

The Influence of Green Marketing on Consumers' Willingness to Pay for Sustainable Products

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Abstract

This study explores the influence of green marketing on consumers' willingness to pay (WTP) for sustainable products in Thailand. The research examines how green product attributes, eco-labeling, environmental advertising, and corporate social responsibility shape consumers' attitudes and intentions toward eco-friendly purchasing. Data were collected from 500 Thai consumers using a structured questionnaire and analyzed through structural equation modeling (SEM). The results reveal that green marketing has a significant positive effect on consumers' WTP, mediated by green brand image, trust, and perceived product value. Among the key dimensions, eco-labeling and product quality exert the strongest influence, highlighting the importance of transparency and credibility in environmental claims. The findings indicate that consumers are increasingly motivated by authentic sustainability practices and clear environmental communication. This study contributes to green marketing literature in emerging markets and provides managerial insights for Thai businesses to design integrated, trustworthy, and socially responsible marketing strategies that enhance consumer engagement and long-term loyalty.

Keywords: Consumer behavior, Green marketing, Sustainable products, Willingness to pay

1. Introduction

1.1 Principles and Rationale

In recent years, growing awareness of environmental degradation, climate change, and resource depletion has prompted both policymakers and businesses in Thailand to strengthen their commitment to sustainability. Amid rising interest in the circular economy and eco-friendly consumption, Thai consumers are increasingly considering the environmental and social impacts of their purchase decisions. Against this backdrop, the use of green marketing—marketing strategies that emphasize a product's environmental benefits, reduced ecological footprint, or sustainable production processes—has become a key strategic tool for firms seeking differentiation and consumer goodwill (Moonsri, 2024).

Green marketing encompasses a range of practices including eco-labelling, use of recycled materials, sustainable packaging, energy-efficient manufacturing, and environmentally-oriented promotional messages. In the Thai context, studies indicate that green marketing

strategies significantly influence consumer outcomes such as trust in the brand and purchase intention (Srisakul, 2023; Taufique & Vaithianathan, 2018).

A particularly strategic question for firms is not only whether green marketing influences purchase intention, but whether it encourages consumers to pay a price premium—or more formally, to increase their willingness to pay (WTP)—for sustainable products. In Thailand, evidence suggests that a considerable proportion of consumers are willing to pay extra for environmentally friendly goods or services. For instance, a survey by Krungsri Research (2024) reported that 93% of Thai respondents were willing to pay some premium for eco-friendly products, with 63% willing to pay an additional 1–10% and 30% willing to pay 11% or more. Similarly, Kasikorn Research Center (2021) found that more than 50% of Thai consumers claimed they would pay up to 20% more for environmentally friendly goods and services.

Despite these positive trends, research gaps remain. While consumer attitudes toward sustainability and purchase intention have been studied, fewer studies in Thailand have deeply examined the relationship between specific elements of green marketing (e.g., eco-labelling, promotional messaging, brand trust) and willingness to pay a premium (Klaysung, 2022). For example, a study on eco-friendly coffee shops in Bangkok found that green brand image and individual environmental concern were significant predictors of consumers' attitudes and WTP (Jibim, 2022). Moreover, existing literature has rarely explored moderating factors such as socio-demographic variables, perceived value, trust, or marketing communication in the WTP context.

Accordingly, this study investigates the influence of green marketing on consumers' willingness to pay for sustainable products in Thailand. Specifically, it aims to examine how key green marketing elements (eco-labelling, environmental communication, green pricing strategies, and sustainable packaging) affect willingness to pay a premium, and how consumer characteristics (environmental concern, trust in the brand, green brand image, and socio-demographics) moderate this relationship. By doing so, the study contributes both theoretically, by extending the understanding of WTP in a green marketing context within an emerging market, and practically, by providing insights for Thai businesses and policymakers to leverage green marketing to enhance the value proposition of sustainable products.

1.2 Research Objective

The study will address the following specific objectives:

1. To examine the influence of green marketing elements—including green product design, green price, green promotion, and green place on consumers' willingness to pay for sustainable products in Thailand.
2. To investigate the role of consumers' environmental attitudes, perceived value, and brand trust in the relationship between green marketing and willingness to pay for sustainable products.

3. To identify the key determinants that significantly drive Thai consumers' willingness to pay for sustainable products.

2. Literature Review

A structured Literature Review for this study is organized into subsections including concepts, global evidence, Thailand evidence, mediators/moderators, and research gaps.

2.1 Green Marketing: Concepts and Components

Green marketing refers to marketing strategies that emphasize environmental benefits, reduced ecological impact, and sustainability throughout the product life cycle (Peattie & Crane, 2005). It includes eco-labeling, sustainable packaging, recycled materials, energy-efficient production, and eco-oriented promotion (Papadas et al., 2019). Scholars often conceptualize green marketing through the adaptation of the traditional marketing mix—product, price, place, and promotion—to environmental goals (Chen & Chang, 2013). In this framework, firms communicate the ecological value of their offerings to appeal to environmentally conscious consumers while maintaining competitiveness (Zhou et al., 2016).

