

# Literature Review on the Impact of Green Marketing on Customers' Green Purchasing Behavior

Qianru Huang\*, Wenwen Yue

School of Economics and Management, Southwest Petroleum University, Chengdu 610500, China

\*Corresponding author email: 202321000592@swpu.edu.cn

## Abstract

With the growing concern about environmental issues, there is a growing demand for sustainable actions to minimize damage to ecosystems. To meet this demand, various companies have adopted green marketing programs in an attempt to mitigate environmental degradation. The purpose of this paper is to provide a comprehensive and systematic overview of green marketing and its impact on customers' emergence of green purchasing behaviors in order to fill the conceptual gap of the unclear relationship between green marketing and customers' green purchasing behaviors. The findings show that scholars often focus on the theory of planned behavior and its predecessor, the theory of rational action. Corporate green marketing varies in the factors and mechanisms of action that influence customers' green buying behavior at the strategic and tactical levels. The research in this paper helps marketers identify best practices in this area to effectively influence customer behavior.

## Keywords

Green Marketing; Green Purchase Intention; Theory; Strategy; Tactics.

## 1. Introduction

In today's society, environmental issues are increasingly prevalent, with problems such as land desertification, water scarcity, and global warming becoming focal points of global concern. Existing research has confirmed that irrational consumption habits and patterns are among the key contributors to environmental degradation [1]. In light of this, in early 2022, China's National Development and Reform Commission, along with the Ministry of Industry and Information Technology, the Ministry of Commerce, and other agencies, jointly issued the Implementation Plan for Promoting Green Consumption, with the core objective of integrating green principles into consumers' lifestyles and decision-making processes [2]. Meanwhile, many companies are actively adopting green marketing strategies to encourage more environmentally friendly consumption behaviors.

Although research on green marketing and its impact on consumer purchasing behavior has grown significantly in recent years, the relationship between these two concepts remains unclear. This ambiguity hinders marketers from identifying which green marketing initiatives are most likely to influence customers' purchase decisions. Therefore, this study addresses the following research questions: Which green marketing initiatives influence customers' green purchasing behavior? Do these initiatives facilitate or hinder such behavior? Answering these questions requires a systematic analysis and synthesis of existing research in this field.

This paper finds that few systematic reviews on green marketing and its impact on consumer purchasing behavior classify corporate green marketing initiatives based on their planning scope. To address this gap, this study examines the influence of corporate green marketing initiatives on customers' green purchasing behavior from both strategic and tactical

perspectives. The aim is to provide a comprehensive and systematic overview of their relationship, helping to identify promising directions for future research.

## 2. Basic Concepts

### 2.1. Green Marketing

Existing research has defined green marketing narrowly as the promotion of green products [3]. However, green marketing also encompasses the development of green product labels [4], the adoption of green packaging [5], and green brand building [6]. Based on previous studies on green marketing, we interpret its concept as "the activities and processes in which organizations engage strategically, tactically, and operationally in marketing, with the overarching goal of creating and disseminating products and green consumption concepts that minimize environmental impact" [7]. The core idea of green marketing lies in achieving a harmonious coexistence of social well-being, corporate profitability, and ecological conservation, ensuring that it meets current market demands while safeguarding resource sustainability for future generations [8]. In other words, it integrates environmental protection and sustainability principles into corporate marketing strategies. Thus, green marketing involves a wide range of strategic and tactical approaches.

At the strategic level, green marketing involves formulating strategies to target and selectively attract environmentally conscious customers [9]. Companies can adopt defensive or assertive strategies based on the anticipated size of the green market and marketers' ability to differentiate green products.

At the tactical level, green marketing encompasses solutions related to the marketing mix, which drive enterprises to achieve sustainable marketing outcomes and thereby create value. This constitutes a controllable marketing variable, meaning that companies can consciously manage its impact on customers. This implies that products, pricing, distribution, and promotion must explicitly emphasize environmental concepts. These marketing mix elements, as part of green marketing strategies, are employed to meet customer needs.

