungkapan keberlanjutan mampu meningkatkan nilai dari praktik akuntansi hijau yang dilakukan perusahaan, serta memberikan dampak positif terhadap kinerja secara keseluruhan. Temuan ini memberikan implikasi praktis bahwa perusahaan perlu meningkatkan kualitas pelaporan keberlanjutan sebagai bagian dari strategi bisnis jangka panjang.

Kata Kunci: Akuntansi Hijau, Pengungkapan Keberlanjutan, Kinerja Perusahaan.

1. Introduction

In recent decades, the world has faced major challenges due to increasing environmental damage, climate change, and social inequality resulting from unsustainable economic activities. Rapid industrial growth and modernization do have a positive impact on global economic growth, but on the other hand also put

great pressure on environmental and social sustainability. The climate crisis, pollution, massive exploitation of natural resources, and increased greenhouse gas emissions are major concerns on the global agenda, including in Indonesia.

This sustainability issue has driven a transformation in the business world, where companies are no longer measured only by financial performance, but also by the

extent to which they are responsible for social and environmental aspects. In this context, the emergence of the concept of green accounting has become an important strategic approach (Ghazali & Zulmaita, 2020). Green accounting is a record-keeping, measuring, and reporting system that incorporates elements of costs and environmental benefits into a conventional accounting system. This practice not only reflects the company's operational efficiency in managing resources, but also an indicator of the company's commitment to carrying out its environmental responsibilities (Hariyanto & Ghozali, 2024).

However, in practice, the implementation of green accounting is often not enough to create a real impact on the company's performance at large, especially in terms of reputation and market value. This is because information related to environmentally friendly activities is often not communicated transparently to the public and stakeholders. Therefore, the role of sustainability disclosure is very crucial. Sustainability disclosure is a formal means of communication for companies to report on their initiatives, strategies, and the impact of their economic activities on environmental, social, and governance (ESG) (Narulita et al., 2025). With this disclosure, the company can build trust with stakeholders, strengthen its brand image, and demonstrate compliance with international regulations and standards.

In the context of theory, sustainability disclosure can also be viewed through the lens of Legitimacy Theory and Stakeholder Theory. The Legitimacy Theory explains that companies need to demonstrate that they operate within the boundaries of socially acceptable norms and values, while the Stakeholder Theory emphasizes the importance of corporate relationships and responsibilities to stakeholders, such as customers, investors, regulators, and the community. Within this framework, sustainability disclosure is a strategic tool to maintain and strengthen the company's social legitimacy and build constructive relationships with stakeholders (Ida Ayu Putu & Devi, 2024).

In Indonesia itself, regulations regarding sustainability reporting have undergone developments. The Financial Services Authority (OJK) through POJK No. 51/POJK.03/2017 requires financial services institutions and issuers to prepare and submit sustainability reports. In addition, more and more companies are starting to use international standard reporting guidelines such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) (Ghazali & Zulmaita, 2020). This shows that sustainability disclosure has become an important part of business strategy and corporate governance.

Nevertheless, despite the increased adoption of sustainability reporting, its effectiveness in bridging the link between the implementation of green accounting and improved corporate performance remains a relevant question to be examined. Are companies that implement green accounting and disclose sustainability information widely reap benefits in the form of improved

performance? Or does disclosure only serve as a tool of legitimacy that has no real impact on business results?

A number of previous studies have shown mixed results. Several studies state that green accounting practices and sustainability disclosures are able to increase efficiency, customer loyalty, and investor confidence, thus having a positive impact on company performance. But other studies have shown that these effects are indirect and highly dependent on the quality of disclosure as well as public perception. Therefore, a research approach is needed that is able to comprehensively explain the causal relationship between these variables.

In this study, researchers propose that sustainability disclosure can act as a mediating variable that explains the relationship between green accounting and company performance. In other words, the influence of green accounting on company performance is not only direct, but also through indirect channels, namely through sustainability disclosure. When a company implements green accounting, but does not disclose it transparently to the public, the impact on reputation and market value may not be optimal. Conversely, if such information is systematically communicated through sustainability reports, then communities, investors, and other stakeholders can assess and respond positively.

The company's performance in this study is measured through financial performance approaches such as Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q as a representation of market value. These three indicators are considered to be able to provide a comprehensive picture of how effective the company is in creating value through the sustainability strategy implemented (Narulita et al., 2025).

