DIJEFA: Dinasti International Journal of Economics, Finance & Accounting
E-ISSN: 2721-303X
P-ISSN: 2721-3021
https://dinastipub.org/DIJEFA dinasti.info@gmail.com +62 811 7404 455

DOI: https://doi.org/10.38035/dijefa.v6i1.3919
https://creativecommons.org/licenses/by/4.0/
Received: 29 December 2024 | **Revised:** 26 February 2025 | **Accepted:** 03 March 2025

The Crucial Role of Environmental Accounting Towards a Green Economy

Rizky Amalia[1*], Ninuk Riesmiyantiningtias[2], Amalia Tresna Fadhilah[3]
[1]Universitas Bina Sarana Informatika, Indonesia, rizky.ram@bsi.ac.id
[2]Universitas Bina Sarana Informatika, Indonesia, ninuk.nys@bsi.ac.id
[3]Universitas Bina Sarana Informatika, Indonesia, amalia.itf@bsi.ac.id

[*]Corresponding Author: rizky.ram@bsi.ac.id[1]

Abstract: This study examines how environmental accounting can help companies achieve sustainability. By analyzing various case studies, the study concludes that environmental accounting not only measures environmental impact, but also improves the efficiency and reputation of companies. Despite the challenges, engaging stakeholders is critical to the successful implementation of environmental accounting.

Keywords: Accounting Environment, Green Economy, Sustainable Report, Carbon Accounting.

INTRODUCTION

Environmental accounting has developed into a crucial field in the business world. From simply calculating costs, environmental accounting has now become a comprehensive tool for measuring a company's environmental performance and integrating environmental aspects into business strategies. As an integral part of a company's accounting system, environmental accounting provides managers with essential information to make balanced decisions between profitability and sustainability (Suhartini, 2021).

In recent years, awareness of the importance of sustainable business has increased. The Sustainable Development Goals (SDGs) encourage companies to be more environmentally friendly. By adding environmental information to financial statements, companies become more transparent and attract investors (Wang et al, 2022). Environmental accounting is not only for reporting, but also as a strategic tool for achieving long-term goals. This is especially important in a green economy that prioritizes human and environmental well-being.

A green economy, as defined by UNEP, is an economic system that not only pursues economic growth, but also improves people's well-being and protects the environment. To achieve this, companies need to adopt a broader accounting approach, taking into account social and environmental aspects in decision-making (UNEP, 2020).

Haji and Hossain (2021) in their research found strong evidence that the application of environmental accounting can stimulate business creativity. By analyzing data from different companies, they concluded that environmental accounting helps companies identify

opportunities to improve operational efficiency and develop more environmentally friendly products. Ultimately, this can provide a competitive advantage for companies in a market that is increasingly demanding sustainability.

Although the concept of environmental accounting has been widely discussed, its implementation in the field is still constrained by the lack of knowledge and skills among practitioners (Alon et al, 2023). Therefore, there is a need for a combination of increasing human resource capacity through intensive training, support for conducive government policies, and the development of comprehensive environmental accounting standards to overcome these obstacles.

It is important to remember, environmental accounting not only benefits the company, but also provides added value to society and the environment. And ultimately, this study aims to understand how companies implement environmental accounting and identify best practices that can be widely adopted. Thus, this research is expected to contribute to the sustainable development of Accounting Science and practice.

Literature Review

To be able to apply environmental accounting effectively, we need to understand its precise definition, its relationship with the concept of green economy, as well as the theories underlying this practice. Thus, companies can build a solid foundation to integrate environmental accounting into their business operations and face future sustainability challenges.

Environmental Accounting Theory

Environmental accounting is a comprehensive approach to measuring, monitoring, and reporting the environmental impact of business activities. This concept goes beyond conventional accounting by incorporating social and environmental aspects into the decision-making process. The aim is to provide relevant information to stakeholders, such as investors, customers and society, so that they can assess the extent to which the company is committed to sustainability (Schaltegger & Burritt, 2018).

Environmental accounting provides a useful tool for companies to measure and manage costs associated with environmental pollution and damage. Thus, companies can make better business decisions that take into account environmental and social aspects, as well as improve operational efficiency and competitiveness in the long term (Bebbington et al, 2022).
the information generated by environmental accounting forms the basis for managers in making investment decisions, for example in choosing environmentally friendly technologies or adopting better waste management practices (Lamberton, 2020).

The development of environmental accounting has enabled businesses to identify and measure their performance in terms of sustainability. By using environmental metrics (Sweeney & Cormican, 2021) such as reduced carbon emissions, renewable energy use, and waste management, businesses can track their progress toward sustainability goals, increase transparency, and make more informed decisions.