At the tactical level, green marketing focuses on greening the marketing mix, which involves implementing specific strategies and actions to help enterprises achieve sustainable marketing objectives, thereby creating value for both customers and society. This dimension is regarded as a controllable marketing variable for enterprises, meaning they can proactively adjust their market behaviors to directly influence customer perceptions and responses [10]. From the perspective of green marketing, all four elements of the marketing mix—product, pricing, distribution, and promotion—must incorporate environmental concepts. This ensures they function as integral components of green marketing strategies, enabling effective responses to customer needs [11].

Green products can be either minor upgrades to conventional goods aimed at reducing their environmental footprint, or completely innovative new green products. Despite the higher market risks and R&D challenges involved, these innovative green products often become powerful tools for corporate differentiation [12]. Green pricing reveals a reality: the production and consumption of environmentally friendly products typically incur higher costs, stemming from their environmental investments in materials, processes, or technologies [13].

The greening of distribution channels and supply chains demonstrates a company's commitment to renewable energy and environmentally friendly logistics practices. This not only helps reduce operational carbon emissions but also enhances the company's green credibility and market image [14]. As Banares et al. pointed out in their research, the application of green marketing in advertising communication is particularly notable. Through creative advertising strategies, companies highlight the environmental features of their

products to attract environmentally conscious consumer groups and strengthen their brand's social responsibility image [15].

At the operational level, green marketing focuses on attracting environmentally conscious target customers and efficiently completing the sales process [16]. This study argues that marketers should not only concentrate on efficiently executing sales processes but also emphasize achieving environmental and social value.

Typically, green marketing applies to business-to-consumer (B2C) markets. However, Gelderman and Vijgen [17] have demonstrated that this concept is equally applicable to business-to-business (B2B) or business-to-government (B2G) contexts. Within strategic, tactical and operational frameworks, green purchasing behavior is generally associated with sustainable, responsible, ethical and environmentally friendly procurement practices. Adopting green behaviors constitutes a core aspect of achieving sustainable development [18].

## 2.2. Green Purchasing Behavior

Green purchasing behavior has also been referred to in academic circles as sustainable consumption behavior and pro-environmental behavior during its development [19]. In the narrow sense, green purchasing behavior specifically denotes the purchasing of green products. However, from a product life cycle perspective, the broad sense of green purchasing behavior encompasses not only green product purchasing behavior but also green usage behavior and green post-use disposal behavior [20]. Among these, green usage behavior refers to product usage that causes minimal or no environmental harm while ensuring consumer health and safety. Green post-use disposal behavior refers to the recycling and reuse of product waste [21]. In numerous empirical studies on green purchasing behavior, many scholars have used green purchase intention or green consumption intention to measure and predict actual green purchasing behavior in practical applications. Green purchase intention, also referred to as green consumption intention, evolved from an important variable in the Theory of Planned Behavior - namely, purchase intention. In research on green purchasing behavior, the most direct reflection indicator of green consumer behavior is consumption intention, that is, purchase intention. As one of the key theories frequently employed by early scholars studying green consumption behavior, the Theory of Planned Behavior provided the framework within which green marketing scholars developed the important concept of green purchase intention, defining it as consumers' subjective tendency to purchase green products [22-23].

Green consumption intention is considered as consumers' subjective tendency to purchase green products, and this variable has long been recognized by academia as an important antecedent and predictor of green consumption behavior [24]. Currently, research on green consumption behavior from the consumer perspective mainly focuses on consumer characteristics, social factors, and psychological factors. Studies examining green consumption behavior through the lens of consumer characteristics primarily proceed from two aspects: demographic characteristics and socio-demographic characteristics. These two dimensions share some overlapping factors while each encompasses specific elements that reflect their respective features. Demographic characteristics typically include indicators such as age, gender, education level, marital status, and income. Socio-demographic characteristics, on the other hand, encompass indicators like residence location, political affiliation, social class, and subjective economic status.

