



Implementation of Green Accounting and Sustainability Performance: Critical Reflections, Challenges and Opportunities

Safri Haliding¹, Rosyada Haerunnisa², Kamaruddin Arsyad³, Muhammad Rizky Prima Sakti⁴, Sahabuddin Nanda⁵

Muhammadiyah University of Makassar^{1&2}, State Islamic University of Alauddin³, University College Bahrain^{4&5}

Surel: safrihaliding@unismuh.ac.id, haerunnisanisa18@gmail.com,
dr.kamaruddin46@gmail.com, mrizky@ucb.edu.bh,
sahabuddin.nanda@unismuh.ac.id

INFO ARTIKEL

JIAP Volume X
Nomor 2
Halaman 184-198
Samata,
Juli-Desember 2024

ISSN 2441-3017
E-ISSN 2697-9116

Tanggal Masuk:
27 Desember 2024
Tanggal Revisi:
31 Desember 2024
Tanggal Diterima:
31 Desember 2024

ABSTRACT

The growing awareness of environmental issues and the pressing need for sustainable development have led to significant changes in the corporate world. Traditional accounting practices are increasingly seen as insufficient for addressing the broader impacts of business activities on the environment and society. This study analyses the implementation of green accounting and sustainability performance in the business and decision-making of corporate activities and promote sustainability. The study also highlights the critical reflections of green accounting. The study find that the development of green accounting reflects a growing recognition of the need to incorporate environmental considerations into business operations and decision-making that it will be crucial for organizations to adopt best practices and address the barriers to successful implementation and its impact on sustainability performance that the critical aspects of green accounting is its ability to improve a company's sustainability performance such as government policies and regulations, plays a crucial role in ensuring the successful implementation of green accounting and its impact on environmental preservation.

Keyword: *Green Accounting, Sustainability Performance, Environmental, Critical Analysis, government policies*

Copyright: Haliding. Safri. Rosyada Haerunnisa, Kamaruddin Arsyad, Muhammad Rizky Prima Sakti, Sahabuddin Nanda . (2024). Implementation of Green Accounting and Sustainability Performance: Critical Reflections, Challenges and Opportunities. Vol. X No. 2 (184-198). <https://doi.org/10.24252/jiap.v10i2.51500>

INTRODUCTION

In recent years, the growing awareness of environmental issues and the pressing need for sustainable development have led to significant changes in the corporate world. Traditional accounting practices, which primarily focus on financial metrics, are increasingly seen as insufficient for addressing the broader impacts of business activities on the environment and society. This has paved the way for the development and implementation of green accounting, a system that incorporates environmental and social considerations into the financial reporting process.

The concept of green accounting has emerged as a promising approach to address the environmental impacts of corporate activities and promote sustainability (Ulupui et al., 2020). By incorporating environmental costs and benefits into traditional financial accounting systems, green accounting aims to provide a more comprehensive and accurate representation of a company's environmental performance (Moorthy & Yacob, 2013).

Corporate social responsibility and green finance are closely related to the implementation of green accounting, as they can contribute to enhancing an organization's sustainability performance (Zheng & Siddik, 2022). Corporate social responsibility refers to the voluntary integration of environmental and social considerations into business practices, while green finance involves the use of financial instruments and investments to support environmentally sustainable economic activities (Zheng & Siddik, 2022).

Researchers have highlighted the potential for sustainability accounting and reporting to act as powerful tools in the management, planning, control, and accountability of firms' social and environmental impacts (Cho et al., 2012). However, the effectiveness of these practices in driving meaningful change has been questioned, with concerns raised about the use of impression management techniques in sustainability reporting (Cho et al., 2012).

The proliferation of corporate claims about environmental performance has also led to the increasing incidence of greenwashing, where organizations mislead stakeholders about their environmental practices or products (Lyon & Montgomery, 2015). Implementing green accounting and promoting sustainability performance requires a critical examination of the underlying motivations and integrity of corporate representations.

