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Exploring the Adoption of Green Accounting Practices in Vietnamese Small and Medium Enterprises

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ABSTRACT

This research addresses the gap in understanding the adoption of green accounting among small and medium enterprises (SMEs) in Vietnam, particularly in the context of developing economies where such practices are underexplored. The purpose of the research was to investigate the awareness, motivations, barriers, and current practices of SMEs regarding green accounting, aiming to understand how these businesses can better integrate environmental costs into their financial operations. A qualitative approach was used, involving semi-structured interviews with 6 SME owners, 5 CFOs and 4 accountants from 10 SMEs across a range of sectors (manufacturing, agriculture and tourism), the interview data was analysed using thematic analysis to identify key themes relating to green accounting awareness, adoption drivers and barriers. The results revealed that while awareness of green accounting is growing, it remains limited, with most SMEs driven by external pressures such as regulatory compliance and customer demand. However, barriers such as financial constraints, operational challenges, and knowledge gaps hinder widespread adoption. The significance of these findings lies in their implications for policymakers and industry leaders, suggesting that targeted incentives, training programs, and stronger regulatory frameworks can help overcome these barriers. Enhancing support for SMEs in adopting green accounting can lead to more sustainable business practices, improved competitiveness, and better environmental outcomes.

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1. INTRODUCTION

In recent decades, environmental sustainability has been seen as one of the most pressing global challenges driven by the growing recognition that economic development must take place within the limits of our planet's ecological viability. The increasing rate of industrialization, urbanization, and technological progress has put enormous pressure on natural resources, leading to issues such as climate change, deforestation, pollution, and resource depletion (UNEP, 2021). As a result, governments, businesses, and civil society organizations around the world are increasingly adopting policies and activities that minimize environmental harm while promoting sustainable growth. This global trend highlights the importance of integrating environmental considerations into decision-making processes at all levels, from international agreements such as the Paris Climate Agreement to corporate strategies aimed at reducing carbon emissions.

In the Vietnamese context, environmental sustainability is particularly concerning given the country's rapid economic growth over the past few decades. Vietnam has transformed from one of the world's poorest countries into a lower-middle-income country, driven mainly by industrialization and export-oriented industries such as coffee, cocoa and agriculture (World Bank, 2020). However, this economic progress comes at a heavy environmental cost, with increasing levels of air and water pollution, deforestation, and greenhouse gas emissions. Vietnam is one of the most vulnerable countries to climate change, with its long coastline and dependence on climate-sensitive industries such as agriculture and fisheries (ADB, 2021). Therefore, there is increasing recognition that Viet Nam's continued economic growth must be accompanied by stricter environmental management to ensure long-term sustainability.

Green accounting, also known as environmental accounting, is a framework for integrating environmental costs into traditional financial accounting systems. It goes beyond the usual focus on financial transactions to include the measurement, management, and reporting of environmental impacts such as resource consumption, pollution, and waste generation (Bebbington et al., 2001). The primary goal of green accounting is to provide stakeholders, including businesses, regulators, and investors with a more comprehensive understanding of an organization's environmental performance and its financial consequences. By doing so, green accounting helps organizations make better decisions, balancing economic growth with environmental sustainability.

In fact, green accounting includes several key components, such as the identification and quantification of environmental costs (such as the costs of controlling pollution or resource depletion), the valuation of natural resources, and the reporting of environmental liabilities. This holistic approach allows businesses to assess the full cost of their operations, including the often overlooked externalities that traditional accounting systems fail to capture. For example, a firm may realize that investing in cleaner technologies or using resources more efficiently not only reduces environmental harm but also leads to long-term cost savings and improved market competitiveness (Schaltegger & Burritt, 2010). In this way, green accounting serves as an important tool to promote sustainable business practices and drive the transition to a greener economy.

SMEs play an important role in Vietnam's economic landscape. According to the Ministry of Planning and Investment, SMEs account for more than 98% of the total number of enterprises in Vietnam, contribute about 40% of GDP and employ more than 50% of the labor force (MPI, 2020). These businesses operate across a variety of sectors, including manufacturing, agriculture, tourism, and services, making them critical to the country's resilience and economic growth. Despite their enormous economic importance, SMEs in Vietnam often lack the resources, expertise, and institutional support of larger corporations, making it more difficult for them to adopt advanced technologies and operate sustainably.

The environmental impact of SMEs in Vietnam is noteworthy, especially in industries that rely heavily on natural resources and energy. For example, small production companies can pollute through inefficient production processes, while small and medium enterprises in the agricultural sector can engage in activities that lead to soil degradation and water pollution. Given their ubiquity and environmental footprint, the actions of SMEs can exacerbate environmental problems or contribute significantly to sustainable solutions. However, the adoption of green practices - such as energy efficiency, waste management, and sustainable sourcing - in SMEs remains inconsistent, mainly due to financial and information barriers (Nguyen & Le, 2019; Hung, 2022).

By adopting green accounting practices, SMEs in Vietnam can better understand and manage their environmental impacts, which can lead to better compliance with environmental regulations, enhanced corporate social responsibility (CSR), and even financial benefits through cost savings and increased efficiency. However, despite these potential advantages, green accounting has not been widely researched, understood and applied in small and medium enterprises in Vietnam. While larger corporations, especially those with international relations, are beginning to adopt green accounting frameworks to meet regulatory requirements and respond to market pressures, SMEs are slower to adopt them. This situation may be due to a number of factors, including limited awareness of green accounting principles, lack of financial and technical resources, and lack of appropriate incentive policies specifically for smaller businesses (Nguyen & Pham, 2020; Pham, 2022).

Moreover, much of the existing research on green accounting focuses on large enterprises or multinational corporations, leaving a significant gap in the understanding of how SMEs, especially in developing economies such as Vietnam perceive and implement green accounting. Studies that look at green accounting in the context of SMEs often highlight barriers such as perceived complexity in integrating environmental costs into financial reporting, the shortage of trained personnel, and the belief that environmental initiatives are too costly for small businesses (Burritt & Schaltegger, 2010). However, there is still a significant lack of qualitative studies that delve into the specific experiences, challenges and motivations of Vietnamese SMEs in adopting green accounting.

Therefore, this study was conducted with the aim of exploring the application of green accounting practices in Vietnamese SMEs. Specifically, the study aims at the following objectives:

(i) Explore the level of awareness of green accounting in Vietnamese SMEs. This objective seeks to understand whether SMEs are familiar with the concept of green accounting, how they perceive its relevance to their operations, and what knowledge gaps exist regarding its implementation.

