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The Impact of Sustainable Marketing on Firm Performance: A Bibliometric Analysis

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ABSTRACT

Purpose: This study synthesizes the fragmented literature on the impact of sustainable marketing on firm performance. Despite growing corporate interest, research findings remain contradictory. This paper aims to map the evolution of the field, identify key mediating factors, and propose a novel conceptual framework for understanding how sustainable marketing initiatives can drive business success.

Methodology: A bibliometric analysis was conducted on a final sample of 55 documents indexed in the Scopus database from 2013 to 2023. The study utilized VOSviewer to map keyword co-occurrences, identifying four central thematic clusters: sustainability, sustainable development, marketing strategy, and green marketing and supply chain management.

Findings: Results indicate that sustainable marketing generally has a positive long-term impact on performance. However, this relationship is not direct; it is mediated by factors such as green reputation, consumer trust, innovation, and marketing communication capabilities, while being hindered by barriers like greenwashing and implementation costs. Success requires an integrated approach that adapts to regional contexts and consumer environmental awareness.

Practical and Research Implications: The study proposes a novel conceptual framework that organizes variables into a logical structure linking strategic antecedents, mediating mechanisms, and multi-dimensional outcomes. Practical recommendations include integrating sustainable marketing into traditional strategies, investing in green supply chain management, and ensuring transparency. The research highlights the need for adaptive approaches and suggests future studies incorporate additional databases and empirical testing.

Originality/Value: This study provides the first bibliometric analysis to synthesize the relationship between sustainable marketing and firm performance into a structured conceptual framework. It integrates fragmented findings from 2013–2023 into a coherent body of knowledge, enriching theoretical understanding by linking results to the Resource-Based View (RBV) and Stakeholder Theory. It offers a new theoretical lens for the field and translates academic findings into practical managerial insights.

KEYWORDS

Sustainable marketing; firm performance; bibliometric analysis; marketing strategy; corporate sustainability

Introduction

In an era of unprecedented environmental challenges, companies face increasing pressure to align their operations with environmental stewardship and social responsibility (Zhang et al. 2017). Sustainable marketing has emerged as a critical strategy to meet these demands, integrating social and environmental considerations into all marketing stages, from product development to promotion, to create value responsibly (Foltean 2019; Reutlinger 2012). While traditionally viewed through the lens of regulatory compliance,

sustainability is now recognized as a driver of long-term growth and competitive advantage (Genç and Di Benedetto 2015).

In this context, firm performance has been defined as the efficient use of resources to satisfy both financial and non-financial stakeholder needs (Selvam et al. 2016). Despite the strategic importance of sustainable marketing, the academic literature regarding its impact on firm performance remains fragmented and contradictory.

The core research gap lies in the inconsistency of results. While studies suggest a positive correlation

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between sustainability and performance (Han et al. 2019; Jassim, Al-Mubarak, and Hamdan 2020; Mahmoud 2016), others highlight significant barriers such as initial implementation costs (Çankaya and Sezen 2019), consumer skepticism (Hellmeister and Richins 2019), and “greenwashing” accusations that can erode firm value (Farooq and Wicaksono 2021; Wood et al. 2018). There is a lack of consensus on the specific mechanisms, mediators and moderators, that determine whether a sustainable marketing initiative will succeed or fail. Without a comprehensive synthesis, the literature remains a collection of isolated findings, making it difficult for scholars to build a cohesive theory or for managers to implement evidence-based strategies.

While bibliometric analysis has gained popularity for organizing large volumes of scientific data (Pardo-Jaramillo et al. 2020), this study fills a specific niche that prior reviews have overlooked. Previous bibliometric or systematic reviews in this domain have often focused broadly on “green marketing” (Dangelico and Vocalelli 2017; Taktakishvili and Sachaleli 2025) or general “corporate social responsibility” (CSR) (Vishwanathan et al. 2020). However, these studies frequently fail to isolate the specific link between marketing-driven sustainability and multi-dimensional firm performance.

Moving beyond the descriptive statistics common in bibliometric studies, this paper differs by focusing on the 2013–2023 decadal shift, capturing the evolution of the field during a significant period of institutional and regulatory change (Saravanan et al. 2018). It also provides a thematic synthesis of mixed results by explicitly addressing the “mixed results” gap and integrating fragmented evidence into a comprehensive framework that identifies mediators, such as green reputation and innovation, which explain why some initiatives succeed while others fail. In addition, the study integrates RBV and Stakeholder Theory, moving beyond descriptive mapping to offer a theoretical synthesis of how these practices create value. Finally, unlike previous bibliometric studies that merely identify themes, this paper develops a structured explanatory model that links strategic antecedents to specific performance outcomes.

This study aims to bridge the identified gaps by providing a structured synthesis of the literature

published over the last decade. It seeks to answer the following research questions:

- RQ1: What does the literature reveal about the impact of sustainable marketing on firm performance between 2013 and 2023?
- RQ2: What factors mediate the relationship between sustainable marketing and firm performance as discussed in the literature?
- RQ3: Based on existing evidence, how can companies strategically use sustainable marketing to improve their performance?

By answering these questions using the Scopus database and VOSviewer software, this research develops a conceptual framework that organizes fragmented variables into a logical structure. This serves as both a theoretical foundation for future empirical testing and a practical tool for managers navigating the complexities of sustainable business results.

The remainder of this paper is organized as follows: The Methodology section details the bibliometric methodology; the Results and Discussion section examines the results, analyzing the main themes identified in the reviewed documents; the Conceptual Framework section presents a novel conceptual framework; and the Conclusion section encompasses the conclusions, limitations, and directions for future research.

Methodology

The methodology developed in this study corresponds to a bibliometric analysis. In general, bibliometric analysis is a popular and rigorous method that allows researchers to explore and analyze large volumes of scientific data. This methodology aims to identify the trends of evolution in a specific field and, at the same time, to identify emerging areas within that same field based on the existing literature. Thus, its main objective is to present the intellectual structure and emerging trends of a research field (Donthu et al. 2021).

Bibliometric analysis has been widely applied across various fields of business research, particularly in management and marketing (Donthu et al. 2021). This analysis can be performed through

methods such as coauthor analysis, co-citation analysis, and keyword co-occurrence (Ellegaard 2018).

Research method steps

The identification of relevant literature was conducted using the Elsevier Scopus database. This database was chosen over other established databases such as Web of Science (WoS) and Google Scholar for the following reasons. First, while WoS is a well-regarded source, Scopus offers a wider journal coverage, which provides a more comprehensive and less biased sample for a global bibliometric analysis (Falagas et al. 2008). This extensive coverage is crucial for obtaining a larger and more inclusive set of documents for the study. To ensure data integrity and methodological consistency, this study utilizes Scopus as a standalone database. This approach aligns with recent guidelines for bibliometric research, which recommend settling on a single appropriate database to mitigate the need for data consolidation (Donthu et al. 2021). As different databases employ unique data formats and incompatible subject classification schemes, the process of merging records from multiple sources, such as Scopus and Web of Science, requires manual reclassification that can introduce subjective bias and human error (Donthu et al. 2021; Pranckutė 2021).

Furthermore, while Google Scholar includes a vast amount of literature, its lack of rigorous curation and peer-review filtering mechanisms can introduce noise from non-academic and gray literature, making it less suitable for a systematic bibliometric study (Ross-White et al. 2019). Thus, the choice of Scopus balances comprehensive coverage with the scholarly quality of the included literature, ensuring the reliability of our findings.

While we acknowledge the limitation of using a single database, we selected Scopus over other databases based on established bibliometric best practices. Scopus provides broader journal coverage compared to Web of Science and more rigorous peer-review filtering compared to Google Scholar (Falagas et al. 2008). This approach aligns with the recommendations of recent bibliometric studies in marketing research.

Once the database was selected, the formulation of the search string was a critical and iterative process designed to ensure a precise and comprehensive retrieval of relevant literature. Rather than selecting

keywords arbitrarily, we conducted exploratory searches to refine the query and maximize the quality of the results.