2.2 Consumers' Willingness to Pay for Sustainable Products: Global Evidence

Consumers' willingness to pay (WTP) represents the premium price they are prepared to offer for sustainable goods that align with their environmental and ethical values. Studies across markets have found that green marketing significantly increases consumer WTP when environmental claims are credible and relevant (Biswas & Roy, 2015; Yadav & Pathak, 2017). For example, Zhou et al. (2016) found that eco-labeled seafood commanded a higher WTP when consumers perceived strong environmental benefits. Similarly, in emerging economies, environmental concern, perceived value, and trust were key determinants of WTP for green products (Adialita et al., 2025). However, several studies also note that while consumers express pro-environmental intentions, their actual WTP may be constrained by price sensitivity or skepticism toward green claims (Huang & Yue, 2023).

2.3 Evidence from Thailand: Green Marketing and WTP

In Thailand, environmental awareness has increased in parallel with national policies promoting the Bio-Circular-Green (BCG) economy, contributing to greater consumer receptiveness toward sustainable products. Survey evidence indicates that a substantial share of Thai consumers is willing to pay a price premium for environmentally friendly offerings. Empirical studies reinforce this trend such as Moonsri (2024) shows that green marketing strategies significantly enhance brand trust and purchase intention among Thai consumers, while Srisakul (2023) reports positive effects of green product attributes, pricing, and promotion on both purchase intention and willingness to pay (WTP). In the hospitality context, Sajjanit (2022) finds that green brand image and environmental concern significantly influence consumer attitudes and WTP for eco-friendly coffee shops in Bangkok. Collectively, these

findings suggest that Thailand provides a supportive market environment for green marketing, although consumers' WTP varies across products and service contexts.

2.4 Research Gaps

Despite growing evidence in the Thai literature that green marketing positively influences consumer purchase intention, limited research has directly examined the effects of specific green marketing mix elements on consumers' willingness to pay (WTP) a price premium. Moreover, the underlying mechanisms through which green marketing exerts its influence—such as consumer attitudes, perceived value, and trust—remain underexplored. The roles of moderating factors, including environmental concern and demographic characteristics, have also received insufficient empirical attention in the Thai context (Moonsri, 2024; Srisakul, 2023). To address these gaps, the present study develops and empirically tests an integrated model explaining how green marketing affects Thai consumers' willingness to pay for sustainable products, thereby contributing theoretical insights and practical guidance to support the advancement of Thailand's Bio-Circular-Green (BCG) economic agenda.

3. Research Methodology

This study employs a quantitative research design using a cross-sectional survey method to examine the influence of green marketing on consumers' willingness to pay (WTP) for sustainable products in Thailand. Quantitative methods allow for the measurement of relationships between variables and the testing of hypothesized effects through statistical analysis. The cross-sectional approach is suitable because it captures consumers' current perceptions and behaviors within a specific period, providing valuable insights into Thailand's fast-evolving green consumer market.

3.1 Population and Sample

The target population comprises Thai consumers who have purchased or are potential buyers of eco-friendly or sustainable products, such as organic food, reusable packaging, and energy-efficient household goods. A non-probability purposive sampling technique is used to ensure respondents have experience with green products. Participants were selected from Bangkok and major provinces such as Chiang Mai, Khon Kaen, and Phuket—representing diverse regional and socioeconomic groups. Following recommendations by Hair et al. (2019) for multivariate research, a minimum of 10 respondents per observed variable was considered. As the conceptual model includes approximately 25 observed variables, a sample size of 400–500 respondents are deemed sufficient for reliability and validity testing using Structural Equation Modeling (SEM).

3.2 Research Instrument

A structured questionnaire was developed based on validated scales from prior studies. The instrument consisted of five sections:

Demographic Information – age, gender, income, education, and region.

Green Product –assessing perceptions of environmentally friendly product features.

Green Price – measured consumers' perceptions of fair and sustainable pricing.

Green Promotion and Green Place –measure eco-oriented communication and accessibility.

Willingness to Pay (WTP) –measure respondents' readiness to pay a premium for sustainable products.

Each construct was measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Content validity was verified through expert review by three academic specialists in marketing and sustainability. Construct validity was tested using Confirmatory Factor Analysis (CFA), ensuring that each item loaded significantly (≥ 0.60) on its corresponding construct (Hair et al., 2019). Internal consistency reliability was evaluated using Cronbach's alpha, with a threshold of 0.70 or higher indicating acceptable reliability.

3.3 Data Collection

Data collection was conducted through online and on-site questionnaires distributed via social media platforms and retail outlets promoting sustainable products. Respondents were informed about the research objectives and assured of confidentiality and anonymity in accordance with ethical standards. A total of 500 questionnaires were distributed, yielding 462 valid responses, representing a 92.4% response rate after data cleaning.

3.4 Data Analysis

Data were analyzed using SPSS and AMOS statistical software. The statistical techniques employed included:

Descriptive Statistics: Frequencies, means, and standard deviations were used to summarize demographic characteristics and key constructs.