(ii) Identify the drivers and barriers faced by SMEs adopting green accounting practices: This objective focuses on exploring both internal and external factors influencing SMEs' decision to adopt or not adopt green accounting. This goal will consider drivers such as regulatory compliance, market pressures, and cost savings, as well as barriers such as financial constraints, lack of expertise, and inadequate government support.

(iii) Examine the extent to which SMEs incorporate environmental costs into their accounting and decision-making processes: This objective aims to assess how SMEs have adopted green accounting practices that are integrating environmental costs into their financial reporting and whether these practices are influencing their strategic decision-making process.

This study will contribute to the literature on green accounting by providing new insights into the application of green accounting in the context of developing economies, with a specific focus on Vietnam. While the majority of existing research focuses on developed countries or large companies, there is an increasing need for research that looks at how SMEs in emerging markets are responding to the global sustainability agenda. By filling this gap, the study will enhance our understanding of the unique challenges and opportunities faced by SMEs in Vietnam when adopting green accounting practices. At the same time, the study will provide practical insights for policymakers and business leaders on how to promote sustainable accounting practices in SMEs. For policymakers, the findings could inform the development of more targeted regulations, incentives, and support programs to encourage SMEs to adopt green accounting. For business leaders, especially those in SMEs, the study will highlight the potential benefits of green accounting, such as improved environmental performance, cost savings, and enhanced market reputation. In addition, the study can serve as a valuable resource for industry associations and NGOs working to promote sustainability in Vietnam's business sector.

2. LITERATURE REVIEW

2.1. Definition and Scope of Green Accounting

2.1.1. Overview of Green Accounting, Its Principles, and Its Importance in Sustainable Business Practices

Green accounting, often referred to as environmental or ecological accounting, is an accounting method that integrates environmental factors into traditional financial accounting practices. Unlike conventional accounting, which mainly focuses on financial transactions and economic performance, green accounting expands its scope to include the costs and benefits associated with environmental activities (Schaltegger & Burritt, 2000). In essence, green accounting seeks to provide businesses and stakeholders with a more holistic view of a company's performance by incorporating the environmental impacts of its operations. This involves recognizing the use of natural resources, the cost of pollution and waste management, the pricing of ecosystem services, and the long-term sustainability of business activities.

The principles of green accounting are closely aligned with the broad goals of sustainable development, aiming to balance economic growth, environmental management, and social equity (Bebbington et al., 2001). One of the essential principles of green accounting is the “polluter pays” principle, which holds companies responsible for the environmental damage they cause, whether through direct pollution or depletion of natural resources. By measuring and reporting environmental costs, businesses can make more appropriate decisions, taking into account their long-term environmental responsibilities. This, in turn, promotes strategies to reduce resource consumption, minimize waste, and improve environmental outcomes, while maintaining profitability for the company.

The importance of green accounting is increasingly being affirmed as businesses come under increasing pressure from governments, investors, and consumers to demonstrate their commitment to sustainability. This trend is reflected in the rise of Environmental, Social and Governance (ESG) reporting which has become an important tool for investors wishing to assess the sustainability performance of companies (KPMG, 2020). By adopting green accounting practices, companies can improve transparency, reduce regulatory risk, and enhance their credibility with stakeholders who prioritize environmental responsibility.

2.1.2. Various Frameworks and Models of Green Accounting, Including Environmental Costs, Resource Usage, and Externality Accounting

There are a number of frameworks and models that green accounting can be implemented in practice, each with a specific focus on different aspects of environmental sustainability. One of the most widely recognized frameworks is the Environmental Management Accounting (EMA) framework, which integrates environmental costs into organizations' internal decision-making processes. EMA focuses on the identification, quantification and management of both physical and monetary environmental information. Physical information relates to the flow of matter and energy within a business (e.g., raw material use, emissions, and waste), while monetary information captures the costs associated with these environmental activities, such as waste disposal, energy consumption, and pollution control (Burritt et al., 2002).

Another important model is the Life Cycle Assessment (LCA), which evaluates the environmental impact of a product or service over its entire life cycle, from raw material extraction to disposal or recycling. LCA is a valuable tool for businesses looking to minimize their product's environmental footprint by identifying opportunities for improvement at each stage of the product lifecycle (Guinea et al., 2002). For example, companies can use LCA to make more sustainable sourcing decisions, reduce energy consumption in the manufacturing process, and design products that are easier to recycle.

External accounting is another important aspect of green accounting that focuses on costs or benefits to third parties - usually social or environmental - that traditional financial accounting does not reflect. Negative externalities such as pollution, deforestation and carbon emissions cause environmental and social costs but are often overlooked in conventional accounting practices. By incorporating these externalities into financial reporting, green accounting helps businesses, policymakers, and stakeholders better understand the true social and environmental costs of economic activities (Gray & Bebbington, 2001). This approach also supports the development of more effective environmental policies, such as carbon taxes or cap-and-trade systems, as it provides a clearer picture of the environmental impact of business activities.

While these frameworks and models provide valuable tools for businesses looking to implement green accounting, their adoption remains uneven, especially among SMEs. This uneven adoption is often due to an awareness of the complexity of these models and the lack of resources available to smaller firms.

2.2. SMEs and Their Role in Environmental Sustainability

2.2.1. Characteristics of SMEs in Vietnam and Their Contribution to the Economy

SMEs are the backbone of many economies around the world, and Vietnam is no exception. According to the Ministry of Planning and Investment (MPI), SMEs account for more than 98% of the total number of enterprises in Vietnam, contribute about 40% of the country's GDP, and employ more than 50% of the workforce (MPI, 2020). These businesses operate in a variety of sectors, including manufacturing, agriculture, commerce, and tourism, and serve as important drivers of economic growth, innovation, and job creation. By providing goods and services to both domestic and international markets, SMEs play an important role in Vietnam's ongoing economic development, especially in rural areas where larger corporations may have less presence.

However, while SMEs play an important role in Vietnam's economy, they also face their own challenges that may affect their ability to adopt sustainable business practices. Many of Vietnam's SMEs are family-owned or informal, which means they often lack the financial resources, management expertise, and technical capacity of larger firms (Nguyen et al., 2019). This makes it difficult for them to invest in new technologies, adopt environmentally friendly practices, or comply with changing environmental regulations. Furthermore, many SMEs operate in highly competitive markets where cost-cutting is a top priority and environmental considerations can be seen as a secondary concern.

Despite many challenges in production and business activities, the role of small and medium enterprises in promoting environmental sustainability is increasingly recognized. As Vietnam seeks to balance economic growth with environmental protection, SMEs are seen as key stakeholders in efforts to reduce pollution, manage natural resources more effectively, and contribute to climate change mitigation. For example, small and medium enterprises in the agricultural sector can play a pivotal role in implementing sustainable farming practices that protect soil health, conserve water and reduce the use of hazardous chemicals. Similarly, SMEs in the manufacturing sector can adopt cleaner production techniques that reduce waste and energy consumption (Nguyen & Le, 2020).