Initial test searches were performed with alternative keywords, such as “sustainability,” “organizational,” and “business,” to assess their impact on the relevance of the document set. Through this process, it was determined that the combination of “sustainable” and “marketing” was more effective in capturing the specific scope of our study, while the term “firm” consistently yielded a more focused set of results directly related to corporate performance than broader synonyms.

The final search string was constructed using Boolean operators (AND) to ensure that all four key concepts were present in the document’s title, abstract, or keywords. This deliberate combination proved to be the most effective in balancing the need for a broad capture of the topic’s literature with the necessity of a high-quality sample. This final query, along with the specified filters, was implemented in the Scopus database to retrieve the initial set of documents. The complete search string used was as follows:

TITLE-ABS-KEY (sustainable AND marketing AND firm AND performance) AND PUBYEAR > 2012 AND PUBYEAR < 2024 AND (LIMIT-TO (SUBJAREA, “BUSI”) OR LIMIT-TO (SUBJAREA, “SOCI”) OR LIMIT-TO (SUBJAREA, “ENVI”) OR LIMIT-TO (SUBJAREA, “ECON”)) AND (LIMIT-TO (DOCTYPE, “ar”) OR LIMIT-TO (DOCTYPE, “cp”) OR LIMIT-TO (DOCTYPE, “cr”)) AND (LIMIT-TO (LANGUAGE, “English”))

The initial set of documents identified through this process were then screened, a crucial step in bibliometric analysis, allowing the selection of studies to be included in the research. Figure 1, based on the PRISMA methodology, illustrates the steps of the literature screening process, detailing the number of studies identified, excluded, and finally included in the analysis.

As shown in Figure 1, 329 studies were initially identified through Elsevier Scopus. This identification was performed using four keywords: “marketing,” “sustainable,” “firm,” and “performance.” Of these 329 documents, 151 were automatically removed by Elsevier Scopus by applying filters corresponding to the document selection criteria. As a result, 178 documents remained for manual screening.

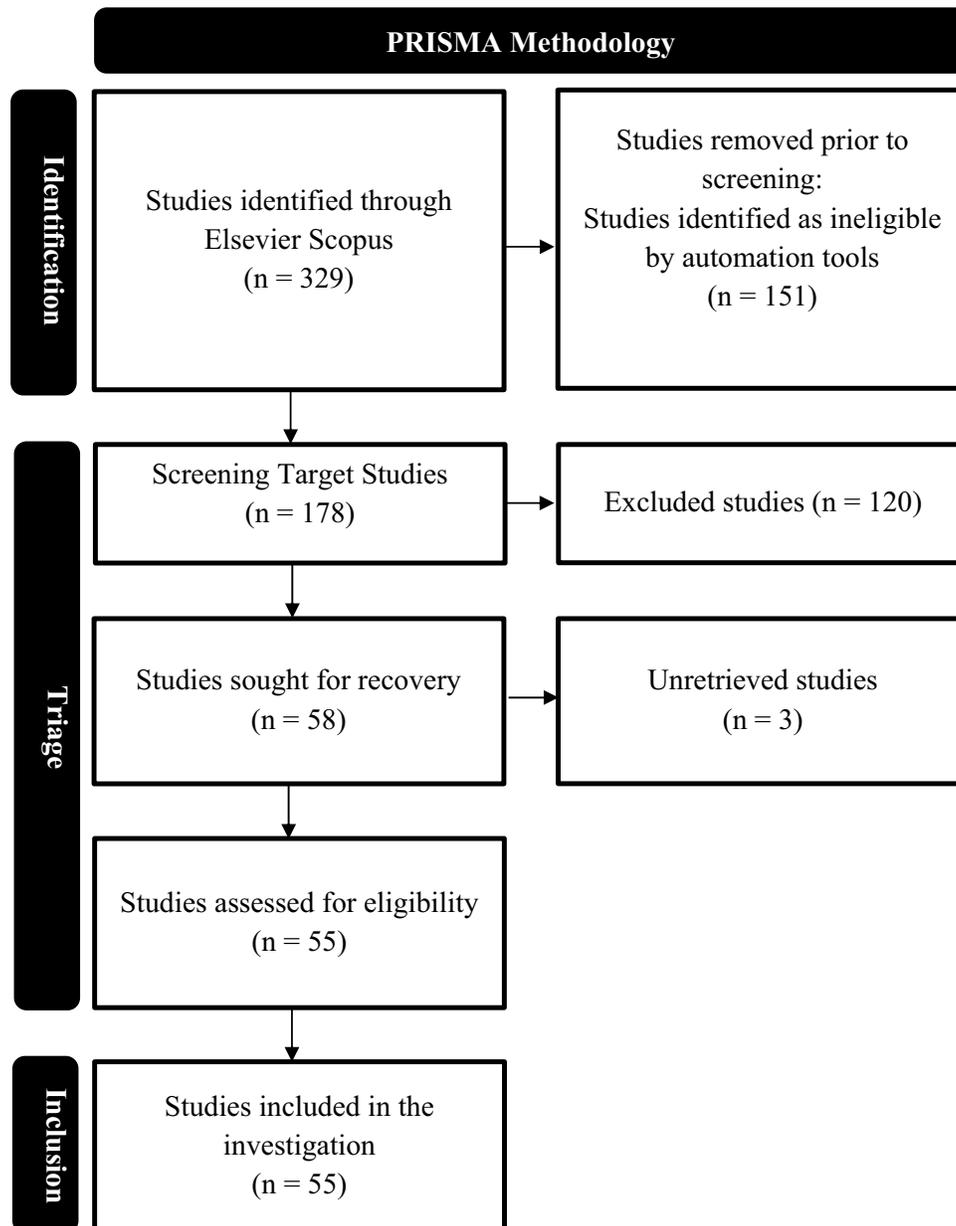


Figure 1. Literature screening process based on the PRISMA methodology.

The selection criteria were defined to ensure the relevance, comprehensiveness, and quality of the results, prioritizing recent, widely cited, and highly credible sources. To ensure a contemporary and relevant analysis, the study focused on a 10-year period (2013–2023). This timeframe was selected specifically to capture the most recent trends, developments, and emerging research in the field. Thus, these were the criteria applied to improve the results:

(1) Articles, conference papers, and conference reviews

(2) Published between January 1, 2013, and December 31, 2023

(3) English language

(4) Database used was Elsevier Scopus

(5) Research was limited to four areas of study: business, management and accounting; environmental science; economics, econometrics and finance; social sciences.

Of the 178 studies screened, 120 documents were excluded because they were duplicates or considered irrelevant to the present study. This exclusion

was carried out based on reading the summaries of these documents, which were followed, where necessary, by a revision of the full text of the documents. Consequently, the initial sample was refined to ensure the relevance of the selected literature. This process resulted in 58 potentially eligible documents.

Finally, 3 documents could not be recovered, which means that access to them was unfeasible. Thus, after identifying and screening the relevant literature for this study, 55 documents were selected for inclusion.

Although the final sample consists of 55 documents, this focused selection reflects a deliberate emphasis on quality over quantity. Each document underwent a rigorous screening process to ensure thematic alignment, methodological robustness, and scholarly credibility.

Keyword co-occurrence mapping

To examine the conceptual structure of the literature, a keyword co-occurrence analysis was conducted using VOSviewer. [Figure 2](#) visualizes the most frequently occurring keywords and their relationships, providing an overview of the main research themes and how they are interconnected.

Based on [Figure 2](#), it is possible to understand that “Marketing,” “Sustainable Development” and “Sustainability” and “Commerce” are the most prominent keywords, indicated by their larger size and central positioning on the map. The proximity and numerous links between “Marketing” and “Sustainability” suggest that research often explores the link between these two areas.

In addition, when analyzing [Figure 2](#), 4 clusters are noticeable, as can be seen in the [Table 1](#). Clusters consist of groups of keywords that often appear together in the same documents, indicating a strong relationship of co-occurrence. On the other hand, keywords from different groups are less likely to be found together.

