

Sustainable Business Management Through Green Finance, Green Marketing, and Green Accounting: Strategies for Organizational Growth and Environmental Responsibility

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ABSTRACT:

The linkage of financial management decisions, market strategies, and performance measures to the environment is gaining in importance in sustainable business management. This comprehensive review examines the roles of green finance, green marketing, and green accounting as interconnected mechanisms for supporting organizational growth and sustainability. A narrative review approach was used to synthesize relevant literature on sustainable business models, green investment, environmentally responsible marketing, environmental management accounting, ESG disclosure, and digital sustainability. The review finds that green finance enables capital mobilization for low-carbon technologies, cleaner production, and resource-efficient innovation. Green marketing converts credible environmental performance into consumer trust, brand differentiation, and

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competitive advantage, while green accounting provides the information infrastructure needed to measure environmental costs, assess carbon performance, and strengthen managerial accountability. Their integration creates a coordinated sustainability architecture that links investment, market value, and environmental performance. The review also

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identifies persistent challenges, including fragmented regulation, inconsistent reporting standards, weak impact measurement, greenwashing, and limited evidence from emerging economies. Digital technologies such as fintech, artificial intelligence, blockchain, and data analytics can enhance traceability, access, and decision quality, although their effectiveness depends on sound governance and reliable data. The study contributes to the gap by combining three thematic areas into an integrated perspective, and by developing a research agenda which identifies a set of areas for future research; areas that include longitudinal analysis, crosscountry comparison, impact metrics that can be standardized, and technology-based sustainable management.

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1. Introduction

The management of businesses is no longer only about profit and efficiency, but it is more of a focus on the balance between the economic, social and environmental aspects of business. The organizations are required to create longterm value and meet the needs of stakeholders, regulatory requirements and global sustainability issues. In order to make sustainable business management a strategy, it is necessary to make environmental responsibility an integral part of the management decision-making and organizational processes (Erasmus et al., 2019). Sustainability is an important consideration for the design of business strategies, resource allocation and business performance. Compliance is no longer the only reason for tackling the environment, but also a way to innovate, build resilience and gain a competitive advantage. It is a reflection of a new business paradigm that incorporates sustainability into business success and not as an extra corporate

responsibility measure (Bergquist, 2017). The world faces environmental issues such as climate change, dwindling resources and growing energy needs, which have made it more urgent than ever to develop new business models that are sustainable and contribute to sustainable development. The Sustainable Development Goals (SDGs) will need an integrated approach of governments, financial institutions and companies for a faster transition to low-carbon and resource-efficient economies. For this reason, sustainability has become a key factor that is considered in strategic planning in any industry (Spataru et al., 2024).

Green finance, one of the new methods that are being used to help manage sustainable businesses, has received a lot of attention for channeling investment into environmentally responsible investments and helping to transition towards cleaner production systems. The integration of green finance within financial mechanisms like green bonds, sustainable investments and climate

finance provides an important impetus for sustainable transformation (ST) to help organizations implement environmental goals while still sustaining economic growth (Sachs et al., 2019a). Increased interest in the circular economy principles and investments in renewables, especially in emerging economies, have been followed by the growth of Green Finance. Funding for sustainable projects provides incentives for projects to be more environmentally friendly, use resources more efficiently, and contribute to the national and global sustainability goals. The emergence of such innovations signals how financial innovation is increasingly an integral tool for the growth of business towards a more environmentally responsible direction (Singh et al., 2025).

In addition to financial measures, green marketing has emerged as a marketing tool that allows organizations to establish a connection with consumers who are more aware of the value of the environment and communicate it in their marketing messages. When supported by a sophisticated digital toolset like AI, which can boost marketing efforts and decision-making, an effective green marketing strategy can lead to better organizational performance, impacting the organization's customers' perceptions as well (Al-Ahmed et al., 2025). Sustainable business management is further supported by the concept of 'green accounting', which involves considering environmental costs, the use of resources and the performance of the organization from the point of view of sustainability. By incorporating information about the environment into financial reporting, managers can make informed and strategic decisions and enhance transparency and accountability. Green finance, green marketing and green accounting are three pillars that are interconnected and can contribute to the environment-friendly growth of organizations and their long-term competitiveness (Bergquist, 2019). Although research on green finance, green marketing and green accounting is a vast field of study, few researchers have tried to analyze how the three components interact in the process of sustainable business management. Moreover, the current body of literature has mainly focused on

the organizational level without providing an adequate understanding of the strategic synergies between financial sustainability, environmentally conscious marketing and sustainability approach to accounting in organizations. While sustainability is now in a new stage of transformation, where all aspects of sustainability work together, there are limited examples of sustainability assessments that combine these different sustainability perspectives into a single managerial tool (Hoffman, 2018). Moreover, the increasing amount of sustainability research calls for systematic evidence synthesis that is able to identify the research themes, conceptual evolution and future research priorities in these complementary fields (Easterby-Smith et al., 2021).

