




Green accounting practices for green economic performance on micro, small, and medium enterprises

Chairia¹, Suci Cahyati², Habel Sabilah³

^{1,2,3}Entrepreneurship Study Program, Satya Terra Bhinneka University, Medan North Sumatra

Article Info	ABSTRACT
<p>Article history:</p> <p>Received Dec 02, 2024 Revised Dec 15, 2024 Accepted Dec 30, 2024</p> <hr/> <p>Keywords:</p> <p>Entrepreneurial; Green accounting; Green economic performance; Micro, Small and Medium Enterprises.</p>	<p>Our environment is facing serious challenges. Many environmental challenges stem from business and entrepreneurial practices that have failed to address environmental sustainability throughout the entire manufacturing chain, from raw material acquisition to customer delivery. Meanwhile, in Indonesia, there is an increase in the number of people beginning businesses. If this tendency continues, it may constitute a significant threat to our environmental sustainability. Micro, Small and Medium Enterprises (MSMEs) have been recognised as one of the key drivers of economic growth in many countries. They are critical to the development of economies as they contribute to job creation, income generation, innovation, and technological advancement. Micro, Small and Medium Enterprises (MSMEs) have great potential to upgrade and contribute more to the local economy. Activist and MSME player, there are a number of challenges that must be overcome, such as the lack of consistency and commitment from MSME players.</p> <p><i>This is an open access article under the CC BY-NC license.</i></p> 

Corresponding Author:

Chairia,
Entrepreneurship Study Program,
Satya Terra Bhinneka University,
Sunggal Street, Bakul Alley, North Sumatra, 20128, Medan.
Email: chairialubis@satyaterabhinneka.ac.id

1. INTRODUCTION

Industrial competition in the world is getting tighter every year, making industry players will compete to create high-value products so that it makes it one of the advantages of the industry, but some industry players are only concerned with how good and high-value production without caring less about the environment. The environment is one of the important things to support the business process activities of an industry, otherwise the industry will have a negative impact on the environment (Rosaline et al., 2020). Industries are required to implement environmentally friendly companies that are in accordance with the law and are implemented with green accounting-based management practices which are the process of identifying, measuring, presenting and disclosing costs for corporate and environmental activities where these environmental costs will be applied when management makes business decisions and will be conveyed to stakeholders (Aniela, 2012).

Our environment is facing serious challenges. Many environmental challenges stem from business and entrepreneurial practices that have failed to address environmental sustainability throughout the entire manufacturing chain, from raw material acquisition to customer delivery. Meanwhile, in Indonesia, there is an increase in the number of people beginning businesses. If this tendency continues, it may constitute a significant threat to our environmental sustainability. Many entrepreneurs do not consider energy efficiency, waste management, or even environmental welfare

when running their firms. This can have a severe impact on the quality of water, air, and soil, threatening the long-term viability of natural ecosystems (Cahyati et al., 2024).

Barriers to green accounting practices were identified and classified into seven clusters: (1) organizational or managerial, (2) technological, (3) financial and economic, (4) external partnership and stakeholder engagement, (5) government support, (6) market and customer, and (7) knowledge and information barriers. Organizational or managerial impediments frequently stem from management's lack of commitment to green practices, as they want to run a business in a traditional manner and seek to minimize unforeseen risk from innovation. Furthermore, they stated that technological, cognitive, and information-related limitations are mostly present due to resource restrictions that are common in MSMEs. Unlike large corporations that can promote technological innovation through their research and development activities, SMEs frequently rely on easily available technology in the marketplace (Purwandani & Michaud, 2021).

There is an increasing recognition that the ecology of the planet is threatened by human activities. This phenomenon should be taken into account that danger is all around us. One solution is that everyone should pay more attention to the environment. A new awareness has developed recently, as customers question not only the quality of products, but also how the processes during manufacturing have an effect on the environment. The community known as the green consumer, which also consists of various groups including investors and corporate lenders are also questioning them. On the one hand, corporate business institutions associated with environmental impacts must respond to this, that they have an obligation to keep their environment as it is. One way is to create a 'corporate environmental report' that can help them preserve the environment and improve the company's economic performance as well (Chairia et al., 2022). The growth of the industrial world is an undeniable environmental challenge, with industrial conduct frequently ignoring environmental impacts such as water, soil, air pollution, and social injustice. As the industrialized world expands, companies' needs for environmental protection grow. Companies are concerned not just with management and shareholders, but also with employees, customers, and society. Accounting is essential for regulating the interaction between the organization and the environment (Chairia et al., 2022).

