International Journal of Research and Review
Vol. 10; Issue: 11; November 2023
Website: www.ijrrjournal.com
Research Paper
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Green Accounting in Enhancing Sustainability Report Disclosure

May Hana Bilqis Rangkuti, Fauziah Kumalasari

Faculty of Economics and Business, Universitas Sumatera Utara, North Sumatera, Indonesia

Corresponding author: May Hana Bilqis Rangkuti

DOI: https://doi.org/10.52403/ijrr.20231156

ABSTRACT

Green accounting serves as a key driver in enhancing corporate value and provides a solution to address challenges encountered by companies involved in environmentally impactful activities. The objective is to instill greater investor confidence in the company's performance. The study targets all companies within the manufacturing sector that were honored with PROPER awards from the Ministry of Environment for the years 2016-2019. Employing a quantitative research method, the study relies on secondary data sources. These include audited and published financial reports for publicly traded companies, data from the archives of the Indonesia Stock Exchange (IDX) focusing on companies' annual reports from 2016-2019, and information on the environmental performance evaluation of companies by the Ministry of Environment during the same period. Data analysis utilizes the Partial Least Square (PLS) method with SmartPLS 3.0 software. The research seeks to demonstrate that the adoption of green accounting is a strategic initiative by companies to transparently communicate information to the public, contributing to their overall objectives.

***Keywords**:* Green Accounting, Sustainability Reports, Legitimacy Theory, Stakeholder Management, Manufacturing Sector

INTRODUCTION

According to Cohen and Robbins (2011), environmental accounting is a specialized form of accounting that encompasses the indirect costs and benefits resulting from economic activities, such as the environmental impact and health repercussions of business decisions and strategies. Referred to interchangeably as green accounting, this discipline aims to furnish environmental information to both internal and external stakeholders (Ditz et al., 1995). The purpose of environmental accounting extends to unveiling the potential advantages of environmental investments for profit generation and the mitigation of environmental liabilities (Beer and Friend, 2006). Lako (2011) defines green accounting, or environmental accounting, as a paradigm shift within accounting, emphasizing that the accounting process should not solely focus on financial transactions or activities but also encompass social and environmental transactions or events.

Green accounting emerges as a pivotal driver in augmenting corporate value and offers a solution to challenges faced by companies involved in environmentally impactful activities, thereby bolstering investor confidence in the company's performance. Through green accounting, valuable insights into an organization's or company's contribution to its environmental quality are communicated (Komar, 2004). The community can assess the extent of a company's social activities through a sustainability report, indicative of the company's ability to endure over an indeterminate period, thereby signifying a long-life company. A sustainability report,

also known as a sustainability report, is a document published by a company or organization addressing economic, social, and environmental aspects of its day-to-day operations (ACCA, 2013). These reports adhere to the sustainability report guidelines outlined by the Global Reporting Initiative (GRI).

Elkington (2010) defines a sustainability report as a comprehensive document that provides non-financial information, offering intricate insights into social and environmental activities. The Global Reporting Initiative (GRI), dedicated to addressing environmental and social concerns of companies, formulates guidelines for evaluating a company's environmental performance, known as the G4-Guidelines. A sustainability report serves as a mechanism for tracking, sharing, and taking responsibility for activities that promote sustainability, ultimately contributing to the achievement of sustainable development (Ade Irma, 2019). This report acts as a conduit for disseminating information from the company to its stakeholders (Sari and Marsono, 2013). Legitimacy theory has been used by Gray et al. (1995), Deegan and Rankin (1996), Deegan and Gordon (1996), Wong (2011), and Ghosh (2015) to look at how companies disclose information about social and environmental issues in order to build a good reputation among stakeholders. The term "stakeholder," as defined by Freeman and Reed (1983), encompasses any group or individual influencing the attainment of organizational goals or being influenced by such accomplishments. Freeman (2004) refined this definition, characterizing stakeholders as groups indispensable to the sustainability and triumph of the company. Identified stakeholders within an organization include shareholders, employees, customers, suppliers, creditors, the government, and the community (Riahi-Belkaoui, 2003). Competent management of these components can generate added value for the company, subsequently enhancing financial performance for the benefit of stakeholders.