This review will critically summarize the literature on green finance, green marketing and green accounting fields and analyze the impacts of each field on sustainable business management. The research aims are to build a holistic understanding of how these strategic approaches can contribute to organizational growth and environmental responsibility; to pinpoint the key research trends and gaps in the current research; and to suggest future directions of research to advance the body of knowledge and to help practitioners.

2. Review Methodology

The study used the method of comprehensive narrative review to integrate the research work of the fields of green finance, green marketing, green accounting and sustainable business management. The peer-reviewed journal articles, books and scholarly chapters were selected by conducting relevant searches on the academic databases by combining the following keywords: sustainable business, green finance, green marketing, environmental accounting, ESG, organizational growth, and environmental responsibility. Studies were included if they were directly related to the conceptual, strategic or performance aspects of these themes. Sources that were not deemed to satisfy the clear need for the specific review goals were eliminated. Thematic analysis was used to analyse the selected literature and identify key concepts,

theories, strategic linkages, implementation challenges and gaps in research. The findings were then categorized according to the three green management dimensions, namely organization, economy and ecology, into integrated thematic sections to explain the interaction of the dimensions in the sustainable development of the organization and in the quest for environmental responsibility.

3. Theoretical Foundations of Sustainable Business Management

However, sustainable business management has become, in recent years, a strategic management paradigm that incorporates not only the economic aspect but also the environmental and social aspects, creating a sustainable organization. Sustainability is not only a compliance requirement or a business gesture of goodwill in modern organizations, but a part of the business strategy, the way the business is run, and the way it creates value. This has led to rethinking the business model to generate longterm value and tackle environmental issues, in accordance with the stakeholders' expectations to make sustainability a core part of organization success (Nosratabadi et al., 2019). The concept of sustainable business management is built on a theoretical base that recognizes that a company's development is grounded in balancing the business objectives with an attitude of sustainable environment and society. Sustainable management is more than just optimizing resources; it also involves making governance systems, innovation capabilities and decisionmaking processes that generate long-term value for business and for society. In doing so, it will reinforce the adaptability of organizations and increase the ability to respond to increasingly complex sustainability issues in the dynamic nature of the business environment (Singh, 2019). Stakeholder Theory is a basic framework for interpreting sustainable business management by suggesting that the organizations are responsible to a wide range of stakeholders on whose interests depend the legitimacy and long-term performance of the organizations. In other words, sustainable business practices demand that businesses generate value for shareholders

and also customers, employees, suppliers, investors, governments, communities and future generations. Considering the expectations of the stakeholders in the strategic decision-making process creates trust, builds the corporate image, and contributes to sustainable value creation within the business ecosystem (Mahajan et al., 2023). Another extension of the Triple Bottom Line (TBL) framework adds a social pillar to the economic and environmental pillars and is a call to action to achieve economic, environmental, and social goals. From this view, an organization's effectiveness is measured by the balanced generation of profits, the maintenance of nature's ecosystems, and the enhancement of social welfare. The TBL framework has since emerged as one of the most influential sustainability paradigms that seek to enable organizations to strive for integrated performance in addition to the traditional financial measures (Molina & Rajagopal, 2023).