2.2.2. The Environmental Impact of SMEs, Particularly in Industries Such as Manufacturing, Agriculture, and Tourism

SMEs in Vietnam have a significant environmental footprint, especially in industries that rely heavily on natural resources or generate a lot of waste and emissions. For example, manufacturing is an important industry for small and medium enterprises in Vietnam, especially in industries such as textiles, pulp, food processing and building materials. Many SMEs in this industry operate with outdated technology and inefficient production processes that contribute to high levels of air and water pollution. For example, textile production often produces large amounts of wastewater containing dyes and chemicals that contaminate local water sources if not properly treated (Nguyen et al., 2018). In addition, small producers often face challenges in managing solid waste, resulting in improper disposal practices that exacerbate environmental degradation.

In the agricultural sector, SMEs are involved in a wide range of activities from farming to animal husbandry and aquaculture. Agriculture is a major contributor to greenhouse gas emissions in Vietnam, especially through methane emissions from rice fields and livestock, as well as nitrogen oxide emissions from fertilizer use (ADB, 2021). Moreover, unsustainable farming practices such as excessive use of fertilizers and pesticides, deforestation to expand cultivated areas, and inefficient irrigation systems have led to land degradation, loss of biodiversity, and depletion of freshwater resources. Given Vietnam's reliance on agriculture to ensure domestic food security and export revenues, it is important for SMEs in this sector to adopt more sustainable practices that protect the environment while improving productivity.

Tourism is another industry where SMEs play an important role, especially in popular destinations such as Ha Long Bay, Hoi An, Da Nang and the Mekong Delta. While tourism creates significant economic benefits for local communities, it also puts significant pressure on the environment. In many cases, small and medium enterprises involved in tourism, such as small hotels, tour operators, and restaurants, contribute to problems such as plastic waste, water pollution, and habitat destruction. For example, the overuse of single-use plastics by small hospitality businesses has become a major environmental concern in tourist hotspots, where waste management infrastructure may be inadequate (Biggs et al., 2011). Moreover, unregulated tourism development, especially in ecologically sensitive areas, has led to the destruction of wildlife habitats and increased carbon emissions from transportation.

Despite the environmental impact, many SMEs in Vietnam still lack the resources or knowledge needed to adopt sustainable practices. This is where green accounting can play a transformational role. By providing SMEs with tools to measure and manage environmental costs, green accounting can help them identify opportunities to reduce their environmental footprint while improving operational efficiency and profitability. However, as the literature has shown, the application of green accounting in SMEs is still limited, especially in developing economies such as Vietnam (Nguyen & Pham, 2020).

2.3. Green Accounting Adoption in SMEs - Global and Local Perspectives

2.3.1. Review of Previous Studies on the Adoption of Green Accounting in SMEs Globally

The adoption of green accounting in SMEs is increasingly receiving attention in both academia and practice, especially as businesses worldwide face pressure to operate more sustainably. Globally, studies have shown that while large corporations are often at the forefront of adopting green accounting practices due to more resources and disclosure capabilities, SMEs are slower to integrate environmental accounting into their operations (Schaltegger & Burritt, 2000). This discrepancy is largely due to the financial, operational, and information constraints that SMEs often face compared to larger firms. Moreover, SMEs often operate in highly competitive markets where cost reduction and short-term profitability take precedence over long-term sustainability commitments (Chang, 2007).

Research on the application of green accounting in small and medium enterprises across many regions has yielded mixed results. For example, studies in developed economies such as the United Kingdom and Germany have found that SMEs are increasingly adopting green accounting practices, driven by government regulations and market incentives. In the UK, mandatory reporting of carbon emissions for some businesses has encouraged many SMEs to adopt green accounting as a means to comply with these regulations (Bebbington et al., 2014). Similarly, in Germany, the presence of strong environmental regulations and a corporate culture of social responsibility has prompted SMEs to integrate environmental considerations into their financial statements (Schaltegger et al., 2012).

In contrast, studies in developing economies have emphasized slower adoption of green accounting practices in SMEs. In countries such as India, Brazil, and South Africa, many SMEs lack the financial resources and technical expertise to implement green accounting frameworks (Joshi & Li, 2016). Moreover, the lack of strong regulatory frameworks and market incentives in these regions often means that SMEs are not forced to adopt sustainable practices, resulting in continued reliance on traditional accounting methods that prioritize short-term financial performance over environmental sustainability. For example, in India, a study by Kumar & Devi (2016) found that while some larger companies have adopted green accounting due to pressure from international investors, many SMEs are still unaware of the concept or consider it too expensive to implement.

Despite significant differences, global studies show that green accounting can bring practical benefits to SMEs, including cost savings through more efficient use of resources, better compliance with environmental regulations, and enhanced reputation with environmentally conscious consumers (Burritt & Schaltegger, 2010). However, the extent to which SMEs adopt these practices is often influenced by external pressures, such as government policies and market demands, as well as internal factors such as corporate culture and management priorities.

2.3.2. Current State of Green Accounting Practices in Vietnam

In Vietnam, the application of green accounting in SMEs is still in its early stages, with only a few actively integrating environmental costs into their financial statements. A study by Nguyen & Pham (2020) shows that despite increasing awareness of the importance of sustainability in Vietnamese enterprises, the practical application of green accounting is still limited, especially in small and medium enterprises. This is largely due to a combination of factors, including limited knowledge of green accounting principles, lack of technical expertise, and the perception that green accounting is too complex or expensive for small businesses to implement.

Vietnamese SMEs face additional challenges due to the country's changing regulatory landscape. Although the Vietnamese government has introduced a number of policies to promote environmental sustainability, such as the Law on Environmental Protection and the National Green Growth Strategy, the implementation of these regulations is still inconsistent, especially at the local level (World Bank, 2020). As a result, many SMEs do not feel compelled to adopt green accounting practices unless they are directly affected by government audits or face pressure from international partners.

However, there are signs that green accounting adoption in Vietnam is growing slowly, in part due to external pressures from multinational corporations and export markets that require a higher level of environmental accountability. For example, SMEs in Vietnam that are part of the global supply chain, especially in sectors such as textiles and agriculture, increasingly have to comply with environmental standards set by international buyers (Nguyen et al., 2019). This has led some SMEs to start including environmental costs in their financial statements, especially in areas such as energy use, waste management and emissions reduction.

