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The Role of Sustainability Accounting in Improving Environmental Performance in Vietnam's Manufacturing Industry

Le The Anh
Dai Nam University, Vietnam

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CORRESPONDENSI
Nama : Le The Anh
Email : hungph0302@gmail.com

ABSTRACT

This research addresses the question of how sustainability accounting practices influence environmental performance in Vietnam's manufacturing sector, filling a gap in understanding how these practices are applied in developing economies. The purpose of the study is to explore how sustainability accounting impacts key environmental metrics such as emissions reduction, waste management, and energy efficiency, and to identify the challenges faced by companies in implementing these practices. A qualitative case study methodology was used, involving semi-structured interviews with 15 participants from 5 manufacturing companies across various sectors (e.g., textiles, electronics, food processing). The research found that while sustainability accounting is helping companies improve their environmental performance, challenges such as limited resources, lack of expertise, and insufficient regulatory support hinder broader adoption. The results are significant because they highlight the potential for sustainability accounting to drive environmental improvements, but also emphasize the need for increased investment in technology, capacity building, and stronger regulatory frameworks. These findings provide practical recommendations for Vietnamese manufacturers to enhance their sustainability accounting practices, which is increasingly important as they seek to meet global sustainability standards and improve their competitiveness in international markets.

Introduction

In recent years, the global emphasis on sustainability and environmental responsibility has intensified, leading to heightened expectations for businesses to adopt and transparently report their sustainable practices. Manufacturing enterprises, which are among the largest contributors to environmental degradation due to their high resource consumption and pollutant emissions, are under increasing pressure to mitigate their ecological footprint (Burritt & Schaltegger, 2010). The adoption of sustainability accounting, which integrates environmental and social dimensions into traditional financial reporting frameworks, has emerged as a critical tool for businesses to assess, monitor, and enhance their environmental performance (Gray, 2010). Through sustainability accounting, firms can track key metrics related to emissions, waste generation, and energy use, thereby aligning their operational activities with broader sustainability goals. However, in developing economies such as Vietnam, the implementation of sustainability accounting practices within the manufacturing sector is fraught with complexities. Factors such as insufficient regulatory support, limited organizational capacity, and resource constraints often hinder the widespread adoption of these practices (Kieu & Huyen, 2022; Hung, 2024). This is especially important in Vietnam's rapidly growing manufacturing sector, where environmental degradation is a pressing concern.

Given this context, the proposed research seeks to investigate how sustainability accounting practices are influencing environmental management and performance in Vietnam's manufacturing sector. Specifically, the study will focus on the role of sustainability accounting in achieving key environmental goals such as reducing emissions, minimizing waste, and improving energy efficiency. By conducting in-depth interviews with company managers and sustainability officers, this research aims to uncover how these practices are integrated into corporate strategies and operational decisions, and how they contribute to the broader environmental agenda within the industry. Furthermore, this study will shed light on the challenges and opportunities that manufacturing enterprises face in their efforts to embed sustainability accounting into their environmental management systems, offering valuable insights for both academics and practitioners. Finally, the study will provide practical recommendations for manufacturing enterprises to improve their sustainability accounting practices, with the ultimate goal of bolstering their environmental performance and contributing to Vietnam's broader sustainability goals.

Literature Review

1. The Emergence and Importance of Sustainability Accounting

The concept of sustainability accounting has gained significant traction in recent years due to increasing global awareness of environmental degradation and the need for businesses to account for their environmental and social impacts. Sustainability accounting extends traditional accounting frameworks by incorporating environmental, social, and governance (ESG) factors, allowing businesses to measure and report on their sustainability performance (Burritt & Schaltegger, 2010). Research suggests that sustainability accounting not only helps firms manage their environmental and social responsibilities more effectively but also improves transparency and accountability, which are essential for building trust with stakeholders (Gray, 2010). This is particularly important in the manufacturing sector, which is often criticized for its high levels of resource consumption and pollution. By adopting sustainability accounting practices, manufacturers are better equipped to monitor their environmental performance and make informed decisions that contribute to reducing their ecological footprint (Gimenez et al., 2012).