The Sustainable competitive advantage, as described in the Resource-Based View (RBV), is achieved by the possession and the efficient use of valuable resources and capabilities within an organization. In recent years, the theory has evolved to acknowledge that the competencies of sustainability, such as green innovation, environmental knowledge, technological skills and responsible leadership, can be regarded as strategic resources that are hard for the competition to imitate. The capabilities allow organizations to increase their operational efficiency, to be agile in response to changes in the market, and to consolidate their long-term competitiveness in the markets that are sustainability-focused (Helfat et al., 2023). The Natural Resource-Based View (NRBV) builds on the Resource-Based View by explicitly adding environmental resources to strategic management theory. It believes that the capabilities that focus on pollution prevention, product stewardship, sustainable resource use and the development of clean technology are major sources of competitive advantage. Indeed, organizations that manage environmental resources well not only minimize ecological impacts, but also make them more efficient,

innovative and economically valuable in the long term, thus consolidating the strategic role of environmental sustainability in the management of organizations (McDougall et al., 2019). The Institutional Theory is an explanation of why organizations are using sustainable business practices in response to pressure that comes from regulatory frameworks, industry standards, societal expectations, and demands from stakeholders. Institutional environments can shape the organizational behaviour of firms through the promotion of conformity to prevailing sustainable governance norms and expectations, and enable firms to gain legitimacy and sustain their competitive positioning. This means that sustainable business management is not only based on strategic internal capacities but

governance & social responsibility, while circular economy principles involve the use of regenerative production systems, principles of resource efficiency and waste minimization. These complementary perspectives inspire organizations to evolve from linear business models to regenerative systems that can help create sustainable value and minimize environmental damage (Kandpal et al., 2024). These theoretical approaches provide a solid theoretical foundation for the strategic application of green finance, green marketing and green accounting to sustainable management of business. These multidimensional performance targets are introduced in the Triple Bottom Line, problems of sustainable competitive advantage are discussed in the RBV

Table 1. Evolution of Green Business Strategies in Sustainable Business Management

Evolution Stage	Strategic Focus	Dominant Business Orientation	Organizational Outcome
Traditional Business Management	Profit maximization	Financial performance	Short-term competitiveness
Environmental Compliance	Pollution control and regulatory compliance	Risk reduction	Legal conformity
Corporate Sustainability	Environmental and social responsibility	Stakeholder value creation	Sustainable operations
Green Business Management	Green finance, green marketing and green accounting	Integrated sustainability strategy	Long-term organizational resilience
Sustainable Value Creation	ESG, circular economy and digital sustainability	Innovation-driven growth	Sustainable competitive advantage

4. Green Finance as a Strategic Driver of Sustainable Business

finance in the service of sustainable development also on the external institutional context in which organizations operate (Kauppi, 2022).

The new concepts of “ESG” (Environmental, Social and Governance) and the circular economy have also contributed to the theoretical literature on sustainable business management. ESG promotes strategic decision-making taking into account environmental performance, ethical

and NRBV, and effects of external legitimacy are discussed in the Institutional Theory, all of which are included in sustainable business models with an ESG focus. Theoretical synthesis provides a basis for the study of the impact of green management practices on organizational development and environmental responsibility as a whole (Goni et al., 2021).

All of these theories have shown that managing for sustainability is not a series of individual "sustainable initiatives" but is a multidimensional strategic approach to business management. They provide a solid basis to understand the potential of how organizations can be competitive, create value for stakeholders and at the same time contribute to environmental sustainability within integrated green business strategies. It can be seen that the development of sustainable business management has progressed from isolated environmental initiatives to integrated green management systems (Table 1). has become green finance. It is the assignment of financial resources to investment, project and business activities that produce positive environmental effects and contribute to the economy's development. In contrast to conventional finance, green finance takes environmental factors into account in order to enable companies to make environmental considerations part of their long-term business strategies. This transformation has made the financial value chain a key enabler of sustainable business management and low-carbon economic development (Fu et al., 2023). The fast development of green finance has shown that financial institutions are increasingly recognized as key drivers in tackling climate change and environmental degradation. The financing of environmentally sustainable projects is gaining momentum in banks, capital markets, governments and institutional investors, in order to implement the UN Sustainable Development Goals agenda through finance. Financial markets are constantly changing, and green finance is the key link between economic development and environmental responsibility, which allows companies to make sustainable investments without sacrificing economic performance (Berrou et al., 2019).

Green financial instruments are the operational pillars of sustainable financing and offer organizations specific funding instruments for environmentally friendly projects. Green bonds, green loans, financing linked to sustainability goals, environmental funds, and climate-oriented investment portfolios enable companies to invest in renewable energies, cleaner production

processes, sustainable infrastructure and resource-efficient innovations. They reduce the price of financing sustainable investments and encourage organizations to incorporate environmentally responsible production systems and technologies into their operations, thereby improving their efficiency and benefiting the environment (Koval et al., 2022). Green finance is not only important for organizational investment decisions but also for sustainable development. Green finance helps to channel investments into the green economy, contribute to achieving climate targets, drive the shift towards renewable energy systems and enhance energy security. Green finance thus plays a crucial role in the implementation of sustainability policies and in enhancing economic resilience and is an essential pillar of national and global sustainable development strategies (Sachs et al., 2019b).