Existing research has shown that while some scholars have recognized consumers' green purchasing behavior as an extremely complex phenomenon influenced by both internal and external factors, academic attention has predominantly focused on factors such as consumers' specific situations, relevant reference groups, social-cultural context, and macro-environmental conditions. Few scholars have examined the concrete impact of corporate green marketing efforts or green marketing practices on consumers' green purchasing behavior.

However, the significant role of this pathway-where companies interact with consumers through green marketing activities and thereby influence their green purchasing behavior-cannot be overlooked. Therefore, this study contends that it is necessary to fully consider the influence of corporate green marketing efforts on consumers' green purchasing behavior when investigating this phenomenon.

### 3. Theoretical Approach

This paper systematically categorizes and summarizes the theoretical approaches underlying how corporate green marketing initiatives influence customers' green purchasing behavior.

The Theory of Planned Behavior represents the most prominent customer behavior theory in green marketing. This perspective regards attitudes, subjective norms, and perceived behavioral control as predictors of customer behavior. Although recent marketing literature has raised criticisms of the Theory of Planned Behavior [25], this framework has profoundly influenced the development of customer behavior research.

The study by Testa et al. [26] introduced green marketing tools employed by companies from the perspective of the Theory of Planned Behavior. The authors specifically examined the effectiveness of eco-labels as a particular green marketing instrument. Since then, the Theory of Planned Behavior has gained increasing popularity. For instance, in a recent study, Lago et al. [27] emphasized that the Theory of Planned Behavior provides strong support for understanding green purchasing behavior.

Another theoretical perspective, namely the Theory of Reasoned Action, has also been widely applied in research examining how green marketing tools shape customer behavior. This theory has been utilized in studies investigating the impact of eco-labels [26], green appeals [28], and perceptions of green products [29]. The repeated application of the Theory of Reasoned Action in these domains is related to the aforementioned Theory of Planned Behavior, as the Theory of Reasoned Action originated as an improved version of the Theory of Planned Behavior.

In addition to the Theory of Planned Behavior and the Theory of Reasoned Action, other scholars have adopted theoretical frameworks such as Stimulus-Organism-Response, Cognition-Affect-Behavior, Environmentally Conscious Customer Behavior, the Four Forces Model, Attitude-Behavior-Context, Attribution, Regulatory Focus, or Value-Belief-Norm theories as their conceptual foundations. While most studies are grounded in a single theory, some scholars have integrated two or more theoretical perspectives. For instance, Liao [30] demonstrated that combining Signaling Theory and Attitude-Behavior-Context Theory can effectively explain the moderating effect of green marketing on customer purchase intentions.

### 4. The Impact of Green Marketing on Customers' Green Purchasing Behavior

According to the levels of green marketing, we categorize the research factors of green marketing into two types. The first level describes green marketing actions entirely from a strategic perspective. The second level focuses on tactical solutions typically associated with the marketing mix. Scholars may choose either of these two levels as their research focus, or combine both levels.

#### 4.1. Strategic Level

Some scholars in existing research have adopted a fully strategic approach to green marketing. In these studies, brand reputation [31], green marketing awareness [32], green design [33], green positioning [34], green integration [35], green management [36], greenwashing [37],

green image [38], as well as the development of strategic green marketing policies and strategies, represent common practices for achieving customers' green purchasing behavior.

## 4.2. Tactical Level

Numerous existing studies have focused on the impact of tactical green marketing on customer behavior. The most common standard approaches involve revealing a company's tactical green marketing through products (e.g., eco-labels [39] and clean production [40]) or promotions (e.g., green campaigns [41] and media exposure [42]).

