

PROMOTING THE APPLICATION OF GREEN ACCOUNTING IN VIETNAMESE ENTERPRISES IN THE CURRENT CONTEXT

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ABSTRACT

In the context of sustainable development becoming a global trend, green accounting has emerged as an effective management tool that enables enterprises not only to measure and report financial performance but also to assess and control environmental impacts throughout their operations. In Vietnam, although the concept of green accounting has been mentioned in various studies and policy discussions, its practical implementation in enterprises remains limited. This is mainly due to the lack of a specific legal framework, insufficient awareness among managers, and the absence of well-trained accounting personnel specializing in environmental aspects. This paper aims to analyze the theoretical foundations of green accounting, assess its current application in Vietnamese enterprises, and propose several solutions to enhance its implementation, thereby contributing to the promotion of a green and sustainable economy.

Keyword: *green accounting, sustainable development, environmental reporting, corporate social responsibility, Vietnamese enterprises*

1. INTRODUCTION

In recent years, environmental protection and sustainable development have become top priorities of the international community. Organizations and enterprises are no longer solely focused on maximizing profits but are also required to minimize negative impacts on the environment and society. In this context, green accounting has emerged as an inevitable trend, serving as a bridge between economic activities and environmental responsibility. It enables businesses to evaluate the costs, benefits, and effectiveness of their environmental protection activities.

In Vietnam, the Government has issued various policies to promote green growth, such as the National Green Growth Strategy for the 2021–2030 period, with a vision to 2050, which emphasizes the role of financial and accounting instruments in resource management and pollution control. However, in practice, the implementation of green accounting in Vietnamese enterprises remains at an early stage. Most businesses do not yet have a comprehensive system for recording and reporting environmental costs and benefits, while accounting personnel have not been adequately trained to perform this task effectively.

Stemming from this reality, the article “Promoting the Application of Green Accounting in Vietnamese Enterprises” focuses on clarifying the concept, role, and content of green accounting, analyzing its current application in Vietnamese enterprises, and proposing several solutions to strengthen its implementation in the coming years. Through this, the paper aims to provide both theoretical and practical foundations for improving accounting policies, enhancing corporate social responsibility, and moving toward a green and sustainable economy in Vietnam.

2. THEORETICAL FOUNDATIONS OF GREEN ACCOUNTING

2.1. Concept and Nature of Green Accounting

Green accounting represents an innovative approach within the field of accounting, aiming to integrate environmental factors into the traditional accounting framework. According to the United Nations Division for Sustainable Development (UNSD, 2001), green accounting is defined as “the process of identifying, measuring, and analyzing the economic costs and benefits associated with environmental protection and the sustainable use of natural resources.” Similarly, the Organisation for Economic Co-operation and Development (OECD, 2005) consider green

accounting a vital tool that enables businesses to quantify the environmental impacts of their production and operational activities, thereby enhancing managerial efficiency and supporting better decision-making.

At the enterprise level, green accounting goes beyond merely recording revenues and expenses related to production activities. It also includes environmental costs such as waste treatment expenses, investments in clean technologies, and compensation for environmental damages (Jasch, 2009). This broader scope allows enterprises to assess both their economic and environmental performance more comprehensively, while increasing transparency for stakeholders, including investors, regulatory agencies, consumers, and the community.

In essence, green accounting can be regarded as an extension of both financial accounting and management accounting, where environmental information is incorporated into the decision-making process. As noted by Burritt, Schaltegger, and Zvezdov (2011), green accounting constitutes a key component of the Environmental Management Accounting (EMA) system. It plays a pivotal role in helping enterprises improve resource efficiency, mitigate environmental risks, and gain competitive advantages through sustainable business practices.

2.2. Role and Objectives of Green Accounting

Green accounting plays an essential role in promoting sustainable economic development. First and foremost, it enables enterprises to identify and control environmental costs—an element often neglected in traditional accounting systems. Research by Burritt and Schaltegger (2010) indicates that implementing green accounting helps firms reduce production costs, save energy, and simultaneously enhance corporate image and brand reputation.

Furthermore, green accounting contributes to transparency and accountability by providing reliable environmental information to stakeholders. Through environmental reports and sustainability reports, businesses can demonstrate social responsibility, thereby building trust among investors and consumers (Gray & Bebbington, 2001). At the macro level, data generated from green accounting systems supports governments in developing green national accounting frameworks (often referred to

as Green GDP Accounting), which more accurately measure real economic growth after deducting resource depletion and environmental degradation (World Bank, 2012).

The core objective of green accounting is to ensure that business decisions are not based solely on short-term financial benefits but also account for long-term environmental costs and benefits. This aligns with the “Triple Bottom Line” model of sustainable development introduced by Elkington (1997), which emphasizes the balance between three pillars: economic growth, social equity, and environmental protection.