Organizations such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) have played an important role in driving the adoption of better environmental accounting practices. Through the development of sustainability reporting frameworks, these organizations aim to improve the quality and quantity of information relevant to stakeholders, thereby increasing transparency, accountability and trust in the company's business practices (Eccles & Klimenko, 2019).

Environmental Accounting As A Pillar Of The Green Economy

The green economy, which prioritizes human and environmental well-being, requires an accounting system that can measure the environmental impact of economic activity. Environmental accounting plays an important role in providing accurate information about a company's environmental performance, thus enabling the company to identify areas that need improvement and take action to reduce negative impacts on the environment (UNEP, 2021).

Environmental accounting allows companies to systematically collect and report data on their environmental impact, which is an important requirement in meeting various environmental regulations (KPMG, 2020). Environmental accounting has a dual role, namely as a tool to measure environmental performance and as an instrument to ensure compliance with environmental regulations. By implementing environmental accounting, companies can not only identify areas that need improvement, but also avoid legal sanctions that could harm the business. In addition, compliance with environmental regulations can also increase stakeholder confidence and strengthen the company's reputation as a responsible organization. Through the implementation of environmental accounting, companies are increasingly encouraged to develop products and services that have a lower environmental impact. This is in line with the principles of a green economy that prioritizes sustainability and resource efficiency (Porter & van der Linde, 2019). This is in line with the function of environmental accounting as an effective tool for measuring and managing business impacts on the SDGs. Thus, the company can ensure that its business activities are aligned with the Sustainable Development Goals.

For the rest, the information obtained from environmental accounting can serve as a foundation for companies to develop new products that are more efficient in the use of resources and generate less waste. This not only helps companies meet the expectations of consumers who are increasingly concerned about the environment, but also opens up new market opportunities and improves the company's competitiveness in the long term.

Theories Related To Environmental Accounting

Stakeholder theory, which emphasizes that a company must consider the interests of all parties affected by its business activities, has become the cornerstone of the development of environmental accounting. This means that the company is not only responsible to shareholders, but also to employees, customers, society, and the environment (Freeman, 1984). In the context of environmental accounting, companies must consider environmental aspects in every decision - making and report their impact to the public. The basic principles of this approach are transparency and accountability.

In accordance with the theory of legitimacy proposed by Suchman, companies need to acquire and maintain social legitimacy. Environmental accounting can be an effective instrument to achieve these goals. By reporting their environmental impact transparently, companies can convince the public of their commitment to sustainability and build a positive reputation (Suchman, 1995)

Giddens ' social systems theory provides a useful framework for understanding the role of environmental accounting. By viewing the world as a system made up of various interacting elements, environmental accounting helps us understand how economic activity impacts the environment and society. Thus, environmental accounting can be an effective tool to achieve a balance between economic growth and Environmental Protection (Giddens, 1984).

Finally, to achieve sustainability, companies need to adopt a holistic approach taking into account not only financial, but also social and environmental aspects. Triple Bottom Line (TBL) theory and environmental accounting provide useful tools for companies to measure their progress toward sustainability goals.

Contribution Of Environmental Accounting To The Quality Of Business Decision-Making

Environmental accounting provides a deep insight into the interaction between business activities and the environment. Using environmental accounting information, management can identify and measure the environmental impact of various business decisions. This allows companies to conduct more comprehensive environmental risk evaluations and make more sustainable investment decisions, thereby increasing the durability of the business in the long term (Sweeney, 2021).

The application of an environmental accounting system allows the company to identify areas that need improvement in terms of environmental performance. Thus, companies can develop more effective strategies to reduce negative impacts on the environment and at the same time improve operational efficiency (Eccless & Klimenko, 2019).

Investors are increasingly selective in choosing companies to invest in. By implementing environmental accounting, the company can demonstrate its commitment to sustainability and attract investors who have similar preferences. This in turn can increase a company's access to funding sources needed for sustainable growth (Porter & van der Linde, 2019).

Environmental accounting plays a crucial role in helping companies achieve their long-term goals. By providing a clear picture of the environmental impact of business activities, environmental accounting enables companies to make better decisions, manage risks, and create long-term value for all stakeholders (Elkington, 2020).

Integration of environmental aspects in the company's Financial Statements

The implementation of environmental accounting requires a comprehensive and sustainable approach. Companies should develop clear environmental policies, establish relevant performance indicators, and routinely measure and report on the environmental impact of their business activities. This will enable companies to identify areas of improvement, measure progress, and make more sustainable business decisions (Bebbington et al, 2022).