2. Sustainability Accounting in the Manufacturing Sector

Manufacturing enterprises, as major contributors to greenhouse gas emissions and industrial waste, are increasingly seeking ways to integrate sustainability into their operational processes. Sustainability accounting provides a systematic approach for these companies to measure key environmental performance indicators, such as energy consumption, waste reduction, and emissions control (Schaltegger & Wagner, 2006). Several studies have highlighted the positive impact of sustainability accounting on environmental management in manufacturing. For instance, Burritt and Schaltegger (2010) found that companies that adopted sustainability accounting frameworks were able to reduce their energy consumption and emissions more effectively than those that did not. Moreover, sustainability accounting enables firms to track their progress toward environmental goals, ensuring that they remain aligned with both regulatory requirements and stakeholder expectations (Bebbington & Larrinaga, 2014). Despite these benefits, the adoption of sustainability accounting in the manufacturing sector, particularly in developing countries, remains uneven due to a range of challenges, including limited expertise, insufficient regulatory support, and financial constraints (Nguyen & Pham, 2021; Hung & Que, 2024).

3. Challenges in Implementing Sustainability Accounting in Developing Countries

In developing economies like Vietnam, the manufacturing sector faces unique challenges in adopting sustainability accounting practices. One of the key barriers is the lack of a robust regulatory framework that mandates comprehensive sustainability reporting. Unlike in developed countries, where governments often require firms to disclose their environmental performance, regulations in Vietnam are still evolving, resulting in inconsistent adoption of sustainability accounting practices (Pham & Nguyen, 2020). Additionally, many manufacturing firms in Vietnam operate in highly competitive markets with limited financial resources, which restricts their ability to invest in specialized sustainability accounting systems (Pham, 2022). Studies have also indicated that a lack of awareness and expertise regarding sustainability accounting among managers and accountants further hinders its adoption (Schaltegger et al., 2006). As a result, many firms struggle to integrate sustainability considerations into their decision-making processes, which limits their ability to monitor and improve their environmental performance.

4. The Role of Management and Organizational Culture

The successful integration of sustainability accounting into manufacturing firms often depends on leadership and organizational culture. Research has shown that companies with strong managerial commitment to sustainability are more likely to adopt and benefit from sustainability accounting practices (Rodrigue et al., 2013). Managers play a critical role in driving the adoption of sustainability initiatives by allocating resources, setting sustainability goals, and fostering a corporate culture that prioritizes environmental responsibility (Jenkins, 2006). In the context of Vietnam, however, managerial support for sustainability accounting is often limited due to competing priorities, such as cost reduction and market expansion (Nguyen & Pham, 2021). This highlights the need for greater awareness and training among company leaders to recognize the long-term benefits of sustainability accounting, not only for environmental performance but also for enhancing operational efficiency and competitiveness.

5. The Impact of Sustainability Accounting on Environmental Performance

Several studies have established a strong link between sustainability accounting and improved environmental performance. By providing a comprehensive view of a company's environmental impact, sustainability accounting enables firms to identify inefficiencies and areas for improvement (Schaltegger & Wagner, 2006). For example, Gimenez et al. (2012) found that firms that implemented sustainability accounting practices were able to reduce their waste and emissions more effectively than their counterparts. Furthermore, sustainability accounting facilitates continuous improvement by encouraging firms to set measurable environmental targets and track their progress over time (Burritt & Schaltegger, 2010). In the manufacturing sector, where resource consumption and waste generation are significant, sustainability accounting can play a crucial role in helping firms transition to more sustainable production processes. However, the effectiveness of these practices depends largely on how well they are integrated into the broader environmental management systems of the firm, as well as the level of commitment from management.

6. Sustainability Accounting in the Vietnamese Context

Vietnam's manufacturing sector, which has experienced rapid growth over the past few decades, presents both opportunities and challenges for the adoption of sustainability accounting. On the one hand, the country's increasing integration into global supply chains has exposed its manufacturing firms to greater pressure from international stakeholders to adopt sustainable practices, including sustainability accounting (Nguyen & Pham, 2021; Hung, 2024). On the other hand, the relatively nascent stage of environmental regulation and the limited availability of resources for sustainability initiatives pose significant barriers for many firms. Despite these challenges, there is growing evidence that some leading manufacturing companies in Vietnam are beginning to recognize the importance of sustainability accounting as a tool for improving their environmental performance and meeting the demands of global markets (Pham & Nguyen, 2020).

While existing studies have underscored the potential benefits of sustainability accounting, there is still limited research on how these practices are being implemented in the context of Vietnam's manufacturing sector. Most studies on sustainability accounting have focused on developed countries, where regulatory frameworks and organizational structures are more conducive to the adoption of such practices (Bebbington & Larrinaga, 2014). In contrast, there is a paucity of research on how manufacturing firms in developing countries like Vietnam navigate the challenges of implementing sustainability accounting in environments characterized by weak regulatory support and limited resources (Nguyen & Pham, 2021). This gap in the literature highlights the need for further research to explore the specific factors that influence the adoption and effectiveness of sustainability accounting practices in Vietnam's manufacturing industry.