The implementation of green accounting presents numerous challenges and opportunities for organizations. On one hand, it requires a paradigm shift in how companies perceive and report their environmental impacts, which can be complex and resource-intensive. On the other hand, it offers significant benefits, including enhanced corporate reputation, better risk management, and improved long-term financial performance. Additionally, regulatory pressures and stakeholder expectations are driving the adoption of green accounting, making it a crucial tool for achieving sustainability objectives.

This article provides a critical reflection on the implementation of green accounting and its impact on sustainability performance. It explores the

challenges organizations face in integrating environmental considerations into their accounting practices and highlights the opportunities that arise from embracing this approach. By examining both the theoretical and practical aspects of green accounting, this article aims to offer insights into how companies can effectively navigate the complexities of sustainability reporting and leverage green accounting to drive meaningful change in their environmental performance.

Green accounting emerged as a response to the growing recognition that traditional accounting practices often overlook environmental costs and benefits. The theoretical foundations of green accounting are rooted in environmental economics and ecological economics, which emphasize the integration of ecological constraints and the true cost of environmental degradation into economic decision-making.

Environmental economics is a distinct field within the broader discipline of economics that focuses on the relationship between the natural environment and economic activity. One of the key concepts in environmental economics is the idea of "externalities," which refers to the unintended consequences of economic activity that affect third parties or the environment.

Green accounting, also known as environmental accounting, is a crucial component of environmental economics that seeks to quantify and incorporate these environmental externalities into traditional economic models and decision-making processes. By doing so, green accounting provides a more comprehensive understanding of the true costs and benefits associated with economic activities, allowing for more informed and environmentally sustainable decision-making.

The importance of environmental accounting is highlighted by the growing recognition that traditional economic metrics, such as Gross Domestic Product, fail to adequately capture the environmental impact of economic activities (Yakhou & Dorweiler, 2004). As a result, there has been a push to develop alternative accounting frameworks that can better reflect the environmental costs and benefits associated with business operations and government policies (Das, 2015).

Environmental accounting can be used for both internal and external purposes. Internally, it can assist managers in making more informed decisions about pricing, overhead control, and capital budgeting, by providing them with accurate information about the environmental impacts and related costs of their operations (Yakhou & Dorweiler, 2004).

Externally, environmental accounting can be used to disclose environmental information to the public and the financial community, allowing for greater transparency and accountability (Yakhou & Dorweiler, 2004). While environmental economics and accounting are well-established disciplines, environmental finance is a relatively new and emerging field that seeks to apply the lessons learned from these other domains to the realm of

finance (Pham & Ramiah, 2018). For instance, the macroeconomic literature suggests that environmental regulations can affect employment levels, international trade, and productivity, which in turn can impact the market portfolio and systematic risk (Pham & Ramiah, 2018). At the microeconomic level, the accounting literature indicates that environmental disclosure and performance can lead to changes in a firm's market value (Pham & Ramiah, 2018).

Overall, the theory of environmental economics in green accounting provides a framework for understanding the environmental costs and benefits associated with economic activities, and for incorporating these factors into decision-making processes. By doing so, it can help to promote more sustainable and environmentally-conscious economic practices.

In the burgeoning field of environmental economics, the theory of ecological economics has emerged as a critical framework for understanding the intricate relationship between economic activities and the natural environment. This approach emphasizes the need to maintain the integrity of global ecosystems, recognizing that efficiency alone is not a sufficient objective for sustainable development. (Perrings, 1991)

Ecological economics seeks to uncover the underlying causes of environmental degradation and propose solutions that prioritize the preservation of natural resources. This is a departure from the traditional economic model, which often treats the environment as an externality to be managed rather than a fundamental component of the economic system. The theory of ecological economics highlights the dynamic interactions between human economies and natural ecosystems, acknowledging the importance of incorporating ecological factors into economic decision-making. (Baumgärtner & Quaas, 2009)

A key aspect of ecological economics is the concept of "green accounting," which aims to develop a more comprehensive and accurate measure of economic progress and sustainability. Traditional accounting methods often fail to capture the full environmental costs associated with economic activities, leading to a distorted view of economic performance. By incorporating environmental factors into accounting frameworks, green accounting seeks to provide a more holistic understanding of the true costs and benefits of economic activities, including the preservation of natural capital and the mitigation of environmental degradation.

