

 <p>International Meetings and Journals Research ISSN p (e): 27900 ISSN 0127 Established: 2010</p> <p>Science, Education and Innovations in the Context of Modern Problems</p> <p>Editor-in-Chief & Chair of the Editorial Board: Dr. Hafid Hafid</p> <p>Monthly Regular Open Access October 2025 - Issue 10, Vol. 8</p> <p>imcra-az.org</p>	<p>Science, Education and Innovations in the Context of Modern Problems</p> <p>Issue 10, Vol. 8, 2025</p>
	<p>RESEARCH ARTICLE </p>
	<h2>Toward a Theoretical Framework for Green Marketing Strategies and Their Role in Advancing Sustainable Development</h2>
<p>Maiche Amira</p>	<p>Dr. University Abdelhafid Boussouf- Mila Algeria E-mail : a.maiche@centre-univ-mila.dz</p>
<p>Issue web link</p>	<p>https://imcra-az.org/archive/384-science-education-and-innovations-in-the-context-of-modern-problems-issue-10-vol-8-2025.html</p>
<p>Keywords</p>	<p>green marketing, sustainable development, marketing strategies, green marketing mix, environmental behavior.</p>
<p>Abstract</p> <p>This research aims to examine the role of green marketing strategies in supporting and achieving sustainable development by analyzing how companies employ environmentally friendly marketing practices across the different elements of the marketing mix, and the impact of these practices on the economic, social, and environmental dimensions of development. The study adopts a descriptive-analytical approach, drawing on recent literature and previous studies that address the concepts of green marketing, green markets, and green consumer behavior, in addition to reviewing the conceptual framework of sustainable development and its dimensions. The findings indicate that the adoption of green strategies by organizations has a positive impact on their performance through improving ecological efficiency, reducing production costs, and enhancing competitiveness through innovation and the development of sustainable products and services, as well as improving their corporate image within society through transparency and compliance with environmental standards. The study also shows that green marketing contributes to achieving balance among the dimensions of sustainable development by raising environmental awareness, stimulating responsible consumer behavior, and enhancing the participation of stakeholders in supporting environmental protection initiatives. Overall, the study confirms that green marketing represents an effective mechanism for creating comprehensive development that meets present needs without compromising the ability of future generations to meet their own needs.</p>	
<p>Citation</p> <p>Amira M. (2025). Toward a Theoretical Framework for Green Marketing Strategies and Their Role in Advancing Sustainable Development. <i>Science, Education and Innovations in the Context of Modern Problems</i>, 8(10), 1443-1452. https://doi.org/10.56334/sei/8.10.128</p>	
<p>Licensed</p> <p>© 2025 The Author(s). Published by Science, Education and Innovations in the context of modern problems (SEI) by IMCRA - International Meetings and Journals Research Association (Azerbaijan). This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).</p>	
<p>Received: 14.04.2025 Accepted: 11.06.2025 Published: 30.10.2025 (available online)</p>	

Introduction :

Over recent decades, the world has witnessed profound environmental, economic, and social transformations that have compelled organizations to reconsider their production and marketing models and to search for more sustainable practices. The significant increase in consumption, the rising demand for natural resources, and the intensification of pollution and global warming problems have highlighted the need to adopt new strategies that take the environmental dimension into account and align with the principles of sustainable development. In this context, the concept of green marketing has emerged as one of the modern approaches through which organizations seek to achieve a balance between profit objectives and environmental protection. This trend responds to the evolution of contemporary consumer

awareness, as consumers no longer assess products solely in terms of quality and price, but have become increasingly concerned with their environmental impact and the extent to which organizations adhere to the values of social responsibility and sustainability. Accordingly, green marketing has become a strategic option imposed by global transformations and competitive requirements, rather than merely a voluntary orientation, as it represents a tool capable of guiding consumer behavior toward more environmentally friendly choices and supporting the achievement of sustainable development.

Research Problem : Despite the growing interest in green marketing, its effectiveness in achieving sustainable development remains a subject of debate among researchers and practitioners, particularly with regard to its ability to influence the economic, social, and environmental performance of organizations. Hence, the research problem is articulated through the following main question: To what extent does green marketing contribute to supporting and achieving sustainable development within organizations, and what is the impact of its elements and mechanisms on consumer behavior and organizational performance?

Research Hypotheses : The study is based on a set of hypotheses, the most important of which are:

- The application of green marketing practices has a positive effect on the economic performance of the organization.
- The adoption of green strategies enhances the organization's corporate image and strengthens its social responsibility.
- Green marketing contributes to reducing negative environmental impacts by encouraging sustainable production and consumption.
- Green consumer behavior plays an important role in the success of green marketing strategies and the achievement of sustainable development goals.

Research Objectives: The study aims to:

- Analyze the relationship between green marketing and the dimensions of sustainable development.
- Highlight the role of the green marketing mix in improving organizational performance and enhancing competitiveness.
- Examine the impact of green consumer behavior on the success of green marketing practices.
- Provide a theoretical framework that helps integrate the environmental dimension into organizations' marketing strategies.

Importance of the Study : The importance of this study stems from its focus on a modern and growing topic that aligns with global trends toward supporting sustainability. It contributes to clarifying how organizations can benefit from green practices to improve their economic and social performance, develop their competitive advantage, and reduce costs by increasing environmental efficiency. It is also valuable to researchers by enriching the literature that links green marketing with sustainable development.

Research Methodology : The study adopts a descriptive-analytical methodology due to its suitability to the nature of the topic, as it allows for describing key concepts and analyzing the relationships between variables based on scientific literature and previous studies. A comparative theoretical analysis is also employed to infer the links between green marketing and the dimensions of sustainable development.

Study Model : The study is based on a conceptual model that considers the elements of the green marketing mix (product, price, distribution, promotion) as the independent variable, while the dimensions of sustainable development (economic, social, environmental) represent the dependent variable. Green consumer behavior mediates the relationship between the two main variables, as it constitutes a fundamental element in the success of green strategies.