Government Regulation No. 47 of 2012 regulates the use of green accounting for limited liability corporations, which have social and environmental responsibilities when conducting natural resource-related activity. Green accounting can help improve how environmental performance is assessed. Environmental performance demonstrates how the company cares about the environment (Rosaline et al., 2020). In an effort to prevent environmental pollution and improve the positive perception of the community, these hospitals focus on financial, social, and environmental activities. Positive impacts of implementing green accounting include increased community loyalty, which has the potential to increase the company's sales and profits. of the company. Furthermore, this study concludes that green accounting has a positive contribution to firm value, which in turn plays a role in increasing business sustainability. to firm value, which ultimately plays a role in improving overall business sustainability. as a whole. Responsibilities towards economic, social, and environmental sustainability are reflected in this approach, encompassing profit, people, and planet as the main focus.

The growing need to account for the environmental and social impacts of business activities in corporate financial reporting demands the existence of standards. In In this context, sustainable accounting standards become an important instrument for companies to measure, report, and remedy the environmental and social impacts of their activities. The implementation of sustainable accounting standards can also help companies meet the demands of various stakeholders, such as investors, consumers, and regulators, who are increasingly paying attention to environmental and social issues in decision-making. environmental and social issues in their decision-making. However, the implementation of sustainable accounting standards can also pose challenges for companies, such as additional costs to account for environmental and social impacts. additional costs to account for environmental and social impacts, as well as difficulties in measuring impacts that cannot always

be measured financially. impacts that cannot always be measured financially (Rahmawaty & Fahmi, 2024). Therefore, analysing the impact of the implementation of sustainable accounting standards on corporate financial reporting is very helpful for companies in understanding financial reporting is very helpful for companies in understanding the benefits and challenges of implementing the standard. challenges of implementing these standards. This analysis also plays a role in helping stakeholders understand the environmental and social impacts of the company's business activities.

The United Nations Environment Programme (UNEP) describes the green economy as a system that improves human well-being while reducing environmental hazards and ecological resource shortages. Green economy which centres on the idea that economic growth is the main driver of long-term prosperity and that human well-being can be achieved without harming the environment or depleting natural resources. Many countries have historically traded environmental protection for economic growth. However, as we know, the green economy has emerged as a creative way to address social injustice. 'Green economy' is a term used to describe economic structures and ideas that have the potential to drastically reduce environmental pollution while improving social and human well-being (Andina et al., 2024).

Micro, Small and Medium Enterprises (MSMEs) have been recognised as one of the key drivers of economic growth in many countries. They are critical to the development of economies as they contribute to job creation, income generation, innovation, and technological advancement (Muhammad et al., 2019). The development of MSMEs has significant implications for economic growth and poverty alleviation, as it can encourage economic activities in various sectors. MSMEs often operate in low-income areas and employ people who may have limited opportunities for other types of employment (Harahap et al., 2020). One of the main challenges is limited access to finance, especially for those in developing countries (Riffianto & Suryani, 2016). Access to finance is critical for MSMEs to start and grow their businesses, as they often lack collateral and can be considered high-risk borrowers by banks and other financial institutions. Limited access to finance is an issue for women entrepreneurs and those in low-income areas, who may have limited access to capital and financial services. Another challenge faced by MSMEs is the lack of access to modern technology, which can affect their competitiveness and productivity (Supriatna et al., 2023). Many MSMEs cannot access or afford new technologies, which may limit their ability to innovate and compete effectively in the market. In addition, many MSMEs lack the necessary skills to use technology effectively or capitalise on new opportunities. Lack of access to modern technology is a particular problem in low-income areas, where infrastructure and technology may be inadequate or even non-existent (Rizos et al., 2016).