The adoption of green accounting is considered a means to improve environmental protection because it can encourage businesses to voluntarily comply with government regulations and policies. (Ulupui et al., 2020).

Furthermore, the integration of environmental factors into accounting and finance disciplines can have significant implications for the market value of firms, as the costs and revenues associated with environmental performance can affect stock prices and systematic risk (Pham & Ramiah, 2018).

Overall, the theory of ecological economics and the adoption of green accounting principles represent a crucial step towards a more sustainable and equitable economic system. By acknowledging the interconnectedness of human economic activities and natural ecosystems, this approach offers a promising path forward in addressing the pressing environmental challenges of our time.

Green accounting, also known as environmental accounting, is an emerging field that aims to incorporate the environmental impact of economic activities into traditional financial reporting. This approach recognizes that the preservation of the environment is crucial for sustainable development, and that businesses have a responsibility to account for their environmental footprint. (Yakhou & Dorweiler, 2004)

The integration of environmental policy with business strategy is a key focus of green accounting. By adopting green accounting practices, businesses can voluntarily comply with government regulations and guidelines, demonstrating their commitment to environmental stewardship. (Ulupui et al., 2020) These practices can also help businesses identify and manage the capital and operating costs associated with pollution control equipment, providing valuable insights for strategic decision-making. (Yakhou & Dorweiler, 2004)

The green accounting concept has gained momentum in recent years, driven by increasing social focus on environmental issues. Many companies, particularly small and medium enterprises, are now interested in being "green" as investors and stakeholders place a high value on environmental responsibility. (Moorthy & Yacob, 2013) However, the implementation of green accounting in organizations like SMEs in Malaysia has faced challenges, such as lack of awareness and ethical education. (Moorthy & Yacob, 2013)

To address these challenges, some researchers have proposed the integration of green accounting with the concept of "maslahah," or the promotion of the common good. This approach emphasizes the importance of environmental care, involvement in the environment, environmental reporting, and environmental audits based on the principles of maslahah. By aligning green accounting practices with the preservation of the environment and the well-being of society, this framework can help ensure the existence and business continuity of more sustainable and responsible entities.

Overall, the development of green accounting reflects a growing recognition of the need to incorporate environmental considerations into business operations and decision-making. As the field continues to evolve, it will be crucial for organizations to adopt best practices and address the barriers to successful implementation.

Developments:

- **Environmental Management Accounting (EMA):** Combines environmental and economic information to support decision-making.

- **Corporate Environmental Reporting:** Encourages companies to disclose their environmental performance in annual reports and sustainability reports.

METHOD

Various methodological approaches have been proposed to implement green accounting, each with its strengths and limitations.

1. Full Cost Accounting (FCA) of Implementation of Green Accounting:

In the ever-evolving landscape of environmental sustainability, the concept of Full Cost Accounting has emerged as a critical framework for organizations seeking to holistically understand and manage their environmental impact. This research paper examines the full cost accounting considerations associated with the implementation of green accounting practices, a crucial step in promoting environmental stewardship and corporate social responsibility.

Green accounting concepts are widely recognized as a more effective means of improving environmental preservation (Ulupui et al., 2020). One of the key institutional aspects that can drive the success of green accounting implementation is the regulatory environment, as government regulations and policies can coercively impose the necessary requirements on corporations (Ulupui et al., 2020). Accounting for environmental costs, a central component of green accounting, can be approached in various ways, ranging from one-time solutions to more integrated approaches within the existing accounting system (Taygashinova & Akhmetova, 2019).

Incorporating green accounting into a company's environmental management accounting system is a key step in fully capturing the environmental costs associated with its operations (Moorthy & Yacob, 2013). These costs can include, but are not limited to, the expenses incurred for compliance with environmental regulations, waste management, and the implementation of sustainable practices.