Existing studies have shown that through the implementation of strategic and tactical green marketing solutions, enterprises can effectively facilitate desirable green purchasing behaviors among customers. These studies have further established correlations between green marketing and various behavioral intentions, including: environmental behavior intention, brand/organization support intention, purchase interest, product preference, green procurement intention, and willingness to pay price premiums. The research has also documented the positive impacts of green marketing initiatives on multiple customer behavior dimensions: environmental protection behaviors, energy conservation behaviors, purchasing behaviors, and consumption patterns. Regarding the relationship between green marketing programs and key post-purchase behavioral variables, the analyzed studies demonstrate enhanced customer loyalty toward brands, green products, eco-oriented retail outlets, and environmental organizations. Green marketing research reveals that marketing factors at different levels (strategic vs. tactical) exert differentiated effects on customers' green purchasing behaviors. Notably, promotional activities - as a core element of tactical green marketing - exhibit particularly significant potential to influence customers' green purchasing decisions.

## 5. Conclusion

Building upon previous research, this study examines how corporate green marketing strategies and activities influence consumers' green purchase intentions from both strategic and tactical perspectives, set against the broader societal context of national green development and ecological civilization construction.

Through a review of green marketing-related research, it can be observed that although theoretical studies on green marketing have received significant academic attention against the backdrop of national green development and vigorous ecological civilization construction. Examining research from the mature period of green marketing development, numerous scholars have studied green marketing based on fundamental marketing theories as their theoretical foundation. However, regarding research on green marketing promotions, existing studies have focused more on green advertising and promotional methods, such as advertising appeals and discount approaches. While some scholars have pointed out that corporate green marketing practices can also influence customers' green purchasing behavior to some extent, such research remains relatively scarce domestically, lacking sufficient attention and in-depth investigation. Based on this, the current study, set against the context of green marketing, specifically examines through which factors corporate green marketing can influence consumers' green purchasing behavior, thereby enriching existing theoretical research outcomes in green marketing.

## 6. Research Limitations and Future Directions

### 6.1. Research Limitations

Although the topic of corporate green marketing has attracted significant scholarly attention, research in this field still presents several limitations. First, most studies focus on market

contexts in Western developed countries, while green marketing practices in developing countries and emerging markets and their impact on consumer behavior remain relatively underexplored. Second, existing research predominantly employs cross-sectional data analysis, making it difficult to capture the dynamic effects of evolving green marketing strategies on consumer behavior over time, thereby limiting the potential for deeper understanding of causal relationships. Furthermore, the relationship between green marketing and customers' green purchasing behavior is often simplified as a linear association, neglecting potential nonlinear or threshold effects, as well as the complex interactions with external environmental factors (e.g., policies and regulations, socio-cultural contexts). Finally, although many studies emphasize the positive impacts of green marketing, insufficient attention has been paid to potential negative effects, such as greenwashing phenomena and their long-term detrimental consequences on consumer trust and behavior.

## 6.2. Research Prospects

Looking ahead, the deepening and development of research on corporate green marketing and customer green purchasing behavior will rely on interdisciplinary integration and methodological innovation. On one hand, cross-cultural comparative studies will be an important frontier direction. By collecting data globally to explore the effectiveness of green marketing strategies and the similarities and differences in consumer responses across diverse cultural contexts, it will help construct a more comprehensive and refined theoretical framework. On the other hand, adopting longitudinal research designs, combined with big data and machine learning technologies, can track the long-term effects of green marketing strategies, reveal the evolutionary trajectory of consumers' green purchasing behavior, and provide a scientific basis for the dynamic adjustment of marketing strategies. Additionally, delving into the complex relationship between green marketing and consumer psychology as well as social identity, along with exploring new forms and challenges of green marketing in the digital era, will be a promising field of research. With the growing global awareness of sustainable development and the rise of the green economy, the future of green marketing research holds boundless possibilities, offering potential contributions toward advancing human society toward a greener, healthier, and more prosperous future.

## References

- [1] SHENG G H, XIE F, GONG S Y, et al. The role of culture values in green purchasing intention: empirical evidence from Chinese consumers[J]. *International Journal of Consumer Studies*, 2019, 43(5): 315-326.
- [2] Li X, Zhang K, Zhao W, et al. A Knowledge Push Approach to Support the Green Concept Design of Products[J]. *Processes*, 2023, 11(10): 2891.
- [3] Bojanowska A, Kulisz M. Polish consumers' response to social media eco-marketing techniques[J]. *Sustainability*, 2020, 12(21): 8925.
- [4] Lin W, Nayga Jr R M. Green identity labeling, environmental information, and pro-environmental food choices[J]. *Food Policy*, 2022, 106: 102187.
- [5] Deng Y, Yang Y C. Impact of green packaging design on green purchase intention[J]. *Social Behavior and Personality: an international journal*, 2024, 52(4): 1-13.
- [6] Li J, Sun X, Hu C. The role of skepticism and transparency in shaping green brand authenticity and green brand evangelism[J]. *Sustainability*, 2022, 14(23): 16191.
- [7] Turker D. Measuring corporate social responsibility: A scale development study[J]. *Journal of business ethics*, 2009, 85: 411-427.
- [8] Li X, Wang C, Li D, et al. Environmental Regulations, Green Marketing, and Consumers' Green Product Purchasing Intention: Evidence from China[J]. *Sustainability*, 2024, 16(20): 8987.

- [9] Dangelico R M, Vocalelli D. "Green Marketing": An analysis of definitions, strategy steps, and tools through a systematic review of the literature[J]. *Journal of Cleaner production*, 2017, 165: 1263-1279.
- [10] Machová R, Ambrus R, Zsigmond T, et al. The impact of green marketing on consumer behavior in the market of palm oil products[J]. *Sustainability*, 2022, 14(3): 1364.
- [11] Nath P, Siepong A. Green marketing capability: A configuration approach towards sustainable development[J]. *Journal of Cleaner Production*, 2022, 354: 131727.
- [12] Borin N, Lindsey-Mullikin J, Krishnan R. An analysis of consumer reactions to green strategies[J]. *Journal of Product & Brand Management*, 2013, 22(2): 118-128.
- [13] Kumbarger A, Tripathi S. Price green inference: The role of green= higher production cost lay belief[J]. *Journal of Business Research*, 2025, 194: 115382.
- [14] Mydock III S, Pervan S J, Almubarak A F, et al. Influence of made with renewable energy appeal on consumer behaviour[J]. *Marketing Intelligence & Planning*, 2018, 36(1): 32-48.
- [15] Bañares A B, Silva M F S, Rodríguez S R. Green but ignored? The irrelevance of television advertisements on energy sustainability in Spain and its impact on consumer perceptions[J]. *Energy research & social science*, 2021, 73: 101835.
- [16] Roth A V, Van Der Velde M. Operations as marketing: a competitive service strategy[J]. *Journal of Operations Management*, 1991, 10(3): 303-328.
- [17] Gelderman C J, Schijns J, Lambrechts W, et al. Green marketing as an environmental practice: The impact on green satisfaction and green loyalty in a business-to-business context[J]. *Business strategy and the environment*, 2021, 30(4): 2061-2076.
- [18] Chang S H. The influence of green viral communications on green purchase intentions: The mediating role of consumers' susceptibility to interpersonal influences[J]. *Sustainability*, 2015, 7(5): 4829-4849.
- [19] Kadic-Maglajic S, Arslanagic-Kalajdzic M, Micevski M, et al. Being engaged is a good thing: Understanding sustainable consumption behavior among young adults[J]. *Journal of business research*, 2019, 104: 644-654.
- [20] Wang P, Liu Q, Qi Y. Factors influencing sustainable consumption behaviors: a survey of the rural residents in China[J]. *Journal of cleaner production*, 2014, 63: 152-165.
- [21] Nguyen D T, Le T T M, Nguyen T Q M, et al. What matters in the linkage between value orientations and usage behavior of electric ride hailing service?[J]. *Asia Pacific Journal of Marketing and Logistics*, 2024.
- [22] Badar K, Khattak A, Danish M, et al. Cosmopolitan orientation, consumer consciousness and green purchase intentions: mediating role of green trust[J]. *European Journal of International Management*, 2025, 25(1): 79-97.
- [23] Li X, Wang C, Li D, et al. Environmental Regulations, Green Marketing, and Consumers' Green Product Purchasing Intention: Evidence from China[J]. *Sustainability*, 2024, 16(20): 8987.
- [24] Long R, Yuan X, Wu M. Consumers' green product purchase intention considering para-social interaction: An experimental study based on live-streaming e-commerce[J]. *Journal of Cleaner Production*, 2024, 481: 144169.
- [25] Yuriev A, Dahmen M, Paillé P, et al. Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review[J]. *Resources, Conservation and Recycling*, 2020, 155: 104660.
- [26] Testa F, Iraldo F, Vaccari A, et al. Why eco-labels can be effective marketing tools: Evidence from a study on Italian consumers[J]. *Business Strategy and the Environment*, 2015, 24(4): 252-265.
- [27] Lago N C, Marcon A, Ribeiro J L D, et al. Determinant attributes and the compensatory judgement rules applied by young consumers to purchase environmentally sustainable food products[J]. *Sustainable Production and Consumption*, 2020, 23: 256-273.
- [28] De Silva M, Wang P, Kuah A T H. Why wouldn't green appeal drive purchase intention? Moderation effects of consumption values in the UK and China[J]. *Journal of business research*, 2021, 122: 713-724.

- [29] Borin N, Lindsey-Mullikin J, Krishnan R. An analysis of consumer reactions to green strategies[J]. *Journal of Product & Brand Management*, 2013, 22(2): 118-128.
- [30] Liao Y K, Wu W Y, Pham T T. Examining the moderating effects of green marketing and green psychological benefits on customers' green attitude, value and purchase intention[J]. *Sustainability*, 2020, 12(18): 7461.
- [31] Zhang L, Li D, Cao C, et al. The influence of greenwashing perception on green purchasing intentions: The mediating role of green word-of-mouth and moderating role of green concern[J]. *Journal of cleaner production*, 2018, 187: 740-750.
- [32] Guo R, Tao L, Li C B, et al. A path analysis of greenwashing in a trust crisis among Chinese energy companies: The role of brand legitimacy and brand loyalty[J]. *Journal of business ethics*, 2017, 140: 523-536.
- [33] Cronin J J, Smith J S, Gleim M R, et al. Green marketing strategies: an examination of stakeholders and the opportunities they present[J]. *Journal of the Academy of Marketing Science*, 2011, 39: 158-174.
- [34] Chen Y S, Huang A F, Wang T Y, et al. Greenwash and green purchase behaviour: the mediation of green brand image and green brand loyalty[J]. *Total Quality Management & Business Excellence*, 2020, 31(1-2): 194-209.
- [35] Wu H C, Cheng C C, Ai C H. What drives green experiential loyalty towards green restaurants?[J]. *Tourism Review*, 2021, 76(5): 1084-1103.
- [36] Majeed M U, Aslam S, Murtaza S A, et al. Green marketing approaches and their impact on green purchase intentions: Mediating role of green brand image and consumer beliefs towards the environment[J]. *Sustainability*, 2022, 14(18): 11703.
- [37] García-Salirrosas E E, Rondon-Eusebio R F. Green marketing practices related to key variables of consumer purchasing behavior[J]. *Sustainability*, 2022, 14(14): 8499.
- [38] Pereira Heath M T, Chatzidakis A. 'Blame it on marketing': consumers' views on unsustainable consumption[J]. *International Journal of Consumer Studies*, 2012, 36(6): 656-667.
- [39] Sedky D, AbdelRaheem M A. Studying green marketing in emerging economies[J]. *Business Strategy & Development*, 2022, 5(1): 59-68.
- [40] Yadav R, Pathak G S. Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior[J]. *Ecological economics*, 2017, 134: 114-122.
- [41] Aagerup U, Nilsson J. Green consumer behavior: being good or seeming good?[J]. *Journal of Product & Brand Management*, 2016, 25(3): 274-284.
- [42] de Lenne O, Vandenbosch L. Media and sustainable apparel buying intention[J]. *Journal of Fashion Marketing and Management: An International Journal*, 2017, 21(4): 483-498.