Although the potential of green finance is high, there are some structural and operational limitations to its effectiveness. Lack of regulatory harmonization, transparency, problems in measuring environmental impacts and worries about 'greenwashing' remain challenges to investor confidence and to the effectiveness of green financial markets. Moreover, the lack of harmonization and governance in sustainability taxonomies and reporting frameworks further impeded environmental performance assessments, making it more difficult to compare projects and organizations. Additionally, inequalities in sustainability taxonomies and reporting standards made it more challenging to assess environmental performance across projects and organizations (Gilchrist et al., 2021). The last few developments suggest that sustainable finance is getting more entangled in the general climate governance framework. All measures are complementary and can be applied to support the carbon neutrality targets by focusing investments on low-carbon technologies and low-carbon business models, such as carbon pricing, environmental, social and governance (ESG) investment approaches and green bonds. This integrated financial ecosystem enables companies to make investment decisions

more aligned with their long-term climate targets and increase their competitiveness in sustainability-minded markets (Lin & Wang, 2025). Secondly, the growing prominence of green financial instruments can be attributed to the growing confidence in them among investors. The growing awareness of potential environmental dangers and benefits has made green investments more attractive to institutional and private investors, who seek returns on their investment and a positive environmental impact. As people are more and more interested in sustainable investment products, green financial instruments are expected to play an increasingly crucial role in supporting business innovation, in the responsible allocation of capital and in

In this sense, green finance has developed from a marginal financing method to a key enabler for sustainable change in business. It can open the door for funds, promote green innovation and initiate green investments, thus becoming a key part of sustainable business management. With proper support from good governance, communication, and sustainability measures, green finance can help companies grow sustainably and meaningfully while also playing a critical role in improving environmental protection and climate resilience. Green finance is illustrated in Figure 1, which shows the conceptual pathway through which green finance can act as a mobiliser for financial resources into sustainable business transformation, which in

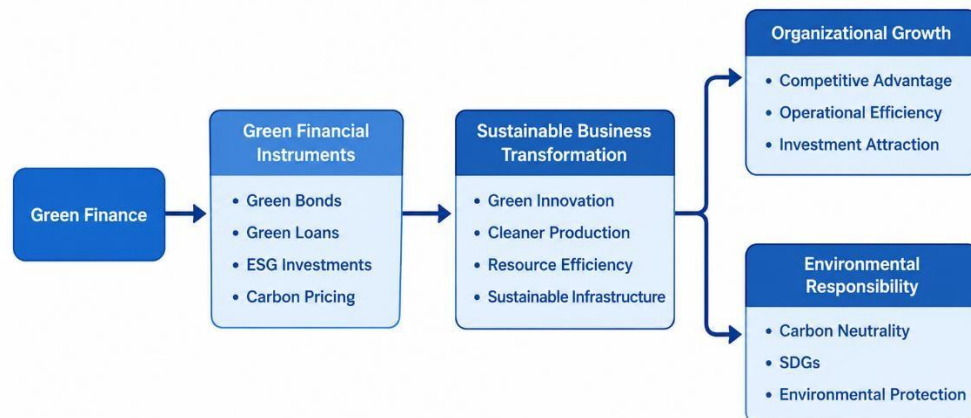


Figure 1. Green finance as a strategic driver of sustainable business transformation

stimulating the economic growth of the environment (Shaydurova et al., 2018).

5. Green Marketing for Sustainable Competitive Advantage

Green marketing has now become an integrated business strategy, which incorporates environmental concerns into the product, its price, promotion, distribution and customer interaction. Green marketing not only aims at increasing the market for environment-friendly products, but also aims at ensuring that the organization's strategies are in line with the sustainability goals and that value is added for the organization and the consumers. Incorporating environmental responsibility into the marketing process can improve customer trust, increase competitive advantage and help achieve sustainable development (Dangelico & Vocalelli, 2017). The key value of green marketing is to

turn creates organizational growth and environmental responsibility.

bring sustainability as a differentiation in the market. More and more companies realize that the environmentally friendly brand, transparent communication and environmentally responsible product policies meet not only the requirements of law and society, but also bring benefits to the long-term competitiveness of companies. Green marketing needs to be authentic, innovative, and part of a company's DNA and not just a marketing stunt (Ottman, 2017).