The benefits of implementing green accounting extend beyond mere compliance. By adopting a comprehensive full cost accounting approach, organizations can gain a deeper understanding of their environmental impact, identify opportunities for cost savings, and make informed decisions that align with their sustainability goals (Moorthy & Yacob, 2013) (Ulupui et al., 2020) (Taygashinova & Akhmetova, 2019). However, the implementation of green accounting can also incur additional costs, such as the need for specialized expertise, the development of new accounting systems, and the ongoing monitoring and reporting requirements.

To effectively implement full cost accounting for green accounting, organizations must consider a range of factors, including the regulatory landscape, the existing accounting infrastructure, the availability of environmental data, and the potential financial and operational implications (Das, 2015) (Taygashinova & Akhmetova, 2019). Engaging stakeholders, such

as government agencies, industry associations, and environmental organizations, can also be crucial in shaping the implementation and ensuring the long-term success of green accounting initiatives.

In conclusion, the full cost accounting of green accounting implementation is a complex and multifaceted endeavor, requiring a holistic approach that considers both the financial and environmental implications. By embracing this approach, organizations can not only enhance their environmental stewardship but also unlock new opportunities for cost savings, improved operational efficiency, and long-term sustainability.

2. Activity-Based Costing (ABC) of Implementation of Green Accounting:

In today's increasingly environmentally conscious business landscape, the implementation of green accounting has become a critical component of corporate sustainability strategies. Green accounting, also known as environmental accounting, aims to provide a comprehensive framework for measuring and reporting the environmental impacts of a company's operations, thereby enabling more informed decision-making and improved environmental performance. (Ulupui et al., 2020)

One of the key tools in the green accounting arsenal is activity-based costing, which offers a more accurate and nuanced approach to allocating environmental costs and benefits. Activity-based costing is a costing method that allocates costs to activities based on their resource consumption, rather than relying on traditional quantity-based allocation methods.

By adopting an activity-based costing approach to green accounting, organizations can better understand the true environmental costs associated with their operations, from raw material procurement to waste disposal. This information can then be used to identify opportunities for improved resource efficiency, investment in cleaner technologies, and the development of more environmentally-friendly products and services.

The integration of activity-based costing into green accounting also enhances the ability of companies to prioritize and allocate resources towards initiatives that deliver the greatest environmental and financial benefits. As regulatory pressures and stakeholder expectations continue to drive the adoption of sustainable business practices, the implementation of activity-based costing for green accounting will become increasingly important for organizations seeking to remain competitive and responsible corporate citizens. (Carrera & Iannuzzi, 1998) (Antić et al., 2021)

Nonetheless, the integration of environmental costs into traditional accounting systems can present challenges, as these costs are often dispersed across various overhead accounts and may be difficult to identify and quantify. Accounting systems that rely on one-time solutions or independent calculations may struggle to fully capture the complexities of environmental performance.

To address these challenges, organizations must strive to develop more robust and integrated environmental management accounting systems that

seamlessly incorporate activity-based costing principles. (Moorthy & Yacob, 2013) (Taygashinova & Akhmetova, 2019) (Das, 2015) By doing so, they can unlock the full potential of green accounting to drive sustainable business practices and contribute to the broader goal of environmental stewardship.

In summary, the implementation of activity-based costing in green accounting offers a powerful tool for organizations to more accurately measure and manage their environmental impacts. By aligning environmental costs with specific business activities, companies can make more informed decisions, prioritize sustainability initiatives, and ultimately enhance their overall environmental performance.

3. Life Cycle Assessment (LCA) of Implementation of Green Accounting:

In the ever-evolving landscape of environmental sustainability, the concept of Life Cycle Assessment has emerged as a crucial tool in understanding the holistic impact of various products, services, and processes. As businesses and industries strive to become more environmentally conscious, the implementation of green accounting practices has become a prominent strategy to quantify and mitigate their environmental footprint.

The concept of green accounting is seen as a new and better means to improve environmental protection because it allows businesses to voluntarily comply with government regulations and policies in the areas where they operate. (Ulupui et al., 2020). One of the most important institutional aspects that can impose mandatory regulation and ensure the successful implementation of green accounting is the regulatory aspect, namely regulations and policies of local governments as stakeholders of businesses. (Ulupui et al., 2020).

