

ROLE OF SUSTAINABILITY ACCOUNTING IN SUPPORTING SUSTAINABLE DEVELOPMENT GOALS (SDGs): A CASE STUDY OF MANUFACTURING COMPANIES IN INDONESIA

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Abstract:

Sustainable accounting has become a crucial element in supporting the achievement of the Sustainable Development Goals (SDGs) across various sectors, including the manufacturing industry in Indonesia. This study aims to analyze how sustainable accounting practices, including environmental accounting and sustainability control systems, can contribute to achieving the SDGs, particularly in the context of manufacturing companies. This study uses a desk study approach that integrates various related literature to explore the relationship between sustainable accounting and goals such as poverty alleviation, environmental protection, and improving community welfare. The results of the study indicate that the implementation of sustainable accounting, such as sustainability reporting and ERP-based accounting information systems, can enhance the transparency, accountability, and operational efficiency of companies while supporting the achievement of the SDGs. However, challenges such as lack of consistent regulations, high implementation costs, and limited human resources remain obstacles. This study suggests that manufacturing companies in Indonesia should strengthen the integration of sustainable accounting with their business strategies to achieve a more significant impact on SDGs.

Keywords: Sustainability Accounting, Sustainable Development Goals (SDGs), Manufacturing Companies, Environmental Accounting, and Sustainability Control Systems.

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INTRODUCTION

The Sustainable Development Goals (SDGs), set by the United Nations in 2015, constitute a global agenda aimed at addressing challenges such as poverty, inequality, climate change, and environmental degradation by 2030. In the Indonesian context, the manufacturing sector plays a vital role in the national economy, but it also faces pressure to adopt more sustainable practices in support of the SDGs. Sustainable accounting, which encompasses environmental accounting, sustainability reporting, and sustainability control systems, is a strategic tool that helps companies fulfil their social and environmental responsibilities. This study aims to explore the role of sustainable accounting in supporting the SDGs, focusing on manufacturing companies in Indonesia which have significant environmental impacts due to their production activities (Ellenasari et al., 2024).

Manufacturing companies in Indonesia face numerous complex challenges, including waste management, energy efficiency, and corporate social responsibility (CSR). Sustainable accounting offers a framework for measuring, reporting, and managing the environmental and social impacts of a company's operations. This approach not only helps companies comply with regulations but also improves their reputation in the eyes of stakeholders. Additionally, the integration of technology, such as ERP-based accounting information systems, has been shown to improve operational efficiency and support the achievement of the SDGs (Fauziah et al., 2023). However, the implementation of sustainable accounting still faces obstacles, such as lack of awareness, limited resources, and challenges in measuring sustainability impacts.

This study employs a literature review approach to examine the implementation of sustainable accounting in the context of manufacturing companies in Indonesia. By referring to various literature, this study identifies best practices, challenges, and opportunities to strengthen the contribution of sustainable accounting to the SDGs. The main focus is on SDG goals such as poverty eradication (SDG 1),

decent work and economic growth (SDG 8), industry, innovation, and infrastructure (SDG 9), and climate action (SDG 13). This study is expected to provide insights for manufacturing companies and policymakers to develop more effective strategies for supporting sustainable development (Handayani & Sari, 2025).

METHODS

This study employs a qualitative approach grounded in a literature review, which involves analyzing academic literature, journals, and reports related to sustainable accounting and the SDGs. Data were collected from various reliable sources, including scientific journals published between 2021 and 2025, as listed in the references. The criteria for selecting literature include relevance to the topic of sustainable accounting, focus on the manufacturing sector or related industries in Indonesia, and relevance to achieving the SDGs. The analysis was conducted using a qualitative synthesis method, where data from various sources are compiled and integrated to form a coherent argument about the role of sustainable accounting. This approach enables researchers to identify patterns, trends, and gaps in the existing literature without requiring primary data collection (Sutadji, 2024).

The analysis process involved three main stages: (1) literature collection, (2) grouping findings based on themes such as environmental accounting, sustainability control systems, and technology integration, and (3) synthesis to generate insights into how sustainable accounting can support the SDGs. The literature used included case studies of manufacturing companies in Indonesia, government policy analysis, and an exploration of SDG audit challenges. This approach was chosen because it allows for in-depth exploration without requiring direct access to company data, which is often difficult to obtain (Gusriantika & Deviani, 2024).

RESULT AND DISCUSSION

Sustainability Accounting and its Contribution to SDGs. Sustainable accounting encompasses practices such as environmental accounting, sustainability reporting, and sustainability control systems that aim to integrate environmental, social, and economic aspects into corporate decision-making. In the context of manufacturing companies in Indonesia, sustainable accounting enables companies to measure and report their environmental impacts, including carbon emissions, energy use, and waste management. A study by Ellenasari et al. (2024) showed that implementing sustainability control systems (SCS) in manufacturing companies can improve operational efficiency while supporting SDG goals such as climate action (SDG 13) and responsible consumption and production (SDG 12).