The four clusters reveal distinct areas of focus and recurring themes within the analyzed literature. The “Sustainability” Cluster brings together concepts related to corporate social responsibility, industrial and business performance, and consumer behavior, exploring the

relationship between sustainable practices and company performance. The “Sustainable Development” Cluster addresses aspects such as trade, environmental management and performance, and profitability, emphasizing the role of sustainability in business and industrial practices. The “Marketing Strategy” Cluster focuses on innovation, marketing capacity and strategic planning, highlighting the development of marketing strategies. The “Green Marketing and Supply Chain Management” Cluster involves topics such as organizational innovation, financial performance and competition, with a focus on the application of sustainable practices in business operations.

Results and discussion

For companies in the 21st century, integrating sustainability into business practices is not only a response to external pressures, but also a strategic opportunity. As companies navigate the complexities of a rapidly changing market, sustainability has become a key driver of innovation, competitiveness and growth. This shift has led to a transformation in the way companies approach marketing, with sustainability becoming an integral part of corporate strategy (Genç and Di Benedetto 2015).

In this context, this section aims to answer the proposed research questions, through the analysis of the 55 studies included in this research. The focus is on understanding the impact of sustainable marketing on firm performance, identifying the mediating factors in this relationship, and exploring how companies can use sustainable marketing strategies and practices to leverage their performance. When analyzing the impact of sustainable marketing on firm performance, the use of bibliometric information is particularly appropriate because, as Gu (2004) notes, it allows researchers to explore both the differences and similarities among studies and their results.

RQ1: The impact of sustainable marketing on firm performance according to the literature between 2013 and 2023:

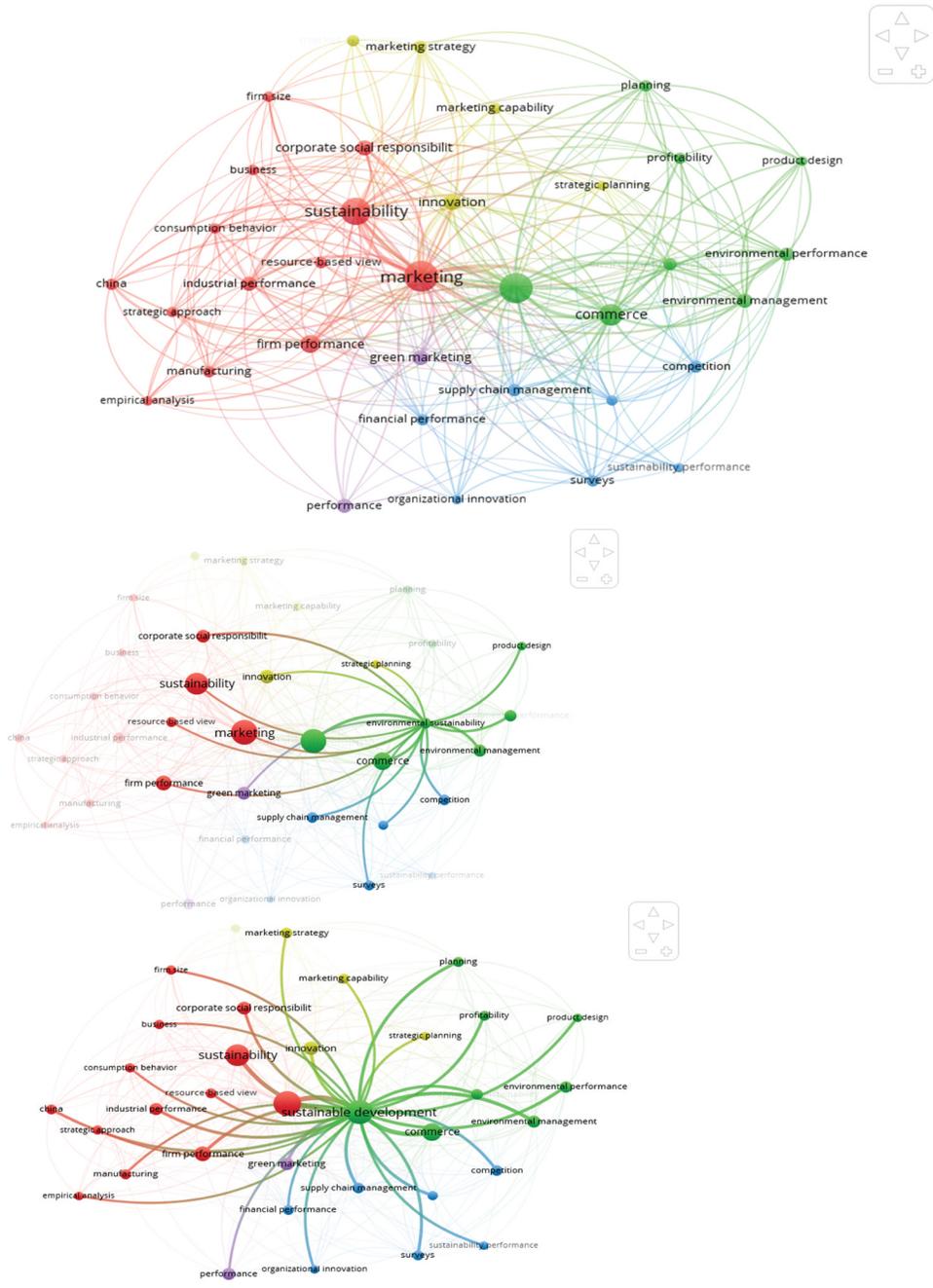


Figure 2. Keyword co-occurrence map taken from VOSviewer.

Table 1. Keyword clusters.

Cluster 1: Sustainability	Cluster 2: Sustainable development	Cluster 3: Marketing Strategy	Cluster 4: Green Marketing, Supply Chain Management
Corporate social responsibility; Company size; Industrial performance; Business performance; Business; Consumer behavior; Manufacturing; China; Resource-based view; Strategic approach.	Trade; Environmental Sustainability; Environmental management; Environmental performance; Profitability; Planning; Product design.	Marketing capacity; Innovation; Strategic Planning.	Financial performance; Organizational innovation; Competition; Performance.

To address RQ1, we provide an overview of the literature on sustainable marketing and its influence on firm performance over the last decade. Table 2 presents a structured snapshot of the reviewed studies, highlighting the specific sustainable marketing aspects investigated and their reported impacts on firm performance.

The literature between 2013 and 2023 largely supports a positive relationship between sustainable marketing and firm performance, particularly in the long term (Galletto and Barisan 2019; Iqbal and Khizar 2022; Kim 2018; Kim et al. 2015; Mahmoud 2016; Shibli et al. 2021). Sustainable marketing contributes to economic, environmental, and social performance

Table 2. Summary of literature on sustainable marketing and firm performance (2013–2023).