Previous Studies : The study draws on a wide range of research that has addressed green marketing in terms of its concept, drivers, consumer attitudes toward it, and models of its application within organizations. It also reviews studies related to sustainable development and its dimensions, as well as research focusing on the impact of environmental and social responsibility on organizational performance. These studies have contributed to identifying the research gap that the current study seeks to address.

Study Terminology:

- **Green marketing** : A set of marketing activities aimed at providing products and services that preserve the environment and reduce environmental impact across the stages of production and consumption.
- **Sustainable development**: A process that balances economic, social, and environmental dimensions to meet present needs without compromising the rights of future generations.
- **Green consumer**: A consumer who makes purchasing decisions that take into account the environmental impact of products.
- **Green marketing mix**: The use of product, price, promotion, and distribution elements in a way that serves environmental protection and achieves sustainability.

First Axis: Conceptual Framework

First: General Overview of Green Marketing

- **Definition of Green Marketing:** Green marketing is considered one of the modern concepts that has gained increasing importance in light of global environmental challenges, as it seeks to integrate environmental considerations into companies' marketing strategies. The focus on this type of marketing arises from organizations' awareness of the need to reduce the negative impacts of their activities on the environment while maintaining competitiveness and business sustainability (Al-Imam, 2006). Michael defined green marketing as "all activities related to modifying the product or updating production methods, as well as changes in packaging and advertising methods, such that these modifications contribute to reducing or completely preventing negative environmental impact. (Ou Saleh, 2015)"

The American Marketing Association (AMA), on the other hand, emphasized the practical aspects of this concept, considering it to include the marketing of environmentally friendly and safe products, encompassing activities such as product modification, development of production methods, improvement of packaging techniques, and redesign of promotional strategies.

Green marketing is viewed as any marketing activity undertaken by an organization with the aim of enhancing the positive environmental impact of its products or reducing their potential negative effects, making it an important tool for achieving balance among the economic, social, and environmental objectives of organizations.

It can be said that green marketing goes beyond being merely a traditional marketing activity to become a comprehensive strategy that integrates environmental considerations into all stages of products and services. It represents a point of convergence between companies' economic objectives and society's environmental concerns, thereby enhancing corporate responsibility toward the environment and society and constituting a fundamental pillar of any sustainable development model (Al-Farhan, 2009).

2- Study of the Green Market and Green Consumer Behavior

2-1- Definition of the Green Market : Green markets are gaining increasing importance within the context of sustainable development, as environmental considerations have become an integral part of corporate strategies. Understanding the nature of these markets helps organizations adapt to the demands of environmentally conscious consumers and develop marketing strategies that balance profitability with the protection of natural resources.

The green market can be defined as a marketing domain that focuses on company activities aimed at enhancing the positive environmental impact of products or reducing the negative impact resulting from them. It is also viewed as a strategic process aimed at identifying customer needs and satisfying them at an appropriate value, while ensuring no harm to individuals or the natural environment. The importance of the green market lies in focusing on all marketing activities that may have contributed to creating environmental problems and working to find practical solutions to these challenges.

Thus, the green market is not merely a limited marketing trend, but a comprehensive strategy that reflects organizational awareness of environmental and social responsibility. It also provides companies with opportunities to innovate in their products and services, thereby enhancing competitiveness and ensuring long-term sustainability.

2-2- Green Consumer Behavior:

Definition of Consumer Behavior:

Understanding consumer behavior is considered one of the fundamental pillars for designing effective marketing strategies, especially in the green market where interest in environmentally friendly products is increasing. Studying this behavior enables organizations to identify consumer motivations and decisions, contributing to the development of products and services that align with the environmental and social aspirations of society.

Howard defined consumer behavior as the set of actions performed by individuals to obtain and use economic goods and services, including the prior procedures that determine such behavior. This behavior is characterized by the cyclical repetition of purchase, as consumers may repeatedly buy the same product or different products depending on the level of satisfaction derived from the purchasing experience. The green consumer, in turn, reflects a lifestyle that balances the fulfillment of personal needs with environmental preservation. This behavior involves making sustainable decisions that reduce negative environmental impacts, such as purchasing organic or environmentally friendly products, participating in recycling, and reducing the consumption of natural resources. It reflects an increasing awareness of social responsibility and a commitment to preserving the environment for present and future generations (Yousfi, & Ayoub,).

Analysis of green consumer behavior shows that organizations that understand consumers' environmental orientations can design products and services that meet their expectations, thereby enhancing customer loyalty and supporting sustainability. Such understanding also serves as an effective tool for linking marketing objectives with environmental strategies, achieving a positive impact on society and the environment.

B- Importance of Consumer Behavior:

The study of consumer behavior is a fundamental tool for understanding economic interactions between individuals and organizations, as it enables companies to design products and services that meet consumer expectations and to develop green marketing strategies. It also contributes to guiding production and marketing policies toward achieving a balance between meeting consumer needs and protecting the environment. The importance of studying consumer behavior is evident in its impact on various parties involved in the exchange process, from individuals and households to industrial and commercial organizations:

At the level of individuals and households:

It enables consumers to access information about products and compare available alternatives according to financial capabilities and personal preferences. It helps identify priorities and needs in light of the surrounding environmental conditions, including family and social customs and traditions. It allows households to evaluate the strengths and weaknesses of different alternatives and select the product that provides the highest level of satisfaction. It contributes to determining optimal times and places for shopping in order to meet needs efficiently (Fathallah, 1998).

At the level of industrial and commercial organizations:

- The results of consumer behavior studies provide organizations with guidance on what to produce in terms of type and quantity to meet consumer desires. They help determine the most appropriate marketing mix for goods and services.
- They enable organizations to prioritize investments and allocate available resources in a way that ensures profitability and continuity and helps cope with environmental changes.