Micro, Small and Medium Enterprises (MSMEs) have great potential to upgrade and contribute more to the local economy. Activist and MSME player, there are a number of challenges that must be overcome, such as the lack of consistency and commitment from MSME players. With the right approach and strong support from the government and other related parties, he continued, MSMEs can step forward to compete at a higher level. Another obstacle is the limited financial resources that make it difficult for MSMEs to maintain consistency in their operations. Lack of capital hinders investment in quality raw materials or new product development, which in turn can disrupt production flow and long-term business growth (Razak, 2024). Regardless of their precise size and business sector(s), MSMEs confront a variety of challenges to implementing green practices into their operations, which can be slow and difficult. MSMEs frequently showed a willingness to participate in voluntary environmental activities as long as the process was not prohibitively expensive or difficult. Small and medium-sized enterprises (SMEs) sometimes struggle to take advantage of new opportunities due to a lack of critical skills and knowledge, even if they recognize the potential for increased competitiveness (Purwandani & Michaud, 2021).

The urgency of this research stems from the fact that green accounting can help organizations, including MSMEs, reduce their environmental impact. This approach can improve environmental management efficiency by considering both environmental costs and economic

rewards. Practically, this research helps MSMEs understand that their business sustainability performance is a sort of business consistency. In this example, sustainability refers to an ongoing promising business process that includes growth, development, business continuity measures, and company development, all of which lead to a sustainable and resilient effort. Green accounting initiatives will positively improve MSMEs' financial and sustainability performance. This research contributes both conceptually and practically. Theoretically, this study contributes to the development of knowledge and understanding while also enriching the literature review on green accounting, financial performance, and sustainable performance.

2. RESEARCH METHOD

The research design is a literature review. A literature review study is a strategy used by academics to collect data or identify sources connected to this issue, which can be obtained from a variety of sources including journals, books, the internet, and others. The process of searching for papers in research journal databases and on the internet. Google Scholar was utilized to do the database search between 2014 and 2024. The data collection includes the keywords used in article searches, which include "Green Accounting Practice, Green Economic Performance, and Micro Small and Medium Enterprises." Searching for published journals on academic search complete, medline with fulltext, Proquest and Pubmed, and EBSCO using the given keywords: Green Accounting Practice, Green Economic Performance, and Micro Small and Medium Enterprises. Articles or journals that meet the inclusion and exclusion criteria are selected for further investigation (Chairia et al., 2022).

The data collection method used in this study is documentation, which is the search for data about items or variables in the form of notes, books, papers or articles, journals, and so on. After all of the data has been collected, the author will examine it in order to reach a conclusion. The author use critical analysis approaches to achieve accurate and exact results when evaluating data. Critical analysis is a viewpoint that holds that the researcher is not a free subject in viewing the research. Critical analysis is often motivated by the researcher's own beliefs or values (Basthiani et al., 2024).

The data analysis used in this research is the Miles and Huberman model, which suggests that data analysis activities include data reduction, data presentation and drawing conclusions. among others, namely data reduction, data presentation and drawing conclusions. In this study, data collection was obtained from theses, scientific articles, and journals that are in accordance with this research, to be able to find out Green accounting practices in the green economy of MSMEs, then the data that has been obtained is then analyzed and studied in depth, critically, and systematically which is then described. Then the data that has been obtained is then analyzed and studied in depth, critically, and systematically which is then described in a narrative (Munib & Wulandari, 2021).

3. RESULTS AND DISCUSSIONS

Green accounting has a similar concept to traditional accounting, but adds an important element, namely environmental factors. With this additional indicator, green accounting not only focuses on the financial aspects of the company, but also considers the environmental impact of its business activities that encourage companies to remain in an environmentally acceptable condition (Yoga & Sastri, 2020). Green accounting refers to an approach in accounting that considers environmental and sustainability aspects in the financial reporting process. This approach involves measuring, disclosing, and reporting the environmental costs and benefits of a business activity or project. The goal of green accounting is to ensure that the environmental impact of economic activities is accurately reflected in the company's financial information, thereby enabling more sustainable decision making (Çaliyurt, 2021).

This is very important in this modern era where environmental issues are getting global attention. Companies can improve their environmental performance in various ways. One of the main ways is through cost control, where companies seek to reduce costs associated with negative environmental impacts. In addition, companies can also invest in environmentally friendly

technologies, which can reduce emissions, waste and natural resource use. These technologies reduce negative environmental impacts. In addition, green accounting encourages environmentally friendly production processes. This includes using more sustainable raw materials, reducing production waste, and minimising energy use.