From a practical perspective, the results of this study are expected to provide recommendations to companies in managing green accounting practices and developing more strategic disclosure strategies, not only as a form of compliance, but also as part of competitive advantage. For regulators, the results of this research can be used as a consideration to develop policies that better support the integration of sustainability reporting in the company's annual reports. Meanwhile, for academics, this research can enrich the literature in the field of sustainability accounting and become the basis for the development of modern accounting theories and practices that are adaptive to global issues.

Based on this background, this research is important to address the empirical and theoretical gaps regarding the role of sustainability disclosure in strengthening the influence of green accounting on company performance. This research will be conducted with a quantitative approach using path analysis based on Structural Equation Modeling (SEM-PLS), with the object of manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period. It is hoped that the results of this research can make academic, practical, and policy contributions in encouraging the transformation of companies towards a greener, more transparent, and sustainable business.

2. Theoretical basis

This research is based on several main theories that support each other. Legitimacy Theory explains that companies seek to gain support from the public by demonstrating that their operations are in accordance with applicable social norms and values. In this context, the implementation of green accounting and sustainability disclosure is a tool to gain legitimacy from the public and regulators. By reporting on environmentally friendly activities, companies show that they are socially and environmentally responsible (Ningwati et al., 2022).

Furthermore, the Stakeholder Theory states that the company must meet the expectations of all stakeholders, not just shareholders. Therefore, companies are required to be transparent about activities that affect the environment and society. Sustainability disclosure becomes a form of strategic communication to stakeholders to maintain their trust and support, which can ultimately improve the company's performance.

From the perspective of Signaling Theory, sustainability disclosure is seen as a positive signal to the market and investors that the company has good governance and a long-term commitment to sustainability. These signals help reduce information asymmetry between management and external stakeholders, which contributes to increased company value.

Meanwhile, Environmental Accounting Theory provides a conceptual basis that environmental information should be integrated into the company's accounting system. By identifying and measuring environmental costs and benefits, green accounting allows companies to evaluate operational efficiencies and contributions to the environment, while supporting strategic decision-making.

Finally, the Triple Bottom Line (TBL) concept developed by John Elkington emphasizes that a company's success is not only determined by financial aspects (profit), but also by its contribution to society (people) and the environment (planet). In the context of this research, the implementation of green accounting and sustainability disclosure is part of the company's efforts to achieve sustainable performance in these three aspects.

By combining these theories, the study highlights that sustainability disclosure is not only an ethical responsibility, but also serves as a mediation mechanism that strengthens the link between green accounting practices and overall improvement of corporate performance.

Sustainability disclosure is the process of delivering company information to stakeholders regarding the company's economic, social, and environmental performance in a transparent and responsible manner. This disclosure is usually done through sustainability reports and refers to international standards such as the GRI (Global Reporting Initiative).

Green accounting is an accounting system that takes into account the environmental impact of business activities and integrates environmental costs and benefits

into the Company's financial reporting and decision-making (Mekonnen, 2011).

A company's performance reflects the company's level of success in achieving its operational, financial, and strategic goals. This performance can be measured from the financial (profitability, ROA, ROE, EPS) and non-financial (customer satisfaction, environmental efficiency, reputation) sides.

3. Methodology

This study uses a quantitative approach with the aim of examining the causal relationship between variables, namely the influence of green accounting on company performance with sustainability disclosure as a mediating variable. This approach was chosen because it is able to objectively explain the relationship between variables based on numerical data that can be measured statistically.

The research design used is causal research, which aims to find out the extent to which independent variables (green accounting) affect dependent variables (company performance), either directly or indirectly through mediation variables (sustainability disclosure). The type of data used is secondary data obtained from annual reports, sustainability reports, and other company documents that have been published in manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2019 to 2023 (Indonesia Stock Exchange, 2022).

The sampling technique uses a purposive sampling method with certain criteria, such as companies that consistently publish sustainability reports and have complete data on research variable indicators. The data that has been collected is then analyzed using a multivariate statistical method with the Structural Equation Modeling-Partial Least Squares (SEM-PLS) approach. The use of SEM-PLS is considered appropriate because this method can analyze the relationships between complex latent variables and is able to accommodate models with relatively small sample numbers or data that are not strictly distributed normally (Ida Ayu Putu & Devi, 2024) (Manurung, 2022).