According to Orisu Lillyani (2021), citing Giegiel and Wasiluk (2020), there is evidence across many European nations and globally that a company's financial transparency to the general public tends to decrease with its size. This implies that larger companies may be less efficient and effective in managing their finances. By optimizing corporate functions, including contributions to society, companies aim to achieve their goals while adhering to the principle of accountability. Accountability involves providing the public with information that belongs to the company (Rangkuti, 2018).

Given this phenomenon, the researcher has chosen the theme of green accounting to enhance the sustainability reports of companies in Indonesia. The research specifically focuses on all companies operating in the manufacturing sector that received PROPER awards from the Ministry of Environment for the years 2016-2019. The selection of the manufacturing sector is motivated by its direct relevance to sustainability dimensions: economic, technological, social, and environmental. These dimensions are rooted in the efficiency and cost-effectiveness of production and waste management (Darwin, 2007).

RESEARCH METHODOLOGY

The study focused on companies within the manufacturing sector that were honored with PROPER awards by the Ministry of Environment and Forestry between 2016 and 2019. The sampling technique employed for selecting participants from the mining industry followed purposive sampling, as outlined by Trianto (2015; p. 55). Purposive sampling involves the deliberate selection of samples based on specific criteria. For this research, the following criteria were applied:

1. Inclusion of all companies listed on the Indonesia Stock Exchange (IDX) throughout the 2016–2019 period.
2. Requirement for companies to be registered as PROPER participants and to

possess environmental performance reports evaluated by PROPER.

3. Selection of companies that consistently published comprehensive annual reports, inclusive of social disclosures, on the Indonesia Stock Exchange from 2016 to 2019.
4. Inclusion of companies that submitted consecutive financial reports for the four-year period spanning 2016 to 2019.
5. Consider companies that issued consecutive sustainability reports over the same four-year timeframe (2016–2019).

The data analysis method employed in this study is Partial Least Squares (PLS), utilizing SmartPLS 3.0 software. Ghozali (2006b) explicates that Partial Least Squares is a soft modeling analysis, characterized by its flexibility regarding data measurement scales. This flexibility allows for the inclusion of small sample sizes, even below 100 samples.

The variables utilized in this research encompass both independent (predictor) and dependent (response) variables. The relationships between these variables are categorized as follows:

Independent Variables: Termed as stimulus variables, predictors, or antecedent variables, independent variables instigate changes in the dependent variable. In this study, the independent variable is:

- *Green Accounting:* The environmental performance is assessed using the PROPER rating. The PROPER rating system, evaluating a company's environmental performance, employs five color codes: black, red, blue, green, and gold, representing ascending levels from the lowest to the highest environmental performance (Ministry of Environment and Forestry, 2012; as cited in Sarumpaet et al., 2017).

Dependent Variable: Referred to as the bound variable, the dependent variable is influenced by the independent variable. In this research, the dependent variable is:

- *Company's Value:* Measured through the sustainability report. As per Soelistyoningrum (2011), a sustainability report is a non-financial document containing information about social and environmental activities. The evaluation of a sustainability report is guided by the Sustainability Report Disclosure Index (SRDI), wherein each SR item receives a score of 1 if disclosed and 0 if undisclosed. These scores are then utilized in the SRDI formula:

$$SRDI=n/k$$

Where:

- *SRDI*: Sustainability Report Disclosure Index for the company
- *n*: Number of items disclosed by the company
- *k*: Number of expected items

This meticulous delineation of variables and their interconnections enhances the clarity and precision of the research framework, aligning with best practices in accounting research methodologies.