2.4. Barriers to the adoption of green accounting

2.4.1. Main barriers

One of the most important barriers to the adoption of green accounting in SMEs is a lack of awareness. Many SMEs, especially those in developing economies such as Vietnam, are not familiar with the concept of green accounting or do not fully understand its potential benefits (Nguyen & Le, 2020). This lack of awareness is often exacerbated by a lack of targeted training programs or educational resources that can help SMEs build the knowledge and skills needed to implement green accounting frameworks. In many cases, business owners see environmental accounting as a complex and technical process that is better suited to large corporations with departments dedicated to sustainability.

Financial constraints are another major barrier preventing SMEs from adopting green accounting. Many small businesses operate on a tight budget and are reluctant to invest in new accounting systems or hire specialized staff to manage environmental reporting. In addition, the costs associated with implementing environmental monitoring systems, such as those needed to track energy consumption or waste generation, can be a barrier for SMEs that are struggling to compete in the marketplace (Joshi & Li, 2016). As a result, many SMEs continue to rely on traditional accounting methods that focus only on short-term financial performance without considering the long-term environmental costs of their business.

The lack of sufficiently strong management incentives also discourages many SMEs from adopting green accounting practices. While governments in countries such as Vietnam have introduced environmental regulations to encourage sustainable business practices, enforcement is often weak, especially at the local level (World Bank, 2020). This means that many SMEs do not face significant penalties for not taking their environmental impact into account, reducing their motivation to adopt green accounting frameworks. Furthermore, current regulations often do not provide clear guidance or support to SMEs on how to integrate environmental costs into their financial statements.

Finally, the lack of expertise poses a significant challenge for SMEs. Few SMEs have access to qualified accountants or sustainability experts who can help them implement green accounting systems. This skills gap is particularly pronounced in developing countries, where there is often limited access to training programs or professional development opportunities related to environmental accounting (Nguyen & Pham, 2020). Without the necessary expertise, many SMEs cannot effectively measure and report their environmental impacts, even if they are motivated to do so.

2.4.2. Specific challenges faced by SMEs transitioning to green accounting practices

In addition to the common barriers outlined above, SMEs in Vietnam also face specific challenges in the transition to green accounting. One of those challenges is the informal nature of many SMEs. In Viet Nam, a significant portion of SMEs operate in the informal economy, meaning they are often not fully integrated into formal financial or management systems (Nguyen et al., 2019). This makes it difficult for these enterprises to access the resources and support needed to implement green accounting activities. Informal SMEs may also lack the organizational structure or record-keeping system needed to track environmental costs, further hampering their ability to adopt green accounting.

Another challenge is limited access to financial support for green initiatives. Despite government programs and international development projects to promote sustainability in Viet Nam, many SMEs still have difficulty accessing these resources due to administrative barriers, lack of information or the perception that the application process is too complex (ADB, 2021). As a result, SMEs may miss out on opportunities for funding or technical assistance that can help them transition to green accounting.

Despite these barriers, there are some incentives that can encourage SMEs to adopt green accounting, as explored in the following section.

2.5. Motivation for the adoption of green accounting

2.5.1. The external factors

One of the most important external drivers driving the adoption of green accounting is government regulation. As governments around the world continue to tighten environmental regulations, businesses of all sizes are increasingly required to account for their environmental impact. In Vietnam, the Law on Environmental Protection has introduced a number of provisions to encourage businesses to adopt more sustainable practices, including requirements for environmental impact assessment and pollution control (World Bank, 2020; Kieu et al., 2022). While enforcement of these regulations is still uneven, increasing pressure from government agencies is likely to prompt many SMEs to adopt green accounting as a means of complying with legal requirements and avoiding fines.

Market pressures also play an important role in promoting the adoption of green accounting. SMEs that are part of global supply chains are increasingly required to meet environmental standards set by their international partners. For example, multinational corporations often require their suppliers to demonstrate compliance with sustainability reporting frameworks, such as the Global Reporting Initiative (GRI) or the Carbon Disclosure Project (CDP) (KPMG, 2020). This provides a strong incentive for SMEs to adopt green accounting practices as a means to maintain their competitiveness in the global market.

In addition to market and regulatory pressures, customer demand for environmentally responsible products and services is another key driver of green accounting adoption in SMEs. As consumers become more aware of environmental issues, they are increasingly looking for products that are produced in a sustainable way. This trend is particularly evident in industries such as food and beverage, textiles, and tourism, where consumers are willing to pay extra for eco-friendly products (Nguyen & Le, 2020). By adopting green accounting and demonstrating their commitment to sustainability, SMEs can attract environmentally conscious customers and build a stronger reputation in the market.

2.5.2. Intrinsic Motivations

In addition to external pressures, there are some internal motivations for SMEs to adopt green accounting practices. One of the most important drivers is the desire to enhance corporate social responsibility (CSR). Many SMEs recognize that adopting sustainable practices is not only good for the environment but also aligns with their broader CSR goals. By integrating environmental considerations into their accounting systems, SMEs can demonstrate their commitment to ethical business practices, which can improve their relationships with stakeholders, including employees, customers, and investors (Schaltegger & Burritt, 2010).

Cost savings from more efficient use of resources are another important intrinsic motivator. Green accounting allows SMEs to identify inefficiencies in their operations, such as excessive energy consumption or waste generation, and take steps to reduce these costs. For example, by monitoring energy use and implementing energy-saving measures, SMEs can not only reduce their environmental impact but also reduce operating costs (Burritt et al., 2002). This dual benefit of cost savings and improved environmental performance makes green accounting an attractive option for SMEs looking to improve their net profits.

Finally, many SMEs are motivated by long-term sustainable development goals. As businesses become more aware of the risks associated with environmental degradation and climate change, there is growing recognition that sustainable practices are essential to long-term success. By adopting green accounting, SMEs can better manage their environmental risks and ensure that their business models are resilient to future challenges, such as resource scarcity or more stringent environmental regulations (Schaltegger et al., 2012).

In summary, while SMEs face some significant barriers to adopting green accounting, there are also many incentives - both external and internal - that can encourage them to integrate environmental considerations into their financial reporting. Understanding these barriers and drivers is critical to developing effective policies and support mechanisms that can help SMEs transition to more sustainable business practices.

3. METHODS

This study uses a qualitative approach to explore the perceptions, challenges, and drivers of green accounting adoption among SMEs in Vietnam. This method allows an in-depth review of each business's unique experiences and insights.

The target audience includes small and medium enterprises from major industries such as manufacturing, agriculture and tourism in Vietnam. The study will focus on SMEs that have adopted or are considering green accounting practices. The intentional sampling method will be used to select 10 SMEs, which is a manageable number to conduct a detailed interview.

Data will be collected through semi-structured interviews with 15 decision makers including 6 owners, 5 finance directors and 4 accountants in selected SMEs. Open-ended questions will be used to explore their perceptions of green accounting, the challenges they face, and the perceived benefits. Each interview lasts between 30 and 45 minutes between April 2024 and September 2024. In addition, secondary data such as company reports and case studies will be considered to complement the primary data.