On the other hand, in life cycle assessment, the entire life cycle of a product, process or activity is considered, from raw material procurement to production, use and disposal, and the environmental impact is evaluated holistically (Curran, 2004). Environmental managers and decision makers increasingly regard the assessment of environmental impacts from a life cycle perspective as an important factor in achieving environmental sustainability (Curran, 2004).

By integrating the principles of Life Cycle Assessment with the implementation of green accounting, organizations can gain a comprehensive understanding of their environmental performance and develop targeted strategies to improve their overall environmental impact. The application of LCA in the context of environmental accounting provides a powerful framework for businesses to quantify, manage, and report on their environmental footprint, enabling more informed decision-making and improved environmental stewardship.

As outlined in the research, the key aspects of green accounting that can be evaluated through a life cycle assessment approach include the measurement of environmental costs, the integration of environmental

considerations into business strategy, and the transparent reporting of an organization's environmental performance (Yakhou & Dorweiler, 2004) (Moorthy & Yacob, 2013) (Das, 2015). This holistic approach allows for a deeper understanding of the environmental trade-offs and helps organizations prioritize areas for improvement, ultimately contributing to a more sustainable future.

RESUT AND DISCUSSION

Navigating The Challenges Of Green Accounting and Sustainability Performance

In the era of heightened environmental consciousness, the role of accounting has come under scrutiny as a critical tool in driving corporate sustainability. As organizations grapple with the increasing pressure to report on their environmental and social impacts, the field of "green accounting" has emerged as a vital component of business strategy (Yakhou & Dorweiler, 2004).

Accounting professionals are now expected to measure and communicate the environmental performance of their organizations, a task that requires a nuanced understanding of the complexities involved (Yakhou & Dorweiler, 2004).

One of the key challenges in this domain is the lack of standardized frameworks and regulations, which can lead to a "weak approximation of the triple bottom line" (Ngwakwe, 2012). Accounting bodies have made appreciable strides in promoting sustainability initiatives, but the absence of universal guidelines continues to hamper the effectiveness of these efforts (Ngwakwe, 2012).

Moreover, the issue of "impression management" in sustainability reporting has been a subject of concern (Cho et al., 2012). Some audiences may perceive these reports as attempts at greater transparency and accountability, but the reality is that companies can still employ techniques to present a more favorable image of their environmental and social performance (Cho et al., 2012).

This highlights the need for a more pragmatic approach to sustainability accounting, one that goes beyond mere public relations and truly reflects the organization's impact on the environment and society (Ngwakwe, 2012). Addressing these challenges requires a multifaceted approach that involves the collaboration of various stakeholders, including policymakers, regulatory bodies, and the accounting profession itself.

The integration of sustainability concepts into the accounting curriculum is a positive step, as it equips the next generation of professionals with the necessary knowledge and tools to navigate the complexities of green accounting (Sisaye, 2013). Additionally, the adoption of frameworks such as Material Flow Cost Accounting can provide a more comprehensive

understanding of the environmental and economic implications of a company's operations (Ulupui et al., 2020).

As the urgency of sustainability continues to grow, the accounting field must rise to the occasion and develop robust mechanisms for measuring, reporting, and driving sustainable practices. This will not only enhance the credibility of corporate sustainability efforts but also contribute to the broader societal goal of environmental stewardship and social responsibility.

Impact On Sustainability Performance

Numerous studies have examined the impact of green accounting on sustainability performance, revealing both positive outcomes and challenges.

Positive Impacts:

- **Resource Efficiency:** Green accounting helps identify areas where resources can be used more efficiently, leading to cost savings and reduced environmental impact.
- **Corporate Reputation:** Companies that adopt green accounting practices often enjoy an enhanced reputation among customers, investors, and other stakeholders.
- **Regulatory Compliance:** Green accounting supports compliance with environmental regulations by providing detailed information on environmental performance.

Challenges:

- **High Implementation Costs:** The initial investment required to implement green accounting systems can be a barrier, especially for small and medium-sized enterprises (SMEs).
- **Resistance to Change:** Organizational culture and resistance to change can hinder the adoption of green accounting practices.
- **Balancing Financial and Environmental Goals:** Companies may struggle to balance traditional financial performance metrics with environmental goals, leading to potential conflicts in decision-making.