To integrate environmental accounting in business operations, companies need to perform several important steps. First, provide training to employees so that they understand the concepts and practices of environmental accounting. Second, it adopts information technology that enables accurate collection and analysis of environmental data. Thus, companies can make more sustainable and transparent business decisions

In addition to the technical aspects, the success of environmental accounting also depends on the active involvement of stakeholders. Companies need to build good relationships with customers, suppliers, employees, investors, and the surrounding community to get input and support in implementing transparent and accountable environmental accounting practices (Freeman, 1984).

Continuous evaluation and improvement is the key to success in implementing environmental accounting. Companies should routinely analyze environmental data, identify areas that need improvement, and make adjustments to their accounting policies and procedures. This will ensure that the company remains relevant and responsive to the changing business environment and the increasingly high expectations of society towards sustainable business practices (Lamberton, 2020).

METHOD

This study adopts a qualitative approach by conducting an extensive literature study and in-depth analysis of relevant case studies. The aim is to gain a comprehensive understanding

of the application of environmental accounting in a business context, including identifying patterns, challenges, and best practices that can be used as a reference for other companies.

Research Design

This study adopts a qualitative approach to investigate how environmental accounting is adopted by companies. By analyzing various literature sources and case studies, this study aims to uncover the contribution of environmental accounting to the company's efforts in achieving sustainability.

Data Sources

To obtain the necessary data, the study conducted a comprehensive literature review with a focus on scientific publications, corporate reports, and policy documents related to environmental accounting. This secondary Data was selected because it has gone through a peer-review process and is considered a credible source of information.

Data Collection Techniques

This study uses a multi-method approach that combines literature review and Case Study Analysis. Literature review is conducted to build a theoretical framework and understand the context of the research.

Meanwhile, case study analysis was conducted to dig deeper into the experience of companies that have successfully implemented environmental accounting. The companies selected as case studies have unique characteristics, such as high implementation success rates, innovation in sustainability practices, and positive perceptions from stakeholders.

Data Analysis Techniques

Thematic analysis allows us to systematically organize data and identify recurring themes. In this way, we can gain a better understanding of how environmental accounting can support business sustainability goals, as well as identify the challenges and opportunities associated with its implementation.

Data Validity

This study cross-checked the data to ensure the validity of the data. By comparing different credible sources, the study aims to produce accurate and relevant findings.

RESULTS AND DISCUSSION

An in-depth analysis of the data obtained from the literature and case studies of companies will allow us to better understand how environmental accounting can benefit businesses, both in terms of efficiency, cost savings and reputation improvement. In addition, this study will also identify the obstacles that are often encountered in the application of environmental accounting and emphasize the importance of involving various related parties in this process.

Discussion Of Research Results

Research proves that environmental accounting plays an important role in promoting business sustainability. Companies that implement environmental accounting consistently report significant reductions in operating costs, especially those related to waste management and energy consumption. In addition, the company's image as an environmentally responsible organization is also getting stronger, thus attracting investors and consumers who care about sustainability issues (Adams & Frost, 2021).

In addition, the study reveals that many businesses have difficulty in integrating environmental accounting into their operations. One of the main challenges is the lack of knowledge of employees regarding how to collect and report relevant environmental data (Bebbington et al, 2022). Inaccurate and inconsistent environmental Data resulting from a lack of understanding can result in biased analysis and wrong business decisions. To avoid this, companies need to improve their human resources capacity through environmental accounting training

The study reveals that the active role of stakeholders, such as local communities and customers, in the environmental accounting process can be a key driver of a company's success in achieving sustainability goals. This engagement also contributes to increased transparency and corporate accountability (Haji & Hardin, 2020). Involving multiple perspectives in the application of environmental accounting will result in more innovative and sustainable solutions. This proves that environmental accounting is not a stand-alone task, but rather part of a collective effort to achieve sustainability.

Practical Implications

This study concludes that a systematic and integrated approach is essential in implementing environmental accounting. Companies need to develop accounting systems that are able to accurately measure and report on the environmental impact of business activities. In addition, the full support of top management and the integration of environmental accounting policies into business strategies are key factors for achieving sustainability

To achieve sustainability goals, companies need to proactively monitor their environmental performance. By designing appropriate metrics and collecting accurate data, companies can make better business decisions and ensure that their business practices are aligned with sustainability principles (García-Sánchez et al, 2021).