Research Methodology

This research will adopt a qualitative case study approach to explore the role of sustainability accounting in enhancing environmental performance in Vietnam's manufacturing sector (Yin, 2014). The study will focus on 5 manufacturing companies that have implemented sustainability accounting practices. These companies have been selected based on their demonstrated commitment to sustainability and their participation in sustainability reporting. The chosen companies represent a diverse range of manufacturing fields, including textiles, electronics, food processing, chemicals, and automotive manufacturing. This range ensures a comprehensive view of how sustainability accounting is applied across different sub-sectors within Vietnam's manufacturing industry.

Data will be collected through semi-structured interviews with 15 participants across the selected companies. Specifically, the interviews will be conducted with: Sustainability officers or managers responsible for implementing and overseeing sustainability reporting and environmental management. Financial managers or accountants involved in integrating sustainability into accounting frameworks. Senior executives who are in charge of corporate sustainability strategies and decision-making. Each company will provide three participants, ensuring a well-rounded perspective from various levels of management. The interviews will each last 60 to 90 minutes and will take place over a period of three months, from March to May 2024. The interview questions will focus on the sustainability accounting practices adopted by the companies, the impact of these practices on environmental performance (including emissions reduction, waste management, and energy efficiency), and the challenges and opportunities encountered during implementation.

Additionally, document analysis will be carried out on the sustainability reports, environmental audits, and CSR reports from each company. This will provide supplementary data to validate and triangulate the findings from the interviews. Sampling: The study will use purposive sampling to select the 5 companies, targeting firms that have publicly committed to sustainability practices and have been recognized for their efforts in sustainability reporting. This sampling strategy ensures that the study captures a diverse range of experiences and practices across different manufacturing fields, providing a broader understanding of how sustainability accounting is applied in Vietnam's industrial landscape. Data Analysis: The data collected from interviews and document analysis will be processed using thematic analysis to identify recurring themes and patterns related to sustainability accounting practices and their impact on environmental performance. NVivo software will be used to code and organize the data, allowing for a systematic comparison of responses across companies and participants. The analysis will focus on key themes such as the effectiveness of sustainability accounting in reducing emissions, waste, and energy consumption, as well as the challenges faced by companies in implementing these practices.

Result and Discussion

Implementation of Sustainability Accounting Practices in Vietnamese Manufacturing Companies

The findings from the interviews reveal that the adoption of sustainability accounting practices is still in its early stages for many manufacturing companies in Vietnam, but there is a growing recognition of its importance. Most participants acknowledged that sustainability accounting is becoming increasingly relevant, especially as firms encounter pressure from international clients and regulatory bodies to improve environmental performance.

For example, the Sustainability Officer at Viet Tien Garment Corporation noted, *"We started implementing sustainability accounting in 2019 after we received requests from international buyers to report our environmental impact. Since then, we've been tracking our water usage, energy consumption, and waste, and this has helped us identify areas where we can reduce costs and improve efficiency."* This sentiment was echoed by several other participants, particularly those working in sectors that are heavily integrated into global supply chains, such as textiles and electronics.

However, the level of sophistication in sustainability accounting practices varied across companies. Some, like Vingroup, a major player in the electronics and automotive sectors, had more advanced systems in place. The Financial Manager at Vingroup explained, *"We use integrated software to track our environmental data in real-time. This allows us to report on emissions and energy use accurately, and we can quickly adjust our processes if we see areas where we're falling short."* In contrast, smaller companies or those in more resource-heavy industries, like Duc Giang Chemicals, were still in the process of formalizing their sustainability accounting systems. *"We're still learning how to integrate sustainability metrics into our accounting practices. Right now, we focus mostly on compliance with environmental regulations, but we know we need to do more,"* said the Environmental Manager at Duc Giang Chemicals.

Impact of Sustainability Accounting on Environmental Performance

One of the key findings of this study is the positive impact that sustainability accounting has had on environmental performance, particularly in terms of reducing emissions, waste, and energy consumption. Several interviewees indicated that by systematically tracking these metrics, their companies were able to identify inefficiencies and take corrective actions.