Opportunity Of Green Accounting and Sustainability Performance

The notion of "green accounting" has gained significant traction in recent years as organizations and governments worldwide seek to address the pressing environmental challenges posed by traditional economic activities. Green accounting, also known as environmental accounting, is a framework that aims to integrate environmental considerations into the financial and management accounting practices of organizations.

One of the primary drivers behind the rise of green accounting is the growing emphasis on sustainable development. Firms are increasingly expected to report on their environmental performance and to demonstrate their commitment to minimizing their ecological footprint. This has led to a remarkable growth in the integration of sustainability topics into the accounting curriculum, with a greater emphasis on the application of social science perspectives, such as organizational sociology and ecological anthropology. (Sisaye, 2013)

The integration of environmental policy with business policy is a critical component of green accounting. Businesses must strategically respond to the capital and operating costs associated with pollution control equipment and other environmental compliance measures. Moreover, green accounting provides a means for companies to voluntarily comply with government regulations and policies, which can serve as a coercive force in ensuring the success of these initiatives. (Ulupui et al., 2020). Environmental accounting fills an expectation role in measuring and reporting on environmental performance, which is driven by the increasing social focus on environmental issues.

Examining the integration of environmental policy with business policy is a key focus of research in this area. (Yakhou & Dorweiler, 2004) The status of environmental awareness provides a dynamic for businesses to report on their environmental performance, with green accounting serving as a mechanism to do so. (Yakhou & Dorweiler, 2004)

Ultimately, the opportunity presented by green accounting lies in its potential to drive sustainable business practices and improved environmental performance. By incorporating environmental considerations into their accounting and decision-making processes, organizations can make more informed choices that prioritize environmental stewardship and long-term sustainability. (Ulupui et al., 2020) (Yakhou & Dorweiler, 2004)

Critical Analisis Of Green Accounting And Sustainability Performance Implementation

Green accounting has emerged as a vital approach for companies to address environmental concerns and achieve sustainable performance (Ulupui et al., 2020). Companies are under increasing pressure to implement green management systems and demonstrate their commitment to environmental sustainability (Putri & Sudarma, 2020). The key goal of green accounting is to measure the environmental costs and benefits associated with a firm's operations (Moorthy & Yacob, 2013).

One of the critical aspects of green accounting is its ability to improve a company's sustainability performance. According to Schaltegger et al., the regulatory aspect, such as government policies and regulations, plays a crucial role in ensuring the successful implementation of green accounting and its impact on environmental preservation. Additionally, the literature suggests that green accounting can serve as a powerful tool for addressing the social and environmental impacts of firms' actions, similar to how conventional management and financial accounting has been used to manage economic aspects. (Cho et al., 2012)

However, the adoption and implementation of green accounting practices still face significant challenges. Despite the growing emphasis on sustainability in the accounting curriculum, a review of the literature indicates that accounting has been criticized for being apathetic to societal and environmental concerns (Ngwakwe, 2012). The lack of standardized

frameworks, regulations, and uniform accounting schemes poses a significant obstacle to the widespread adoption of sustainable accounting practices (Ngwakwe, 2012).

To address these challenges, accounting bodies and policymakers need to take a more pragmatic and proactive approach to sustainable development. This would involve the development of clear standards, regulations, and accounting frameworks that would facilitate the integration of environmental and social considerations into corporate decision-making and reporting (Ngwakwe, 2012). Furthermore, the integration of sustainability concepts into the accounting curriculum, as discussed in the literature, can play a crucial role in shaping the mindset and skills of future accounting professionals, enabling them to effectively navigate the complexities of green accounting and sustainability performance (Sisaye, 2013).

In conclusion, the implementation of green accounting and the pursuit of sustainability performance are critical for addressing the environmental and social impacts of corporate activities. While progress has been made, substantial challenges remain in terms of standardization, regulation, and the broader integration of sustainability into the accounting profession. Addressing these issues through a collaborative effort involving accounting bodies, policymakers, and educational institutions will be crucial for driving meaningful and lasting change towards a more sustainable future.