Interview data will be analyzed using thematic analysis to identify key topics related to green accounting awareness, adoption dynamics, and barriers. Interviews will be coded to systematically extract insights that directly address research questions.

4. RESULTS AND DISCUSSION

4.1. Awareness and understanding of green accounting

4.1.1. The level of awareness of small and medium enterprises on green accounting principles

Interviews conducted with SME owners, CFOs and accountants show a low to medium level of awareness of green accounting principles among Vietnamese SMEs. While some participants had a basic understanding of the concept, most admitted to being only a little familiar with how to apply green accounting to their business. One participant from a small manufacturing company commented, *"We've heard about sustainability in general, but I'm not sure how it fits into our accounting system. We are more focused on achieving our production goals."* This view is shared by some, suggesting that green accounting is often seen as an abstract or secondary concern that is an integral part of business.

SMEs exposed to international markets or working with multinational corporations demonstrate a higher level of awareness. A chief financial officer from a textile export company mentioned, *"Our foreign clients sometimes require environmental reporting, so we have to learn a little bit about this, but mostly to comply more than anything else."* This highlights that perception is often driven by external pressure, especially from international buyers demanding some form of environmental disclosure. However, even in these cases, the level of understanding is still limited, with many SMEs viewing green accounting as a compliance measure rather than a strategic tool to improve business performance.

In contrast, SMEs operating in industries with significant environmental impact, such as agriculture and manufacturing show slightly higher awareness. A manager from a small and medium-sized enterprise in the agricultural sector noted, *"We know our industry has a great impact on the environment and we have started to look for ways to reduce waste and use water more efficiently, but we have not yet linked this to our accounting."* This reflects the separation between operational and financial reporting sustainability efforts, where SMEs may be taking steps to reduce their environmental footprint but have yet to integrate these efforts into the formal accounting framework.

4.1.2. Misconceptions or gaps in understanding green accounting practices

The interviews also uncovered several misconceptions about green accounting, which further complicate the adoption of green accounting in SMEs. One of the most common misconceptions is the belief that green accounting is primarily concerned with regulatory compliance or environmental reporting to external stakeholders, such as government agencies or large corporations. *"We think green accounting is only for large companies or those that need to comply with strict environmental laws," said an accountant from a tourism SME. We didn't realize that it could actually help us manage costs better."* This reflects a common misconception that green accounting is more of an important task than a practical tool for improving internal business performance and decision making.

Another misconception identified is the belief that green accounting is too costly and complicated for small businesses. Some interviewees expressed concerns about the costs associated with implementing green accounting systems. A small business owner in the manufacturing sector commented, *"Green accounting sounds good in theory, but we don't have the budget for high-end software or hiring experts. It looks like only big companies can afford it."* This view underscores the common perception that green accounting is out of reach for SMEs, although it can often be implemented using existing accounting systems with some modifications, such as tracking resource use and environmental costs.

Moreover, many SMEs do not fully understand the long-term benefits of green accounting. While some acknowledge the potential for immediate cost savings - such as lower energy or waste management costs - few businesses recognize the wider financial advantages, such as improved risk management, enhanced brand reputation, or access to green financing. A finance executive from a small agribusiness commented, *"We know that being more environmentally friendly can save us some money, but we haven't thought about how it can protect us from future risks or attract more customers."* This suggests that SMEs tend to focus on the short-term costs of green accounting without considering the long-term benefits it can bring to the business in terms of resilience and growth.

There is also considerable confusion about the terminology. Some SMEs have confused green accounting with related activities, such as carbon accounting or environmental impact assessment. A participant from a small and medium-sized enterprise in the construction sector stated, *"I think green accounting is just about measuring carbon emissions. We didn't realize it could include other things like water use or even waste disposal costs."* This confusion hinders the adoption of green accounting, as businesses are unclear about what it actually involves and how it can be applied across different environmental dimensions.

In summary, although there is some awareness of green accounting in Vietnam's small and medium enterprises, this perception is still limited and often misunderstood. Many SMEs are aware of sustainability in a general sense but do not fully grasp the role that green accounting can play in their financial systems. Misconceptions about cost, complexity, and relevance are common and there is a significant gap in the knowledge of the long-term benefits that green accounting can bring. As one participant aptly summarized, *"We knew we needed to be more sustainable, but we weren't sure how to make it part of our daily business, especially in the area of accounting."* These findings highlight the need for targeted education and support to help SMEs understand how to implement green accounting in a way that saves costs and contributes to their long-term success.

4.2. Motivation to apply green accounting

4.2.1. The main motivation for small and medium enterprises to apply green accounting

Findings from interviews with SME owners and CFOs reveal a range of drivers for green accounting adoption, albeit to varying degrees of commitment. One of the most frequently mentioned motivations is regulatory compliance. As environmental regulations in Vietnam continue to grow, SMEs are increasingly aware of the need to align their activities with legal requirements to avoid fines or disruption. A director from a small manufacturing company noted, *"The government is getting stricter with environmental laws, especially with regard to waste and emissions management. We don't want to be fined or shut down, so we're trying to get ahead by implementing some of these green activities."* This compliance dynamic is particularly pronounced in industries with significant environmental footprints, such as manufacturing and agriculture, where the burden of regulation is higher.

In addition to compliance, market competitiveness is another important driver for SMEs to adopt green accounting. Some interviewees emphasized that being seen as environmentally responsible can provide a competitive advantage, especially in areas where customers are increasingly concerned about sustainability. A business owner in the tourism industry commented: *"Many of our customers, especially international tourists, are asking about our environmental policy. If we can demonstrate that we are monitoring and reducing our environmental impact, we will have an advantage over competitors that are not doing so."* This suggests that SMEs see green accounting as a way to enhance their brand image and attract environmentally conscious customers, a trend that is becoming increasingly important as global awareness of sustainability issues grows.

Cost reduction is another important driver for green accounting adoption, especially in under-resourced SMEs. Some participants said they initially explored green accounting as a way to identify inefficiencies in their operations, particularly in terms of energy consumption and waste management. A finance director from an agricultural company just explained, *"We started to take a closer look at our water and energy usage because the costs are so high. By monitoring these, we have been able to reduce invoices and improve efficiency, which directly benefits our net profits."* This reflects the growing recognition that green accounting can help SMEs not only reduce their environmental footprint but also their operating costs, which is an important concern for businesses operating in highly competitive markets with low profit margins.