Authors (Year)	Sustainable Marketing Approach	Reported Impact on Firm Performance
Mahmoud (2016)	Sustainable market orientation	Positive impact on economic and social performance, particularly in emerging markets
Jassim, Al-Mubarak, and Hamdan (2020); Han et al. (2019)	Green marketing and customer communication	Improved firm performance through enhanced trust and customer loyalty
Ullah (2021, 2023)	Resource-intensive sustainability communication strategy	Substantial investment on marketing resources supports sustainable product development, customer loyalty, and profitability
Kinnunen et al. (2022); Gupta and Kumar (2013)	Marketing efforts related to sustainability	Increased marketing efforts improve environmental performance
Nutsugah et al. (2021)	Integrated marketing communication	Creates a positive influence of environmental performance on firm performance
Silva et al. (2023)	Environmentally friendly export marketing strategy	Positive contribution to export performance
Richey et al. (2014)	Consumer perception	Influences success of sustainable marketing initiatives
Abbas et al. (2019)	Socially responsible marketing	Attracts value-aligned customers, improving company performance
Kim (2018); Kim et al. (2015)	Sustainable marketing balancing economic, environmental, and social dimensions	Supports sustainable firm performance
Shibli et al. (2021)	Green marketing combined with dynamic capabilities	Significant positive impact on sustainable performance
Kushwaha and Sharma (2016)	Green initiatives including green marketing	Direct contribution to improved company performance
Sarkar, Qian, and Peau (2020)	Green business strategies in the ready-made wear industry	Enhanced competitiveness
Zhang et al. (2017)	Commercialization and segmentation of environmentally friendly products	Improved profits and environmental performance
Fatoki (2019)	Green marketing orientation in the hotel industry	Improved environmental and social performance
Kim, Kim, and Nam (2021)	CSR-related advertising campaigns	Higher advertising spending associated with better CSR performance
Al-Issa et al. (2022)	CSR/ESG communication as a marketing strategy	Higher market value with reduced marketing spending
Fan et al. (2021)	Sustainable supplier development initiatives and communication	Increased customer satisfaction and sales performance
Frank (2021)	Marketing of AI-enhanced products with environmental benefits	Positive influence on purchase intentions
Kadic-Maglajlic et al. (2019), as quoted in Foltean (2019)	Marketing strategies to promote sustainable consumption	Engaged and emotionally intelligent consumers are more likely to adopt sustainable consumption behaviors
Toopgajank et al. (2019)	Green marketing in green manufacturing	No significant association with economic performance
Çankaya and Sezen (2019)	Green marketing	Positive environmental effects, but no economic or social performance impact
Battisti et al. (2023)	Sustainable marketing communication in family businesses	Ineffective communication can undermine CSR outcomes
Hellmeister and Richins (2019)	Effectiveness of sustainability-related marketing messages	Limited influence on customer behavior due to lack of credibility
Wood et al. (2018)	Sustainability claims and overpromising	Negative stock market reactions and reputational damage
Farooq and Wicaksono (2021)	Environmental communication strategies	Poorly structured communication leads to distrust and negative purchase intentions
Crapa, Latino, and Roma (2024)	Green content on social media	Engagement varies by platform and media richness
Khan, Johl, and Akhtar (2021)	Green marketing	Mixed effects across different financial indicators
Laari, Töyli, and Ojala (2017)	Alignment of green supply chain management and marketing strategy	Improved brand differentiation and competitive advantage
Iqbal and Khizar (2022)	Integration of sustainability, entrepreneurship, and marketing	Supports superior and sustainable firm performance
Nath and Siepong (2022)	Green marketing capability	Proactive integration leads to superior green marketing performance
Genç and Di Benedetto (2019)	Proactive versus reactive environmental marketing strategies	Proactive strategies result in better new product performance
Galletto and Barisan (2019)	Carbon footprint strategy and communication in the wine industry	Strong positive relationship with firm performance
Chen and Yang (2019)	Green marketing audits	Support effective strategy management and performance
Nayal et al. (2023)	Industry 4.0-enabled dynamic marketing capabilities	Improved market performance, amplified by circular product design

through improved customer communication, trust, loyalty, and strategic differentiation (Jassim, Al-Mubarak, and Hamdan 2020; Han et al. 2019; Abbas et al. 2019; Fatoki 2019; Laari, Töyli, and Ojala 2017; Fan et al. 2021). However, the impact varies across sectors and market conditions, and studies highlight limitations such as high implementation costs, mixed financial outcomes, and consumer skepticism arising from credibility issues or poorly executed sustainability communication (Battisti et al. 2023; Çankaya and Sezen 2019; Farooq and Wicaksono 2021; Hellmeister and Richins 2019; Khan, Johl, and Akhtar 2021; Toopgajank et al. 2019; Wood et al. 2018). These findings underline the importance of strategic alignment, adequate marketing resource intensity, and authentic communication in maximizing the benefits of sustainable marketing initiatives (Ullah 2021, Ullah 2023; Chen and Yang 2019; Genç and Di Benedetto 2019; Nath and Siepong 2022; Nayal et al. 2023).

RQ2: The mediating factors between sustainable marketing and firm performance, within the scope of the bibliographic literature:

To provide a concise overview of the mechanisms through which sustainable marketing influences firm performance, Table 3 summarizes the mediating factors identified in the reviewed literature. The table reflects the mediators explicitly discussed in the studies and illustrates how these factors help explain the complexity of the relationship between sustainable marketing initiatives and firm performance outcomes.

The review of studies highlights mediating factors that influence the relationship between sustainable marketing and firm performance, emphasizing the complexity of this interaction (Casidy and Yan 2022; Foltean 2019; Hong et al. 2020; Negi, Gupta, and Gaur 2023; Taoketao et al. 2018; Papadas et al. 2019, as quoted in). Key mediators identified in the literature include consumer environmental awareness, trust, green reputation, perceived fit of sustainability strategies, marketing communication capabilities, green innovation, customer loyalty, environmental performance, and competitive advantage (Hong et al. 2020; Casidy and Yan 2022; Wang and Juo 2024; Gleim et al. 2023; Ilyas and Osiyevskyy 2022; Negi, Gupta, and Gaur 2023; Taoketao et al. 2018; Jorge et al. 2015, Papadas et al. 2019, as quoted in; Foltean 2019). These factors explain how sustainable marketing initiatives are translated into tangible business outcomes across different market contexts (Ilyas and Osiyevskyy 2022; Negi, Gupta, and Gaur 2023; Wang and Juo 2024). They also highlight that the success of sustainable marketing depends not only on isolated actions, but on a coordinated effort that combines internal capabilities and responses to external market dynamics (Gleim et al. 2023; Casidy and Yan 2022; Hong et al. 2020, Papadas et al. 2019, as quoted in; Foltean 2019).

Contextual variations of key mediators

The effectiveness of mediating mechanisms such as green reputation, consumer environmental awareness, and sustainability-oriented marketing

Table 3. Mediating factors between sustainable marketing and firm performance identified in the literature.

Mediating Factor	Authors (Year)	Role of the Mediator as Described in the Literature
Consumer environmental awareness (CEA)	Hong et al. (2020)	Guides pricing strategies of green companies, increasing competitiveness and profitability in environmentally conscious markets
Trust (B2B context)	Casidy and Yan (2022)	Trust built through effective sustainability positioning improves financial and relational performance
Green reputation	Wang and Juo (2024)	Converts green marketing efforts into significant environmental performance outcomes
Perceived fit of sustainability strategies	Gleim et al. (2023)	Mediates the impact of sustainable marketing on consumer attitudes and purchase intentions
Marketing communication capabilities	Ilyas and Osiyevskyy (2022)	Transform sustainable proposals into financial gains by increasing the effectiveness of sustainability messages
Green innovation	Negi, Gupta, and Gaur (2023)	Mediates the relationship between green marketing orientation and firm performance
Customer loyalty	Taoketao et al. (2018)	Partially mediates the relationship between sustainability marketing strategy and firm performance
Environmental performance	Jorge et al. (2015)	Mediates the impact of image and relational marketing on competitive performance
Competitive advantage	Papadas et al. (2019), as quoted in Foltean (2019)	Bridges the gap between strategic green marketing orientation and financial results

capabilities varies substantially across market and institutional contexts. In B2C markets, green reputation tends to function as a direct signaling mechanism, shaping consumer perceptions of credibility, brand attitudes, purchase intentions, and loyalty, which can translate into superior market and financial performance when sustainability claims are perceived as credible and aligned with consumer expectations (Gleim et al. 2023; Taoketao et al. 2018; Wang and Juo 2024). Empirical evidence further suggests that the strength of this mediation is contingent on consumer environmental awareness and perceived sustainability fit, as misalignment or excessive promotional emphasis may trigger skepticism and weaken performance outcomes (Farooq and Wicaksono 2021; Hong et al. 2020).