Company performance must consider the effectiveness and efficiency of the actions of the parties in the company. Company performance is the unity of financial and non-financial indicators that provide information on the level at which the company achieves corporate goals and results, is dynamic, can be explained by causal models, and is different from personal or individual performance. MSMEs operate in a rapidly changing environment and lack of resources, so the right performance measurement to be applied in MSMEs must be flexible, simple, and easy to implement. Then, some of the requirements for appropriate performance measurement for MSMEs must fulfil several aspects, namely easy to understand and use, clear and measurable, data related to measurement is easy to obtain, involves all stakeholders, is easy to implement, shows cause-and-effect relationships, and can be used to measure past and future performance (Akmal, 2021).

According to other study, using green accounting procedures increases earnings. Reducing insurance and capital costs can also lower total production costs, potentially increasing profits (Trisnawati et al., 2022). Green accounting and financial performance can help to increase the sustainability of MSME performance. Furthermore, MSMEs' concern for the environment through green accounting can bring value to MSME enterprises in Indonesia. (Indriastuti & Mutamimah, 2023).

The concept of a "green economy" has received significant attention in recent years as a strategic path to achieve environmentally sustainable economic success. (Wartoyo & Haida, 2023). An economic system that prioritizes renewable energy, reduces emissions and pollution, improves energy and resource efficiency, and fosters green jobs and innovations. A green economy seeks to encourage economic growth while protecting the natural environment and ecosystems. It captures a broader perspective of welfare, basing economic activity on principles of environmental sustainability and social equality (Basthiani et al., 2024).

Green accounting practices shows that MSMEs business actors concerned about the environment, as seen by the use of green technology and the promotion of environmentally friendly products. According to stakeholder theory, MSME players assess how green accounting initiatives will benefit their stakeholders. In accordance with stakeholder theory, the company is committed to providing stakeholders with environmental information. The goal is to provide more accurate costs and suit the needs of MSMEs by providing environmentally friendly products/services. This will encourage MSMEs to continue and grow (Indriastuti & Mutamimah, 2023). In addition, green accounting practices implemented by MSMEs to produce an assessment of data in the form of numbers about costs and impacts on the green economy. Green accounting and green economics can minimize environmental expenses and enhance MSMEs' environmental performance, affecting both human health and business success (Indriastuti & Mutamimah, 2023).

Based on the outcomes of this study, MSMEs that include green accounting into their business operations can increase company performance by increasing their ability to compete with other MSMEs. There are various methods that MSMEs can implement green accounting practices. For example, from the perspective of marketing management, MSMEs should produce ecologically sustainable products, both in terms of raw material quality and product packaging (Pratama et al., 2024). MSMEs can promote environmentally friendly activities by offering eco-friendly products. Apart from the marketing function, MSMEs can also engage in economy activities by allocating expenses for waste treatment and investing cash in eco-friendly enterprises.

Additionally, MSMEs can employ environmentally friendly quality standards in the production process and adopt work mechanisms that might conceal harmful materials and goods in items created from business operations as part of operational management activities. Finally, in order to be able to implement green economy comprehensively and collaborate in every field or function, MSMEs must also have employees who are skilled in processing environmentally friendly products

and who exhibit behaviors that reflect a positive attitude toward the environment (Pratama et al., 2024).

4. CONCLUSION

MSME activities generally have a positive impact positive for regional progress, but also has negative impacts that lead to conflicts between community with MSME owners. The issue of environmental degradation, air pollution, flooding, the difficulty of clean water, the large number of children's snacks containing synthetic dyes has awakened and encouraged people to realize the importance of healthy living, the need for environmentally friendly products and services.

Green accounting is the process of identifying, measuring, presenting, and disclosing the costs and indirect benefits of a company's environmental and social initiatives. Green accounting will encourage businesses not only to focus on industry-related operations for business reasons, but also to conduct environmental management. One of its implementations in finance is the use of Environmental Accounting, commonly known as green accounting. Green Accounting is an accounting concept that connects or incorporates environmental costs or budgets into the company's operations. Green accounting can improve a company's environmental performance while also increasing its financial performance.