2.3. Scope and Content of Green Accounting

According to Burritt et al. (2002), the scope of green accounting encompasses two interrelated dimensions: physical environmental accounting and monetary environmental accounting. Physical environmental accounting focuses on tracking and analyzing the flows of materials, energy, and waste generated throughout the production process. This component enables enterprises to quantify their resource consumption and waste output, thereby identifying opportunities for improving efficiency and reducing environmental impacts. In contrast, monetary environmental accounting translates these physical data into financial terms by recording environmental costs, revenues, assets, and liabilities associated with environmental protection activities. This approach provides a comprehensive view of how environmental factors affect the financial performance and sustainability of a business.

At the enterprise level, the content of green accounting is reflected through several key aspects. First, it involves the recognition and classification of environmental costs, including expenditures for wastewater treatment, emission control, solid waste management, environmental restoration, and training programs aimed at enhancing employees’ environmental awareness. Second, it includes the recording of environmental revenues and benefits, such as income from recycling activities, energy savings, or the sale of carbon credits. Third, enterprises are encouraged to evaluate and disclose environmental information transparently in their financial statements and sustainability reports, thereby strengthening corporate accountability and credibility with stakeholders (Bennett & James, 1997).

Furthermore, green accounting is closely linked with various modern environmental management tools such as Life Cycle Costing (LCC), Environmental Cost–Benefit Analysis (ECBA), and Sustainability Reporting based on the Global Reporting Initiative (GRI, 2020) standards. These tools provide a structured framework for measuring, analyzing, and reporting environmental performance throughout a product's life cycle. By integrating such tools into their accounting systems, enterprises can more accurately assess their ecological footprint, optimize the use of natural resources, and improve compliance with environmental regulations. In addition, the implementation of green accounting practices enhances a company's reputation, strengthens its competitive advantage, and supports long-term sustainable growth in both domestic and international markets.

2.4. Factors Influencing the Application of Green Accounting

The adoption of green accounting in enterprises is influenced by multiple factors, including managerial awareness, enterprise size, industry characteristics, regulatory requirements, and social pressure. Research by Qian and Burritt (2009) suggests that large-scale enterprises, particularly those operating in environmentally sensitive sectors such as mining, cement production, and energy, tend to adopt green accounting earlier. These companies face stricter environmental regulations and greater public scrutiny, which drives them to implement green accounting to ensure compliance and strengthen corporate reputation.

In developing countries, including Vietnam, one of the major barriers to green accounting implementation is the absence of a specific legal framework and detailed accounting standards. Moreover, limitations in human resource capacity, lack of reliable environmental data, and high implementation costs pose additional challenges to enterprises. These constraints often prevent small and medium-sized enterprises (SMEs) from integrating environmental considerations into their accounting systems.

Therefore, raising awareness among business leaders, providing specialized training for accountants, and establishing a comprehensive legal and institutional framework are essential prerequisites for the effective implementation of

green accounting. Once these conditions are met, green accounting will serve as a powerful tool for guiding Vietnamese enterprises toward a green economy and achieving the country's long-term goal of sustainable development.

3. THE CURRENT APPLICATION OF GREEN ACCOUNTING IN VIETNAMESE ENTERPRISES

3.1. National Policy Framework and Its Impact on Enterprises

In recent years, Vietnam has introduced several strategic policies to promote green growth and shift the national economy toward sustainability. A significant milestone is Decision No. 1658/QĐ-TTg dated October 1, 2021 by the Prime Minister, which approved the National Green Growth Strategy for the 2021–2030 period with a vision to 2050. This policy serves as a fundamental framework that encourages enterprises to adopt environmental management tools, including green accounting. The strategy defines specific objectives for emission reduction, efficient resource use, and green finance development, creating both direct and indirect pressure on enterprises to become more transparent about their environmental impacts in production and business activities.

However, despite the existence of a national policy foundation, the transition from macro-level orientation to technical regulations and detailed accounting standards for recording environmental costs and preparing green accounting reports remains limited. This situation causes difficulties, particularly for small and medium-sized enterprises, in developing and implementing systematic environmental accounting processes. Several domestic analyses have pointed out that the absence of mandatory standards, detailed technical guidance, and a clear legal framework is a major obstacle to the effective implementation of green accounting.

3.2. Degree of Green Accounting Adoption by Enterprise Size and Industry

Studies and surveys show that the adoption of green accounting in Vietnam is still modest and varies significantly by enterprise size and industry characteristics. Research and professional articles indicate that large corporations, listed companies, and enterprises operating in sectors with high environmental impact such as mining, steel, cement, chemicals, and energy are among the first

to apply green accounting practices. These businesses often publish Sustainability Reports or Environmental, Social and Governance (ESG) Reports that present environmental indicators, compliance costs, and emission reduction efforts.