In contrast, in B2B markets, sustainability-related mediators operate more indirectly and relationally. Rather than driving immediate purchasing decisions, green reputation and sustainability positioning influence performance through trust formation, compliance with environmental standards, supply chain transparency, and long-term inter-firm relationships (Casidy and Yan 2022; Chabowski et al. 2023). Studies on green supply chain management (GSCM) demonstrate that environmental practices enhance firm performance by reducing supplier-related risks, strengthening relational capital, and supporting differentiation strategies embedded within supply networks, rather than through direct end-customer engagement (Fan et al. 2021; Laari, Töyli, and Ojala 2017). This underscores that, in B2B contexts, sustainability mediators are often embedded within network-level mechanisms rather than firm-consumer interactions.

Regional and institutional environments further condition the effectiveness of these mediating factors. In developed economies, higher levels of consumer environmental awareness, regulatory stringency, and institutional enforcement strengthen the performance impact of sustainability initiatives by enhancing credibility and reducing information asymmetry between firms and stakeholders (Gupta and Kumar 2013; Hunt 2017). In such contexts, green reputation and sustainability-oriented marketing are more likely to yield competitive advantages through both market-based assets and stakeholder legitimacy.

Conversely, in developing and emerging economies, weaker institutional frameworks, higher cost sensitivity, and heterogeneous consumer awareness constrain the direct performance effects of sustainability mediators. Empirical studies show that firms in these contexts often realize performance gains only when sustainability initiatives are paired with appropriate communication capabilities, stakeholder-oriented marketing, and incremental environmental improvements, rather than comprehensive or highly symbolic strategies (Jassim, Al-Mubarak, and Hamdan 2020; Mahmoud 2016; Nutsugah et al. 2021). As a result, green reputation in emerging markets is more likely to be built through visible compliance, local stakeholder engagement, and credible operational practices than through branding alone.

Taken together, these findings indicate that mediating mechanisms in sustainable marketing are highly context-dependent rather than universally effective levers. Their influence on firm performance is contingent upon market structure (B2C vs. B2B), institutional development, regulatory intensity, and stakeholder expectations. This reinforces the need for adaptive and context-sensitive sustainability strategies that align mediating mechanisms with the specific environmental, relational, and institutional conditions in which firms operate.

Integration of bibliometric clusters with findings

Having examined how mediating factors operate across different contexts, it is instructive to interpret these findings through the lens of the bibliometric clusters identified in the literature. The four clusters provide a structured framework that connects thematic patterns in prior studies to strategic outcomes. The Sustainability Cluster emphasizes that firm performance is multidimensional, encompassing economic, environmental, and social outcomes that align with corporate objectives. This cluster reinforces the link between mediating factors such as trust, consumer awareness, and green reputation, and performance outcomes, consistent with Stakeholder Theory. The Sustainable Development Cluster highlights the strategic embedding of sustainability into broader

organizational processes, emphasizing long-term value creation and institutional alignment. Mediators such as environmental performance and competitive advantage reflect how sustainability is operationalized across organizational functions. The Marketing Strategy Cluster underscores the importance of internal capabilities, including green marketing and dynamic marketing capabilities, in translating sustainability initiatives into measurable performance. These capabilities exemplify the Resource-Based View (RBV) logic that firm-specific competencies enable a sustainable competitive advantage. Finally, the Green Marketing and Supply Chain Management Cluster demonstrates that mediators such as green innovation, trust, and customer loyalty are central to operationalizing sustainability strategies. This cluster illustrates the interplay between strategic resources, mediating mechanisms, and firm performance outcomes.

Collectively, these clusters confirm that sustainable marketing delivers long-term benefits for both firms and society. By combining strategic antecedents, mediating mechanisms, and context-specific adaptations, sustainable marketing extends beyond short-term campaigns to integrated initiatives that enhance economic performance, societal well-being, and environmental sustainability.

RQ3: Sustainable marketing as a catalyst for business improvement:

Analysis of the studies reveals multiple strategies and considerations that companies should adopt to

optimize their marketing effectiveness, while contributing to environmental and social objectives. Table 4 summarizes the recommendations made to companies seeking to use sustainable marketing to improve their performance.

Integrating sustainable marketing into business strategies

Mahmoud (2016) underlines the need for companies to integrate sustainable marketing into their traditional marketing strategies. This involves broadening the focus beyond conventional marketing practices to include sustainable practices that address economic, social, ecological, and environmental performance indicators. Such integration can improve overall performance, producing long-term benefits that are aligned with both business objectives and social well-being.

Nath and Siepong (2022) argue that, for optimal performance, companies should proactively integrate sustainability into their overall marketing strategy. This highlights the importance of proactive and comprehensive approaches in order to achieve superior green marketing results. Accordingly, Genç and Di Benedetto (2019) highlight that proactive environmental marketing strategies, which exceed regulatory requirements, lead to better sustainable performance of new products compared to reactive strategies that only comply with regulations. The authors also point out that the commitment of top management is crucial to the success of proactive strategies. Thus, companies must focus on exceeding

Table 4. Practical recommendations to maximize the benefits of sustainable marketing.

Focus Areas	Key Observations
Integration of Sustainable Marketing	Companies must integrate sustainable marketing into their traditional strategies to improve long-term performance and align business goals with social well-being. Management commitment is crucial.
Adapting to Regional and Institutional Contexts	It is essential to adapt sustainable marketing strategies to different regional and institutional contexts to ensure effectiveness in different markets.
Consumer Environmental Awareness	Companies must adjust their marketing strategies based on consumers' levels of environmental awareness to maximize performance results.
Importance of Effective Communication	Effective communication of sustainable initiatives differentiates companies, builds customer loyalty and increases stakeholder trust, positively impacting firm performance.
Green Supply Chain Management (GSCM)	GSCM practices can be a competitive advantage, allowing companies to charge premium prices for eco-friendly products and reduce risks associated with suppliers.
Transparency and Credibility	Transparency in sustainable practices is essential to maintain trust and avoid negative consequences such as greenwashing, positively impacting reputation and performance.
Innovation and Sustainable Product Development	Cross-functional integration in sustainable product development is crucial to the success of green innovations, positively impacting the company's overall performance.
Alignment with Consumer Expectations	Aligning the sustainability strategy with consumer expectations and adopting a stakeholder-centric approach can improve firm performance and competitiveness.

regulatory standards and ensuring the commitment of top management to drive the superior performance of new products and improve overall sustainability.

Finally, green marketing guidance serves as a strategic resource that can improve sustainable performance, according to Fatoki (2019). By incorporating green marketing principles into their overall strategy, companies can improve their sustainability results and performance metrics. Green marketing guidance provides a framework for companies to integrate sustainability into their core operations, aligning their marketing efforts with environmental objectives.

Adapting to regional and institutional contexts

Chabowski et al. (2023) discuss the complexities companies face when implementing circular-economy (CE)-based marketing plans across diverse institutional settings. The success of these initiatives often depends on the ability to adapt to different formal and informal institutional factors in various markets. Companies, especially those in countries with a limited understanding of the environmental, social, or economic standards of host countries, may encounter challenges due to their perceived strangeness. To overcome these obstacles and boost performance, companies must invest in understanding and adapting to local standards, while building trust with local consumers. In the same vein, Jassim, Al-Mubarak, and Hamdan (2020) argue that regional differences in social awareness and green habits can have a significant impact on the effectiveness of sustainable marketing strategies. Companies should take these regional variations into account when implementing sustainable marketing practices to ensure their effectiveness in different markets.

The role of consumer environmental awareness

Consumer environmental awareness (CEA) plays a critical role in defining green marketing strategies, as found by Hong et al. (2020). The study reveals that in markets with a high CEA, green companies can strategically reduce product prices to increase market share and profitability.

Consequently, companies must assess and respond to various levels of consumer environmental awareness when designing and implementing their green marketing strategies to achieve better performance results.

Importance of effective communication

Battisti et al. (2023) highlight the vital role of communication in sustainable marketing, especially for family businesses. Effective communication of sustainable initiatives allows companies to differentiate themselves from competitors, build customer loyalty, and foster stakeholder trust. This engagement creates a positive feedback loop that improves firm performance and the impact of corporate social responsibility activities. The effectiveness of green marketing content on social media is also significant, as Crapa, Latino, and Roma (2024) demonstrate. The study finds that green content generates higher consumer engagement compared to non-green content, with Instagram having the highest engagement rates. To maximize consumer responses, companies must tailor their green marketing content to specific platforms, making appropriate use of media richness.