In addition to these practical concerns, some SMEs are motivated by a broader sense of corporate social responsibility. While this dynamic is less prominent than those related to regulation or cost, some interviewees expressed a desire to align their business practices with ethical values and contribute to environmental sustainability. A business owner in the retail sector stated, *"We want to do our part for the environment. It's not just about profits; it's about being a responsible company that our employees and customers can be proud of."* This highlights the role of intrinsic motivation, with some SMEs seeing green accounting as part of their broader commitment to sustainable and ethical business practices.

4.2.2. Influence of external stakeholders on the application process

The influence of external stakeholders - including customers, investors, and regulators - plays a key role in shaping the adoption of green accounting in SMEs. For many businesses, customer demand is one of the most immediate and visible pressures driving the shift to environmentally responsible practices. As consumer awareness of environmental issues increases, especially in international markets, SMEs serving environmentally conscious customers are increasingly expected to demonstrate their commitment to sustainability. A manager from a textile export company explained:

"Our foreign customers expect us to meet certain environmental standards and they demand more transparency in how we manage our resources. Green accounting helps us provide that information and keep our contracts." This illustrates how customer expectations, especially in export-oriented industries, can serve as a strong incentive for SMEs to adopt green accounting practices.

Similarly, investors are focusing more on environmental, social, and governance (ESG) factors when evaluating businesses. Several SMEs have mentioned that potential investors have inquired about their environmental practices, especially when seeking funding or entering into partnerships. A finance officer from a small agricultural company noted, *"We had an investor ask about our environmental impact before they decided to invest. They want to see that we are thinking long-term and managing our resources in a sustainable way."* This suggests that for some SMEs, adopting green accounting can improve their attractiveness to investors who are increasingly prioritizing sustainability in their decision-making processes.

Regulators also play an important role in influencing the adoption of green accounting, particularly through enforcement of environmental laws and guidelines. In Viet Nam, while enforcement is still under development, SMEs are increasingly aware that future regulations are likely to become more stringent. Therefore, some businesses are adopting green accounting as a proactive measure to prepare for expected regulatory changes. A manager from a manufacturing company just explained, *"We know that the government is pushing for more environmental reports in the future, so we're trying to get ahead by starting now. It is better to prepare in advance rather than rush when regulations come into effect."* This forward-thinking approach suggests that some SMEs are adopting green accounting not only to comply with existing regulations but also to protect their future operations against expected regulatory developments.

In addition to these direct impacts, industry associations and NGOs can also play a role in encouraging the adoption of green accounting. Several SMEs have mentioned that they have received support or guidance from industry groups promoting sustainable business practices. A business owner in the tourism sector commented, *"We received help from an NGO focused on sustainable tourism. They have provided us with resources on how to monitor our environmental impact, making it easier for us to start implementing these activities."* This highlights the potential of external organizations to provide the knowledge and tools that SMEs need to adopt green accounting, especially in a context where internal resources and expertise may be limited.

As such, the adoption of green accounting in Vietnam's SMEs is driven by a combination of legal requirements, market pressures, cost savings opportunities, and CSR considerations. External stakeholders such as customers, investors, and regulators have a significant influence on this process, with customer demand and regulatory compliance emerging as the most direct drivers. However, SMEs also recognize that adopting green accounting can bring more long-term benefits, such as improved market competitiveness and stronger relationships with investors and customers. These findings suggest that while the dynamics of adopting green accounting are diverse, overall they point to a growing recognition among SMEs of the importance of integrating environmental considerations into their financial performance.

4.3. Barriers to adoption

4.3.1. Financial barriers

One of the most important barriers to the adoption of green accounting in SMEs in Vietnam is the lack of financial resources. Many SMEs operate on tight budgets, with limited capital to invest in new systems or processes that do not provide immediate financial returns. Green accounting, although beneficial in the long run, often requires an initial investment in technology, software, and training, which can be very costly for smaller businesses. A participant from a small manufacturing company highlighted this issue, saying, *"We learned about green accounting, but the cost of implementing the new system, training staff, and hiring consultants is currently too high for us. We are struggling to manage our daily expenses."* This view is shared by several other interviewees, suggesting that the upfront costs associated with green accounting are a significant barrier for many SMEs.

In addition to the cost of implementing a green accounting system, SMEs often face challenges in securing external funding or financial support to offset these costs. Unlike larger corporations that have access to a wider range of financing options, including green bonds or sustainability-linked loans, SMEs often have fewer options. Many smaller businesses also don't have the credit capacity or financial stability needed to qualify for loans or funding to drive sustainability initiatives. Therefore, the financial burden of adopting green accounting falls entirely on their shoulders, making many people reluctant to take the first step.

Moreover, the long-term nature of profits from green accounting can be a deterrent to SMEs focusing on short-term survival. While green accounting can lead to cost savings through more efficient use of resources, minimizing waste, and improving risk management, these benefits are often realized over time rather than immediately. For SMEs struggling with tight cash flow or profit margins, the prospect of investing in a system that may not offer immediate financial rewards may seem risky. Therefore, many SMEs choose to prioritize short-term financial stability over long-term sustainability, further delaying the adoption of green accounting.

4.3.2. Operational challenges

In addition to financial constraints, many SMEs face operational challenges when adopting green accounting, especially in terms of environmental cost measurement and reporting. Unlike financial transactions, which are relatively easy to track, environmental costs are much more complex to quantify. This includes costs associated with resource consumption (such as water and energy use), waste generation, emissions, and other environmental impacts. Many SMEs lack the infrastructure or tools needed to accurately measure these factors, making it difficult for them to integrate environmental costs into their accounting systems.

Some interviewees expressed frustration at the lack of clear guidelines or standardized methods for measuring environmental costs. A manager from a small agribusiness commented, *"We know that we are using a lot of water and energy, but we don't have the tools to accurately measure the amount of water and energy or calculate the cost we are paying environmentally. Without that information, we wouldn't be able to put it on our books."* This highlights the practical difficulties faced by many SMEs when monitoring their environmental impact, especially in resource-intensive industries where monitoring systems have not yet been developed.

Furthermore, the process of integrating environmental data into financial statements can be challenging for SMEs that do not have dedicated accounting software or systems. Traditional accounting systems are often designed to track monetary transactions, not environmental metrics, which means businesses have to modify existing systems or invest in new ones. This is a complex and time-consuming process, especially for SMEs without a dedicated IT or accounting department. A finance manager from a manufacturing company just explained, *"Our current accounting system is not capable of tracking environmental data, so we have to upgrade or buy an entire new system. It's a big investment of both time and money."*

In addition, reporting environmental costs in a way that is consistent with both financial goals and sustainable development goals is a difficult task. Many SMEs have difficulty identifying how to classify and report these expenses in their financial statements. For example, should costs associated with waste disposal be considered an operational cost, or should they be considered part of a broader sustainability initiative? This lack of clarity confuses and hinders the adoption of green accounting, as businesses may be uncertain about how to effectively integrate environmental costs into their current financial framework.