RESULTS AND DISCUSSION

Description of the Research Object

In accordance with the defined sample criteria, eligible samples have been meticulously selected. From a population comprising 144 publicly traded manufacturing companies, this study has successfully secured a representative sample of 10 companies, meticulously observed over a rigorous 4-year timeframe. This comprehensive observation period has resulted in a total of 32 meticulously documented observations. This strategic approach ensures a robust and focused examination of the chosen companies, providing valuable insights into their financial and operational dynamics over the specified period.

Descriptive Statistics

The results of the descriptive statistical test, as presented in Table 1, reveal that each variable in the study is based on a substantial sample size of 40 observations. The variables

under consideration encompass the domains of green accounting and sustainability reporting. This methodical approach to sample selection ensures a robust foundation for statistical analysis, enabling a comprehensive exploration of the relationships and patterns within the context of green accounting and sustainability reporting.

Table 1 Descriptive Statistical Results

	Mean	Min	Max	Standard Deviation
X1	3.49	2	5	0.703
Y1	0.447	0.045	1.059	0.211

- Variable X1 (GA) exhibits an average value of 3.49, accompanied by a standard deviation of 0.703. The range of values spans from a minimum of 2 to a maximum leverage of 5.
- Variable Y1 (SR) demonstrates an average value of 0.447 with a standard deviation of 0.211. The values for this variable range from a minimum of 0.045 to a maximum leverage of 1.059.

This presentation provides a clear and concise summary of the descriptive statistics for both variables X1 (GA) and Y1 (SR), allowing for a nuanced understanding of their central tendencies, dispersions, and extremities.

Partial Least Square Analysis

Table 2 R Square and Path Coefficients Model 1

Sample	T Statistics	P Values
Y -> X	0.293	2.5

In the first model, the results pertaining to path coefficients for hypothesis 1 reveal the significance of the sustainability report. This is evident through a t-statistic value surpassing the critical threshold of 1.96. Furthermore, the associated P Values are 0.006, equivalent to 0.6%, falling below the conventional 5% significance level. The original sample coefficient is positive, specifically 0.293, indicating a favorable direction in the relationship under consideration.

Given these findings and their interpretations, it is reasonable to conclude that hypothesis 1 is supported. This conclusion is drawn from the significant t-statistic, the low P Value, and the positive direction of the path coefficient, collectively suggesting a meaningful and positive association between the sustainability report and the variable under investigation.

DISCUSSION

The influence of sustainability report as a moderating variable on corporate value

Sustainability reporting is a step forward in the way information is presented. It encourages openness about performance metrics, with the end goal of building trust among investors. The degree of information transparency holds substantial influence over stakeholders, playing a pivotal role in their investment decision-making processes and subsequently contributing to an upswing in corporate profits. The issuance of a sustainability report by a company serves the fundamental purpose of providing tangible evidence of its commitment to social and environmental aspects, allowing interested parties to assess and scrutinize the information.

This study supports the idea that the disclosure of environmental performance has a significant impact on corporate performance, which is in line with earlier research by Wijayanti (2016). The study's results add to what is already known in a way that is consistent with other research. This supports the idea that environmental performance disclosure has an effect on a company's overall performance.

CONCLUSION

This study sought to uncover insights into the disclosure of green accounting practices among companies listed on the Indonesia Stock Exchange. Based on the outcomes of the analysis, the following conclusions can be drawn: The results of hypothesis testing suggest that sustainability reporting significantly influences the company's value. It is important to note that this research faced limitations due to the utilization of purposive sampling, which impacted the sample size. To get a more complete and accurate sample of companies, future research could build on this one by using a broader sampling strategy that might include companies from a wider range of industries. Additionally, extending the study period would provide a more comprehensive perspective.

Looking ahead, the establishment of regulations and policies related to green accounting is deemed essential. Such frameworks play a pivotal role in providing a solid foundation for companies to articulate their sustainability performance and measure their environmental impact accurately. These regulations serve as catalysts for companies to integrate and disclose green accounting practices consistently, fostering transparency and accountability in reporting.