A Critical Theoretical Approach To Green Accounting

The concept of green accounting, also known as environmental accounting or sustainability accounting, has gained significant attention in recent years as a means of addressing the environmental impact of economic activities. This paper presents a critical theoretical analysis of green accounting, drawing insights from various disciplines to shed light on the challenges and opportunities inherent in this approach.

One of the key goals of green accounting is to develop a comprehensive set of measures that can be integrated into the environmental management accounting system of a firm (Moorthy & Yacob, 2013). The concept of green accounting is considered a new and better way to improve environmental protection as it encourages businesses to voluntarily comply with government regulations and guidelines in the areas where they operate (Ulupui et al., 2020). However, the success of implementing green accounting depends largely on the regulatory aspect, namely: Regulations and policies from local governments as stakeholders of businesses (Ulupui et al., 2020).

Compared to many other disciplines in the social and administrative sciences, the integration of sustainability topics into the accounting curriculum is a relatively recent phenomenon (Sisaye, 2013). Nevertheless, there has been a remarkable growth in both the content and the coverage of sustainability topics in accounting (Sisaye, 2013). This multidisciplinary approach, combining organizational sociology and ecological anthropology,

has been instrumental in the integration of sustainability into the accounting curriculum (Sisaye, 2013).

Despite these advancements, a critical review of the literature suggests that accounting has been criticized for being apathetic to society and the environment (Ngwakwe, 2012). To address this criticism, this paper examines the sustainability initiatives included in the portals of selected accounting firms. The results indicate a high level of sustainability initiatives; however, the lack of standards, regulations and consistent accounting systems still poses a challenge, making contemporary sustainability accounting look more like a weak approximation of a triple income statement (Ngwakwe, 2012).

In conclusion, this paper argues that accounting requires a more pragmatic response to sustainable development, as this would facilitate government and institutional policies towards sustainability. This response should include vital aspects such as carbon accounting, which would help to facilitate the transition towards a more environmentally responsible and sustainable economic system.

CONCLUSION

The implementation of green accounting and its impact on sustainability performance is a complex and multifaceted topic that requires critical reflection. A growing body of research suggests that the integration of green accounting practices can indeed contribute to improved sustainability performance for companies (Ulupui et al., 2020) (Ngwakwe, 2012). By incorporating environmental considerations into their accounting and reporting systems, organizations can better monitor and manage their environmental impact, leading to more sustainable business practices (Ulupui et al., 2020).

Additionally, the adoption of green accounting has been linked to enhanced financial performance, as it enables companies to identify cost savings and new revenue streams associated with eco-friendly operations (Huong et al., 2021).

However, the literature also highlights significant challenges and limitations in the widespread adoption of green accounting. The lack of standardized frameworks, regulations, and uniform accounting schemes has resulted in a "weak approximation" of the triple bottom line approach, where the environmental and social dimensions are often overshadowed by the economic focus (Ngwakwe, 2012).

Furthermore, the literature suggests that the accounting profession has historically been "apathetic" to societal and environmental concerns, and a more pragmatic and holistic response is needed to fully integrate sustainability into the accounting discipline (Ngwakwe, 2012).

To address these challenges, accounting curricula are increasingly incorporating sustainability topics, drawing on perspectives from other social sciences (Sisaye, 2013). Additionally, calls have been made for accounting to

move beyond the traditional focus on financial performance and to develop new metrics that capture the ‘quality of growth’ and its impact on the natural environment and society (Chabrak, 2018).

Overall, the implementation of green accounting and its impact on sustainability performance is a complex and evolving field that requires critical reflection, systematic reforms, and a more holistic approach to accounting and reporting.