4.3.3. Knowledge and professional gap

A significant barrier to the widespread adoption of green accounting in SMEs is the lack of knowledge and expertise on how to implement these activities effectively. Many SMEs are simply unaware of the tools and frameworks available for green accounting or they do not fully understand how it can benefit their business. This knowledge gap often stems from the fact that training programs in green accounting are not widely available, especially for smaller enterprises in developing economies such as Vietnam.

Some interviewees expressed a desire for more accessible guidance and training on green accounting. A business owner in the tourism sector commented, *"We've heard about green accounting, but we really don't know where to start. There aren't many resources or training programs for small businesses like us, so it's hard to figure out how to implement it."* The lack of access to these training and educational materials is a common problem for SMEs, especially those in rural areas or industries unrelated to traditional environmental protection practices.

In addition to the lack of training, SMEs often face difficulties in accessing consulting services that can help them implement green accounting. Larger corporations often have the resources to hire sustainability consultants or external auditors who can guide them in the process of integrating environmental costs into their financial statements. However, for SMEs with limited budgets, hiring outside consultants is often not an option. A finance officer from a small manufacturing company explained, *"We don't have the internal expertise to implement green accounting and hiring a consultant would be too expensive. We're stuck trying to figure it out on our own, which is very difficult when we don't have the right knowledge."* This lack of professional guidance exacerbates the challenges faced by SMEs adopting green accounting practices.

Moreover, even if SMEs are motivated to adopt green accounting, the complexity of related frameworks and tools can be enormous. Many of the tools available to measure and report environmental costs, such as Life Cycle Assessments or Environmental Management Accounting, require a certain level of expertise that most SMEs do not have. Without appropriate training or consulting support, SMEs may not fully understand or implement these frameworks, resulting in incomplete or inaccurate reporting. This was echoed by a participant from a small agribusiness, who stated, *"We tried to learn about green accounting, but it's very specialized. We don't have the background knowledge to understand all the details, so we hesitate to get started without proper guidance."*

As such, the adoption of green accounting in Vietnam's SMEs is hampered by a number of significant barriers, including financial constraints, operational challenges, and knowledge gaps. The initial cost of implementing green accounting systems, coupled with the difficulty of measuring and reporting environmental costs, makes it difficult for SMEs to integrate these activities into their operations. Moreover, the lack of training and consulting services exacerbates the problem, leaving many SMEs without the necessary expertise to apply green accounting effectively. Addressing these barriers will require targeted support, including financial incentives, clear guidelines, and accessible training programs, to help SMEs overcome these challenges and fully realize the benefits of green accounting.

4.4. Integration of environmental costs

4.4.1. Actual situation of calculating environmental costs in small and medium enterprises

The current state of environmental cost accounting in SMEs in Vietnam is largely undeveloped, with many enterprises not accounting for all environmental costs or accounting in an informal, inconsistent manner. Interviews with SME owners and CFOs show that most businesses do not have formal systems in place to systematically monitor or report on their environmental impact. Instead, environmental costs - if considered - are often combined with overhead costs, making it difficult for businesses to separate and analyze their environmental footprint.

For example, one business owner in agriculture explained, *"We know that we spend a lot on water and fertilizer, but we have never separated those costs into 'environmental'. It's just part of our total cost of production."* This reflects a common view among SMEs, where environmental costs are seen as a byproduct of regular operations rather than as a separate category of special interest. As a result, many SMEs are unaware of the true environmental costs of their activities, such as the depletion of natural resources, pollution control, or waste management, and how these costs may differ from their overhead costs.

In some cases, SMEs have begun to account for specific environmental costs - such as energy use or waste disposal - due to external pressures, but this is often done in a limited and arbitrary way. For example, a participant from a small manufacturing business noted, *"We have started to monitor our electricity usage a bit more closely as bills are getting higher and we know that reducing energy waste is good for the environment and our budget. But we don't officially report on this in our financial reports."* This suggests that while some firms are becoming more conscious of their resource consumption, they have not yet incorporated these costs into their formal accounting practices or financial reporting systems.

In sectors such as tourism, where environmental concerns such as waste management and resource conservation are becoming increasingly important, some SMEs have made initial efforts to take environmental costs into account. A hotelier in Hoi An explained, *"We have started to monitor the amount of water we use and the amount of waste we generate, mainly because this is becoming a customer concern. But mostly for internal purposes, not what we officially report."* This highlights that while awareness of environmental costs is increasing, the formal integration of these costs into the accounting system remains limited.

Overall, the findings suggest that while SMEs in Viet Nam may recognize some environmental costs in a simple or reactive manner, systematic environmental cost accounting remains limited. Most businesses have yet to adopt formal green accounting practices that allow them to effectively track, manage, and report on these costs.

4.4.2. The level of green accounting is integrated into financial decisions and statements

The integration of green accounting into financial decision making and reporting processes in SMEs in Vietnam is still in its infancy, with very few enterprises fully incorporating environmental costs into their strategic and financial processes. For many SMEs, decision-making remains largely driven by short-term financial considerations, such as profit margins, cost control, and market demand, with little attention to long-term environmental sustainability. The disconnect between financial and environmental decision-making is a major barrier to green accounting adoption.

It is clear from interviews that environmental considerations are often considered secondary to the core financial metrics that guide business decisions. A chief financial officer of a textile company recently remarked, *"We mainly focus on our net profit - how much we are spending and how much we are earning. Environmental costs, like waste disposal or energy use are things we know about, but they're not really part of our financial reporting or our decision-making process."* This highlights the fact that green accounting has yet to be incorporated into the financial processes of most SMEs. Although some firms are aware of their impact on the environment, these concerns are not formally integrated into their accounting framework or used to inform strategic decisions.

In rare cases green accounting is partially integrated, often due to external pressures or specific business needs rather than an internal commitment to sustainability. For example, some SMEs that are part of the global supply chain have begun reporting on certain environmental metrics, such as energy use or carbon emissions, because international customers require this information. A participant from an agricultural export SME explained: *"Our foreign partners require us to report on things like water use and pesticide use, so we have started to monitor these costs more closely. But mainly to comply with customer requirements, not something we have integrated into our overall financial strategy."* This suggests that while external stakeholders may promote the adoption of green accounting, integration remains superficial and is often limited to meeting specific reporting requirements rather than being fully integrated into decision-making processes.