In contrast, most small and medium-sized enterprises have not yet adopted green accounting in a systematic manner due to limited resources, high implementation costs, and a lack of specialized knowledge. Domestic studies estimate that the adoption rate among SMEs remains relatively low, although specific figures differ depending on the method of data collection and analysis. Therefore, the current situation in Vietnam reflects a pattern of selective adoption where large corporations are the main practitioners while the majority of smaller enterprises have not yet integrated green accounting into their management systems.

3.3. Forms of Implementation and Reporting Practices

In practice, Vietnamese enterprises currently apply green accounting in two main ways. The first is through the voluntary disclosure of environmental information in sustainability reports or annual reports that include ESG sections. The second involves integrating environmental elements into internal management accounting systems, such as tracking waste treatment costs, monitoring energy consumption, or calculating life-cycle costs for key products.

Many large corporations and listed companies have begun publishing sustainability reports containing detailed information about environmental performance, emission reduction targets, and energy-saving initiatives. Examples include corporations such as Vinamilk, Vingroup, Petrolimex, Toyota Vietnam, and several banks such as SHB, which have issued sustainability or ESG reports in recent years. These reports usually provide data on energy consumption, emissions, waste recycling ratios, and environmental risk management initiatives. However, the level of detail and data standardization still varies widely across enterprises.

Despite these efforts, only a few enterprises have integrated monetary environmental accounting fully into their official financial statements in accordance with standardized accounting principles. Most environmental disclosures

remain descriptive and voluntary, mainly used to demonstrate sustainability efforts rather than to serve as formal components of financial reporting systems.

3.4. Key Barriers to Implementation

Several academic studies and professional reports have identified key barriers that hinder the implementation of green accounting in Vietnam. One of the most significant challenges is the lack of a clear legal and technical framework. Although Vietnam has developed national strategies that promote green growth, there are still no mandatory environmental accounting standards or detailed technical guidelines to help enterprises measure and record environmental costs consistently. This absence of regulation leads to inconsistency and fragmentation in data collection and reporting practices across different sectors.

Another major barrier is the limited professional expertise and shortage of qualified human resources. Most accountants in Vietnam are trained under traditional financial accounting systems and therefore lack the necessary knowledge and technical skills related to physical and monetary environmental accounting. Without proper training and capacity building, it becomes difficult for enterprises to integrate environmental aspects into their accounting systems effectively.

High implementation costs also pose a significant obstacle. Establishing systems for environmental measurement, monitoring, software development, and data management requires substantial investment. This challenge is particularly serious for small and medium-sized enterprises, which often operate with limited financial capacity and may perceive green accounting as an unnecessary expense rather than a long-term investment.

In addition, the absence of mandatory requirements from regulatory authorities or major customers limits the motivation for enterprises to adopt green accounting practices. Since most current environmental reporting regulations remain voluntary, businesses often implement such initiatives only when compelled by external pressures from investors, financial institutions, or international supply chain partners.

Finally, poor data standardization and limited comparability among enterprises also hinder

progress. The lack of uniform indicators and standardized reporting formats makes it difficult to assess and compare environmental performance across industries. This limitation reduces the transparency and reliability of environmental information, weakening the role of green accounting as a tool for sustainable business management.

3.5. Positive Trends and Emerging Practices

Despite the above challenges, there are encouraging signs. Many large enterprises and banks have started integrating ESG criteria into their business strategies and risk management systems. Some have begun disclosing specific data on emissions, energy use, and phased reduction targets. Sustainability reports from Toyota Vietnam, PVCFC, SHB, and several other companies show clear improvement in both the quality of information and the number of enterprises willing to increase transparency regarding their environmental performance.

These initiatives not only help enterprises comply with policy goals but also enhance their ability to access green finance, attract environmentally conscious consumers, and explore new market opportunities. Furthermore, the growing use of digital technologies and big data in resource management, along with support from international organizations and development projects, creates new opportunities for Vietnamese enterprises to strengthen their environmental accounting and ESG reporting capacity. However, expanding these practices across the broader economy will require time, sustained investment in training, and stronger policy coordination among government agencies, enterprises, and society.

4. SOLUTIONS TO ENHANCE THE APPLICATION OF GREEN ACCOUNTING IN VIETNAMESE ENTERPRISES

In the context of Vietnam promoting its National Green Growth Strategy and transitioning toward a circular economy model, strengthening the application of green accounting in enterprises has become an urgent requirement. Green accounting is not only a tool for reflecting environmental costs and benefits but also a foundation for improving corporate competitiveness, attracting investment, and fulfilling social responsibility. However, to maximize its effectiveness, a comprehensive system of solutions is needed,

ranging from policy formulation to enterprise-level practices.