Al-Issa et al. (2022) emphasize the need for companies to actively communicate their CSR and ESG efforts. Effective communication of these initiatives can create synergies with marketing strategies, leading to a favorable consumer response and increased marketing effectiveness. These results are in line with the findings of Doan et al. (2019), who concluded that CSR activities have a positive impact on the financial performance of companies.

Green supply chain management

The role of green supply chain management (GSCM) as a marketing differentiator is emphasized by Laari, Töyli, and Ojala (2017). Companies that implement GSCM can charge premium prices for eco-friendly products and minimize risks associated with poor supplier environmental performance. GSCM practices can serve as a competitive advantage when

integrated into the overall market strategy, making sustainable practices a key component of differentiation. In addition, Fan et al. (2021) recommend integrating supply chain strategies with marketing communication efforts to leverage sustainable sourcing development initiatives as a competitive advantage. Companies can increase customer awareness of their sustainability efforts by stepping up advertising and using marketing channels effectively, leading to increased satisfaction and performance.

Transparency and credibility in sustainable practices

Maintaining transparency and integrity in environmental claims is crucial for companies, as Wood et al. (2018) point out. The serious consequences of failing to deliver on environmental pledges (evident in stock market reactions to environmental scandals) underline the need to ensure that promised environmental performance is achieved. This transparency is essential for maintaining trust and achieving long-term success. The importance of realistic and consistent green marketing messages is also emphasized by Çankaya and Sezen (2019). The study notes that exaggerated or contradictory messaging can lead to failures in green marketing efforts. To improve social performance and consumer trust, companies should avoid exaggeration and focus on genuine sustainability efforts, thereby increasing their credibility and effectiveness in promoting green products.

Consumer skepticism, fueled by previous incidents of greenwashing or industry-specific distrust, is a significant challenge addressed by Farooq and Wicaksono (2021). The study indicates that skepticism is higher among large companies, particularly in industries such as oil, and is influenced by cultural and demographic factors. To mitigate skepticism, companies should carefully structure their environmental communication strategies, avoiding excessive advertising that could be considered selfish. The visibility and transparency of environmental practices are crucial to positively impacting a company's reputation and competitive performance (Jorge et al. 2015). Sustainable practices that meet the demands of stakeholders and are

actively communicated can improve a company's image and competitive advantage.

Research and development (R&D) of sustainable products

The role of cross-functional integration in sustainable new product development (SNPD) is highlighted by Genç and Di Benedetto (2015). Effective collaboration between marketing, R&D, manufacturing and environmental experts during the SNPD process is essential for the successful development and market introduction of sustainable products. The integration between these functions positively impacts the performance of projects. Yuan et al. (2024) highlight the benefits of using recyclable raw materials and reducing waste and pollution emissions in promoting green innovation in products and processes. These innovations not only reduce operating costs but also improve the company's overall performance. The study also emphasizes the importance of cross-functional participation and cooperation to ensure the effectiveness of green innovation initiatives. In the wine sector, a carbon footprint strategy combined with strategic tools such as wine tastings, participation in fairs and online campaigns is effective in improving the company's performance and its position in the market, as demonstrated by Galletto and Barisan (2019).

Alignment with consumer expectations

Leclercq-Machado et al. (2022) found that perceived environmental concern and knowledge positively influences consumer purchase intentions. Companies can capitalize on this by integrating environmental attributes into their marketing and sales strategies, demonstrating their commitment to green practices. By effectively communicating their environmental credentials, companies can generate greater consumer interest and improve their performance in the market. In the same vein, Gleim et al. (2023) argue that a sustainability strategy must be aligned with consumer expectations to be effective. A "bottom-up" approach, where sustainability initiatives are

developed in response to consumer feedback and expectations, leads to greater acceptance and improved performance. Companies must ensure that their sustainability strategies are well aligned with consumer values to increase their effectiveness. Finally, Gonzalez-Padron, Hult, and Ferrell (2016) conclude that stakeholder marketing, which focuses on engaging and responding to stakeholder needs, positively influences organizational outcomes. This relationship is mediated by customer satisfaction, innovation and reputation. Adopting a stakeholder-centric approach to marketing strategies, where companies address stakeholder concerns and integrate their feedback into business practices, can improve performance and competitiveness.

In summary, companies can improve their performance while making a significant contribution to environmental and social objectives by adopting these sustainable marketing strategies and considerations, including the integration of sustainable marketing into business strategies; adaptation to regional and institutional contexts; the role of consumer environmental awareness; importance of effective communication; green supply chain management; transparency and credibility in sustainable practices; innovation and development of sustainable products and alignment with consumer expectations.

Theoretical integration of findings

While this bibliometric analysis provides a quantitative overview of the field, its findings gain deeper meaning when integrated with established management theories. The literature identified in this study can be viewed through two key theoretical lenses: the Resource-Based View (RBV) and Stakeholder Theory, which together provide a more comprehensive explanation for the impact of sustainable marketing on firm performance.

Resource-based View (RBV)

The Resource-Based View (RBV), a prominent framework in strategic management (Barney 1991), posits that a firm's ability to achieve a sustained competitive advantage is derived from its unique, valuable, and inimitable resources and capabilities. The findings of this study align strongly with this perspective.

The analysis consistently highlights that the success of sustainable marketing is not an isolated effort but a strategic outcome dependent on a firm's internal capabilities. For instance, the literature identified marketing communication capabilities and green innovation (Ilyas and Osiyevskyy 2022; Negi, Gupta, and Gaur 2023) as key mediators. These are precisely the types of dynamic capabilities that a firm can develop to gain a unique market position. Similarly, the findings underscore the importance of integrating green supply chain management and R&D (Genç and Di Benedetto 2015; Laari, Töyli, and Ojala 2017).

These are not merely operational decisions but unique and firm-specific resources that allow a company to differentiate its brand, justify premium pricing, and minimize risks, thereby creating a sustainable competitive advantage as predicted by the RBV (Yang et al. 2013).

Stakeholder Theory

While the RBV explains the internal mechanisms of competitive advantage, Stakeholder Theory provides the crucial external context. This theory argues that a firm's long-term success is dependent on its ability to manage relationships with a wide array of stakeholders, including customers, suppliers, and the community (Freeman 1984). Our findings are direct reflections of this theory in practice.

The literature consistently shows that successful sustainable marketing balances economic, environmental, and social performance (Kim 2018), which directly addresses the diverse interests of stakeholders, the community, and the planet. The critical role of consumer perception, trust, and credibility (Abbas et al. 2019; Wood et al. 2018) further highlights the importance of the customer as a key stakeholder whose values and expectations must be actively managed.

The analysis also revealed that firms that fail to maintain transparency and credibility in their sustainability claims (an essential part of stakeholder management) face significant risks, such as consumer skepticism and reputational damage (Farooq and Wicaksono 2021). Therefore, a firm's sustainable marketing efforts can be seen as a strategic response to

stakeholder demands, with the ultimate goal of improving organizational outcomes (Gonzalez-Padron, Hult, and Ferrell 2016).

Sustainable marketing serves as a bridge between corporate strategy and societal well-being by promoting transparency, ethical communication, and environmental stewardship. By managing relationships with diverse stakeholders (customers, communities, and regulators), companies can enhance public trust and contribute to sustainable development goals. These insights also offer guidance for policymakers, who can design incentive structures and regulatory frameworks that encourage credible, socially responsible marketing practices.

Conceptual framework

The keyword co-occurrence analysis provides the empirical foundation upon which the conceptual framework and theoretical integration are built. The four identified clusters (visible on Table 1) represent recurring thematic patterns in the literature and informed the structuring of the research questions, the selection of mediating mechanisms, and the positioning of theories within the final conceptual model.