The data analysis process is carried out through the stages of testing the validity and reliability of the instrument, testing the measurement model (outer model) to assess the construct of each indicator, and testing the structural model (inner model) to test the hypothesis and relationship between variables. With this method, it is hoped that the research can provide strong and in-depth empirical results regarding the role of sustainability disclosure in mediating the relationship between green accounting and corporate performance (Dwi et al., 2025) (Kusumawardhani et al., 2023).

3.1 Data

The data used in this study is secondary data obtained from public company documents, especially the annual report and sustainability report of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period from 2019 to 2023. The selection of the manufacturing sector is based on the consideration that

this sector has a major contribution to environmental pollution and is a major highlight in the implementation of sustainability practices and green accounting. Data is collected through the IDX's official website, the website of each company, and other relevant official publication sources.

The sampling technique used in this study is purposive sampling, with selection criteria including: companies that consistently publish sustainability reports during the observation period, have measurable information about environmental costs or green accounting practices, and publish complete company performance indicators (Pebriani et al., 2024). The purpose of this technique is to ensure that the data used is truly representative of the variables being studied, as well as relevant to the research objectives.

3.2 Analysis Method

The data analysis method in this study uses Structural Equation Modeling based on Partial Least Squares (PLS-SEM) with the help of SmartPLS software. PLS-SEM was chosen because it is able to process complex structural models and accommodate data with a relatively small sample size and does not require normal data distribution. The analysis procedure begins with testing the outer model to assess the validity and reliability of constructs, such as convergent validity, discriminant validity, and composite reliability. Furthermore, an internal model test was carried out to see the relationship between constructs and test the significance of the relationship path between variables through t-statistical and p-value values.

Mediation testing was conducted with a bootstrapping approach to find out whether sustainability disclosures significantly mediated the relationship between green accounting and company performance. The results of the estimated path coefficient, R^2 value, and f^2 value were used to assess the relationship strength and contribution of each variable in the model. Through this analytical approach, the research is expected to be able to provide a more comprehensive understanding of the strategic role of sustainability disclosure in strengthening the impact of green accounting on improving company performance.

Using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 software:

Uji Outer Model: Validitas indikator dan reliabilitas (CR, AVE, loading factor)

Uji Inner Model:

- Value R^2 , f^2 , dan Q^2
- Path coefficient

Mediation Test:

- Using the bootstrapping method
- Calculate Variance Accounted For (VAF) to see the mediation type (full/partial)

4. Result and Discussion

4.1 Result

After data processing using Structural Equation Modeling based on Partial Least Squares (SEM-PLS),

results were obtained that showed that green accounting has a positive and significant effect on sustainability disclosure. This indicates that companies that consistently implement green accounting tend to have a greater commitment to conveying sustainability information in their reports. The application of green accounting is usually reflected in the reporting of environmental costs, waste management, energy efficiency, and investments in environmentally friendly technologies, which are then reported in the form of sustainability disclosures to stakeholders.

Furthermore, the results of the study also show that sustainability disclosure has a positive and significant influence on company performance. The company's performance is measured using financial performance indicators such as return on assets (ROA), return on equity (ROE), or other profitability, and is supported by non-financial indicators such as the company's reputation and stakeholder responses. These findings support the theory of legitimacy, where companies that are able to communicate their environmental and social activities transparently to the public will gain social legitimacy and trust from stakeholders, which ultimately has an impact on better business performance (Pebriani & Syafitri, 2024) (Ghisetti, 2017).

Other results from this study suggest that sustainability disclosure significantly mediates the relationship between green accounting and company performance. This means that green accounting not only directly affects the company's performance, but also indirectly through improved quality and quantity of sustainability disclosures. Companies that practice green accounting practices but do not disclose them well in sustainability reports may not be able to add value from a stakeholder perspective, as transparency and accountability are important aspects of decision-making by investors, customers, and regulators.

These findings reinforce the importance of integrating environmental practices in internal accounting systems and external disclosure through sustainability reporting. Sustainability disclosure is an important bridge between the company's internal efforts to protect the environment and the achievement of external performance recognized by the market. In the context of stakeholder theory, companies that are able to respond to stakeholder expectations through sustainability information will receive wider support, both in the form of customer loyalty, ease of capital acquisition, and support from the government and the public.