Theoretical research on "green marketing" highlights that there are several psychological, social and behavioral factors impacting consumers' reaction towards environmentally responsible products. The degree of consumer environmental awareness, perceived value, consumer trust and personal beliefs are crucial

factors that influence consumer buying decisions, and marketers need to be cognizant of consumer behavior when developing sustainable marketing strategies. These theories can be used as a basis to design marketing strategies to promote eco-friendly consumption and reinforce customer relationships (Groening et al., 2018). Green marketing strategies have proved to have a positive impact on consumers' green purchase intent by building up their green brand image and strengthening their pro-environmental beliefs. Frequent communications of credible sustainability statements are likely to build positive brand value, improve customer satisfaction, and encourage customers to purchase more environmentally friendly products. Green branding is becoming an increasingly crucial factor in the organization's competitiveness and market performance in the context of sustainability as an important purchasing criterion (Majeed et al., 2022).

Eco-labels and green advertising are indispensable communication means of decreasing information asymmetry between businesses and consumers. These mechanisms enable the dissemination of reliable information on environmental performance and enhance consumer confidence in sustainable products, improving green brand equity. In this regard, good environmental communication can help organizations distinguish their product/services and help stimulate the buy-in of customers in a growing sustainability-aware market (NguyenViet, 2022). While being a strategic means, ecolabels can only be effective if they are transparent, credible and easy to understand by consumers. Environmental claims that are not informative and/or unsound may lead to confusion and doubt, and thus be counterproductive to successful environmental marketing campaigns. Hence, the credibility of certification systems and environmental labelling is still relevant to ensure consumers' belief in green marketing and its importance for sustainable consumption (Sharma & Kushwaha, 2019). Communication is not limited to only one component of green marketing; green supply chain management is another component of it.

Environmental issues are more and more recognized, and organizations embed environmental issues in procurement, production, logistics and distribution processes to minimize the environmental effects throughout the life cycle of the product. It is not only about being more efficient with the operations and better utilizing resources, but also about building trust in green marketing statements, as sustainability can be shown throughout the value chain (Tseng et al., 2019).

Digital business has expanded the scope and scope of green marketing. Digital business has widened the scope and scope of the green marketing. There has been a huge growth in the reach and impact of green marketing due to the digital transformation of business. Digital platforms, social media, artificial intelligence, and data analytics can help organizations customize their sustainability messages, engage consumers more effectively, and monitor evolving consumer preferences in the field. These technological advancements have helped to expand the capacity of green marketing to connect and respond to their customers and enhanced the communication between the organizations and green-conscious consumers (Alkhatib et al., 2023). Sustainability marketing has become high in frequency and so has been concern of greenwashing, which is defined as exaggeration and/or misrepresentation of its environmental impact. These decisions have the effect of undermining the trust of the consumer in the market, hindering competition and eventually consumer trust in real sustainability efforts. For the reduction of greenwashing, there is a need for clear accountability for the company's communication and marketing, verifiable environmental claims, and transparent reporting of sustainability, along with robust governance mechanisms (Persakis et al., 2025).

Green marketing is no longer a promotional tool but also a tool that creates sustainable values, involves stakeholders and differentiates the company. It is a mix of the use of 'real world' environmental practices, good communication, responsible supply chain and innovation through digital solutions. Green marketing can help

organizations increase their competitive advantage as well as promote environmentally friendly consumption and contribute to a more sustainable approach. The effects of green marketing strategies on consumer responses, which in turn reinforce competitive edge and

promote sustainable development in the system, are depicted in Figure 2.



Figure 2. Conceptual pathway linking green marketing strategies to sustainable competitive advantage

6. Green Accounting and Sustainability Performance Measurement

Green accounting has become a basic and integral part of the sustainable management of businesses by creating a new dimension to accounting, namely the incorporation into the assessment of business performance of the costs of business activity, its ecological impacts and the use of resources. Green accounting differs from conventional accounting in its focus on the importance of considering the environmental impacts of businesses alongside their economic ones, as it aims to achieve long-term sustainable success in business. Environmental accounting takes a more holistic approach to assessing the costs & benefits of organizations, making them more effective at measuring the true costs and benefits of their operations and thereby contributing to sustainable decision-making and corporate accountability (Lako, 2018). The main goal of green accounting is to identify, measure, record and disclose information about the environment that affects the performance of an organization. This encompasses costs from pollution prevention, waste management, resource usage, carbon emissions, environmental rehabilitation and sustainable production programs. By integrating these environmental expenses into financial reporting, organizations

can enhance the transparency of costs, make better use of resources and more effectively assess the cost of sustainability programs. Therefore, the green accounting system gives a manager a wider perspective about organizational performance than traditional financial accounting

(Sadiku et al., 2021).