Green accounting is the process of determining, measuring, reporting, and disclosing the costs and indirect benefits of a company's environmental and social activities. Green accounting will encourage organizations to not only focus on industry-related operations for business purposes, but also to practice environmental management. One of its applications in finance is the usage of Environmental Accounting, sometimes known as green accounting. Green Accounting is an accounting concept that integrates environmental expenses or budgets into a company's operations. Green accounting techniques can help a company enhance both its environmental and financial performance.

The concept of a green economy covers a wide range and represents a new paradigm in economic development to replace environmental policies that in the past were often focused on short-term solutions. In a green economy, job creation and income generation are driven by public and private investment in productive activities, infrastructure and asset development that will reduce carbon emissions. productive activities, infrastructure and asset development that will reduce carbon gas (CO₂) emissions and pollution, improve energy and resource use efficiency and prevent biodiversity loss and ecosystem degradation. In Indonesia, green economy is a new step in the economic field which in the process prioritizes efficiency and effectiveness efforts towards sustainable resource use and preserving the environment.

The limitations of this research is to address the challenge of rational resource utilization and to provide measurement and approach methods. It serves as a tool for cost reduction, enhancing the internal perspective of any economic entity. Additionally, it offers vital information for decision-making, facilitating optimal resource utilization and protecting against environmental threats. Furthermore, MSMEs are encouraged to adopt green accounting as it incurs costs aimed at enhancing the surrounding environment and the company itself. Government support is crucial to promote the implementation of green accounting practices to MSMEs green economy.

To overcome these barriers, this study recommends collaboration between government, academia and the MSMEs sector in providing more intensive training and technical assistance programs. Incentive programs such as green accounting practices assistance provided to companies committed to implementing environmental reporting can be an effective first step. For example, through awards for MSMEs that successfully integrate green accounting practices in their operations.

REFERENCES

- Akmal, D. (2021). Analisis Pengukuran Kinerja Umkm Dengan Model Performance Prism: Kasus Pada All Star Futsal Padang. *ABIS: Accounting and Business Information Systems Journal*, 9(2). <https://doi.org/10.22146/abis.v9i2.65898>