Overall, this discussion shows that the company's success in achieving superior performance depends not only on operational efficiency and conventional business strategies, but also on how the company pays attention to and manages environmental issues and communicates them transparently to the public. Thus, this study confirms the importance of the role of sustainability disclosure as a strategic mediation mechanism in the relationship between green accounting and corporate performance.

4.2 Discussion

The results of this study make an important contribution to understanding how green accounting can impact company performance, both directly and indirectly through sustainability disclosures. Conceptually, the relationship between these three variables can be explained through legitimacy theory and stakeholder theory, both of which emphasize the importance of a company's relationship to the social environment and external regulations.

Green Accounting serves as the initial foundation in shaping the company's sustainability orientation. Green accounting practices reflect the company's commitment to environmental cost management, energy efficiency, and ecological impact control from its operational activities (Indonesia, 2024). This can include recording environmental costs, investing in green technologies, using renewable energy, and managing waste and carbon emissions. When a company internalizes environmental costs into its accounting system, it is a signal that the company is serious about running a responsible business. However, the success of this practice lies not only in its implementation, but also in how the company communicates the business to the public. This is where sustainability disclosure comes in. Sustainability reports not only serve as an informational document, but also as a strategic communication tool to strengthen the company's image, build stakeholder trust, and gain social legitimacy (Antonius & Ida, 2023). Companies that disclose transparently and accurately their environmental, social, and governance (ESG) practices tend to be more trusted by investors and customers.

In the context of mediation, the results show that sustainability disclosure is an important pathway that strengthens the relationship between green accounting and corporate performance. Without effective disclosure, green accounting efforts may not have the maximum impact on market and stakeholder perceptions. On the other hand, if the company actively and openly discloses its sustainability activities, then these efforts will be an added value that encourages market trust, increases reputation, and provides a competitive advantage.

The company's performance as a dependent variable in this study reflects the final output of a strategic process involving environmental and social responsibility. Performance is not only seen from the financial side such as net profit, ROA or ROE, but also from the company's long-term sustainability, customer satisfaction, stakeholder loyalty, and social acceptance. In the long run, companies that are responsive to environmental and social issues are better able to withstand evolving market and regulatory pressures.

In addition, these results also reinforce the literature that states that companies with good sustainability practices tend to be more attractive to institutional investors and individuals who are now paying more attention to ESG criteria in their investment decisions. Therefore, sustainability disclosure becomes not only a reporting function, but also part of a company's value strategy.

From a practical point of view, this discussion implies that companies need to strengthen accounting systems that support the recording of green activities, as well as develop transparent reporting capacity based on international standards such as the GRI (Global Reporting Initiative). Many companies already have environmental practices, but do not have a robust reporting system in place. Conversely, there are also companies that conduct sustainability reporting only as a formality without the support of real practices. Both do not provide optimal added value. These findings also have implications for regulators and policymakers. To encourage the sustainability of the industrial sector, incentives are needed for companies that implement green accounting in real terms and conduct consistent sustainability disclosures. In addition, stricter and more comprehensive reporting standards are needed so that reporting is not just symbolic, but a reflection of actual responsibility.

5. Conclusion

This study aims to analyze the relationship between green accounting and corporate performance with sustainability disclosure as a mediating variable. The results of data analysis show that green accounting has a positive and significant effect on sustainability disclosure, and sustainability disclosure also has a positive effect on company performance. In addition, it was found that sustainability disclosures significantly mediated the relationship between green accounting and company performance.

This means that the implementation of good green accounting is not enough to improve company performance if it is not accompanied by transparent disclosure of sustainability activities. Success in managing internal environmental issues must be followed by a company's ability to communicate its commitment to stakeholders through sustainability reporting.

These findings reinforce the importance of the role of sustainability disclosure as a strategic bridge between a company's environmental activities and business performance recognized by the public, investors, and regulators. The better the company is at conveying sustainability information, the greater the positive influence that green accounting practices can have on the company's overall performance.

Suggestion

1. For company management, it is advisable to not only focus on implementing green accounting practices, but also improving the quality of sustainability reporting. This can be done by referring to international standards such as GRI or ISSB, so that reports are more comparable and trustworthy.
2. For regulators and governments, it is important to encourage policies that require sustainability disclosure, especially for companies that have a significant impact on the environment. Providing incentives for companies that implement green practices can also accelerate the transition to a sustainable economy.