The study concludes that in order to achieve optimal environmental accounting practices, joint efforts of various companies are required. By collaborating and sharing best practices, companies can create a more sustainable business ecosystem. For example, companies can form discussion forums or working groups to discuss challenges and opportunities in the implementation of environmental accounting (Lozano, 2021). By facilitating the sharing of knowledge and experience, the community of practice can encourage companies to achieve better environmental performance and sustainable competitive advantage.

CONCLUSION

The study shows that environmental accounting is the key to sustainable business success. By providing tools to measure environmental impact and optimize resources, environmental accounting not only improves companies ' reputations but also helps them meet increasingly stringent regulatory requirements. Despite the challenges in its implementation, the involvement of various interested parties has encouraged transparency and accountability in Environmental Management. Therefore, companies need to thoroughly integrate environmental accounting in their business strategies to encourage innovation and contribute to sustainable economic development.

REFERENCES

Adams, Carol A., & Frost, Grant R. “Integrating Sustainability into Corporate Reporting: A Review of the Current State of Practice.” Journal of Cleaner Production 287 (2021): 124–37.

Alon, Ilan, W. R. Boulton, & Stuart Lichtenstein. “Barriers to Environmental Accounting Adoption in Developing Countries.” Journal of Environmental Management 312, no. 1 (2023): 123–34.

Bebbington, Jeffrey, Unerman, Jeffrey, & O'Dwyer, Brian. "Sustainability Accounting and Accountability: A Comprehensive Overview." Accounting, Auditing & Accountability Journal 35, no. 2 (2022): 300–322.
Eccles, Robert G., & Klimenko, Svetlana. "The Role of the Board in Sustainability Reporting." Harvard Business Review 97, no. 5 (2019): 22–25.
Elkington, John. "The Triple Bottom Line: 20 Years Later." California Management Review 62, no. 4 (2020): 5–12.
Freeman, R. Edward. "Strategic Management: A Stakeholder Approach." In Pitman Publishing, 1984.
García-Sánchez, I. M., Martínez-Ferrero, José, & Ruiz-Verdú, Pablo. "The Role of Sustainability Reporting in the Development of Corporate Social Responsibility: A Study of Spanish Firms." Sustainability 13, no. 1 (2021): 152.
Giddens, Anthony. "The Constitution of Society: Outline of the Theory of Structuration." In University of California Press, 1984.
Haji, Abdul A., & Hardin, Robert. "The Role of Stakeholders in Sustainability Reporting: A Review of the Literature." Journal of Business Ethics 162, no. 2 (2020): 265–84.
Haji, Abdul A., & Mohammad Hossain. "Environmental Accounting and Corporate Sustainability: Evidence from the Manufacturing Sector." Sustainability Accounting, Management and Policy Journal 12, no. 2 (2021): 196–215.
KPMG. "The Time Has Come: The KPMG Survey of Sustainability Reporting 2020." In KPMG International, 2020.
Lamberton, Gary. "Accounting for Sustainability: A Critical Review of the Literature." Accounting and Business Research 50, no. 7 (2020): 657–83.
Lozano, Rodrigo. "Sustainability and Corporate Social Responsibility: A Review of the Literature and Future Directions." Journal of Business Ethics 172, no. 1 (2021): 1–20.
Porter, Michael E. "Competitive Advantage: Creating and Sustaining Superior Performance." In Free Press, 1985.
Porter, Michael E., & van der Linde, Claas. "Green and Competitive: Ending the Stalemate." Harvard Business Review 73, no. 5 (2019): 120–34.
Schaltegger, Stefan, & Burritt, Roger. "Business Sustainability: Theoretical Foundations and Practical Approaches." In Springer, 2018.
Suchman, Mark C. "Managing Legitimacy: Strategic and Institutional Approaches." Academy of Management Review1 20, no. 3 (1995): 571–610.
Suhartini, Dwi. "The Role of Environmental Accounting in Sustainable Business Practices." International Journal of Accounting and Financial Reporting 11, no. 3 (2021): 45–58.
Sweeney, Eileen, & Cormican, Kieran. "The Role of Environmental Accounting in Sustainable Business Practices." Journal of Cleaner Production 278 (2021): 123–34.
United Nations Environment Programme (UNEP). Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication, 2020.
United Nations Environment Programme (UNEP). "Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication." In United Nations Environment Programme, 2021.
Wang, Hong, L. Chen, & Y. Zhang. "The Impact of Environmental Disclosure on Corporate Financial Performance." Corporate Social Responsibility and Environmental Management 29, no. 7 (2022): 1234–45.