Environmental Management Accounting (EMA) is an active part of green accounting that includes the incorporation of physical and monetary environmental information in the operational processes of management. In the last 20 years, EMA has grown from an accounting exercise focused on compliance to a strategic management tool to promote cleaner production, resource efficiency and the continuous improvement of the environment. EMA provides a systematic way to track material flows, energy usage, waste production, and environmentally related expenditures, which allows organizations to pinpoint inefficiencies, minimize environmental costs, and boost financial and environmental results (Burritt et al., 2023). In recent years, sustainability reporting has become a priority, with companies increasingly becoming transparent about their strategies and declarations of their ESG. By providing information on environmental risks, governance practices, and social impacts, ESG reporting helps organizations communicate their sustainability performance to investors, regulators, customers, and other stakeholders. Good ESG communication helps build company credibility and stakeholder trust, while aiding responsible investment decisions and fostering long-term

accountability and sustainable value creation (Bednářová, 2025). The creation of the International Sustainability Standards Board (ISSB) is an important step in the harmonization of sustainability reporting at a global level. Standardized reporting frameworks make sustainability disclosures easier to understand and make more sense, as they increase the level of comparability, consistency and reliability of sustainability disclosures across industry and jurisdictions, which helps investors and other stakeholders to assess sustainability-related risks and opportunities more effectively. The adoption of the internationally endorsed reporting standards also helps to align financial reporting with sustainability performance, which contributes to the usefulness of and increases the transparency of corporate reports for strategic and investment decision-making (Rimmel et al., 2025).

Carbon accounting and environmental cost accounting are indispensable components of green accounting as they provide the quantification of the environmental impacts of the organizational activities and their representation in measurable information in financial terms. Carbon accounting helps in the monitoring and management of GHG emissions from organizational activities and value chains,

with the regulations, but also in helping to make managerial decisions in many aspects of an organization, in a well-informed manner. Environmental accounting information helps managers make investment decisions, budgeting decisions, design decisions, operational decisions, risk decisions and performance decisions when taking environmental factors into account in decision making. The inculcation of environmental management accounting into strategic decision-making will not only help organizations to be resilient but also to be efficient in their use of resources and to gain a competitive advantage for sustainable business models (Swalih et al., 2024).

Green accounting has become a strategic management system and is now associated with the management of organizational performance and business decision-making with a view to environmental responsibility. By combining environmental management accounting, sustainability reporting, and carbon accounting, companies can enhance transparency, optimize their resource use, and facilitate sustainable development, as well as respond to investors, regulators, and society's expectations. Figure 3 provides a summary of the process that turns environmental information into standardized reporting, strategic decision making and



Figure 3. Green accounting framework for sustainability performance measurement and strategic decision-making

while environmental cost accounting identifies the monetary consequences of emissions, waste, resource consumption, pollution control, and environmental compliance. They can support organizations in establishing measurable sustainability goals, analyzing the value of climate-related investments in the environment and increasing transparency concerning climate-related actions and effects (Schaltegger & Burritt, 2017). The merit and significance of Green Accounting is not only the compliance

improved sustainability performance.

7. Integrating Green Finance, Green Marketing, and Green Accounting for Sustainable Organizational Growth

Rather than individual sustainability projects, it is necessary to integrate complementary green management practices that will further sustainable organizational growth. These three forms of green finance, green marketing and green accounting form a strategic ecosystem that

facilitates financial resources mobilization, sustainable market value creation and measurement of environmental performance. They are integrated to build the capacity of an organization, as they tie investments, engagement with stakeholders, and measurement of performance to long-term sustainability goals, which improves business resilience and its competitive edge (Singh et al., 2022). Green finance and green accounting are closely related as sustainable financial investments depend on transparent and reliable information on the environment to assess the risk, returns, and the value created over the long term. Green accounting is a source of environmental performance information on which financing decisions can be made, and green finance is a source of financing for sustainable projects and technologies. There is a reinforcing relationship between this, which leads to better institutional legitimacy, higher investor confidence and credibility of business strategies aimed at sustainability (Ng, 2018).