3. For future researchers, this study opens up space to develop a model that includes other variables such as corporate governance, green innovation, or stakeholder perception as factors that affect the effectiveness of sustainability disclosure and its impact on company performance.

Bibliography

- Antonius, F., & Ida, I. (2023). Pengaruh Environmental, Social, Governance (ESG) dan Intellectual Capital terhadap Kinerja Perusahaan. *Jurnal EKOBIS: Ekonomi, Bisnis, Dan Manajemen*, 13(2), 126–138. <http://ejournal.utmj.ac.id/index.php/ekobis126>
- Dwi, S., Putri, R., & Tjun, T. (2025). *Faktor ESG dan Biaya Modal: Apa yang Kita Ketahui?* 29(02), 247–268.
- Ghazali, A., & Zulmaita. (2020). Pengaruh pengungkapan environmental, social, and governance (ESG) terhadap tingkat profitabilitas perusahaan (studi empiris pada perusahaan sektor infrastruktur yang terdaftar di bursa efek Indonesia). *Prosiding SNAM PNJ*, 1–13.
- Ghisetti, C. (2017). Green Technologies and Environmental Productivity: A Cross-sectoral Analysis of Direct and Indirect Effects in Italian Regions. *Ecological Economics*, 132, 1–13. <https://doi.org/10.1016/j.ecolecon.2016.10.003>
- Hariyanto, D. B., & Ghozali, I. (2024). Pengaruh Environmental, Social, Governance (ESG) Disclosure Terhadap Nilai Perusahaan. *Diponegoro Journal of Accounting*, 13, 1–13. <https://ejournal3.undip.ac.id/index.php/accounting/article/view/46057%0A>
- Ida Ayu Putu, C. P., & Devi, S. (2024). Pengaruh Environmental Social Governance (ESG) Score dan Struktur Modal Terhadap Nilai Perusahaan. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha*, 15(01), 166–173. <https://doi.org/10.23887/jimat.v15i01.76346>
- Indonesia, B. E. (2024). *Environment, Social and, Governance (ESG)*,. 9(9).
- Indonesia Stock Exchange. (2022). IDX Index Fact Sheet IDXG30. *Indonesia Stock Exchange*, 1–3. <https://idx.co.id/Media/20221003/fs-idxg30-2022-08.pdf>
- Kusumawardhani, A., Thenardi, C. M., & ... (2023). ESG (Environmental, Social And Governance) Memoderasi Kinerja Keuangan Terhadap Nilai Perusahaan. *Jurnal Riset Akuntansi ...*, 10(November), 15–26. <https://doi.org/10.55963/jraa.v10i3.589>
- Manurung, A. D. P. (2022). The Effect of Good Corporate Governance on Firm Value with Financial Performance As an Intervening Variable. *Neo Journal of Economy and Social Humanities*, 1(4), 242–254. <https://doi.org/10.56403/nejesh.v1i4.54>
- Mekonnen, M. M. (2011). The green, blue and grey water footprint of crops and derived crop products. *Hydrology and Earth System Sciences*, 15(5), 1577–1600. <https://doi.org/10.5194/hess-15-1577-2011>
- Narulita, F. D., Soraya, B., Baderi, R. N., & Pandin, M. Y. R. (2025). *Pengaruh Tren Environmental Social Governance (ESG) Terhadap Strategi Portofolio di Pasar Modal Indonesia*. 05(01), 1–9.
- Ningwati, G., Septiyanti, R., & Desriani, N. (2022). Pengaruh Environment, Social and Governance Disclosure terhadap Kinerja Perusahaan. *Goodwood Akuntansi Dan Auditing Reviu*, 1(1), 67–78. <https://doi.org/10.35912/gaar.v1i1.1500>
- Pebriani, R. A., & Syafitri, L. (2024). *How Do Foreign Directors Affect Assurance Practices in Sustainability Reporting?* 15(02), 154–157.
- Pebriani, R. A., Syafitri, L., & Meiriasari, V. (2024). Financial Distress: Ratio of Financial Statements of Mining And Metals Companies. *Islamic Banking: Jurnal Pemikiran Dan Pengembangan Perbankan Syariah*, 10(1), 129–146. <https://doi.org/10.36908/isbank.v10i1.1205>