Firstly, it is essential to raise awareness among business leaders and accounting personnel about the importance of green accounting. Many enterprises still perceive environmental protection activities as compulsory expenses rather than as long-term investments for sustainable development. Therefore, communication, training, and awareness-raising about the benefits of green accounting should be strengthened. Workshops, professional training courses in environmental accounting, and specialized programs in green accounting should be organized regularly to help managers and accountants better understand the role of recording, measuring, and reporting environmental indicators.

Secondly, it is necessary to improve the legal framework and professional guidelines for green accounting. Currently, Vietnam lacks specific environmental accounting standards, which creates difficulties for enterprises in implementation. The Ministry of Finance and related authorities should develop and issue a green accounting framework appropriate to Vietnam's conditions, drawing on international models such as the Global Reporting Initiative (GRI) and the IFRS Sustainability Disclosure Standards (IFRS S1 and S2). Furthermore, detailed guidance on how to record environmental costs, account for green investments, and present environmental information in financial statements should be issued to help enterprises apply these practices effectively.

Thirdly, green accounting should be integrated into corporate management strategies. Green accounting is not merely about recording numbers; it also supports management decision-making. Enterprises should link green accounting with internal management systems to evaluate environmental performance alongside financial results. For instance, when investing in energy-efficient production lines, accountants should be able to measure investment costs, emission reductions, energy savings, and their impact on profitability. Integrating environmental data into management systems helps enterprises identify risks and opportunities related to sustainability, thereby enhancing their long-term competitiveness.

Fourthly, it is vital to promote the application of information technology and digital transformation in green accounting. The use of smart accounting software, Enterprise Resource Planning (ERP) systems, and Big Data technologies enables enterprises to automate the collection, analysis, and reporting of environmental information. Technology also facilitates data integration across departments such as production, energy, and waste management, ensuring the accuracy and timeliness of green accounting data. In the era of digital transformation, this approach is crucial to ensuring that green accounting is both efficient and transparent to investors and regulators.

Fifthly, the role of government agencies, professional associations, and social organizations in promoting green accounting implementation should be strengthened. The government should adopt incentive policies such as tax reductions, financial support for green investment projects, and mandatory environmental disclosure for listed companies and those with significant environmental impacts. Professional associations such as the Vietnam Association of Accountants and Auditors (VAA) and the Vietnam Association of Certified Public Accountants (VACPA) should serve as key intermediaries for training, consulting, and sharing international best practices in green accounting. Meanwhile, social organizations and the media should actively participate in monitoring, communicating, and encouraging transparent and effective adoption of green accounting by enterprises.

Sixthly, it is important to build cooperative mechanisms among enterprises, government bodies, and international organizations in the implementation of green accounting. Collaboration with organizations such as UNDP, UNEP, the World Bank, and ADB can help Vietnam access international tools, models, and experiences in green accounting. Such cooperation can also support enterprises in staff training, technological investment, and strengthening environmental management capacity.

Finally, developing human resources in green accounting is a key factor to ensure sustainable implementation. Universities and research institutes should integrate green accounting into their curricula, combining theoretical teaching with practical simulations and enterprise partnerships. At the same time, short-term training programs should be offered for practicing

accountants to update their knowledge on sustainability reporting standards, environmental cost accounting, and the use of digital technologies in managing green information.

5. CONCLUSION

Green accounting is an inevitable trend in the context of globalization and the transition toward sustainable development. Its application enables enterprises to measure, control, and report environmental impacts in business operations while serving as a strategic decision-making tool that balances economic efficiency with social responsibility. For Vietnam, as the economy deepens its global integration and fulfills international emission reduction commitments, the implementation of green accounting has become an urgent task that enhances both competitiveness and corporate reputation in the eyes of investors and the community. However, the current practice of green accounting in Vietnamese enterprises remains limited in terms of awareness, legal framework, and practical capacity. Many companies have yet to integrate environmental factors into their accounting systems, lack precise tools to measure environmental costs and benefits, and face shortages of skilled personnel in this field. This situation calls for long-term and synchronized solutions from institutional reform and policy support to human capacity development and technological innovation. In the coming years, strengthening the application of green accounting should be part of enterprises' overall development strategies, aligned with Vietnam's national green growth objectives. The government should provide clear incentives, detailed guidance, and strict supervision of environmental information disclosure; professional associations should play a vital role in training, consulting, and knowledge dissemination; and enterprises themselves must proactively invest in resources, innovate their management mindset, and integrate green accounting into internal control systems. When these elements are harmoniously combined, green accounting will truly become an effective tool that helps Vietnamese enterprises achieve sustainable development, enhance brand value, and contribute positively to the country's green economy objectives.

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