- Andina, P., Putri, K., Yakobus, R., Agon, P., & Marcellina, L. V. (2024). Pengaruh Green Accounting Terhadap Green Economy pada UMKM Sentra Wisata Kuliner (SWK) di Semolowaru Surabaya Jurnal Eksplorasi Ekonomi (JEE). *Jurnal Eksplorasi Ekonomi (JEE)*, 6(3), 27–38.
- Aniela, Y. (2012). Peran Akuntansi Lingkungan dalam Meningkatkan Kinerja Lingkungan dan Kinerja Keuangan Perusahaan. *Berkala Ilmiah Mahasiswa Akuntansi Widya Mandala*, 1(1), 15–19. <https://www.neliti.com/publications/375363/>
- Basthiani, I. A., Rini, I., Pangestuti, D., & Diponegoro, U. (2024). The Role Green Economy in Sustainable Development as Long-Term Environmental and Economic Stability: A Literature Review. *Research Horizon*, 04(04), 187–196.
- Cahyati, S., Putri, H., & Romadhona, M. R. (2024). *Application Of Green Entrepreneurship Towards Economic Improvement (Literature Study)*. 7(1), 614–620.
- Çaliyurt, K. T. (2021). Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application. In *Accounting, Finance, Sustainability, Governance and Fraud: Vol. II*. https://doi.org/10.1007/978-981-15-1928-4_10
- Chairia, C., Br Ginting, J. V., Ramles, P., & Ginting, F. (2022). Implementasi Green Accounting (Akuntansi Lingkungan) Di Indonesia: Studi Literatur. *Financial: Jurnal Akuntansi*, 8(1), 40–49. <https://doi.org/10.37403/financial.v8i1.368>
- Harahap, E. F., Luviana, L., & Huda, N. (2020). Tinjauan Defisit Fiskal, Ekspor, Impor Dan Jumlah Umkm Terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal Benefita*, 5(2), 151–161. <https://doi.org/10.22216/jbe.v5i2.4907>
- Indriastuti, M., & Mutamimah, M. (2023). Green Accounting and Sustainable Performance of Micro, Small, and Medium Enterprises: The Role of Financial Performance as Mediation. *The Indonesian Journal of Accounting Research*, 26(02), 249–272. <https://doi.org/10.33312/ijar.691>
- Muhammad, F., Fazal, A., Mubarik, M., Ahmed, K., & Mastoi, S. (2019). The impact of digital transformation on business performance. *Technology & Applied Science Research*, 9(6), 5056–5061. www.etasr.com
- Munib, A., & Wulandari, F. (2021). Studi Literatur: Efektivitas Model Kooperatif Tipe Course Review Horay Dalam Pembelajaran IPA Di Sekolah Dasar. *Jurnal Pendidikan Dasar Nusantara*, 7(1), 160–172. <https://doi.org/10.29407/jpdn.v7i1.16154>
- Pratama, I., Siregar, M. A., Amelia, W. R., & Lubis, A. (2024). *Cuadernos de economía Building the Competitiveness of Textile Creative Economy MSMEs*. 47(134), 118–127.
- Purwandani, J. A., & Michaud, G. (2021). What are the drivers and barriers for green business practice adoption for SMEs? *Environment Systems and Decisions*, 41(4), 577–593. <https://doi.org/10.1007/s10669-021-09821-3>
- Rahmawaty, S., & Fahmi. (2024). Analisis Dampak Implementasi Akuntansi Hijau Terhadap Pelaporan Keuangan Perusahaan The Impact Analysis of Green Accounting Implementation on Corporate Financial Reporting. *Jurnal Kolaboratif Sains*, 7(7), 2746–2759. <https://doi.org/10.56338/jks.v7i7.5550>
- Razak, A. H. (2024). Ini Tantangan Mendesak UMKM Jogja untuk Naik Kelas. *Harian Jogja*. <https://jogjapolitan.harianjogja.com/read/2024/05/07/510/1173656/ini-tantangan-mendesak-umkm-jogja-untuk-naik-kelas>
- Riffianto, A. S., & Suryani, T. (2016). Kapabilitas keuangan usaha kecil dan menengah penghasil produk unggulan. *Journal of Business and Banking*, 6(1), 15–26. <https://doi.org/10.14414/jbb.v6i1.722>
- Rizos, V., Behrens, A., van der Gaast, W., Hofman, E., Ioannou, A., Kafyeke, T., Flamos, A., Rinaldi, R., Papadelis, S., Hirschnitz-Garbers, M., & Topi, C. (2016). Implementation of circular economy business models by small and medium-sized enterprises (SMEs): Barriers and enablers. *Sustainability (Switzerland)*, 8(11). <https://doi.org/10.3390/su8111212>
- Rosaline, V. D., Wuryani, E., Ekonomi, F., Surabaya, U. N., & Surabaya, K. (2020). Pengaruh Penerapan Green Accounting dan Environmental Performance Terhadap Economic Performance. *Jurnal Riset Akuntansi Dan Keuangan*, 8(3), 569–578. <https://doi.org/10.17509/jrak.v8i3.26158>
- Supriatna, D., Candra, E., Adinugroho, I., Nasution, M. A., & Yanti, N. (2023). Pengaruh Kinerja UMKM Terhadap Pertumbuhan Ekonomi Kabupaten Sukabumi. *Sanskara Ekonomi Dan Kewirausahaan*, 1(02), 43–53. <https://doi.org/10.58812/sek.v1i02.88>
- Trisnawati, L. P. P., Nawangsari, L. C., Johannes Lo, S., Zainal, V. R., & Irmaningsih, E. S. (2022). Literature Review of Corporate Sustainability in Practices (The Implementation of Green Accounting in Modern Industries). *International Journal of Social Science And Human Research*, 05(11), 5182–5191. <https://doi.org/10.47191/ijsshr/v5-i11-48>
- Wartoyo, W., & Haida, N. (2023). The Actualization of Sustainable Development Goals (SDGs) In Indonesia Economic Growth an Islamic Economic Perspective. *Iqtishaduna*, 14(1), 107–124. <https://doi.org/10.20414/iqtishaduna.v14i1.6706>

Yoga, I. G. A. P., & Sastri, I. I. D. A. M. (2020). Green Accounting: An Environmental Pollution Prevention Effort to Support Business Continuity. *Jurnal Ekonomi & Bisnis JAGADITHA*, 7(2), 128-137. <https://doi.org/10.22225/jj.7.2.2488.128-137>