Green finance also supports carbon accounting, thereby further fostering the sustainability of the organization, as the financial investment is combined with measurable environmental results. Carbon accounting helps companies measure GHG emissions and the environmental impact of green investments, so that financial resources are optimally used for emissions reduction and climate mitigation projects. This is an evidence-based practice that enhances accountability and provides sustainability investments with both environmental and economic benefits (Wu, 2024). Green finance and green accounting have been increasingly converging to form an integrated sustainability management system due to policy support and institutional coordination. Environmental accounting information is becoming increasingly standardized, and financial accounting frameworks are being developed to meet the growing demand for green financing by financial institutions and for the assessment of the sustainability performance of funded projects. This joint development process increases transparency, improves resource allocation, and

promotes better implementation of sustainable business practices by sector (Yang et al., 2023).

Green accounting is also an ingredient of green marketing, as it also gives credible environmental information that enables transparent sustainability communication. Environmental performance data provide reliable evidence to support green claims and help to minimize information asymmetry and build consumer confidence in environmentally responsible products and services. Hence, the organizations that make environmental accounting a part of their sustainability marketing are better equipped to create a good brand image, build trust among stakeholders, and enhance environmental and financial performance (Khan & Gupta, 2024). The digital transformation has proven to be a strong lever to combine green finance, green marketing and green accounting. Digital banking services, intelligent financing services, and realtime sustainability assessment through financial technologies make sustainable investment more accessible and efficient, enhancing the capability of green financial services. These innovations help to advance the overall transition towards sustainable business models and contribute to the Sustainable Development Goals (SDGs) (Gupta et al., 2025).

On top of that, the innovations of Fintech add to this holistic system by enhancing the transparency, accessibility, and efficiency of sustainable financial systems. Blockchain, Artificial Intelligence, Digital payment systems and Smart financial Platforms are all technologies that will facilitate the management of environmental data, help in making sustainable investment decisions and make environmental financial products more accessible to stakeholders. The digital capabilities enable more linkages between measuring environmental performance, business decision-making and sustainable business operations (Magar, 2025). When green finance, green marketing and green accounting are integrated and succeed well, it can promote organizational transition towards circular economy models, digitalization and carbon neutrality. Those that incorporate

sustainable financing, reporting and transparency, and responsible market interactions are more likely to be able to optimize the use of resources, limit environmental impact, innovate, and create value for their stakeholders. Such a holistic approach to sustainability makes sustainability no longer just an operational goal, but a strategic competency for the development of an organization in a resilient and environmentally responsible way (Zhang et al., 2025).

Green Finance, Green Marketing and Green Accounting are thus combined in a comprehensive framework of sustainability, which synchronizes the principles of finance, the environment and value creation. These interrelated practices can help organizations enhance competitiveness, sustain their growth through better sustainability performance and work towards global environmental and climate goals. The complementary role between the three dimensions of green management is summarized in Table 2, in which each of the three dimensions plays its role in the sustainability of the organizations and also strengthens the rest.

8. Research Gaps and Future Research Agenda

capital into tangible environmental benefits and continuous and meaningful value creation for the

Table 2. Complementary Strategic Roles of Green Finance, Green Marketing, and Green Accounting

Strategic Dimension	Green Finance	Green Marketing	Green Accounting
Strategic objective	Finance environmentally responsible investments	Create sustainable customer value	Measure environmental performance
Primary organizational function	Capital allocation	Market positioning	Performance measurement
Major managerial focus	Green investment decisions	Sustainable branding and communication	Environmental cost and ESG reporting
Principal stakeholders	Investors and financial institutions	Consumers and market partners	Managers, regulators and investors
Contribution to sustainable business	Enables green innovation	Enhances competitive advantage	Improves transparency and accountability

Although the literature on sustainable business management has grown in volume rapidly, research into green finance is still scattered in both space, time and approaches. Previous research has mainly focused on financial products, regulations and environmental impacts without integrating the relevance of green finance for organizational strategy, marketing and accounting. More conceptual linkages are needed to describe the process of converting financial

organization in various institutional contexts (Debrah et al., 2023). However, there is limited research on climate finance in accounting. Scholarship on climaterelated financial flows lacks an adequate focus on the organizational level recognition, measurement, verification and disclosure of climate-related financial flows. The carbon valuation, climate-risk measurement, climate impact attribution and sustainability reporting procedures are not necessarily

comparable across firms, which reduces the usefulness of climate information in decision making. Moving forward, the creation of accounting models linking climate finance with capital budgeting, environmental liabilities, transition risks and the long-term performance of companies should be encouraged (de Aguiar et al., 2024).