REFERENCES

1. ACCA. (2013). The Business Benefits of Sustainability Reporting in Singapore. Retrieved December 10, 2018, from https://www.accaglobal.com/content/dam/acca/global/PDF-technical/sustainability-reporting/tech-tp-smapp.pdf
2. Ade Irma Suryani Lating. (2019). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Sustainability Report Sebagai Variabel Moderating. Equilibrium: Jurnal Ekonomi-Manajemen-Akuntansi, Volume 15(1), April 2019, 129–144.
3. Amalia Anggi Riski, Rahmawati Fitri, Amalia Siti Laeli Rizki, Sugiyanto. (2021). Pengaruh Sustainability Reporting Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Variabel Moderating. Humanities, Management and Sciene Proceeding 2021, Vol. 1(2), Juni 2021.
4. Arisandi, Desi, & Frisko, Dianne. (2011). Green Rush in Accounting Field of Indonesia from Different Perspectives. Papers.ssrn.Vol. 3(1), 137–152.
5. Arum. (2019). The Implementation Of Green Accounting And Its Implication On Financial Reporting Quality In Indonesia. Journal of Business Studies and Management Review, 3(1), 67–75.
6. Bassey, E.B., Sunday, O.E., & Okon, E.E. (2013). The impact of environmental accounting and reporting on organizational performance of selected oil and gas companies in Niger - Delta region of Nigeria. Research Journal of Finance and Accounting.
7. Belkaoui, A.R. (2003). “Intellectual Capital and Firm Performance of US Multinational Firms’: A Study of The Resource-based and Stakeholder views”. Journal of Intellectual Capital, Vol.4 (2), 215–226.
8. Burhany, Dian Imanina. (2012). Akuntansi Lingkungan Dukungan akuntansi Kepada Manajeman dalam Bisnis yang Semakin peduli Lingkungan. ProceedingsSNEB, 1–15.
9. Cohen, N., and P, Robbins. (2011). Green Business: An A-to-Z Guide. Thousand Oaks, CA: Sage Publications Inc.
10. Darwin, A. (2007). Pentingnya laporan keberlanjutan. Akuntan Indonesia, 3(1), 12–14.
11. Deegan, C., & Gordon, B. (1996). A study of the environmental disclosure practices of Australian Corporations. Accounting and Business Research, Vol. 26 No. 3, 187–199.
12. Deegan, C., & Rankin, M. (1996). Do Australian companies report environmental news objectively?. Accounting, Auditing and Accountability Journal, Vol. 9 No. 2, 50–67. Available at
13. Dewa Made I Endiana, Ni Luh Gd Mahayu Dicriyani, Md Santana Putra Adiyadnya, I Putu Mega Juli Semara Putra. (2020). The Effect of Green Accounting on Corporate Sustainability and Financial Performance. Journal of Asian Finance, Economics and Business, Vol. 7(12), 731–738.
14. De Beer, P., dan F. Friend. (2006). Environmental accounting: A management tool for enhancing corporate environmental and economic performance. Ecological Economics, Vol. 5(8), 548–560.
15. Ditz, D., Ranganathan, J., Banks, R., Beloff, B. (1995). Green Ledgers: Case Studies in