It is clear that understanding consumer behavior is not limited to increasing sales, but extends to improving production quality and supporting strategic decision-making within organizations, while ensuring that consumer expectations are met and the environment is protected. This enhances the effective role of green marketing in supporting sustainable development.

C- Objectives of Studying Consumer Behavior:

The study of consumer behavior benefits consumers, researchers, and marketers as follows:

- It helps consumers understand their purchasing decisions and enables them to answer common questions such as: What do they buy? Identifying the different types of goods and services that satisfy their needs and desires, Why do they buy? Identifying the objectives or influencing factors that motivate purchasing decisions, How do they buy? Understanding the processes and activities involved in the purchasing process. It enables researchers to understand the personal and external (environmental) factors that influence consumer behavior (Louati, 2020).

D-Stages of the Purchasing Decision as Follows:

Understanding the stages of the consumer purchasing decision is essential for analyzing consumer behavior, as it enables companies to design more accurate marketing strategies, especially in the field of green marketing, thereby enhancing their influence on consumer choices and final satisfaction. During the purchasing decision-making process, the consumer goes through several successive stages:

- **First Stage: Pre-purchase Stage:**

This stage precedes the actual purchase process and includes a series of preparatory steps undertaken by the consumer to identify and satisfy needs, such as recognizing a need or problem, searching for information about available alternatives, and evaluating different options to make an initial decision regarding the most appropriate choice.

- **Second Stage: Purchase Stage:**

After evaluating alternatives, the consumer forms specific preferences; however, other factors may influence the final decision, including others' opinions, the influence of family members and friends, as well as economic conditions related to available income compared to product prices.

- **Third Stage: Post-purchase Stage:**

The impact of purchasing does not end at the moment of acquiring the product but extends to evaluating its performance compared to consumer expectations. If performance meets or exceeds expectations, satisfaction is achieved and the likelihood of repeat purchase increases. If results fall below expectations, the consumer seeks alternative options, using previous experience to guide future decisions.

Understanding these stages helps institutions improve the design of their marketing strategies, including green products and services, leading to enhanced consumer loyalty and sustainability in the relationship with the organization.

3- Green Marketing Mix Policies (Green Product Policy)

The green marketing mix is considered a strategic tool for institutions seeking to integrate environmental considerations into their marketing operations. Focusing on green products helps meet consumer needs while preserving environmental protection, contributing to the development of the corporate image and the achievement of long-term sustainability.

Green marketing primarily aims to design a marketing mix capable of meeting the needs and desires of the target market while considering environmental dimensions in each of its elements. Although the green mix relies on the same components as the traditional marketing mix, green orientations represent the fundamental difference, as the green mix focuses on:

- Preserving the environment and its resources from excessive depletion and encouraging sustainable resource use, Rationalizing individual consumption and guiding consumers toward environmentally friendly choices, Providing safe and recyclable products that reduce pollution resulting from manufacturing and distribution processes.

Several researchers agree that the green marketing mix consists of four main elements : green product, green price, green promotion, and green distribution, each contributing to achieving the institution's environmental and marketing objectives.

This approach demonstrates how organizations can simultaneously achieve market objectives and environmental protection, making green marketing not merely a marketing tool but an integrated strategy for supporting sustainability and achieving sustainable consumer satisfaction.

4- Green Distribution Policy (Green Promotion Policy)

Green distribution and promotion policies are fundamental pillars of environmental marketing strategy, as they integrate environmental considerations into communication with customers and product distribution processes. This approach aims to enhance the company's image as an environmentally responsible organization and positively influence consumer behavior toward environmentally friendly products (Kotler, et al., 2016).

When adopting the green marketing approach, it is necessary to consider a set of social and political variables that directly affect the marketing mix, as these considerations help companies adapt mix elements in line with green marketing principles.

The importance of the green promotional mix lies in several key points:

- **Enhancing the company green image :** Green promotion contributes to building the company's reputation as an environmentally responsible and sustainability-committed organization, strengthening customer and community trust and increasing customer loyalty and preference for its products.
- **Influencing purchasing decisions :** Green promotion targets consumers interested in environmentally friendly products and practices, helping persuade them to choose the company's products over competitors.
- **Developing competitive advantage :** Green promotion can differentiate the company in the market, contributing to increased sales and demand for its products.
- **Compliance with environmental laws and regulations :** The green promotional mix helps companies comply with environmental requirements issued by regulatory authorities, protecting them from legal risks and penalties.
- **Contribution to sustainable development :** Green promotion contributes to spreading environmental awareness and encouraging sustainable practices within society, thereby supporting sustainable development goals on a broader scale.

This approach shows that green promotion is not merely a marketing tool but represents a comprehensive strategy for enhancing environmental and social sustainability, achieving marketing gains for the company, and building long-term relationships with environmentally conscious customers.

Second : Green Marketing Strategies

Green marketing strategies are essential tools for companies seeking to integrate environmental considerations into their marketing policies. They aim to achieve a balance between environmental sustainability and commercial success. These strategies reflect differences in the level of company commitment to green practices and the methods used to apply environmental principles within products and services, as follows :

1- Lean Green Strategy

These companies focus on cost reduction, efficiency improvement, and long-term compliance with environmental laws and regulations, without emphasizing revenue growth from the green market. Such companies are often hesitant to introduce green products due to concerns about higher environmental compliance commitments.

2- Defensive Green Strategy

Defensive adopters use green marketing as a means to face competition, continuously studying environmental conditions and green products. However, these efforts often go unnoticed by consumers, limiting their direct marketing impact.

3- Shaded Green Strategy

These companies invest in environmentally friendly operations and make long-term financial and non-financial commitments to achieve competitive advantage. Despite their ability to fully apply green marketing principles, returns are often realized through other customer benefits, with products sold through preferred distribution channels within the community.