One important aspect of sustainable accounting is sustainability reporting, which allows companies to be transparent about their environmental and social performance. This reporting not only meets stakeholder demands but also helps companies identify areas for improvement to achieve the SDGs. For example, manufacturing companies that adopt sustainability reporting can demonstrate their commitment to poverty alleviation (SDG 1) through CSR programs that support local communities. A study by Humaira (2023) on PT Bio Farma revealed that integrating CSR programs with the SDGs can enhance the welfare of the surrounding community while strengthening the company's reputation.

Technology Integration in Sustainable Accounting. The development of technology, especially accounting information systems based on Enterprise Resource Planning (ERP), has had a significant impact on the implementation of sustainable accounting. ERP systems enable companies to integrate financial and non-financial data, such as carbon emissions and resource utilization, in a single, integrated platform. According to Fauziah et al. (2023), the use of ERP systems in manufacturing companies can improve operational performance and support the achievement of SDGs, especially SDG 9 (industry, innovation, and infrastructure). This system enables companies to monitor their environmental impacts in real time, making it easier to make more sustainable decisions.

In addition, the integration of digital-based environmental accounting, as analyzed by Aqila and Sisdianto (2025), demonstrates that digital technology can accelerate the achievement of the SDGs by enhancing the efficiency of reporting and data analysis. For example, companies can use accounting

software to calculate their carbon footprint and design emission reduction strategies. However, challenges such as high implementation costs for high technology and a lack of IT experts often hinder the adoption of this system in small and medium-scale manufacturing companies in Indonesia.

Challenges in Implementing Sustainable Accounting. Despite its great potential, the implementation of sustainable accounting in Indonesia faces various challenges. One of them is the lack of consistent regulations related to sustainability reporting. According to Gusriantika and Deviani (2024), the Supreme Audit Agency (BPK) faces difficulties in auditing the achievement of SDGs due to the lack of clear standards and reliable data. This complicates the efforts of manufacturing companies to comply with regulations and meet the expectations of stakeholders.

Another challenge is the high implementation costs, both for technologies such as ERP and for human resource training. Many manufacturing companies, particularly small-scale ones, lack the financial resources to invest in sustainable accounting systems. Additionally, awareness of the importance of sustainable accounting remains low among company management, who often prioritize short-term profits over long-term sustainability (Handayani & Sari, 2025).

Case Study: Implementation in a Manufacturing Company. Case studies of manufacturing companies in Indonesia show various approaches to implementing sustainable accounting. For example, Ellenasari et al. (2024) analyze how manufacturing companies use sustainability control systems to monitor and manage their environmental impacts. These systems include measuring carbon emissions, waste management, and energy efficiency, all of which contribute to SDG 13 (climate action) and SDG 12 (responsible consumption and production). In addition, some companies have adopted a green accounting approach, as discussed by Ahmad et al. (2023), which emphasizes the harmonization of company operations with environmental preservation.

On the other hand, CSR programs are also an integral part of sustainable accounting. A study by Humaira (2023) at PT Bio Farma demonstrated that CSR programs aimed at supporting the SDGs, such as education and public health, can have a significant positive impact. However, challenges such as a lack of coordination between departments within the company and limited access to accurate data often hinder the effectiveness of these programs.

The Role of Government Policy. Government policies play a crucial role in promoting the adoption of sustainable accounting. According to Khair and Sartika (2024), the Indonesian government has begun to integrate green economy principles into sustainable development policies. However, the implementation of these policies is often inconsistent, especially at the regional level. To support the SDGs, the government needs to strengthen regulations related to sustainability reporting and provide incentives for companies that adopt sustainable accounting practices. Additionally, education and training on sustainable accounting need to be improved to enhance the capacity of human resources in the manufacturing sector (Sutadji, 2024).

CONCLUSION

Sustainable accounting has a strategic role in supporting the achievement of Sustainable Development Goals (SDGs) in the Indonesian manufacturing sector. Through practices such as environmental accounting, sustainability reporting, and ERP-based accounting information systems, companies can enhance their transparency, accountability, and operational efficiency while contributing to goals like poverty alleviation, climate action, and responsible consumption. However, challenges such as lack of regulation, high implementation costs, and limited human resources remain major obstacles. This study recommends that manufacturing companies strengthen the integration of sustainable accounting with their business strategies, while the government needs to provide clearer regulations and incentives to encourage the adoption of these practices. Through collaboration among companies, the government, and other stakeholders, sustainable accounting can catalyze the achievement of sustainable development in Indonesia (Ellenasari et al., 2024; Handayani & Sari, 2025).

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