Corporate Environmental Accounting. Washington, DC: World Resources Institute.
16. Elkington, John (1998). Cannibals With Forks: The Triple Bottom Line in 21st Century Business. Gabriola Island, BC: New Society Publishers.
17. ELKINGTON, J. (1997). Cannibals with Forks: The Triple Bottom Line of 21st Century Business. Oxford: Capstone Publishing.
18. Ega Jenny Gunardi Luky Patricia Widianingsih Anastasia Filiana Ismawati. (2021). The Value Relevance Of Environmental Performance, Corporate Social Responsibility Disclosure, And Return On Equity. Research In Management And Accounting, Vol. 4 No. 1, June 2021.
19. Febriani, A., & E. Wany. (2016). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Sustainability Report Sebagai Variabel Moderating. Prosiding Seminar Nasional Ekonomi dan Bisnis & Call For Paper FEB UMSIDA, Sidoarjo.
20. Freeman, R.E., & Reed. (1983). Stockholders and Stakeholders: a New Perspective on Corporate Governance. Californian Management Review, Vol.25 (2), 88–106.
21. GGGI, G. G. G. I. (2015). Mewujudkan Pertumbuhan Ekonomi Hijau di Indonesia.
22. Global Reporting Initiative. (2016). www.globalreporting.org
23. Ghozali, Imam. (2006b). Structural Equation Modeling Metode Alternatif Dengan Partial Least Square PLS. Semarang: Badan Penerbit Universitas Diponegoro. Edisi 2.
24. Ghozali, Imam, & Hengky Latan. (2015). Partial Least Squares Konsep, Teknik, Dan Aplikasi Menggunakan Program SmartPLS 3.0 Untuk Penelitian Empiris. Semarang: Badan Penerbit Universitas Diponegoro. Edisi 2.
25. Ghosh, S. (2015). Communication of corporate social responsibility activities by private sector companies in India: research findings and insights. Metamorphosis, Vol. 14 No. 2, 1–21.
26. Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. Accounting, Auditing and Accountability Journal, Vol. 8 No. 2, 47–77.
27. Huey Shi Tho, T., & Boon Heng Teh, S. (2016). The relationship between environmental disclosure and financial performance of public listed companies in Malaysia. International Business Management, 10(4), 461–467.
28. Irfandi Wijaya Bayu, Sedana Panji I.B. (2015). Pengaruh Profitabilitas Terhadap Nilai Perusahaan (Kebijakan Dividen Dan Kesempatan Investasi Sebagai Variabel Mediasi). E journal Manajemen UNUD, Vol.4, No.12, 2015, 4477–4500.
29. Komar, Seful. (2004). Akuntansi Pertanggungjawaban Sosial (Social Responsibility Accounting) dan Korelasinya dengan Akuntansi Islam. Media Akuntansi. Edisi42/Tahun XI, 54–58.
30. Lako.A. (2018). Akuntansi Hijau:Isu, Teori, dan Aplikasi. Jakarta: Salimba Empat.
31. Learning Media, ACCA Approved Financial Accounting Practice & Revision Kit, London: Learning Media, 2017.
32. Menteri Lingkungan Hidup Republik Indonesia. Peraturan Menteri Negara Lingkungan Hidup Republik Indonesia Nomor 3 Tahun 2014 tentang Program Penilaian Kinerja Perusahaan Dalam Pengelolaan Lingkungan Hidup.
33. Miroshnychenko, I., Barontini, R., & Testa, F. (2017). Green practices and financial performance: A global outlook. Journal of Cleaner Production, 147, 340–351. https://doi.org/10.1016/j. jclepro.2017.01.058.
34. Mohammadi., M. A. D., Mardani, A., Khan, M. N. A. A., & Streimikiene, D. (2018). Corporate sustainability disclosure and market valuation in a Middle Eastern Nation: evidence from listed firms on the Tehran Stock Exchange: sensitive industries versus non-sensitive industries. Economic Research-Ekonomska Istrazivanja, 31(1), 1488–1511. https://doi.org/10.1080/1331677X.2018 .1486722.
35. Ningsih, Rachmawati. (2017). Implementasi Green Accounting Dalam Meningkatkan Kinerja Perusahaan. Journal Of Applied Business And Economics, Vol. 4 No. 2.
36. Nuryanti, T. N., Nurlely, N., & Rosdiana, Y. (2015). Pengaruh akuntansi lingkungan terhadap kinerja lingkungan: Pada perusahaan tekstil wilayah Bandung. Prosiding Akuntansi – SPeSia, 1(1), 214–220.
37. Orisu Lillyani Margaretha, Pentury Marthen Anthon & Kareth Martha A.C. (2021). Fiscal