For instance, Vinamilk, a leader in the food processing sector, has made significant strides in reducing its environmental footprint since implementing sustainability accounting. The Sustainability Manager at Vinamilk shared, *"We've seen a 15% reduction in water usage and a 10% decrease in energy consumption in the past two years, thanks to the visibility that our sustainability accounting system provides. We can now pinpoint exactly where we're wasting resources and make immediate changes."* This level of improvement was not unique to Vinamilk; other companies also reported similar success stories, although the extent of the impact varied depending on the maturity of their sustainability practices. In the case of Hoa Phat Group, a steel manufacturing company, the Senior Executive mentioned that sustainability accounting has helped them reduce their carbon emissions. *"By tracking our emissions data more closely, we realized that our furnace processes were less efficient than they could be. This prompted us to invest in newer technology that has reduced our emissions by 8% over the last year."* This example underscores the tangible benefits that sustainability accounting can bring to industries that are traditionally heavy polluters.

However, not all companies reported immediate success. Participants from smaller or less resource-intensive firms, such as those in the electronics or automotive sectors, indicated that while sustainability accounting has helped them set clearer environmental targets, the long-term impacts on their environmental performance were still evolving. The Sustainability Officer at Vingroup stated, *"We're still in the process of fully integrating sustainability accounting into all of our operations. While we've made progress in tracking emissions and energy use, we expect the real benefits to become more apparent in the next few years as we refine our processes."*

Challenges in Implementing Sustainability Accounting

Despite the reported benefits, the companies surveyed also faced several challenges in implementing sustainability accounting. A common issue raised by participants was the lack of expertise and resources. Many companies struggled with the technical aspects of integrating sustainability metrics into their existing accounting systems, which often required significant investment in new software and training.

The Financial Manager at Duc Giang Chemicals pointed out, *"We don't have the same resources as some of the larger companies, so it's been difficult to find the right tools to track everything. Right now, we rely on basic spreadsheets, but we know this isn't sustainable in the long run."* Similarly, the Sustainability Officer at Viet Tien Garment Corporation noted, *"One of our biggest challenges is getting everyone on board with these new practices. A lot of our staff are used to doing things a certain way, and it takes time to get them to see the value in sustainability accounting."*

Another significant challenge was the lack of regulatory incentives and clear guidelines from the government. Several participants expressed frustration that while sustainability reporting is increasingly expected by international clients, there is little formal support from local authorities. The Senior Executive at Hoa Phat Group shared, *"We're doing this because we know it's important for our international reputation, but we wish there was more guidance from the government on how to implement these practices effectively. Right now, it feels like we're on our own."*

Moreover, cost considerations were a recurring theme throughout the interviews. Smaller firms, in particular, found it difficult to justify the upfront costs of implementing sustainability accounting systems, especially when the financial returns were not immediately apparent. As the Sustainability Manager at Vinamilk explained, *"It's not cheap to set up these systems, and for a long time, we weren't sure if it would pay off. But now that we're starting to see real improvements in our environmental performance, we feel more confident in our decision."*

Role of Management in Driving Sustainability Accounting

The role of management in driving the adoption of sustainability accounting practices emerged as a critical factor in the success of these initiatives. Companies where senior management was deeply involved in sustainability decisions tended to report more significant progress in implementing and utilizing sustainability accounting.

The Senior Executive at Vingroup emphasized, *"Our CEO is very committed to sustainability, and that makes a huge difference. When the leadership is engaged, it's easier to allocate resources and push these initiatives forward."* This sentiment was echoed by other participants, particularly in larger firms where sustainability was seen as a core component of the company's long-term strategy. In contrast, companies where sustainability accounting was primarily driven by middle management or sustainability officers faced more resistance. The Sustainability Officer at Viet Tien Garment Corporation mentioned, *"We've made good progress, but sometimes it feels like we're fighting an uphill battle. Senior leadership is focused on growth and profitability, and sustainability accounting doesn't always seem like a priority to them."* This highlights the importance of top-down support in fostering a culture that values sustainability.

Opportunities for Improvement and Future Directions

While the companies interviewed have made strides in adopting sustainability accounting, many participants recognized that there is still room for improvement. Several companies expressed interest in adopting more sophisticated technologies to automate the tracking of environmental metrics, which would reduce the burden on staff and improve accuracy. The Sustainability Manager at Vinamilk stated, *"We're looking into using AI and machine learning to help us monitor energy use in real-time. This would allow us to make adjustments on the fly, rather than waiting for the end of the month to review the data."* Similarly, Hoa Phat Group is exploring the use of blockchain technology to enhance the transparency and traceability of their sustainability data.