The emerging economies need more attention from scholars due to their institutional, financial, and technological differences from developed economies. Further research is needed on the impact that regulatory quality, financial inclusion, organizational capacities and stakeholder pressures have on aiding the adoption of environmental management accounting and green financing. Comparative analysis between industries and countries may provide insights into the consistency of these practices in enhancing ESG performance or whether their performance varies based on governance systems, firm size, and sustainability-related resources (Zhen & Rahman, 2024). Additionally, there are a number of emerging themes that require further exploration, such as fintech for green investment, climate-risk analytics, biodiversity finance, transition finance, green innovation and sustainability-linked financial instruments. The literature available is mostly descriptive and does not address causal mechanisms or long-term environmental impacts but rather an increase in market growth. Future studies should utilize longitudinal designs, multilevel models, field experiments, and mixed methods to establish relationships between new financial mechanisms and how they impact corporate behavior and technological innovation, as well as how they actually help to reduce environmental impacts (Mudalige, 2023).

Another area of interesting research is the link between green finance and the circular economy.

While financial tools can enable circular production, resource recovery and low-carbon infrastructure, there is still a lack of good metrics for the assessment of circularity and environmental additionality. Policy frameworks and financing mechanisms to enable circular business models, but at the same time avoiding greenwashing and inappropriate investment, should be compared in future studies. Research is also needed to create universal indicators of impact that relate financial investments to resource productivity, waste reduction, emissions reduction, and organizational growth (Taheri Hosseinkhani, 2025). Future research is thus recommended to shift from the fragmented examination to an integrated and testable framework between the three aspects of green finance, green marketing and green accounting. It is important to use cross-country evidence, a longitudinal analysis, standardized impact measurements, digital technologies and the institutional context that determines whether or not green business practices can generate really environmental and organizational value. Table 3 suggests a research agenda for the future that will help further the study of integrated sustainable business management based on the deduced knowledge gaps.

Table 3. Future Research Agenda for Sustainable Business Management

Research Theme	Current Limitation	Future Research Priority	Expected Contribution
Green finance integration	Fragmented evaluation of financing mechanisms	Develop integrated finance–management models	Better strategic investment decisions

Green marketing	Limited evidence on long-term organizational outcomes	Examine consumer trust, AI and digital sustainability	Stronger sustainable competitive advantage
Green accounting	Lack of standardized environmental performance metrics	Improve ESG and carbon accounting frameworks	More reliable sustainability reporting
Digital sustainability	Limited integration of AI, fintech and analytics	Explore digital technologies across green management functions	Enhanced organizational efficiency
Integrated green management	Finance, marketing and accounting are largely examined independently	Develop interdisciplinary and longitudinal frameworks	Comprehensive sustainable business management models

9. Conclusion

This review has shown that green finance, green marketing and green accounting are not separate practices, but they can be considered complementary strategic systems that are better suited in the context of sustainable business management. Green finance can help to invest in low-carbon solutions and innovation, green marketing can bring about the purchase of lowcarbon products and services, and green accounting can enable transparency, accountability and informed decision-making. They integrate to boost the resilience of the organization, coordinating allocation of resources, positioning in the market, and sustainability performance with long-term strategic goals. Additionally, the review uncovers that the value of these practices is linked to institutional quality, standardized reporting,

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reliable impact measurement and safeguarding against “greenwashing”. Digital technologies, such as fintech, artificial intelligence and data analytics, can help to enhance the traceability, access and quality of decisions but will not replace good governance. There is still a lack of synthesis in the literature, especially in the areas of emerging economies and finance, marketing, and accounting. Future research should thus focus on the development of integrated models, on the basis of longitudinal evidence, on a comparison of countries and on the need for a measure of the additionality of the environment. Realizing sustainable organizational growth will not only require the implementation of green practices, but also the integration of them within a comprehensive management structure that fosters sustainable business and quantifies environmental responsibility.

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