Illusion and Asymmetric Response of Regional Financial Performance. Economics Development Analysis Journal, Vol (4) (2021).
38. Pernyataan Standar Akuntansi Keuangan (PSAK). (2009).
39. Rangkuti, M. H. B. (2018). Akuntabilitas Kinerja Di Instansi Pemerintah (Studi Empiris Pada Pemerintah Kabupaten Deli Serdang). Jurnal Akuntansi Bisnis dan Publik, 8(2), 93–101.
40. Sabrin, Buyung Sarita, Dedy Takdir, & Sujono. (2016). The Effect of Profitability on Firm Value in Manufacturing Company at Indonesia Stock Exchange. The International Journal Of Engineering And Science. 5(10), 81–89.
41. Saha, et al. (2019). Research on Social and Environmental Accounting: Current Trends and Future Approaches. Indonesian Journal of Sustainability Accounting and Management, 3(2), 119–136.
42. Salinan Peraturan Otoritas Jasa Keuangan Nomor 51/POJK.03/2017 Tentang Penerapan Keuangan Berkelanjutan Bagi LJK, Emiten dan Perusahaan Publik. (2018, Juli 18). Retrieved on July 27, 2017 from
43. Sari, M., & Marsono. (2013). Pengaruh Kinerja Keuangan, Ukuran Perusahaan Dan Corporate Governance Terhadap Pengungkapan Sustainability Report. Diponegoro Journal of Accounting. 2(3).
44. Sarumpaet et al. (2017). The Value Relevance Of Environmental Performance : Evidence From Indonesia. Social Responsibility Journal, 13(4), 817–827.
45. Sembiring, C. L. (2017). Manajemen Laba dan Pengungkapan Tanggung Jawab Sosial Perusahaan dengan Komisaris Independendan Kepemilikan Institusional sebagai Variabel Pemoderasi. Jurnal Berkala Akuntansi Dan Keuangan Indonesia, Vol. 2 No. 1, 20–41. https://ejournal.unair.ac.id/BAKI/article/vie w /3544
46. Shaley, M. (2016) Green accounting theory and sustainable development. Accounting, Auditing & Accountability Journal, 2, 1-14
47. Soelistyoningrum, J., N. (2011). Pengaruh Pengungkapan Sustainability Report Terhadap Kinerja Keuangan Pada Perusahaan yang Terdaftar di BEI. Tesis. Universitas Diponegoro. Semarang.
48. Sujoko, & Soebiantoro, Ugy. (2007). Pengaruh Struktur Kepemilikan Saham, Leverage, Faktor Intern, dan Faktor Ekstern terhadap Nilai Perusahaan. Jurnal Manajemen dan Kewirausahaan, 9(1), 41-48.
49. Susila, M. P., & Prena, G. Das. (2019). Pengaruh Keputusan Pendanaan, Kebijakan Dividen, Profitabilitas Dan Corporate Social Responsibility Terhadap Nilai Perusahaan. Jurnal Akuntansi: Kajian Ilmiah Akuntansi (JAK), 6(1), 80.
50. Wang, M. S. (2011). Modal intelektual And Firm Performance. Annual Conference on Innovations in Business & Management. London, UK.
51. Wang, G. Y., & Hsu W. H. L. (2011). Corporate Social Responsibility and Firm Performance. Fourth International Conference on Business Intelligence and Financial Engineering (IEEE).
52. Wijayani, D. R. (2017). Pengaruh modal intelektual terhadap kinerja keuangan perusahaan publik di indonesia (Studi Empiris Pada Perusahaan Manufaktur Di BEI 2012- 2014). Jurnal Riset Akuntansi Dan Bisnis Airlangga, 2(1), 97-116. ISSN 2548-1401
53. Wong, R. (2011). Corporate social and environmental reporting: a user perspective. A thesis submitted for the degree of Doctor of Philosophy University of Bath School of Management.

How to cite this article: May Hana Bilqis Rangkuti, Fauziah Kumalasari. Green accounting in enhancing sustainability report disclosure. *International Journal of Research and Review*. 2023; 10(11): 483-489.
DOI: *https://doi.org/10.52403/ijrr.20231156*

******