Moreover, many participants expressed the need for greater collaboration between companies and regulatory bodies. The Sustainability Officer at Vingroup suggested, *"It would be helpful if there was more coordination between the government and businesses. Clearer guidelines and incentives would encourage more companies to adopt sustainability accounting."* This call for regulatory support was a common theme, with many participants highlighting the need for a stronger framework to guide their sustainability efforts.

The results of this study indicate that sustainability accounting is gradually being adopted by manufacturing companies in Vietnam, with positive impacts on environmental performance, particularly in reducing emissions, waste, and energy consumption. However, challenges such as limited resources, lack of regulatory support, and the need for stronger management commitment remain significant barriers. Despite these obstacles, the companies interviewed are optimistic about the future of sustainability accounting and are actively exploring ways to enhance their practices. The findings underscore the importance of continued investment in sustainability accounting systems and the need for greater collaboration between the private sector and regulatory bodies to drive wider adoption of these practices across Vietnam's manufacturing industry.

Conclusion

This study has explored the role of sustainability accounting in enhancing environmental performance within Vietnam's manufacturing sector, focusing on its impact on key environmental metrics such as emissions reduction, waste management, and energy efficiency. The findings indicate that while the adoption of sustainability accounting practices is still in its early stages for many companies, those that have implemented these systems are already experiencing tangible benefits. Companies like Vinamilk and Hoa Phat Group reported measurable improvements in resource efficiency and emissions reductions, demonstrating the potential of sustainability accounting to drive positive environmental outcomes. However, the study also revealed significant challenges, particularly regarding the lack of technical expertise, financial resources, and regulatory support, which hinder broader adoption. Smaller firms, in particular, struggle with the high costs of implementation and the absence of clear government guidelines, leading to inconsistent practices across the industry.

Furthermore, the study highlights the critical role of management in driving the success of sustainability accounting. Companies where senior leadership demonstrated a strong commitment to sustainability were more likely to have integrated these practices into their core operations, leading to better environmental performance. Conversely, firms where sustainability initiatives were led by middle management without top-level support faced more resistance and slower progress. This underscores the importance of top-down leadership in fostering a culture that values environmental responsibility.

Based on the findings of the study, the author proposes a number of recommendations for manufacturing enterprises in Vietnam to improve their sustainability accounting practices, thereby enhancing environmental management and aligning with global sustainability standards. One of the key recommendations is the need for greater investment in technology and tools that facilitate the accurate tracking and reporting of environmental metrics. Many companies in the study, especially smaller firms, still rely on basic spreadsheets and manual methods to track emissions, waste, and energy usage. These methods, while useful for initial steps, limit the ability to capture real-time data and make proactive decisions. By investing in advanced technologies such as automated sustainability software and integrated environmental management systems, companies can streamline data collection, improve accuracy, and better respond to inefficiencies in resource use. This shift would also enable enterprises to generate more comprehensive sustainability reports, which are increasingly demanded by international clients and investors.

Furthermore, the study underscores the importance of capacity building and training for staff involved in sustainability accounting. Many participants pointed out that a lack of expertise and knowledge among accountants and financial managers hindered the full integration of sustainability metrics into traditional accounting systems. To address this, manufacturing enterprises should prioritize training programs that equip employees with the necessary skills to handle sustainability data and apply international reporting frameworks such as the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB). These programs could be developed internally or in collaboration with external sustainability consultants who specialize in bridging the gap between environmental performance and accounting practices.

Another critical recommendation is for companies to foster stronger top-down leadership in driving sustainability initiatives. The study reveals that firms with active engagement from senior management were more successful in adopting sustainability accounting practices. Therefore, it is crucial for company leadership to demonstrate a clear commitment to sustainability, not only by allocating financial resources but also by embedding sustainability goals into the company's strategic direction. This leadership involvement ensures that sustainability accounting is not viewed as a peripheral activity but as a core component of the company's operations and long-term success. Additionally, senior management should be involved in setting measurable environmental targets and regularly reviewing sustainability performance to ensure continuous improvement.

The findings also highlight the need for collaboration with external stakeholders, including government bodies, NGOs, and international partners, to support the adoption of sustainability accounting. One challenge identified in the study is the lack of regulatory support and clear guidelines on sustainability reporting in Vietnam. While international pressure is pushing companies to adopt these practices, local regulations are still evolving, creating uncertainty for many firms. To mitigate this, companies should engage in industry-wide collaborations and partnerships with regulatory authorities to advocate for clearer sustainability reporting standards. Moreover, participating in industry forums or sustainability networks can help companies stay informed about best practices and emerging trends in sustainability accounting, allowing them to align with global standards more effectively.