The “Sustainability” cluster, which includes keywords related to corporate social responsibility, firm performance, and consumer behavior, directly informed the definition of firm performance outcomes in the conceptual framework. This cluster highlights that performance in the sustainable marketing literature is multidimensional, encompassing economic, environmental, and social dimensions. This insight is reflected in the framework’s outcome component and aligns closely with Stakeholder Theory, which emphasizes balancing the expectations of customers, society, and other stakeholders.

The “Sustainable Development” cluster, emphasizing environmental management, trade, and profitability, revealed that sustainability is not treated as an isolated marketing activity but as part of broader business and industrial practices. This cluster helped position sustainable marketing as a strategic organizational approach rather than a tactical tool. It also informed the inclusion of environmental performance and

long-term value creation as central elements in the framework, reinforcing the relevance of both the Resource-Based View and Stakeholder Theory.

The “Marketing Strategy” cluster, which centers on innovation, marketing capability, and strategic planning, directly shaped the strategic antecedents component of the conceptual framework. The prominence of marketing capabilities, innovation, and proactive strategy in this cluster explains why the framework emphasizes internal capabilities such as green marketing capability, dynamic marketing capabilities, and top management commitment. These elements are explicitly grounded in the Resource-Based View, which explains how firm-specific capabilities enable sustainable competitive advantage.

Finally, the “Green Marketing and Supply Chain Management” cluster, which links organizational innovation, competition, and financial performance, provided empirical support for the identification of mediating mechanisms connecting sustainable marketing to firm performance. The frequent co-occurrence of keywords related to innovation, reputation, competition, and performance explains why mediators such as green innovation, trust, customer loyalty, environmental performance, and competitive advantage occupy a central position in the framework.

Taken together, the keyword clusters offer a structured pathway from broad thematic patterns in the literature to the final conceptual framework. The clusters first reveal *what* themes dominate the field, the research questions then clarify *how* these themes relate to firm performance, and the theoretical lenses explain *why* these relationships occur. In this way, the conceptual framework represents a synthesis of bibliometric evidence, empirical findings, and established theory, rather than an abstract or speculative model.

We propose a conceptual framework that synthesizes the key findings from the bibliometric analysis, which mapped the dominant thematic clusters in the literature, the thematic findings from RQ1-RQ3, and relevant theoretical perspectives.

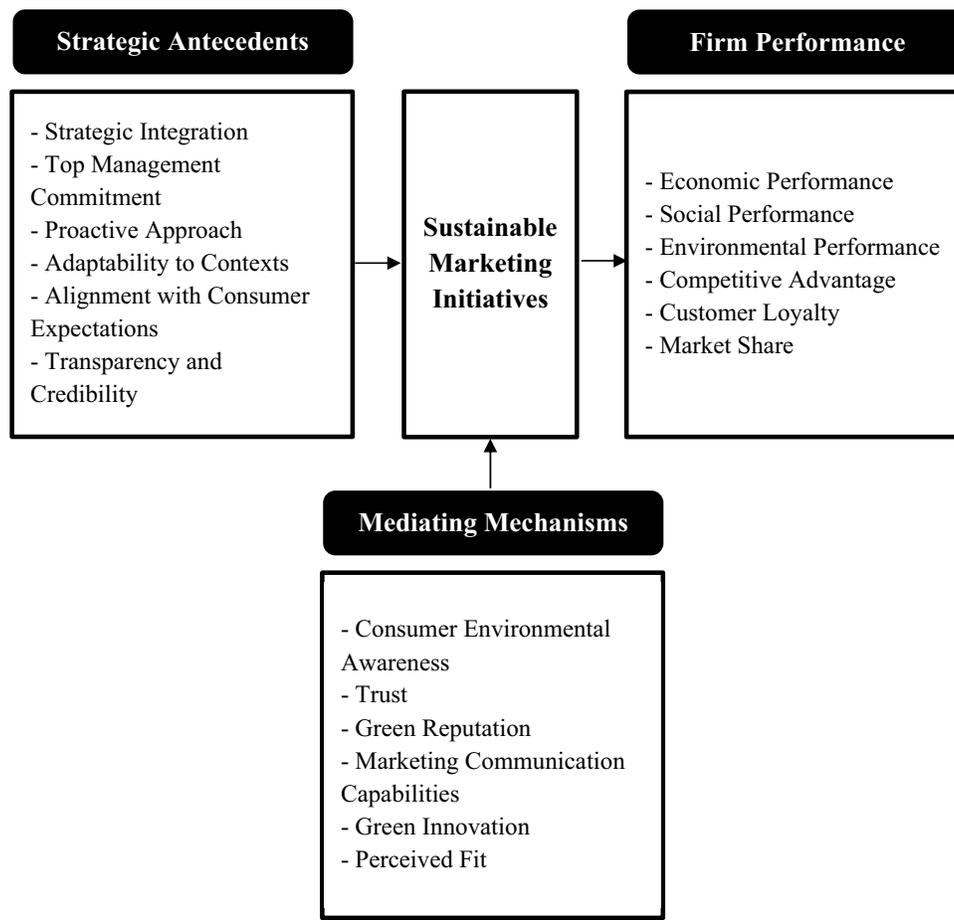


Figure 3. A conceptual framework for sustainable marketing's impact on firm performance.

This model, illustrated below, outlines the causal pathways through which sustainable marketing efforts lead to firm performance, moderated by key strategic and contextual factors.

The framework is structured around three core components, as shown in [Figure 3](#):

- (1) **Strategic Antecedents:** The foundational decisions and capabilities that enable effective sustainable marketing.
- (2) **Mediating Mechanisms:** The crucial “bridges” that translate sustainable marketing initiatives into tangible business outcomes.
- (3) **Firm Performance Outcomes:** The multi-dimensional results (economic, social, and environmental) of these efforts.

The model posits that for sustainable marketing initiatives to successfully impact firm performance, they must be rooted in specific strategic

antecedents and effectively leverage various mediating mechanisms.

Description of the framework

Strategic antecedents

Based on the findings from RQ3, the success of sustainable marketing is not an isolated event but rather the result of strategic decisions. The literature highlights that companies must proactively integrate sustainable marketing into their core business strategies and ensure top management commitment (Genç and Di Benedetto 2019; Iqbal and Khizar 2022). These foundational efforts enable the firm to develop capabilities such as Green Marketing Capability (Nath and Siepong 2022) and Industry 4.0-enabled dynamic marketing capabilities (Nayal et al. 2023), which are essential for effective execution.

Furthermore, a firm's success is contingent upon its ability to align its strategies with external expectations, including adapting to regional and institutional contexts (Chabowski et al. 2023) and aligning with consumer expectations (Leclercq-Machado et al. 2022). These strategic considerations form the bedrock upon which all sustainable marketing initiatives are built.

Mediating mechanisms

As identified in RQ2, the relationship between sustainable marketing and firm performance is not direct but is mediated by key factors. These mechanisms explain how sustainable marketing drives performance. Effective communication builds consumer trust and a strong green reputation (Casidy and Yan 2022; Wang and Juo 2024), which in turn fosters customer loyalty (Taoketao et al. 2018) and a competitive advantage (Papadas et al. 2019, as quoted in Foltean 2019).

In addition, sustainable marketing initiatives drive internal processes like green innovation (Negi, Gupta, and Gaur 2023) and improve environmental performance (Jorge et al. 2015). These internal improvements, in combination with positive consumer responses, collectively influence a firm's overall performance.

Beyond their role in improving firm-level outcomes, these mediating mechanisms also have broader social implications. Factors such as consumer trust, transparency, and authentic communication directly support the advancement of sustainable development goals (SDGs) by fostering responsible consumption patterns, ethical business behavior, and social accountability. In this sense, the mediating pathways identified in the framework demonstrate how sustainable marketing serves as a bridge between corporate performance and societal well-being.