4- Extreme Green Strategy

This strategy involves integrating environmental values and sustainability into all organizational operations and products from the outset, making them the primary driving force of the organization. These companies often serve niche markets and sell products through specialized boutique stores, relying on lower-cost public relations activities instead of traditional advertising tools.

These strategies demonstrate that the degree of commitment to green practices varies among companies and that selecting the appropriate strategy depends on organizational objectives, target market size, and level of sustainability investment, with the possibility of integrating these strategies within the green marketing mix to maximize environmental and commercial benefits.

5- Green Product Marketing (Environmental-Level Marketing)

Green product marketing represents one of the most important methods of integrating environmental considerations into organizational strategies. It focuses on offering environmentally friendly products that help reduce the negative environmental impact of production and distribution processes. This type of marketing aims to enhance corporate environmental responsibility, reduce future risks associated with environmental impacts, and maintain the company's competitive position in the market.

Startups and modern industries seek to improve environmental marketing activities by developing technologies that contribute to waste reduction and recycling or eliminate solid waste generated by other companies. Due to the difficulty of accurately estimating the cost of addressing environmental problems, organizations face challenges in determining the necessary investment to address these issues in the future. Consequently, some organizations engage early in green marketing activities as a preventive measure to reduce or eliminate environmental risks before they arise, thereby enhancing sustainability and reducing potential long-term costs.

Green environmental-level marketing can be considered a strategic step for companies wishing to integrate sustainability into their operations, as it combines environmental protection, future risk reduction, and the achievement of a positive corporate image among consumers and society, enhancing long-term competitive efficiency.

Third: Fundamentals of Sustainable Development

Sustainable development is considered a cornerstone of modern environmental policies, representing an integrated framework that balances economic growth, environmental protection, and improvement of community quality of life. The importance of this concept stems from the urgent need to achieve development that considers the interests of both present and future generations while ensuring the sustainability of natural resources and limiting their depletion.

1- Definition of Sustainable Development

The concept of sustainable development goes beyond economic growth to include humans, the environment, and society within a comprehensive development strategy. It reflects harmony between the current needs of individuals and future generations. Initially, the focus was solely on the economic aspect, but it later evolved to include humans as a core element, eventually encompassing environmental concerns and comprehensive development. This concept is considered a response to environmental challenges resulting from unsustainable economic development, as it seeks to improve living standards while preserving a clean and healthy environment for future generations, emphasizing balance between economic progress and environmental resource conservation.¹

¹ Abdul Halim Ou Saleh, The Role of International Environmental Agreements in Protecting Fragile Ecosystems under Sustainable Development Rules: Case Study of Arab Countries Belonging to ESCWA, Journal of Research Files in Economics, Issue 04, 2015, p. 194.

Sustainable development represents a vital framework for planning future economic, social, and environmental policies. It is not limited to economic growth alone but aims to achieve balance between present and future needs, ensuring human well-being and environmental continuity for future generations.

Several definitions of sustainable development are available, including:

- **Sahar Qadri Al-Rifai (2009):** Sustainable development is an interactive, dynamic development that seeks to achieve harmony among its three pillars: people, environmental resources, and economic development.
- **Maher Abu Al-Maati (2014):** Sustainable development is a real, continuous, and ongoing development whose goal and purpose is the human being. It emphasizes balance among environmental, economic, social, and political dimensions, contributing to the development of natural resources, empowerment and development of human resources, industrial transformation, and scientifically planned development based on a defined strategy to meet present and future needs through community participation while preserving cultural identity.
- **Mohamed Kamel Sharqawi (2014):** Sustainable development is the process aimed at achieving the maximum level of economic efficiency of human activity within the limits of available renewable resources and the capacity of natural biological systems to absorb it, while safeguarding the needs of future generations.
- **Wafaa Ahmed Abdullah (1983):** Sustainable development is a set of policies and procedures adopted to move society toward a better condition through environmentally appropriate technology, achieving balance between natural resource construction and human exploitation within local and global policies aimed at maintaining this balance.

This definition shows that development is no longer merely economic growth but includes humans, the environment, and society, highlighting the role of local communities as active agents in transforming these concepts into concrete programs and projects that meet population needs while preserving natural resources.

2- Roles of Sustainable Development

Sustainable development represents a comprehensive framework that integrates economic, social, and environmental dimensions to ensure resource continuity and improve quality of life. Through its objectives and principles, it contributes to achieving balance between current societal needs and protecting future generations' interests. Its importance is reflected in several vital roles guiding planning and development policies.

Sustainable development seeks to improve population quality of life by considering environmental standards and appropriate urban planning, providing an integrated environment that enhances societal well-being. These roles can be summarized as follows:

- Respecting the natural environment by promoting harmony between human activities and the environment, achieving an integrative relationship between them, Raising community awareness of environmental issues by encouraging citizens to assume responsibility and actively participate in designing, implementing, and monitoring sustainable development programs and projects, in addition to seeking appropriate solutions to these issues, Promoting rational use of natural resources while avoiding depletion or destruction to ensure availability for future generations, Utilizing modern technologies to serve societal goals by enhancing public awareness of the importance of new tools and technologies in improving quality of life without causing negative environmental impacts, Adapting to continuous changes in community needs and priorities while adopting methods that balance available resources and economic requirements to control environmental problems, Achieving economic and technological growth that preserves natural capital, including environmental resources, while developing institutions, infrastructure, and risk management to ensure fair intergenerational distribution of wealth.

Sustainable development thus represents a fundamental pillar for achieving justice and equity between current and future generations, with emphasis on environmental protection, reduction of global environmental risks, and the development of clean technologies that support sustainability and reduce pollution.

3- Dimensions of Sustainable Development

Sustainable development is based on three main dimensions: economic, social, and environmental. These dimensions form the framework that enables local communities and planners to understand how to formulate development policies that balance present needs with future requirements. The integrated application of these dimensions reflects communities' capacity to achieve comprehensive and sustainable development with community participation in decision-making.

3-1- Economic Dimension:

The economic dimension forms the backbone of sustainable development, focusing on optimal resource use to improve living standards, increase gross domestic product, and enhance population welfare.

Economic development refers to sustainable and coordinated actions taken by responsible authorities and local communities to improve living standards and economic health of a region, involving both quantitative and qualitative economic changes. It encompasses areas such as human capital, infrastructure, regional competitiveness, environmental sustainability, and social inclusion.

Economic development differs from economic growth, as the former emphasizes policy interventions to ensure economic and social welfare, while the latter refers to productivity increases and GDP growth. Economic growth thus represents one component of the economic development process.¹

Sustainable economic development therefore extends beyond GDP growth to include improving living conditions and establishing an economic environment that continuously supports general welfare.

3-2- Environmental Dimension:

The environmental dimension of sustainable development focuses on protecting natural resources and biodiversity while ensuring future generations' ability to meet their needs without harming the environment.

Environmental development is a process aimed at conserving natural resources, reducing pollution, and achieving ecological balance to ensure life sustainability on Earth. It relies on the concept of self-sufficiency and mutual coexistence between humans and their environment, reconciling social and economic progress with sound resource management, and preventing potential environmental damage or disasters.

The success of local communities in achieving sustainable development depends on the integrated activation of all three dimensions, highlighting the importance of community participation and effective resource management in achieving comprehensive development.

3-3- Social Dimension:

Balanced development is not limited to economic development alone; it also encompasses social, cultural, and human dimensions. Social development refers to the development of human relationships and the improvement of education, culture, awareness, political participation, and health, while providing opportunities for freedom and participation.

Social development primarily concerns two sectors: government and civil society organizations, particularly charitable and community associations.

Three main approaches to social development can be identified:

- **First approach:** Views development as synonymous with social care in its narrow sense.
- **Second approach:** Considers development as a set of social services provided in various fields such as health and education.
- **Third approach:** Views social development as processes of social change affecting social structures and functions to satisfy individual and collective social needs, meaning comprehensive social transformation aimed at

¹ Medhat Abu Al-Nasr & Yasmin Medhat Muhammad, Sustainable Development: Concept, Dimensions, Indicators, 1st Edition, Arab Training and Publishing Group, Cairo, 2017, p. 85.

establishing a new social structure characterized by new relationships and values that fulfill individuals' needs and aspirations, achievable only through strong momentum to create qualitative change and desired progress.

Axis Two: Previous Studies Addressing the Relationship between Green Marketing and Sustainable Development

First: Local Studies

1/ The Role of Green Marketing in Achieving Sustainable Development

- **Type of study:** Article / study published on ASJP.
- **Objective:** To analyze the impact of green marketing on achieving sustainable development goals within Algerian institutions.
- **Methods:** Literature review and comparison of local institutional experiences, using qualitative analysis to derive effective initiatives.
- **Results:** The study showed that institutions adopting green marketing practices achieve better environmental performance, reduce waste, and enhance their reputation among customers.
- **Recommendation:** Encouraging institutions to adopt integrated green marketing policies within their strategies to ensure sustainable development.

2/ The Role of Green Marketing Ethics in Achieving Sustainable Development - Dhibyan Karima (University Center of Tissemsilt, 2021)

- **Type of study:** Analytical academic thesis.
- **Objective:** To study the relationship between commitment to green marketing ethics and the achievement of sustainable development goals in Algerian institutions.
- **Methods:** Use of questionnaires to measure the perceptions of managers and employees regarding green marketing practices; statistical analysis using SPSS (correlation tests and regression analysis).
- **Results:** There is a strong positive relationship between commitment to environmental and marketing ethics and improved institutional performance in the environmental and social dimensions.
- **Recommendation:** Strengthening training and capacity building on green marketing ethics, and establishing monitoring mechanisms to ensure the implementation of environmental policies.

3/ The Impact of Using Green Marketing in Contributing to Sustainable Development: A Case Study

- **Type of study:** Case study on specific institutions (articles in Arab journals covering Algerian institutional experiences).
- **Objective:** To measure the impact of adopting green marketing on institutional performance across environmental, social, and economic dimensions.
- **Methods:** Analysis of sustainable performance indicators, using a comparative methodology between institutions applying green marketing and those that do not.
- **Results:** Institutions that adopted green marketing showed a reduction in pollution, increased customer satisfaction, and improvement in their overall image.
- **Recommendation:** The necessity of adopting green marketing as a strategic policy for all industrial and service institutions to achieve balanced sustainable development.

Second: Arab Studies

1/ The Impact of Using Green Marketing in Achieving Sustainable Development - Al-Dosouqi (Egypt, 2025)

- **Type of study:** Applied study published in an Egyptian scientific journal.
- **Objective:** To evaluate the role of green marketing in enhancing sustainable development within industrial and service companies in Egypt.
- **Methods:** Use of questionnaires and interviews with company managers ; statistical analysis (regression tests and correlation analysis).
- **Results:** Companies adopting green marketing achieved noticeable improvements in environmental and social performance, increased customer satisfaction, and enhanced institutional image.
- **Recommendation:** Expanding the adoption of green marketing tools and integrating them into companies' strategic policies, with periodic monitoring of sustainable performance indicators.

2/ Socially Responsible Green Marketing as a Mechanism for Achieving Sustainable Development (A Study on Oil Companies, Sonatrach Model)

- **Type of study:** Applied analytical study on oil companies.
- **Objective:** To measure the impact of socially responsible green marketing on the environmental and social performance of oil companies in Algeria.
- **Methods:** Analysis of company data related to environmental and social initiatives ; use of performance analysis tools and comparison between different corporate social responsibility programs.
- **Results:** Socially responsible green marketing programs contributed to reducing the company's environmental impact, strengthening relationships with the local community, and increasing product acceptance.
- **Recommendation:** The necessity of integrating social responsibility into green marketing strategies, with periodic measurement of its impact on society and environmental performance.

3/ The Role of Green Marketing as a Mechanism for Achieving Sustainable Development - Conferences and National Papers (Egypt and Algeria)

- **Type of study:** Research papers and presentations at scientific conferences.
- **Objective:** To study various experiences of Arab companies and institutions in integrating green marketing into their strategic plans to achieve sustainable development.
- **Methods:** Analysis of company experiences through interviews and field observations, with comparison of performance before and after the application of green marketing.
- **Results:** Companies implementing green marketing strategies achieved reduced resource consumption, improved environmental and social performance, and increased customer trust.
- **Recommendation:** Adopting clear green marketing policies at the top management level, and linking environmental and social performance to incentives and rewards.

Third: Foreign Studies

1/ Green Marketing: A Means for Sustainable Development - ResearchGate

- **Type of study:** General theoretical review of concepts and principles.

- **Objective:** To provide a comprehensive overview of green marketing and its impact on sustainable development across various industrial and service sectors.
- **Methods:** Critical analysis of previous scientific literature; examination of green marketing concepts and their linkage to sustainable development principles.
- **Results:** The study showed that green marketing is not merely a promotional tool, but a comprehensive strategy capable of improving economic, environmental, and social performance of institutions.
- **Recommendation:** Adopting green policies at the strategic level of institutions and integrating green marketing principles into organizational culture and sustainable innovation.

2/ Green Marketing Orientation: Achieving Sustainable Performance – Chung, 2020

- **Type of study:** Applied study in the hospitality and hotel sector.
- **Objective:** To measure the impact of green marketing orientation on the sustainable performance of hotels.
- **Methods:** Use of questionnaires directed at hotel managers and customers; statistical analysis (regression and variance analysis).
- **Results:** Hotels adopting green marketing strategies experienced reductions in energy and water consumption, along with improvements in customer satisfaction and brand reputation.
- **Recommendation:** Integrating green marketing into daily operational processes of hotels and investing in environmental training programs for employees.

3/ Towards Sustainable Development: Coupling Green Advertising Receptivity, Green Brand Trust and Transparency – S. Rahman et al., 2023 (Wiley)

- **Type of study:** Quantitative study analyzing relationships between green marketing variables and brand trust.
- **Objective:** To examine how green advertising and brand transparency influence the achievement of sustainable development.
- **Methods:** Analysis of customer questionnaires using SEM to examine relationships between variables.
- **Results:** Transparency in green product advertising and trust in the brand enhance acceptance of environmentally friendly products, thereby contributing to the achievement of sustainable development goals.
- **Recommendation:** Focusing on transparent communication and credibility in green advertising, and developing strategies to strengthen customer trust in environmental products.

Axis Three: The Extent to Which Green Marketing Strategies Contribute to Achieving Balance among the Dimensions of Sustainable Development

Green marketing strategies seek to integrate the economic, social, and environmental dimensions of sustainable development into institutional policies, ensuring rational use of resources and achieving economic and social benefits for society while reducing negative environmental impacts. The importance of this axis lies in evaluating how green marketing can contribute to supporting sustainable economic growth while protecting the environment and improving quality of life.

First: Economic Dimensions

The economic dimension focuses on enhancing efficiency in resource use and achieving economic benefits for institutions and society, in line with sustainable development goals.

1-Eco-efficiency:

Green marketing contributes to cost reduction by improving the utilization of resources, especially non-renewable ones, known as eco-efficiency. According to the World Business Council for Sustainable Development (WBCSD), eco-efficiency can be defined as providing competitively priced products and services that meet human needs while reducing resource depletion and environmental impacts throughout the product life cycle. The use of reusable packaging and containers also helps reduce costs and increase sustainability.

2- Orientation toward services:

Green marketing seeks to reduce resource consumption by focusing on services rather than material products. This is achieved through: Replacing products with alternatives that consume fewer resources, Using devices that consume fewer resources (water, energy, components), Sharing or renting equipment instead of purchasing it, Resorting to services as an alternative to direct purchase (public transport, rental, cleaning, etc.), Collecting and sorting waste for recycling

3- Achieving a competitive advantage:

Green products help institutions attract customers and gain their loyalty, especially startups. Studies have shown that adopting environmental concepts significantly increases profitability, whether through eco-efficiency or increased sales. Green products also provide: Healthy products that do not harm humans, Environmentally friendly and recyclable products, Socially responsible, high-quality products. These practices grant institutions high credibility and a dedicated market of environmentally conscious consumers.

4- Improving the institutions image:

Green marketing contributes to enhancing the institution's image among customers and society, reflecting its commitment to environmental and social standards, and achieving multiple objectives, including:

Clarifying the evolution of policies and organizational orientations, Improving the competitive position in the market and relationships with stakeholders, Enhancing public perception of the institution and reducing previous criticisms. Success in green promotion is linked to clarity of the product message, ensuring consumer responsiveness to the brand, and diversifying communication channels.

5- Innovation for the development of green products:

Innovation is one of the main drivers of sustainable growth. The Organisation for Economic Co-operation and Development (OECD) defines innovation as the development of significantly improved products or services, or new marketing and organizational methods. Green marketing enables eco-innovation, which aims to:

- Deliberately reduce environmental impacts.
- Develop research and development methods and introduce changes in cultural and social standards and organizational structures within the institution.

It is thus evident that green marketing strategies effectively contribute to supporting the economic dimensions of sustainable development by enhancing eco-efficiency, stimulating innovation, achieving competitive advantage for institutions, and improving their image among consumers and society.

Second : Social Dimensions

1- Publishing Commitments Through Various Means: Publishing environmental and social commitments is one of the most important tools of green marketing, as it reflects the institution's adherence to sustainable principles and enhances its credibility with stakeholders and consumers. Green marketing plays a pivotal role in supporting institutions to fulfill their declared commitments by informing all concerned parties in a transparent and systematic manner, clarifying the links between words and actions. This approach aims to highlight the institution's distinction from competitors and make environmental and social commitments verifiable and trackable.

To implement this effectively, the institution must:

- **Identify functional discrepancies:** Analyze existing environmental and social issues.
- **Public commitment to reform:** Announce progress and new programs transparently.
- **Continuous communication with stakeholders:** Exchange information and ideas, review challenges, and provide practical solutions.
- **Present real examples:** Highlight previously implemented initiatives and specify allocated budgets.
- **Promote new programs:** Provide a clear plan outlining achieved commitments and anticipated future progress.

Publishing environmental and social commitments transparently and reliably develops trust and credibility between the institution and consumers, and encourages other institutions to adopt sustainable practices, contributing to sustainable development at the societal level.

2- Providing Reports on Institutional Activities: Preparing environmental and social reports is considered one of the most important tools of green marketing. It enables the institution to monitor its performance and provide transparent information to stakeholders. These reports enhance institutional credibility before civil society, facilitate internal and external evaluation, and encourage continuous environmental and social commitment. Even multinational corporations are obliged to issue environmental reports aligned with their operating regions, taking into account local laws and stakeholder specifics.

Reports typically include:

- **Analysis of current conditions:** Defining the institution's green marketing strategy, adopted environmental and social performance indicators, and relevant laws and regulations.
- **Employee expectations:** Studying how environmental and social dimensions are integrated across all job positions.
- **External stakeholder expectations:** Understanding their requirements and linking them to institutional performance.
- **Selecting appropriate indicators:** Aligning them with internal conditions and stakeholder expectations.
- **Collecting and analyzing internal information:** According to the approved indicators to ensure data accuracy.
- **Preparing the final report:** Including institution profile, used indicators, results, environmental and social impacts, and providing contact information via surveys or dedicated email.
- **Increasing transparency:** By providing the report to NGOs or civil society organizations to verify data accuracy.
- **Determining publication methods:** Ensuring the report reaches all concerned parties.
- **Periodic repetition:** To monitor achievements and verify adherence to environmental and social standards.

3- Green Promotion and ISO Standard ISO14021 :

Environmental declarations aim to inform the public about the institutions voluntary environmental initiatives, whether related to products, services, or management practices, without retracting previously made statements. The International Organization for Standardization (ISO) has issued the ISO14021 standard, which outlines ecological claims that institutions can voluntarily communicate, including:

- Reduced resource usage.,Energy recovery,Waste reduction,Lower energy consumption,Reduced water use ,Extended product lifespan.,Reuse or recharge,Use of natural fertilizers,Design for disassembly and natural biodegradability , Recyclable products.,Products made from reclaimed materials.

4- Disseminating Green Marketing Culture from Inside to Outside:

Environmental teams within institutions coordinate and integrate across departments to provide green products. These teams consist of specialists who study and discuss various environmental aspects from multiple perspectives, enabling each member to be informed and contribute to spreading environmental culture within the institution. This culture extends externally through communication with suppliers or customers, who in turn transmit the institution's values to other entities, raising awareness of environmental challenges and highlighting credible and applicable initiatives.

Public relations play a crucial role in spreading positive values among all parties interacting with the institution, especially those in the value chain. Observing internal positive changes also acts as a strong motivational tool to propagate these values and ideas more broadly.

Third: Environmental Dimensions

1- Reducing Pollution Through Service-Oriented Approaches: As mentioned in the economic dimension, reducing resource use through service-oriented approaches (dématerrialisation) has a tangible positive environmental impact. It contributes to reducing pollution from distribution and transportation processes, lowers energy consumption due to reduced movement of goods and people, and decreases material production, which reduces pollution from industrial operations and minimizes negative impacts from product waste. This approach reflects the integration of economic and environmental dimensions in green marketing.

2- Reducing Pollution Through Ecological Efficiency:

Alongside service-oriented approaches, green marketing effectively reduces pollution through ecological efficiency, which minimizes material consumption, particularly energy resources, reducing pollution and the proportion of defective products turning into waste if not treated. Advanced technology supports this approach by reducing pollutant emissions. Ecological innovation allows institutions to find effective solutions to environmental challenges, enabling goal achievement without harming the surrounding environment.

3- Product Analysis Without Environmental Harm:

Even in cases where waste recovery or recycling is difficult, green marketing provides environmentally friendly, rapidly biodegradable products without external materials for decomposition. Natural biodegradation is defined as the "ability of residues and waste to decompose naturally under the influence of microorganisms in nature." This occurs in two stages : primary partial decomposition of appearance and structure, and microbial (aerobic and anaerobic) decomposition of the material's microscopic structure, preventing waste accumulation, especially plastic, which can take over 400 years to decompose.

Environmentally conscious companies develop formulations for rapid decomposition, preserving the environment. Product life cycle analysis is an essential tool for determining the environmental concept of a product, studying raw material sources, energy use, and potential impacts on ecological balance and living systems. Environmental innovation also seeks production and energy methods that do not harm the environment, ensuring alignment with sustainable development goals. For instance, the SimaPro program helps maximize environmental benefits, resource efficiency, and eco-design to reduce pollution and other environmental impacts.

The environmental dimensions of green marketing focus clearly on reducing pollution and protecting natural resources, whether through service-oriented approaches to reduce transportation and energy consumption, ecological efficiency to minimize material and energy use, or designing biodegradable products and analyzing their life cycle to minimize environmental impact. These measures reflect institutions' commitment to environmental sustainability and its integration with sustainable development goals, making green marketing an effective tool for preserving the environment while enhancing production efficiency.

Conclusion :

This study reveals the concept of green marketing and its role in achieving sustainable development. Institutions adopting this approach not only meet contemporary environmental requirements but also ensure long-term competitiveness and continuity. Results showed that integrating environmental principles into all components of the marketing mix improves economic performance by reducing waste, increasing resource efficiency, and developing high-quality products that meet green consumer expectations. Additionally, these practices enhance societal trust through supporting social and environmental responsibility and create a positive image that fosters loyalty and long-term relationships with consumers.

Environmentally, results confirmed that green marketing effectively reduces pollution and the environmental impact of production and marketing processes, making it a key tool for achieving one of the most important sustainable development dimensions: protecting ecosystems. Green consumer behavior also plays a pivotal role in the success of green strategies, acting as a complementary and accelerating factor in achieving institutional sustainability goals.

Recommendations: Adopt a comprehensive institutional vision that makes green marketing a permanent part of the overall strategy rather than a secondary activity, Encourage investment in research and development to produce innovative, eco-friendly solutions that meet consumer expectations, Enhance transparency in marketing communication to gain consumer trust and avoid misleading environmental claims, Support public-private partnerships to develop joint programs promoting responsible consumption. Include green marketing and sustainability modules in higher education and vocational training to build an informed and competent generation in this field.

Future Perspectives: This study opens the way for deeper future research based on applied methodologies or quantitative models to measure the impact of green marketing on consumer behavior in different contexts. Comparative studies between institutions adopting green marketing and those that do not can highlight performance differences. Promising areas also include studying the impact of technology and digitalization, such as artificial intelligence, smart supply chains, and sustainable digital marketing, on developing more effective and sustainable marketing practices. Research can also expand to analyze the role of government policies and environmental legislation in promoting or limiting green marketing implementation within institutions.

Ethical Considerations. This study is purely theoretical and is based on a descriptive-analytical review of existing academic literature and previously published research. It does not involve human participants, personal data, surveys, interviews, or experimental procedures. Therefore, ethical approval from an institutional review board or ethics committee was not required.

The author has adhered to recognized academic and research ethics by ensuring proper citation of all sources, avoiding plagiarism, and presenting the reviewed literature objectively and accurately. All interpretations and analyses are conducted in a transparent and responsible manner, in line with international standards of academic integrity.

Acknowledgements. The author would like to express sincere appreciation to all scholars and researchers whose academic contributions in the fields of green marketing and sustainable development formed the theoretical foundation of this study.

Special thanks are extended to colleagues at **University Abdelhafid Boussouf - Mila** for their academic support and constructive intellectual environment, which contributed to the completion of this research.

Funding. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. The study was conducted as part of the author's independent academic research activities.

Conflict of Interest. The author declares that there are no conflicts of interest related to this study. The research was conducted independently, and the findings, interpretations, and conclusions presented in this article are solely those of the author and were not influenced by any financial, institutional, or personal relationships.

References:

1. Al-Bakri, T. (2016). *The effect of green marketing mix on consumer behavior for renewable energy products*. Journal of Baghdad College of Economic Sciences University, (Special Issue), 65-92.
2. Al-Bakri, T., & Al-Nouri, A. N. (2007). *Green marketing*. Al-Yazouri Publishing and Distribution.
3. Al-Farhan, A., Hussein, H. A., & Farhan, T. A. (2010). *Philosophy of green marketing* (1st ed.). Dar Safaa for Printing and Publishing.

4. Al-Farhan, T. A., & Hussein, H. A. (2009). *Philosophy of green marketing*. Dar Safaa for Publishing and Distribution.
5. Al-Imam, M. M. (2006). *Population, resources, environment, and development*. Arab Scientific Publishers & UNESCO-EOLSS.
6. Abu Al-Nasr, M., & Muhammad, Y. M. (2017). *Sustainable development: Concept, dimensions, and indicators* (1st ed.). Arab Training and Publishing Group.
7. Ahmad, A. L. R. (2008). *Social development within the framework of the social work profession* (1st ed.). Dar Al-Wafaa for Printing and Publishing.
8. Fathallah, A. T., & Al-Rajhi, D. A. B. H. (1998). *Pollution and the agricultural environment*. Scientific Publishing House.
9. Ghoneim, O. M., & Abu Zant, M. A. (2007). *Sustainable development: Philosophy, planning methods, and measurement tools* (1st ed.). Dar Safaa for Publishing and Distribution.
10. Louati, R. (2020). Green marketing strategies and their role in achieving environmental sustainability of the institution. *Al-Rasid Scientific Journal*, 7(2), 165-190.
11. Ou Saleh, A. H. (2015). The role of international environmental agreements in protecting fragile ecosystems under sustainable development rules: The case of Arab ESCWA countries. *Journal of Research Files in Economics*, (4), 175-205.
12. Yousfi, R., & Ayoub, A. (2020). The impact of adopting creative methods on green marketing strategy: A field study at Novapeint Algérie. *Annals of Guelma University Journal of Social and Human Sciences*, 13(1), 85-105.
13. Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39-48. [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G)
14. Charter, M., & Polonsky, M. J. (1999). *Greener marketing: A global perspective on greening marketing practice*. Greenleaf Publishing.
15. Dangelico, R. M., & Vocalelli, D. (2017). "Green marketing": An analysis of definitions, strategy steps, and tools. *Business Strategy and the Environment*, 26(4), 457-475. <https://doi.org/10.1002/bse.1938>
16. Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone.
17. Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
18. Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2013). "Greening" the marketing mix: Do greeners lead to greener? *International Journal of Business and Social Science*, 32(1), 151-170.
19. Peattie, K. (2001). Towards sustainability: The third age of green marketing. *The Marketing Review*, 2(2), 129-146. <https://doi.org/10.1362/1469347012569869>
20. Polonsky, M. J. (1994). An introduction to green marketing. *Electronic Green Journal*, 1(2), 1-10.
21. Porter, M. E., & van der Linde, C. (1995). Green and competitive: Ending the stalemate. *Harvard Business Review*, 73(5), 120-134.
22. United Nations. (1987). *Report of the World Commission on Environment and Development: Our common future*. Oxford University Press.
23. United Nations Environment Programme. (2011). *Towards a green economy: Pathways to sustainable development and poverty eradication*. UNEP.