Furthermore, financial reporting on environmental costs remains rare among SMEs. Most businesses do not include environmental costs in their official financial statements, such as income statements or balance sheets, and those that do include these costs tend to treat these costs as operating expenses without explicitly classifying them as environmental costs. A participant from a small and medium-sized business in the construction sector noted, *"We take things like waste disposal into account, but they are only part of the overhead. We haven't thought about separating them into environmental costs."* The lack of distinction between environmental and operational costs makes it difficult for SMEs to assess the true impact of their activities on the environment and make informed decisions on how to reduce these costs.

The lack of standardized reporting frameworks for green accounting also contributes to the slow integration of environmental costs into financial reporting. Many SMEs are unsure about how to classify and report environmental costs in a way that is consistent with traditional accounting practices. A business owner in the tourism industry commented, *"We wanted to include environmental costs in our report, but there was no clear guidance on how to do it. Should we report separately or just as part of our total expenses? It's confusing."* This lack of clear guidelines makes it difficult for SMEs to introduce green accounting into their financial systems, even if they are motivated to do so.

In summary, while some SMEs in Vietnam have begun to recognize and take into account certain environmental costs, the full integration of green accounting into decision making and financial reporting is still limited. Environmental costs are often perceived as operating costs rather than explicitly calculated, and green accounting is not yet a standard part of SME financial frameworks. For green accounting to be more widely adopted, businesses need clearer guidance, external support, and a deeper understanding of how environmental costs can inform both strategic decision-making and financial reporting.

4.5. Opportunities to Strengthen Adoption

Currently, one of the main barriers to widespread adoption is the financial burden associated with the implementation of green accounting systems. Many SMEs operate on a limited budget and are reluctant to invest in new accounting frameworks or environmental monitoring technology if there is no immediate financial return. This is where government incentives can play an important role. By offering tax breaks, grants, or grants that encourage environmentally sustainable practices, governments can help reduce the initial financial burden on SMEs. For example, the provision of tax deductions to businesses that invest in energy-saving technologies or pollution control measures to encourage SMEs to take the first steps toward integrating green accounting into their operations.

Furthermore, training programs designed specifically for SMEs to bridge the knowledge gap currently hinder the adoption of green accounting practices. Many SMEs lack the expertise to implement green accounting effectively as it requires a good understanding of how to measure, track and report environmental costs. Government-led initiatives, in partnership with academic institutions or industry experts can provide affordable or subsidized training programs to educate business owners, accountants, and chief financial officers on the principles and benefits of green accounting. These programs not only focus on the technical aspects of environmental cost accounting but also demonstrate the long-term financial returns that can be derived from sustainable business practices. For example, a government-funded program could provide SMEs with step-by-step guidance on how to integrate environmental costs into their existing accounting systems without overloading their limited resources.

In addition to financial and training incentives, regulatory frameworks designed to encourage sustainability can serve as a strong driver of green accounting adoption. Currently, Vietnam's environmental regulations, although improving, are often enforced inconsistently, leaving many SMEs feeling less compelled to adopt green accounting unless they are directly affected by audits or regulatory fines. Strengthening these regulations and ensuring consistent enforcement can motivate many more SMEs to integrate environmental costs into their financial statements. For example, mandatory environmental impact assessments for certain industries or thresholds may require companies to record and report on resource use, emissions, and the amount of waste generated as part of their financial statements. At the same time, regulations that encourage transparency - such as providing benefits to businesses that voluntarily disclose their environmental performance - can encourage companies to adopt green accounting as a way to enhance their market position and comply with future regulatory expectations.

5. CONCLUSION

This study highlights several key findings regarding the adoption of green accounting among SMEs in Vietnam. First, awareness of green accounting remains low, with most SMEs having only a limited understanding of its principles and benefits. Many businesses associate environmental practices with operational improvements but do not integrate these practices into their financial systems. Second, motivations for adopting green accounting are largely driven by external pressures, such as regulatory compliance, market competitiveness, and customer demand for environmental responsibility. Some SMEs also recognize the potential for cost savings in energy and resource use, although this realization is often secondary to immediate financial concerns. Finally, SMEs face significant barriers to adopting green accounting, including financial constraints, operational challenges in measuring and reporting environmental costs, and a lack of knowledge and expertise. These barriers are compounded by the absence of accessible training programs and consultancy services, leaving SMEs without the necessary support to implement green accounting effectively. Overall, while there is growing interest in sustainability, targeted efforts are needed to overcome these challenges and foster wider adoption among SMEs.

Based on the findings from the study, the author makes the following recommendations:

Small- and medium-sized businesses

To successfully adopt green accounting, SMEs in Vietnam can follow several practical recommendations to overcome common barriers. First, SMEs should begin by leveraging existing resources to gradually integrate environmental costs into their current accounting systems. Instead of investing in costly new software, businesses can start by manually tracking key areas such as energy consumption, waste management, and resource use with simple tools like spreadsheets. By focusing on specific, measurable environmental costs, SMEs can gain insights without the need for significant upfront investments.

Second, SMEs can seek external support through government incentives, industry associations, or NGOs offering training and consultancy services. Many organizations provide subsidized training programs or grants aimed at helping businesses adopt sustainable practices. SMEs should actively explore these opportunities to enhance their understanding of green accounting and gain access to the necessary expertise.

Third, collaborative efforts within industries can help reduce the costs and complexity of green accounting. SMEs can join forces with other businesses to share tools, best practices, and resources. Industry associations can also play a key role by developing simplified reporting frameworks tailored to SMEs.

Finally, SMEs should view green accounting as a long-term investment that enhances both sustainability and financial performance. By gradually incorporating environmental costs into decision-making, businesses can identify efficiency improvements and cost savings, while also positioning themselves to meet future regulatory requirements and market demands.

The regulators

Policymakers play a crucial role in promoting the adoption of green accounting practices among SMEs in Vietnam. To encourage wider uptake, they should focus on providing financial incentives that reduce the cost burden of implementing green accounting systems. This could include tax breaks, subsidies, or grants for SMEs that invest in sustainable technologies or adopt formal environmental accounting practices. By easing the financial constraints many SMEs face, such incentives would make it more feasible for smaller businesses to integrate green accounting into their operations.

In addition to financial support, policymakers should invest in education and training programs specifically designed for SMEs. These programs should offer accessible, practical guidance on how to track environmental costs and integrate them into existing accounting systems. Partnerships with academic institutions and industry bodies could help deliver comprehensive training and consultancy services, bridging the knowledge gap that currently hinders adoption.

Lastly, policymakers should strengthen regulatory frameworks that encourage or require environmental reporting, while ensuring these regulations are clear and enforceable. Offering simplified reporting standards for SMEs and gradually introducing mandatory environmental impact assessments could create a more structured environment for green accounting. By combining incentives, education, and strong regulatory support, policymakers can create an ecosystem that facilitates the widespread adoption of green accounting among SMEs.

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