Firm performance outcomes

The ultimate result of a well-executed sustainable marketing strategy is an improvement in multifaceted firm performance. The framework highlights that performance is not just economic but includes economic, social, and environmental dimensions (Kim 2018). These outcomes manifest as increased profitability, stronger market

position, enhanced brand reputation, and better environmental and social metrics, which are often interrelated (Mahmoud 2016; Nutsugah et al. 2021).

Managerial implications

While RQ3 provided a detailed list of sustainable marketing strategies from the literature, this proposed framework serves as a strategic tool for managers to apply and integrate those findings. It moves beyond isolated actions to an integrated and strategic approach, positioning sustainable marketing not as a standalone function but as an integral component of overall business strategy. For example, instead of merely launching a "green" advertising campaign, managers must ensure their efforts are supported by top management commitment and tangible practices throughout the supply chain and product development (Genç and Di Benedetto 2015; Laari, Töyli, and Ojala 2017).

Furthermore, the model highlights that the success of these initiatives hinges on the effective management of mediating factors. Managers should recognize that the goal of effective communication is not just to inform but to build the trust and green reputation that are directly linked to performance (Crapa, Latino, and Roma 2024; Wang and Juo 2024).

The framework also implicitly addresses the risks identified in the literature. By emphasizing transparency and credibility, it provides a direct solution to consumer skepticism and greenwashing (Wood et al. 2018), underscoring the need for authentic messages aligned with actual business practices.

By adopting this integrated perspective, companies can enhance their performance across economic, social, and environmental dimensions.

From a social perspective, the proposed framework also underscores that effective sustainable marketing extends beyond firm performance. By aligning profitability with environmental protection and social responsibility, companies contribute to broader societal objectives such as community welfare, ethical consumption, and social trust in business. These outcomes reinforce

the idea that sustainable marketing creates value not only for firms but also for society as a whole.

Conclusion

The analysis conducted in this article underscores the transformative potential of sustainable marketing for enhancing firm performance. By viewing sustainability as a fundamental business principle, companies can increase their profitability and market position and contribute to broader social and environmental objectives.

While companies that proactively integrate sustainability are best positioned for success, the positive impact of these efforts is subject to a variety of enabling and hindering factors. The bibliometric analysis reveals that although a positive relationship predominates, its success is not guaranteed. It depends on a firm's ability to capitalize on key enablers, such as strategic integration supported by top management commitment (Genç and Di Benedetto 2019), and to leverage external factors like consumer environmental awareness and authentic communication to build trust and green reputation (Wang and Juo 2024). Conversely, the analysis also highlights significant barriers, including consumer skepticism and the risk of greenwashing (Wood et al. 2018). Such challenges are particularly prevalent in certain industries or among large multinational corporations. From an internal perspective, the initial costs of implementing green initiatives can be a significant barrier (Çankaya and Sezen 2019), and some studies have reported mixed financial results, such as a negative impact on returns on equity (Khan, Johl, and Akhtar 2021). The literature also points to contextual barriers arising from a lack of adaptability to different regional and institutional environments, which can hinder effectiveness if a one-size-fits-all strategy is used (Chabowski et al. 2023).

In line with these contextual barriers, the effectiveness of key mediating mechanisms, such as green reputation and consumer environmental awareness, varies across contexts. In B2C markets, green reputation primarily functions as a signaling mechanism that shapes brand image, consumer perceptions, purchase intentions, and

loyalty, provided that sustainability claims are perceived as credible and aligned with consumer expectations (Gleim et al. 2023; Taoketao et al. 2018; Wang and Juo 2024). In B2B contexts, green reputation operates more indirectly, influencing firm performance through compliance with environmental standards, supply chain transparency, and the development of long-term relational trust, as evidenced by firms leveraging green supply chain management (GSCM) practices to mitigate supplier-related risks and strengthen network-based performance outcomes (Casidy and Yan 2022; Chabowski et al. 2023; Laari, Töyli, and Ojala 2017).

Across regions, institutional environments further condition these effects. In developed economies, higher levels of consumer environmental awareness, regulatory rigor, and institutional enforcement amplify the performance impact of sustainability initiatives by enhancing credibility and reducing information asymmetries (Gupta and Kumar 2013; Hunt 2017). Conversely, in developing and emerging economies, limited institutional support, cost sensitivity, and heterogeneous consumer awareness require firms to adapt sustainability strategies, often emphasizing incremental environmental improvements, credible communication, and local stakeholder engagement to translate sustainability efforts into performance gains (Jassim, Al-Mubarak, and Hamdan 2020; Mahmoud 2016; Nutsugah et al. 2021).

This study's contribution to the existing literature is multifaceted. First, it provides a comprehensive, data-driven synthesis of the entire field between 2013 and 2023, integrating fragmented findings into a coherent body of knowledge and offering a clear overview of the domain's intellectual structure. More specifically, the four thematic clusters identified in the bibliometric analysis collectively illustrate how sustainable marketing generates long-term benefits aligned with both business objectives and social well-being. The first cluster emphasizes strategic integration and managerial commitment, highlighting how embedding sustainability into core decision-making supports durable competitive advantage and organizational resilience. The second cluster focuses on mediating mechanisms such as green reputation, trust, and consumer environmental awareness, demonstrating how

sustainability-driven value creation strengthens stakeholder relationships and enhances market legitimacy over time. The third cluster captures performance outcomes, showing that sustainable marketing contributes not only to financial indicators but also to reputational and relational performance dimensions that underpin long-term firm success. Finally, the fourth cluster highlights contextual and institutional factors, underscoring that the societal and environmental benefits of sustainable marketing are most effectively realized when strategies are adapted to specific industry, cultural, and regional conditions. Together, these clusters reinforce the view that sustainable marketing is not merely a short-term tactical tool, but a strategic approach capable of simultaneously advancing firm performance and broader social and environmental well-being. Building on these insights, a key contribution is the conceptual framework, a novel explanatory model that organizes the literature's key variables into a logical structure, linking strategic antecedents, mediating mechanisms, and multidimensional performance outcomes. This model provides a foundation for future empirical testing, moving the field beyond descriptive analysis. Finally, this research translates complex academic findings into practical guidelines for managerial action, offering a holistic view of the strategic decisions and capabilities necessary for successful implementation and risk mitigation.

However, some limitations can be identified in this research. First, the sample size and dependence on a single search engine may have limited the representativeness of the data. Significant variations between industries and countries, on the other hand, limit the generalizability of the results, making it difficult to apply them uniformly. Likewise, the strategies and recommendations identified may need to be adapted to specific contexts. Finally, language barriers and resource limitations may also have influenced the results of the study.

These limitations, however, give rise to clear directions for future research. Scholars could expand the methodological scope by incorporating additional databases and employing advanced analytical techniques, including artificial intelligence tools. Additionally, future studies should transition from a broad overview to a more granular analysis,

conducting single-industry or country-specific case studies to explore unique contextual factors. Furthermore, the complexity of this topic requires a multidisciplinary approach; future research could benefit from integrating perspectives from fields such as psychology or sociology to explore how factors like consumer emotional intelligence or social norms moderate the effectiveness of sustainable marketing communications. Finally, research should move toward empirically testing the causal relationships proposed in our framework, using quantitative and qualitative methodologies to deepen the theoretical understanding of this topic. Future studies could adopt mixed-method approaches that combine bibliometric, quantitative, and qualitative techniques. This would allow researchers to empirically validate the conceptual framework developed in this study and capture deeper insights from practitioners and real-world cases, further enriching the understanding of how sustainable marketing translates into firm performance.

This research is significant because it provides the first bibliometric analysis to synthesize the complex relationship between sustainable marketing and firm performance into a structured and explanatory conceptual framework, offering a new theoretical lens for the field and practical insights for managerial practice.

Author contributions

CRedit: **Ana Catarina Nunes:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Validation, Visualization, Writing – original draft, Writing – review & editing; **Ângelo Pereira:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Supervision, Validation, Visualization, Writing – review & editing; **Margarida Saraiva:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing; **João Martins Canas:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Supervision, Validation, Visualization, Writing – review & editing; **Renato Lopes da Costa:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

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