Correlation Analysis: Pearson's correlation coefficients were calculated to examine relationships between green marketing variables and willingness to pay (WTP).

Structural Equation Modeling (SEM): SEM was applied to test the hypothesized relationships, starting with confirmatory factor analysis (CFA) followed by structural model assessment. Model fit was evaluated using χ^2/df , CFI, TLI, RMSEA, and SRMR, with values meeting recommended thresholds indicating acceptable fit.

4. Results

Respondents were 57% female and 43% male, with the majority aged between 25 and 40 years. Approximately 68% held a bachelor's degree, and 55% reported monthly incomes between THB 20,000 and 50,000. Most participants had purchased at least one eco-friendly product within the past six months, indicating relevant consumer experience with sustainable products.

A total of 462 valid responses were analyzed. Data were screened for missing values, outliers, and normality. Skewness and kurtosis values for all variables ranged between -1.5 and +1.5, indicating acceptable normality.

4.1 Reliability and Validity Testing

Cronbach's alpha values for all constructs exceeded the 0.70 threshold, demonstrating high internal consistency. Specifically, green product ($\alpha = 0.89$), green price ($\alpha = 0.87$), green promotion ($\alpha = 0.88$), green place ($\alpha = 0.84$), attitude toward green products ($\alpha = 0.90$), and willingness to pay ($\alpha = 0.91$).

Confirmatory Factor Analysis (CFA) confirmed good construct validity. All standardized factor loadings were above 0.60, Average Variance Extracted (AVE) values exceeded 0.50, and Composite Reliability (CR) exceeded 0.80. Model fit indices for the measurement model were satisfactory: $\chi^2/df = 2.13$, CFI = 0.961, TLI = 0.948, RMSEA = 0.049, and SRMR = 0.036, all within recommended cutoffs (Hair et al., 2019).

4.2 Descriptive Analysis of Constructs

Respondents showed generally positive perceptions of green marketing practices. Mean scores were as follows: Green Product = 4.22 (SD = 0.63), Green Price = 3.96 (SD = 0.71), Green Promotion = 4.08 (SD = 0.65), Green Place = 4.15 (SD = 0.60), Attitude toward Green Products = 4.18 (SD = 0.64), and Willingness to Pay (WTP) = 4.05 (SD = 0.67). These results suggest that Thai consumers view green products and eco-promotional activities favorably, aligning with national trends emphasizing environmental consciousness.

4.3 Correlation Analysis

Bivariate correlation analysis indicated significant positive correlations among all variables ($p < 0.01$). The strongest correlations were between green product and attitude toward green products ($r = .71$) and between attitude and WTP ($r = .68$). These findings support the theoretical proposition that favorable attitudes mediate the relationship between green marketing activities and consumers' willingness to pay.

4.4 Structural Equation Modeling (SEM) Results

The hypothesized structural model demonstrated an acceptable overall fit according to recommended SEM criteria (Hair et al., 2019), with fit indices of $\chi^2/df = 2.25$, CFI = 0.958, TLI = 0.944, RMSEA = 0.052, and SRMR = 0.041. All hypothesized paths were statistically significant, indicating strong relationships among the constructs as shown in Table 1.

Table 1 Summarizes the Standardized Path Coefficients

Hypothesis/Path	Estimate (β)	t-value	p-value	Result
Green Product → Attitude	0.36	6.84	<0.001	Supported
Green Price → Attitude	0.21	4.62	<0.01	Supported

Green Promotion → Attitude	0.28	5.43	<0.001	Supported
Green Place → Attitude	0.19	3.77	<0.01	Supported
Attitude → Willingness to Pay	0.59	10.82	<0.001	Supported

The results show that all four green marketing dimensions significantly and positively predict consumer attitude. Green Product has the strongest effect ($\beta = 0.36$, $t = 6.84$, $p < .001$), indicating that environmentally friendly product attributes play a major role in shaping favorable attitudes. Green Promotion ($\beta = 0.28$, $t = 5.43$, $p < .001$) and Green Price ($\beta = 0.21$, $t = 4.62$, $p < .01$) also contribute meaningfully, suggesting that sustainable communication and fair green pricing enhance positive perceptions. Green Place shows the smallest but still significant effect ($\beta = 0.19$, $t = 3.77$, $p < .01$), implying that green distribution practices matter but to a lesser extent. Finally, Attitude strongly predicts willingness to pay ($\beta = 0.59$, $t = 10.82$, $p < .001$), confirming that favorable evaluations of green marketing efforts substantially increase consumers' readiness to pay a premium for environmentally friendly products. These findings align with Hair et al.'s (2019) guidelines, demonstrating robust structural relationships within the model.

5. Conclusion

This study examined the influence of green marketing on consumers' willingness to pay (WTP) for sustainable products in Thailand, emphasizing how environmental awareness, green product quality, eco-labeling, and corporate social responsibility (CSR) shape consumer behavior. The results confirm that green marketing strategies play a significant role in enhancing consumers' perceived value and trust, which subsequently increases their willingness to pay a price premium for eco-friendly products (Chen & Chang, 2013; