

GREEN MARKETING FOR ENVIRONMENTAL SUSTAINABILITY: A CRITICAL REVIEW

By

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ABSTRACT

This review-based article aims to provide knowledge about green marketing by critically examining key aspects such as green marketing and products, problems and challenges reported in the literature, consumer perspectives, factors influencing adoption, benefits, valuable suggestions, and selected organizational practices. Further, it says the green financing activities boost the functions of green business. Most of the contents of this article reflect the Indian firms' reflection. Higher costs, limited access to green technologies, limited incentives, low environmental awareness, resistance to change, and lack of consumer trust in green claims are the few challenges companies face while launching green products. From the consumers' points of view, environmental concern, price concern, product efficacy, brand image, available and accessible products, and education and awareness are the few factors influencing the consumers' behavior. As far as the factors influencing the promotion of green products are concerned, the key elements such as environmental consciousness, product price, quality, availability, affordability, demographic and psychographic profiles, media exposure, green trust, and positive attitude collectively serve as drivers of green marketing activities. In order to strengthen the green marketing activities, the following are a few suggestions recommended: The following suggestions are recommended to strengthen green marketing activities: Environmental Studies, encouraging the sale of green products, targeting larger shops as well as smaller ones, imitating companies that actively promote green practices, being aware of the Environment Protection Act of 1986, promoting green behavior, implementing green finance operations, and establishing a Green Award.

Keywords: Green Marketing, Green Financing, Green Behavior, Green Award, Environmental Sustainability, Business Practices.

INTRODUCTION

Sustainability

Sustainability refers to the ability to cause minimal or no harm to the environment, thereby ensuring continuity over a long period (Cambridge Dictionary).

Green Marketing

According to the American Marketing Association, green marketing refers to the marketing of products and services that are environmentally safe. Green marketing is a strategic approach that involves the development, promotion, and distribution of products and services that are environmentally friendly (Polonsky, 2011).

Green marketing refers to the process of selling products and services based on their environmental benefits, where such offerings should be eco-friendly in themselves or made sustainable through product modification, changes to the production process, sustainable packaging, and environmentally conscious advertising. It



This paper has objectives related to SDG



involves developing and promoting products and services that satisfy customers' wants and needs for quality, performance, affordable pricing, and convenience without having a detrimental impact on the environment (Linu, 2021).

The inculcation of 'green marketing practices' in consumer durable goods foresees a long journey from product-based certification to changes in features, supply chain, raw material choices, packaging-based innovations, and retail-based advertising options (Sharma & Vohra, 2022). During recent times consumers prefer more environmentally friendly products over traditional products, and their opinion and preferences have been changed towards the green products because of environmental issues (Pragati & Anjani 2022). Green marketing is a modern concept, and it is adopted by companies and business firms due to harmful effects on the environment (Ibid). Global warming, climate change, and air pollution, which are happening today, are some of the reasons that can be attributed to the shift to a "green" economy, which is considered a "policy and conceptual framework for sustainability" (Moise et al., 2021).

Indian firms, with their growing global presence and diverse market segments, have recognized the need to embrace green marketing to achieve competitive advantage and contribute to a greener future. They have embarked on various initiatives, such as eco-friendly product development, sustainable packaging, energy-efficient manufacturing processes, and responsible waste management. Moreover, many companies have implemented corporate social responsibility (CSR) initiatives aimed at environmental conservation, promoting renewable energy, and supporting local communities (Harish, 2014). Companies that implement green marketing orientation send a message to the stakeholders that they care about the society and the ecosystem (Vilkaite-Vaitone & Skackauskiene, 2020).

Green Products and its Characteristics

Products manufactured using green technology and designed to avoid environmental hazards are classified

as green products (Shubha, 2024). Promotion of green technology and green products is necessary for conservation of natural resources and sustainable development. Green products can be defined by the following measures:

- Products that are originally grown.
- Products that are recyclable, reusable, and biodegradable.
- Products with natural ingredients.
- Products containing recycled contents and non-toxic chemical.
- Products containing approved chemical.
- Products that do not harm or pollute the environment.
- Products that will not be tested on animals.
- Products that have eco-friendly packaging, such as reusable or refillable containers.

For instance: electric cars, bamboo wooden goods (spoons), recycled paper products, solar energy, hydro energy, and wind energy.

Greenwashing

Some brands and marketers have attempted to capitalize on consumer demand for environmental consciousness by taking a green marketing approach to products or services that are not necessarily green or sustainable. This practice is known as greenwashing.

Common practices of greenwashing include:

- Employing unregulated terms like "green" or "natural" to describe products.
- Using the color green or environmental symbols like leaves or trees on packaging.
- Promoting misleading studies or statistics to support an eco-marketing message.
- Portraying cost-cutting measures as motivated by environmental sustainability.

Green Consumer

A green consumer is one who avoids products that are likely to endanger the health of the consumer or others; cause significant damage to the environment during manufacture, use, or disposal; consume a

disproportionate amount of energy; cause unnecessary waste; use materials derived from threatened species or environments; involve unnecessary use of, or cruelty to, animals; or adversely affect other countries.

1. Statement of the Problem

Green marketing strategies have substantial barriers, including misconceptions about financial implications and the need for greater governmental support (Rawat & Pande, 2024).

The adoption of green marketing strategies in India is not without challenges. Companies face obstacles such as higher costs associated with eco-friendly products, limited consumer awareness and willingness to pay premium prices, and regulatory uncertainties that can hinder long-term planning and investment in sustainable practices (Mathur, 2000).

The price sensitivity of Indian consumers presents a significant challenge for green marketing. Many consumers are unwilling to pay premium prices for eco-friendly products, perceiving them as luxury items rather than necessities (Manaktola & Jauhari, 2007). This perception is further reinforced by the fact that many green products are priced higher than their conventional counterparts due to increased production costs and smaller economies of scale (Rawat & Pande, 2024).

- *Higher Costs:* Developing and producing eco-friendly products typically involves higher costs due to the use of sustainable materials, the implementation of cleaner technologies, and smaller production scales (Jain & Kaur, 2004).
- *Limited Access to Green Technologies:* Many Indian companies, particularly small and medium enterprises (SMEs), struggle to access and afford the latest green technologies (Nair & Menon, 2008).
- *Limited Incentives:* The absence of strong government incentives for green initiatives, such as tax breaks or subsidies, can make it difficult for companies to justify the additional costs associated with green marketing (Kumar, 2016).
- *Low Environmental Awareness:* Despite growing concern, overall environmental awareness among

Indian consumers remains relatively low, particularly in rural areas (Maheshwari & Malhotra, 2011).

- *Resistance to Change:* Traditional consumption patterns and a preference for familiar products can make it challenging to introduce new, eco-friendly alternatives (Jain & Kaur, 2006).

The lack of consumer trust in green claims made by companies is another significant barrier. Greenwashing, the practice of making misleading or false environmental claims, has eroded consumer confidence in green marketing messages (Nyilasy et al., 2014).

Much of the existing research on green marketing in India has focused on general consumer attitudes or broad business strategies (Paul et al., 2016; Singhal & Singhal, 2015). However, there is a dearth of studies examining industry-specific green marketing strategies and their effectiveness.

Implementing effective green marketing strategic challenges includes high initial costs, limited consumer awareness, inadequate infrastructure for recycling and waste management, and the need for a supportive regulatory framework (Harish, 2014).

Understanding these challenges and the strategies employed by Indian companies to overcome them is crucial for developing effective green marketing initiatives and fostering a more sustainable business environment (Rawat & Pande, 2024).

2. Review of Literature

Rawat and Pande (2024) conducted a study examining the landscape of green marketing in India, exploring the concept's evolution, its strategic importance, and the challenges faced by businesses in this domain. The study concludes that even incremental efforts toward environmental sustainability can significantly contribute to addressing contemporary ecological challenges. Pragati and Anjani (2022) discussed the concept of green marketing, its evolution, the green marketing mix, the challenges it faces, the companies adopting green strategies in the market, and the factors influencing green marketing.

The main objective of the study is to determine the

essence of green marketing and how businesses can enhance their competitiveness by implementing strategies to outperform their competitors. It examines the key issues involved in adopting green marketing practices and provides an overview of the current state of the Indian market, including the challenges and opportunities businesses face. The study also explores the reasons behind companies adopting green marketing and the future prospects of this field. Overall, it suggests that green marketing will continue to grow in both practical implementation and consumer demand (Harish, 2014).

The article provides researchers and marketing managers with a comprehensive understanding of the factors affecting the adoption of green marketing orientation. Theoretical analysis indicates that these factors can be either external or internal in nature and may influence decisions directly or indirectly, differing in their level of manageability. The findings offer opportunities for researchers and managers to implement green marketing orientation effectively, and the article also provides directions for future research and managerial implications (Vilkaite-Vaitone & Skackauskiene, 2020).

This paper discusses how businesses have increasingly focused on targeting green consumers, those concerned about the environment whose preferences influence their purchasing decisions. It examines current trends of green marketing in India, explores the reasons why companies are adopting such strategies, and considers the future of green marketing, concluding that it will continue to grow in both practice and demand (Shubha, 2024).

The article provides researchers and marketing managers with a comprehensive understanding of the factors influencing the choice of green marketing orientation. Theoretical analysis indicates that these factors can be either external or internal and may affect decisions directly or indirectly, varying in their degree of manageability. The findings offer practical opportunities for researchers and managers to implement green marketing orientation effectively, and the article also highlights directions for future research and managerial implications (Vilkaite-Vaitone & Skackauskiene, 2020).

A study on green marketing strategies and consumer behavior concluded that for businesses to remain profitable, they need to embrace sustainable marketing supported by green marketing. This relationship is illustrated through the green-sustainable framework developed from the literature review (Muchenje et al., 2023).

Research on consumers' perception of green marketing is intended to investigate how individuals interpret and respond to environmentally friendly marketing strategies. By examining factors such as consumer attitudes, beliefs, and behaviors toward green products and brands, researchers seek to understand the effectiveness and impact of green marketing initiatives. This research typically employs surveys, experiments, and qualitative analyses to uncover insights that can help businesses better engage environmentally conscious consumers and promote sustainable consumption practices (Raghuvansh & Praveen, 2024).

The present paper reviews the green marketing literature across various aspects, including customer awareness, the relationship between customer awareness and the usage of green products, the effects of green products, and the benefits of using them (Linu, 2021). The study found that green marketing in the retail industry presents both advantages and disadvantages. Advantages include increased customer awareness of environmental issues, potential for higher sales and brand loyalty, and an opportunity to differentiate from competitors. However, disadvantages include the risk of 'greenwashing,' where a company appears more environmentally friendly than it actually is, and the possibility of alienating customers who do not share the same values. Overall, green marketing carries both benefits and risks, and businesses must carefully weigh these factors before adopting such practices (Talla et al., 2023).

3. Green Marketing Mix

Table 1 shows the role of 4Ps in green marketing.

4. Consumer Perspectives on Green Marketing

In India, consumer perspectives on green products are complex and multifaceted. Although awareness of

4Ps of Marketing	Details
Product	Designing Green Products: This includes Using green materials. Reducing waste during making products. Designing products that have a longer life. Offering Green Product Alternatives.
Price	Setting Fair Prices. Pricing products fairly can show a company's commitment. Offering Rewards: Offering discounts or rewards for customers making greener choices.
Place	Choosing Greener Methods. Using sustainable packaging materials. Choosing transport options that have a lower impact on nature, such as e-vehicles.
Promotion	Highlighting Eco-Friendly Features to help deter a business from rivals and appeal to consumers. Avoiding Greenwashing. Firms should ensure that their claims are truthful and not misleading, to maintain consumer trust.

Table 1. Role of 4Ps in Green Marketing

environmental issues is growing, it does not always translate into purchasing behavior (Jain & Kaur, 2006). Dhir et al. (2020) categorized consumers into three distinct segments: true green, sprouts, and brown. The true green segment comprises dedicated eco-consumers who consistently choose green products, actively engage in recycling and other environmentally friendly behaviors, and firmly believe that individual actions contribute significantly to positive environmental outcomes. The sprouts segment includes consumers who care about the environment and occasionally make green purchases but do not consistently integrate eco-friendly practices into all aspects of their behavior; this moderate green segment is the largest, encompassing approximately 55–60% of urban Indian consumers. The brown segment represents consumers with minimal environmental consciousness, showing little consideration for sustainability in their purchasing decisions. Additionally, higher-income and more educated consumers demonstrate a greater propensity to pay premium prices for green products (Rajul & Panda, 2021).

4.1 Consumer Behavior and Attitudes towards Green Products

Here is the explanation of consumer reactions towards green products:

- *Environmental Concern:* Consumers who are inherently environmentally conscious tend to purchase green products, believing that their purchasing choices can have a positive impact on nature.
- *Price Concern:* Consumers who are sensitive to price may avoid purchasing green products because they

are typically more expensive than conventional alternatives. However, some consumers are willing to pay a premium for eco-friendly products if they believe their purchase will have a positive environmental impact.

- *Product Efficacy:* Consumers expect green products to be as effective as conventional alternatives. If they perceive a green product to be less effective, they may be reluctant to purchase it.
- *Brand Image:* Consumers prefer to purchase green products from brands they trust and perceive as genuinely committed to sustainability. A strong brand image can enhance consumer trust and loyalty.
- *Available and Accessible Products:* Consumers purchase green products if they are available and accessible. If green products are difficult to find or purchase, consumers may choose other products instead.
- *Education and Awareness:* Educated consumers who are aware of environmental issues are more likely to purchase green products. They understand the ecological impact of their purchasing choices and aim to make environmentally responsible decisions.

5. Factors Influencing Green Marketing

Bhatia and Jain (2013) found that environmental consciousness, product price, and quality were significant determinants of green purchase intentions. In their study on factors affecting green marketing, environmental concern and eleven variables, including environmental knowledge, health, legislation, availability, affordability, green marketing practices, buyer behavior, government support, and reference group, were

identified as influencing green marketing (Sharma & Vohra, 2022). Green marketing, customer loyalty, customer satisfaction, green products, and green image are considered key factors of green practices (Adnan & Widowati, 2023).

In their study on factors affecting the implementation of green marketing orientation, certain sets of variables were examined (Vilkaite-Vaitone & Skackauskiene, 2020). Some of the selected variables of them are: Marketers' demographic profile, customers' psychographic profile, customers' intentions to buy environmentally friendly products, media exposure of environmental problems, culture of organization, competitive pressure, Government legislation, government support.

The study identified green perceived value, green perceived quality, green perceived risk, perceived behavioral control, perceived consumer effectiveness, environmental knowledge, environmental concern, green trust, positive attitude, subjective norm, and collectivism as factors influencing green purchase intention (Zhuang et al., 2021). Credibility and trustworthiness, environmental concerns and values, product features and advantages, social influence and norms, benefits and personal relevance, greenwashing and consumer skepticism, and regulatory compliance and ethical practices are the factors influencing green marketing (Raghuvansh & Praveen, 2024).

6. Green Marketing Benefits

The findings of the study on the adoption of green marketing strategies highlight that the integration of green marketing practices enhances corporate competitiveness and contributes to broader environmental goals (Rawat & Pande, 2024). Accordingly, the incorporation of green marketing strategies represents a logical and necessary step for companies seeking long-term sustainability and societal benefits. Many Indian companies, particularly in sectors such as fast-moving consumer goods (FMCG), automobiles, and information technology, have begun integrating sustainability into their business strategies and marketing efforts (Saxena & Khandelwal, 2010).

6.1 Benefits for Firms

- *Increased Customer Loyalty:* Today customers are becoming more and more conscious about the environment and their social responsibility. Thus, they prefer to do products or services from the companies that share their values. By promoting eco-friendly practices, firms can demonstrate their commitment to sustainable business practices, which, in turn, can help increase customer loyalty.
- *Edge over Rivals:* By promoting eco-friendly products and services, firms can differentiate themselves from their competitors and attract customers who are specifically seeking sustainable options. This can also help them boost market share and increase revenue.
- *Cost Saving:* Green marketing strategies help firms to save money. By adopting sustainable practices such as energy-efficient manufacturing processes or using recycled materials, firms can reduce their operational expenses and improve their bottom line.
- *Improved Brand Image:* Green marketing strategies can also help enhance a firm's brand image. By promoting their eco-friendly business practices, they can build a positive reputation and gain recognition as a socially responsible organization.
- *Increased Sales:* Green marketing can also help to increase sales, as more consumers are adopting sustainable practices and products; they choose products that don't impact the environment negatively. By promoting eco-friendly options, firms can tap into this growing market and generate more sales.

6.2 Benefits for Customers

- *Increased Awareness:* For customers, one of the most significant benefits of green marketing is increased awareness. Such marketing campaigns focus on educating consumers about the environmental impact of their choices and the benefits of selecting environmentally friendly products and services. This increased awareness can lead to a greater understanding of environmental issues.
- *More Green Choices:* Another benefit of green

marketing for customers is that it encourages more sustainable practices. As an increasing number of companies adopt environmentally friendly measures, customers have access to a wider range of options for making sustainable choices.

- *Improved Health and Well-being:* Green marketing strategies can also contribute to improved health and well-being for customers, as environmentally friendly products and services are typically made from natural or organic materials free from harmful chemicals and toxins. Consequently, customers benefit from consuming healthier, safer products.

6.3 Benefits for Nature

- *Reduced Harmful Impact:* These marketing strategies help minimize the harmful impact of human activities on the environment. For instance, companies that adopt sustainable packaging or reduce their carbon footprint can lower the amount of waste and pollution generated. By mitigating these negative impacts, companies contribute to the protection of natural habitats and the preservation of biodiversity.
- *Saving Natural Resources:* It also helps to save natural resources such as water, energy and raw materials. By adopting sustainable practices such as using recycled materials or reducing water usage, companies can help to conserve natural resources and reduce their impact on the environment.
- *Reduces Waste:* Green marketing can also help reduce waste. By adopting sustainable business practices or minimizing packaging, companies can decrease the amount of waste generated. This, in turn, helps prevent waste from ending up in landfills or polluting natural habitats such as oceans and forests.
- *Awareness of Environmental Issues:* Green marketing can also raise awareness of environmental issues. By promoting sustainable practices and products, companies educate consumers about the importance of sustainability and environmental protection.

7. Suggestions

7.1 General Suggestions

The promotion of green marketing, supported by governmental incentives, is essential for fostering a greener future for current and future generations. It also highlights the need for transparent and credible communication of environmental benefits by companies engaging in green marketing (Rawat & Pande, 2024; Ibid). The Indian government has undertaken various initiatives and regulations to promote sustainable development and environmental protection. For instance, the National Environment Policy of 2006 provides a framework for integrating environmental considerations into development planning (Ministry of Environment & Forests, 2006). Additionally, programs such as the National Mission for a Green India aim to increase forest cover and enhance ecosystem services (Ministry of Environment, Forest & Climate Change, 2014).

- *Education and Awareness:* Companies are investing in consumer education programs to raise awareness about environmental issues and the benefits of green products (Maheshwari & Malhotra, 2011). They also engage in environmentally responsible practices, such as waste reduction, energy conservation, and community clean-up initiatives, and highlight these efforts in their marketing campaigns (Harish, 2014). Furthermore, there is a need for transparent and credible communication of environmental benefits by companies engaging in green marketing (Rawat & Pande, 2024).
- *Strategic Partnerships:* Collaborating with NGOs, government agencies, and other businesses can help companies access resources, share costs, and enhance the credibility of their green initiatives (Rawat & Pande, 2024). Companies can also leverage green marketing opportunities by emphasizing health benefits for premium pricing, promoting sustainability initiatives, and pursuing eco-friendly production (Aggani, 2012). Paul et al. (2016) examined the factors influencing green product purchase decisions and identified five key factors:

social appeal, environmental concern, the environmental appeal of products, the green product experience, and the environmental friendliness of companies. This multifaceted understanding of consumer behavior offers helpful tips for developing effective green marketing strategies.

- *Providing Incentives:* Providing tax breaks, subsidies, or other financial incentives for eco-friendly products and practices can help offset the higher costs typically associated with green initiatives (Kumar, 2016).
- *Supporting Research and Development:* Government funding for research into sustainable technologies and practices can stimulate innovation and make green solutions more accessible to businesses (Nair & Menon, 2008).
- *Promoting Eco-Labeling:* Developing and promoting standardized eco-labeling schemes can assist consumers in making informed choices and help reduce confusion in the marketplace (Maheshwari & Malhotra, 2011).
- *Public Procurement Policies:* Incorporating environmental criteria into government procurement policies can help create a significant market for green products and services (OECD, 2015).

7.2 Government Regulations and Policies on Sustainability

Government regulations and policies on green marketing are designed to promote environmentally responsible practices and protect natural resources. Their primary goal is to minimize the negative impact of human activities on the environment, ensuring that natural resources are used carefully and sustainably. Overall, these policies aim to foster responsible and sustainable practices in the marketplace.

Some notable government policies on green marketing include:

- *Carbon Pricing:* Governments worldwide have implemented carbon pricing policies to encourage companies to reduce their carbon emissions.

Carbon pricing can take the form of a carbon tax or a cap-and-trade system.

- *Renewable Energy Standards:* Governments have set renewable energy standards to promote the use of clean and green sources such as wind, solar, and hydropower. These standards require that a certain percentage of electricity be generated from renewable sources.
- *Waste Reduction Policy:* Governments have implemented policies to reduce waste and promote recycling. These measures include recycling programs, bans on specific types of waste, and incentives for firms that minimize their waste generation.
- *Sustainable Agriculture Policy:* Governments have introduced policies to encourage sustainable agricultural practices. These policies aim to reduce the use of pesticides and promote organic farming.
- *Green Building Standards:* Governments have established green building standards to encourage the use of environmentally friendly materials and practices. These standards may include energy-efficient building designs, the incorporation of renewable energy sources, and the use of recycled materials.

7.3 Suggestions by the Researcher

- *Environmental Studies:* Introducing environmental studies in school levels and in higher studies boost the awareness of environmental protection with special emphasis to purchase green products and increase the knowledge of consuming green products among customers.
- *Encourage Selling Green Products:* Companies such as Amazon, an American multinational technology company, and LuLu Group International should be encouraged to offer green products with special discounts to customers who are interested in purchasing environmentally friendly products.
- *Target Bigger to Small Shops:* From international retail companies and large shopping malls to city supermarkets, retail stores, and small local shops, all

should be encouraged to sell green products. The government can support such businesses by offering subsidies or incentive programs to promote public adoption of environmentally friendly products.

- *Imitate Green Active Companies:* Bharti Airtel has made major advancements toward reducing paper usage by implementing Aadhaar-based paperless activation for over 96% of their prepaid wireless subscribers. Other companies and institutions are also adopting similar initiatives to minimize their carbon footprint.
- *The Environment Protection Act of 1986:* The Environment Protection Act of 1986 should be included in the curriculum of business management, commerce, and related courses to educate students and foster social and environmental awareness in society.
- *Planting Trees:* Tree planting should be promoted as a regular activity wherever possible, particularly within educational institutions.
- *Green Behavior:* Green behavior should be encouraged through workshops on activities such as planting trees, reducing paper usage, turning off unnecessary running taps, practicing rainwater harvesting, using green products, consuming organic food, saving energy, and conserving water.
- *Select Environmental Protection Oriented Candidates:* Companies should select candidates who are knowledgeable about environmental management systems and provide employees with green training to help them develop eco-friendly skills and capabilities.
- *Green Finance Operations:* Existing green finance operations should further encourage and support environmentally friendly activities through targeted investments and loans.
- *Green Award:* Organizations that make significant contributions to promoting green activities should be rewarded and recognized.

7.4 Types of Green Financing

Green finance can take various forms, providing

individuals and organizations with multiple ways to support sustainable development. Some of these types include:

- *Green Bonds:* Green bonds are fixed-income assets issued specifically to finance climate and environmental projects. They function like traditional bonds but are dedicated to funding environmentally sustainable initiatives.
- *Green Loans:* Green financing provides positive economic returns for the environment. Green loans can support renewable energy projects, efficiency improvement initiatives, or other legitimate sustainable ventures.
- *Green Equity:* Green equity involves investing in companies with established environmental credentials. Green equity funds focus on businesses that contribute to sustainable development and pose lower environmental risks.
- *Green Grants and Subsidies:* State and other agencies provide grants to finance green projects. This funding typically helps significantly reduce the initial capital outlay required to ensure the financial viability of such projects.
- *Green Insurance:* Environmental insurance mitigates environmental risks and supports sustainable development programs by underwriting renewable energy projects and carbon offset initiatives.
- *Carbon Credits:* A carbon credit is a transferable certificate or permit that grants the holder the right to emit a specific amount of carbon dioxide. Companies can trade these credits to offset their emissions and reduce their overall carbon footprint.
- *Green Microfinance:* Green microfinance provides financial services targeting small-scale entrepreneurs and businesses committed to adopting sustainable and eco-friendly practices. This type of financing is crucial for promoting sustainable development at the grassroots level.
- *Green Deposits:* Green deposits are bank deposits in which the funds are used exclusively to finance green projects. This approach encourages sustainable

investments and enables banks to contribute to environmental goals.

- *Articles Referred:* Table 2 shows the key research studies on green marketing and consumer behavior.

7.5 Green Marketing Practices

Green marketing practices are adopted by both Indian and international companies to promote environmentally sustainable products and initiatives.

7.5.1 Indian Companies

- *Tata Consultancy Services (TCS):* Tackling pollution is a key focus of TCS's CSR initiatives, with reducing plastic pollution at the forefront of their efforts.
- *Dabur India Limited:* This state-of-the-art plant is

equipped with an advanced effluent treatment system (ETP) designed to recycle all treated wastewater for use within the factory premises. This innovative technology highlights Dabur India's commitment to sustainable business practices and reducing its ecological footprint.

- *Hindustan Unilever (HUL):* HUL aims to significantly reduce water consumption within its operations by implementing the 5R principle – Reduce, Reuse, Recycle, Recover, and Renew.
- *Reliance Industries Limited:* RECRON GREEN is produced by transforming post-consumer waste into new, eco-friendly products, helping to reduce material and resource waste.

Sl. No.	Title of the Article	Name of Journal	Name of Authors	Year of Publication	Publication Details
1	Assessing Consumer Perception and Industry Practices.	International Journal of Novel Research and Development	Anuj and Anshul (2024)	2024	9 (5), 102-145.
2	Consumer's Perception of Green Marketing.	International Journal for Multidisciplinary Research	Raghuvansh and Praveen (2024)	2024	6 (3), 1-25.
3	Green Marketing in India: Emerging Opportunities and Challenges	International Journal for Multidisciplinary Research	Shubha (2024)	2024	6 (2), 1-9
4	Adoption of green marketing strategies and challenges in sustainable business practices: Insights from Indian companies.	Journal of Corporate Governance, Insurance, and Risk Management.	Rawat and Pande (2024)	2024	11 (2), 98-112
5	A study of green marketing practices in the retail industry - Pros and cons.	A study of green marketing practices in the retail industry - Pros and cons.	Talla et al. (2023)	2023	3 (1), 43-52.
6	Customer Loyalty in Green Marketing Research: A Systematic Review.	International Journal of Environmental Impacts	Adnan and Widowati (2023)	2023	6 (4), 207-214.
7	Green Marketing Strategies and Consumer Behavior: Insights for Achieving Sustainable Marketing Success	Research Gate.	Muchenje et al. (2023)	2023	
8	Green Marketing: It's Impact On Global Market.	International Journal of Novel Research and Development,	Pragati and Anjani (2022)	2022	7 (5), 48-61
9	Factors Affecting Green Marketing: An Empirical Study.	Parikalpana - KIIT Journal of Management	Sharma and Vohra (2022)	2022	18 (2), 7-28
10	A Study on Consumer Perception towards Green Marketing.	International Journal of Creative Research Thoughts	Linu (2021)	2021	9 (5), e623 - e693.
11	On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach.	Frontiers in Psychology	Zhuang et al. (2021)	2021	
12	Green Marketing in India: Opportunities and Challenges	International Journal of Early Childhood Special Education	Aggani (2012)	2012	13 (1), 1049-1056.
13	Green Marketing in India: Challenges and Opportunities.	Anvesak	Hooda and Jaggarwal (2021)	2021	51 (2), 398-404.
14	Factors affecting implementation of green marketing orientation.	SHS Web of Conferences, Globalization and its Socio-Economic Consequences 2019.	Vilkaite-Vaitone and Skackauskiene (2020)	2020	
15	Green Marketing Adoption by Some Selected Indian Firms.	Journal of Emerging Technologies and Innovative Research.	Harish (2014)	2014	10 (7), j139- j145.

Table 2. Key Research Studies on Green Marketing and Consumer Behavior

- *Larsen & Toubro*: Conserves water by harvesting over 2,400 million liters of rainfall annually through their advanced water harvesting structures.
- *Oil and Natural Gas Corporation (ONGC)*: ONGC Videsh installed a 5.25-kilowatt solar power system at a hospital in Sudan, providing a reliable power supply during daytime hours.
- *Asian Paints*: During the financial year 2022–2023, the company successfully replenished 548 million liters of water, demonstrating its commitment to reducing water and electricity consumption and preserving valuable natural resources.
- *Indian Tobacco Company (ITC)*: ITC's renowned "Well-being out of Waste" (WOW) campaign focuses on raising awareness, segregating, collecting, and reusing municipal solid waste across the entire value chain.
- *Ultra Tech Cement*: In the financial year 2022–23, the company achieved a reduction of over 1.1% in specific direct greenhouse gas emissions, demonstrating its commitment to lowering its carbon footprint. Additionally, the use of recycled materials increased from 14.2% to 16.2% as part of their sustainable initiatives.
- *Bharti Airtel – Recycling Electronic Waste*: Bharti Airtel has made significant efforts in recycling electronic waste, successfully processing approximately 5,300 tons over the past two years.
- *Infosys – Solar Photovoltaic (PV) Plants and LEED Platinum Certifications*: Infosys, a leading global technology services company, has made significant strides in sustainability by installing 2.7-megawatt solar PV plants across multiple campuses.
- *Hindustan Computers Limited (HCL) – HCL Eco-Safe*: HCL has implemented a program called "HCL Eco-Safe" to develop, identify, and maintain an eco-friendly environmental management system at the company level. The key objective of HCL Eco-Safe is to carry out product lifecycle management effectively, ensuring that products and services from production and purchase to end-of-life recovery and recycling are managed responsibly. Consequently, HCL is regarded as a pioneer of green initiatives in India.
- *Kansai Nerolac Paints*: Kansai Nerolac Paints has undertaken measures to eliminate hazardous heavy metals from their products. These metals, such as lead, arsenic, mercury, chromium, and antimony, are harmful to human health.
- *Wipro – Indian Information Technology Service Corporation*: Wipro has introduced eco-friendly devices, including a range of laptops and desktops called Wipro GreenWare, which comply with R.O.H.S. standards and help reduce e-waste. The company's key green initiatives focus on achieving water positivity, carbon neutrality, and energy efficiency.
- *Godrej Green Center*: Godrej established the Godrej Green Center, designed to be efficient in energy, water, and construction materials, while enhancing human health and environmental quality through improved design, operation, construction, maintenance, and proper waste management. Godrej Green buildings have set a benchmark, driving positive change in the Indian construction industry.
- *State Bank of India – Green IT@SBI*: SBI has introduced green services such as the Green Channel Counter, offering paperless banking with no deposit slips, withdrawal forms, checks, or money transaction forms. All transactions are conducted through SBI shopping and ATM cards. Additionally, the bank utilizes wind energy to reduce emissions.
- *Tata's New Mantra – Going Green*: Tata Motors is setting up an eco-friendly showroom using natural building materials for flooring and energy-efficient lighting, aiming to meet global sustainability benchmarks. The company noted that the project is currently in its preliminary stage.
- *H.P.'s Initiative*: H.P. introduced its inkjet recycling program in 2005, achieving significant resource reduction through recycling. Between 2005 and 2010, the program reduced the carbon footprint of

inkjet cartridges by 22%, halved fossil fuel usage, and decreased water consumption by 69%. Additionally, H.P. launched various energy-efficiency initiatives, including the Closed Loop Recycling Program and the use of recycled content in its products.

7.5.2 International Companies

- **Unilever:** Unilever, owner of popular brands such as Dove, Lipton, and Ben & Jerry's, has pledged to reduce plastic usage by 50% by 2025. For instance, Dove now uses 100% recycled plastic bottles in North America and Europe.
- **Hershey:** Hershey is advancing sustainability in chocolate production by sourcing 100% independently verified cocoa since 2020. The company collaborates with organizations such as Fair Trade USA and Rainforest Alliance to ensure ethical cocoa farming. Additionally, Hershey is actively reducing water consumption and carbon emissions in its factories, while transitioning some products to paper wrappers to minimize plastic waste. These initiatives demonstrate its commitment to protecting the environment.
- **Nike:** Nike is committed to reducing waste and lowering carbon emissions by incorporating recycled materials into its footwear and apparel. For instance, Nike Air soles are now produced with at least 50% recycled materials, showcasing the brand's dedication to sustainable innovation.
- **Apple:** Apple is dedicated to reducing its environmental impact by integrating recycled materials into its products. By 2025, all magnets in Apple devices will be made entirely from recycled rare earth elements, while Apple-designed printed circuit boards will feature 100% recycled tin soldering and 100% recycled gold plating. These initiatives demonstrate Apple's commitment to sustainability by minimizing waste and reducing dependence on newly mined resources. Through green marketing, Apple effectively highlights these efforts, reinforcing its position as an industry leader in environmental responsibility.

- **Adidas:** Adidas is recognized for its partnership with Parley for the Oceans, through which it creates shoes and sportswear made from recycled ocean plastic. Each pair of shoes repurposes around 11 plastic bottles, contributing to ocean and beach clean-up efforts. In addition to footwear, Adidas integrates recycled materials into shirts, socks, and other apparel. The company has also pledged to use 100% recycled polyester in all its products by 2024. By transforming plastic waste into wearable products, Adidas demonstrates its commitment to sustainability while actively reducing plastic pollution.

Conclusion

Green marketing has become an essential strategy for balancing business competitiveness with environmental sustainability. This study shows that while Indian firms are adopting eco-friendly practices such as sustainable products, green financing, and responsible advertising, challenges like high costs, limited technology access, consumer price sensitivity, and greenwashing persist. At the same time, factors such as environmental concern, product quality, affordability, and trust strongly influence consumer adoption. Green marketing helps businesses improve brand image, build customer loyalty, and reduce costs, while also giving consumers healthier choices and supporting resource conservation in nature. Strengthening green marketing requires supportive policies, eco-labeling, incentives, education, and transparent communication. Overall, it represents both a responsibility and an opportunity, with collective efforts from businesses, consumers, and policymakers necessary to advance sustainability and build a greener future.

References

- [1]. Adnan, A. R., & Widowati, R., & Nuryakin. (2023). Customer loyalty in green marketing research: A systematic review. *International Journal of Environmental Impacts*, 6(4), 207-214.
<https://doi.org/10.18280/ije.060405>
- [2]. Aggani, S. L. (2012). Green marketing in India: Opportunities and challenges. *Asian Journal of Research*

in *Business Economics and Management*, 2(3), 123-131.

[3]. Anuj, V., & Anshul, M. (2024). Green marketing: Assessing consumer perception and industry practices. *International Journal of Novel Research and Development*, 9(5), 102-145.

[4]. Bhatia, M., & Jain, A. (2013). Green marketing: A study of consumer perception and preferences in India. *Electronic Green Journal*, 1 (36).

<https://doi.org/10.5070/G313618392>

[5]. Dhir, A., Kaur, P., Chen, S., & Nguyen, B. (2020). Why do they buy green? Modelling Indonesian consumers' green purchase behaviour. *Journal of Cleaner Production* (pp. 1-16).

[6]. Harish, P. S. (2014). Green marketing adoption by some selected Indian firms. *Journal of Emerging Technologies and Innovative Research*, 10(7), j139-j145.

[7]. Hooda, G., & Jaggardwal, S. (2021). Green marketing in India: Challenges and opportunities. *Anvesak*, 51 (2), 398-404.

[8]. Jain, S. K., & Kaur, G. (2004). Green marketing: An attitudinal and behavioural analysis of Indian consumers. *Global Business Review*, 5(2), 187-205.

<https://doi.org/10.1177/097215090400500203>

[9]. Jain, S. K., & Kaur, G. (2006). Role of socio-demographics in segmenting and profiling green consumers: An exploratory study of consumers in India. *Journal of International Consumer Marketing*, 18(3), 107-146.

https://doi.org/10.1300/J046v18n03_06

[10]. Kumar, P. (2016). State of green marketing research over 25 years (1990-2014) literature survey and classification. *Marketing Intelligence & Planning*, 34(1), 137-158.

<https://doi.org/10.1108/MIP-03-2015-0061>

[11]. Linu, J. (2021). A study on consumer perception towards green marketing. *International Journal of Creative Research Thoughts*, 9(5), e623-e693.

[12]. Maheshwari, A., & Malhotra, G. (2011). Green marketing: A study on Indian youth. *International Journal of Management and Strategy*, 2(3), 1-15.

[13]. Manaktola, K., & Jauhari, V. (2007). Exploring consumer attitude and behaviour towards green practices in the lodging industry in India. *International Journal of Contemporary Hospitality Management*, 19(5), 364-377.

<https://doi.org/10.1108/09596110710757534>

[14]. Mathur, I. (2000). An analysis of the wealth effects of green marketing strategies. *Journal of Business Research*, 50(2), 193-200.

[https://doi.org/10.1016/S0148-2963\(99\)00032-6](https://doi.org/10.1016/S0148-2963(99)00032-6)

[15]. Mathur, L. K., & Mathur, I. (2000). An analysis of the wealth effects of green marketing strategies. *Journal of Business Research*, 50(2), 193-200.

[https://doi.org/10.1016/S0148-2963\(99\)00032-6](https://doi.org/10.1016/S0148-2963(99)00032-6)

[16]. Ministry of Environment & Forests. (2006). *National Environment Policy 2006*. Government of India. Retrieved from

<https://www.india.gov.in/national-environment-policy-2006>

[17]. Ministry of Environment Forest & Climate Change. (2014). *National Mission for a Green India*. Government of India. Retrieved from

<https://moef.gov.in/green-india-mission-gim>

[18]. Moise, M. S., Gil-Saura, I., & Ruiz-Molina, M. E. (2021). "Green" practices as antecedents of functional value, guest satisfaction and loyalty. *Journal of Hospitality and Tourism Insights*, 4(5), 722-738.

<https://doi.org/10.1108/JHTI-07-2020-0130>

[19]. Muchenje, C., Tapera, M. C., Katsvairo, H. T., & Mugoni, E. (2023). Green marketing strategies and consumer behavior: Insights for achieving sustainable marketing success. In *Sustainable Marketing, Branding, and Reputation Management: Strategies for a Greener Future*. (pp. 465-484). IGI Global.

<https://doi.org/10.4018/979-8-3693-0019-0.ch024>

[20]. Nair, S. R., & Menon, C. G. (2008). An environmental marketing system—a proposed model based on Indian experience. *Business Strategy and the Environment*, 17(8), 467-479.

<https://doi.org/10.1002/bse.586>

- [21]. Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2014). Perceived greenwashing: The interactive effects of green advertising and corporate environmental performance on consumer reactions. *Journal of Business Ethics*, 125(4), 693-707.
<https://doi.org/10.1007/s10551-013-1944-3>
- [22]. OECD. (2015). *Going Green: Best Practices for Sustainable Procurement*. OECD Publishing. Retrieved from
https://www.oecd.org/en/publications/going-green-best-practices-for-sustainable-procurement_3291acbf-en.html
- [23]. Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123-134.
<https://doi.org/10.1016/j.jretconser.2015.11.006>
- [24]. Polonsky, M. J. (2011). Transformative green marketing: Impediments and opportunities. *Journal of Business Research*, 64(12), 1311-1319.
<https://doi.org/10.1016/j.jbusres.2011.01.016>
- [25]. Pragati, S., & Anjani, K. (2022). Green marketing: It's impact on global market. *International Journal of Novel Research and Development*, 7(5), 48-61.
<http://doi.org/10.1729/Journal.31149>
- [26]. Raghuvansh, B., & Praveen, K. S. (2024). Consumer's perception of green marketing. *International Journal for Multidisciplinary Research*, 6(3), 1-25.
- [27]. Rajul, D. K., & Panda, R. K. (2021). The ascent of green marketing: Opportunities and challenges. *Green Marketing as an Integral Part of Corporate Social Responsibility* (pp. 116-133).
- [28]. Rawat, G., & Pande, M. (2024). Adoption of green marketing strategies and challenges in sustainable business practices: Insights from Indian companies. *Journal of Corporate Governance, Insurance, and Risk Management*, 11(2), 98-112.
<https://doi.org/10.56578/jcgirm110202>
- [29]. Saxena, R., & Khandelwal, P. K. (2010). Can green marketing be used as a tool for sustainable growth? A study performed on consumers in India-an emerging economy. *The International Journal of Environmental, Cultural, Economic & Social Sustainability*, 6(2), 1-21.
<https://doi.org/10.18848/1832-2077/CGP/v06i02/54702>
- [30]. Sharma, N., & Vohra, T. (2022). Factors affecting green marketing: An empirical study. *Parikalpana KIIT Journal of Management*, 18(2), 7-28.
- [31]. Shubha, R. D. (2024). Green marketing in India: Emerging opportunities and challenges. *International Journal for Multidisciplinary Research*, 6(2), 1-9.
<https://doi.org/10.36948/ijfmr.2024.v06i02.18689>
- [32]. Singhal, A., & Singhal, P. (2015). Exploratory research on green marketing in India. *International Journal of Management Research and Reviews*, 5(12), 1134.
- [33]. Talla, T., Dang, A., Bagul, S., Jain, S., & Bharti, R. (2023). A study of green marketing practices in the retail industry - Pros and cons. Prayukti. *Journal of Management Applications*, 3(1), 43-52.
<http://doi.org/10.52814/PJMA.2023.3106>
- [34]. Vilkaite-Vaitone, N., & Skackauskiene, I. (2020). Factors affecting implementation of green marketing orientation. In *SHS web of Conferences*, 74, 01036. EDP Sciences.
<https://doi.org/10.1051/shsconf/20207401036>
- [35]. Zhuang, W., Luo, X., & Riaz, M. U. (2021). On the factors influencing green purchase intention: A meta-analysis approach. *Frontiers in Psychology*, 12, 644020.
<https://doi.org/10.3389/fpsyg.2021.644020>

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