REFERENCES

- Antić, L., Stevanović, T., & Milenović, J. (2021, January 1). Environmental activity-based costing as an instrument of environmental management accounting., 23(1), 53-68.
<https://doi.org/10.5937/ekopogl2101053a>
- Baumgärtner, S., & Quaas, M F. (2009, May 1). Ecological-economic viability as a criterion of strong sustainability under uncertainty. Elsevier BV, 68(7), 2008-2020.
<https://doi.org/10.1016/j.ecolecon.2009.01.016>
- Cho, C H., Michelon, G., & Patten, D M. (2012, December 1). Impression Management in Sustainability Reports: An Empirical Investigation of the Use of Graphs. American Accounting Association, 12(1), 16-37.
<https://doi.org/10.2308/apin-10249>
- Carrera, R M., & Iannuzzi, A. (1998, September 1). Getting started with environmental cost accounting. Wiley, 8(1), 63-68.
<https://doi.org/10.1002/tqem.3310080108>
- Curran, M A. (2004, December 1). The status of life-cycle assessment as an environmental management tool. Wiley, 23(4), 277-283.
<https://doi.org/10.1002/ep.10046>
- Chabrak, N. (2018, November 12). Reforming accounting to support the shift towards a sustainable financial system. Emerald Publishing Limited, 2(2), 148-161. <https://doi.org/10.1108/jcms-05-2018-0015>
- Das, P K. (2015, January 1). An Introduction to the Concept of Environmental Management: Indian Context., 2(4), 25-34.
<https://doi.org/10.18775/ijied.1849-7551-7020.2015.24.2003>
- Huong, P T., Cherian, J., Hien, N T., Sial, M S., Samad, S., & Tuan, B A. (2021, March 1). Environmental Management, Green Innovation, and Social–Open Innovation. Springer Science+Business Media, 7(1), 89-89. <https://doi.org/10.3390/joitmc7010089>
- Lyon, T P., & Montgomery, A W. (2015, March 23). The Means and End of Greenwash. SAGE Publishing, 28(2), 223-249.
<https://doi.org/10.1177/1086026615575332>
- Moorthy, K., & Yacob, P. (2013, January 1). Green Accounting: Cost Measures. Scientific Research Publishing, 02(01), 4-7.
<https://doi.org/10.4236/ojacct.2013.21002>

- Ngwakwe, C C. (2012, January 1). Rethinking the accounting stance on sustainable development. Wiley, 20(1), 28-41.
<https://doi.org/10.1002/sd.462>
- Pham, H., & Ramiah, V. (2018, April 27). The birth of environmental finance. Edward Elgar Publishing.
<https://doi.org/10.4337/9781786432636.00016>
- Perrings, C. (1991, December 1). Ecological sustainability and environmental control. Elsevier BV, 2(2), 275-295. [https://doi.org/10.1016/s0954-349x\(05\)80003-7](https://doi.org/10.1016/s0954-349x(05)80003-7)
- Putri, V W., & Sudarma, K. (2020, September 18). Creating Model of Sustainable Performance based Green Management System on The Small and Medium Enterprises., 9(3), 340-349.
<https://doi.org/10.15294/maj.v9i3.40537>
- Sisaye, S. (2013, October 21). The development of sustainable practices in complex organizations. Emerald Publishing Limited, 9(4), 223-245.
<https://doi.org/10.1108/wjemsd-01-2013-0010>
- Taygashinova, K., & Akhmetova, A. (2019, January 14). Accounting for environmental costs as an instrument of environmental controlling in the company. Emerald Publishing Limited, 30(1), 87-97.
<https://doi.org/10.1108/meq-08-2017-0088>
- Ulupui, I G K A., Murdayanti, Y., Marini, A C., Purwohedi, U., Mardia, M., & Yanto, H. (2020, January 1). Green accounting, material flow cost accounting and environmental performance. Growing Science, 743-752. <https://doi.org/10.5267/j.ac.2020.6.009>
- Yakhou, M., & Dorweiler, V P. (2004, March 1). Environmental accounting: an essential component of business strategy. Wiley, 13(2), 65-77.
<https://doi.org/10.1002/bse.395>
- Zheng, G., & Siddik, A B. (2022, June 15). Do Corporate Social Responsibility Practices and Green Finance Dimensions Determine Environmental Performance? An Empirical Study on Bangladeshi Banking Institutions. Frontiers Media, 10. <https://doi.org/10.3389/fenvs.2022.890096>