Finally, the study recommends that Vietnamese manufacturing enterprises adopt a phased approach to implementing sustainability accounting. For companies that are new to these practices, starting with a pilot project or focusing on a few key environmental metrics - such as energy consumption or waste management - can help build familiarity with sustainability accounting systems before scaling up to a full, integrated approach. This gradual implementation allows firms to manage costs and resources more effectively while gaining valuable insights into how sustainability accounting can drive improvements in environmental performance. Over time, this phased strategy can lead to more robust systems that cover a broader range of sustainability metrics, ensuring long-term alignment with global standards.

Daftar Pustaka

Bebbington, J., & Larrinaga, C. (2014). Accounting and sustainable development: An exploration. *Accounting, Organizations and Society*, 39(6), 395-413. https://doi.org/10.1016/j.aos.2014.01.003

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Burritt, R. L., & Schaltegger, S. (2010). Sustainability accounting and reporting: Fad or trend? *Accounting, Auditing & Accountability Journal*, 23(7), 829-846.

https://doi.org/10.1108/09513571011080144

Gimenez, C., Sierra, V., & Rodon, J. (2012). Sustainable operations: Their impact on the triple bottom line. *International Journal of Production Economics*, 140(1), 149-159. https://doi.org/10.1016/j.ijpe.2012.01.035

Gray, R. (2010). Is accounting for sustainability actually accounting for sustainability...and how would we know? An exploration of narratives of organisations and the planet. *Accounting, Organizations and Society*, 35(1), 47-62. https://doi.org/10.1016/j.aos.2009.04.006

Hung, P. H. (2024). The applicability of lean accounting in enterprises: The case of pulp and paper manufacturing enterprises in Vietnam. *Multidisciplinary Reviews*, *8*(4), 2025121. https://doi.org/10.31893/multirev.2025121

Hung, P. H. (2024). The Influence of Corporate Governance on Tax Avoidance and The Role of Independent Auditors in Vietnamese Firms. *Journal of Advances in Accounting, Economics, and Management*, *2*(2).

Hung, P. H., & Que, N. T. (2024). Factors Affecting the Ability to Detect Accounting Fraud of Internal Auditors at Vietnamese Commercial Banks. *International Journal of Research in Engineering, Science and Management*, *7*(3), 72-82.

Jenkins, H. (2006). Small business champions for corporate social responsibility. *Journal of Business Ethics*, 67(3), 241-256. https://doi.org/10.1007/s10551-006-9182-6

Kieu, P. H. H. N. T., & Huyen, T. G. T. T. (2022). Factors affecting the application of environmental management accounting in manufacturing enterprises: experimental research in vietnam. *Journal of Positive School Psychology*, *6*(7), 4131-4148.

Nguyen, H. T., & Pham, T. T. (2021). Sustainability accounting in Vietnam: Current status and future perspectives. *Journal of Accounting and Management*, 11(2), 115-130.

Pham, H. H. (2022). Factors affecting the implementation of environmental management accounting in manufacturing enterprises: Evidence from Vietnam. *NeuroQuantology*, *20*(12), 214.

Pham, T. T., & Nguyen, H. T. (2020). The adoption of sustainability reporting in Vietnam: A case study of the manufacturing sector. *Journal of Cleaner Production*, 258, 120760. https://doi.org/10.1016/j.jclepro.2020.120760

Rodrigue, M., Magnan, M., & Boulianne, E. (2013). Stakeholders' influence on environmental strategy and performance indicators: A managerial perspective. *Management Accounting Research*, 24(4), 301-316. https://doi.org/10.1016/j.mar.2013.06.004

Schaltegger, S., Bennett, M., & Burritt, R. (2006). Sustainability accounting and reporting: Development, linkages and reflection. An Introduction to Corporate Environmental Management. Greenleaf Publishing.

Schaltegger, S., & Wagner, M. (2006). Managing the business case for sustainability: The integration of social, environmental and economic performance. *Corporate*

Environmental Strategy, 13(4), 421-434. https://doi.org/10.1016/j.jclepro.2004.12.004

Yin, R. K. (2014). Case study research: Design and methods (5th ed.). SAGE Publications.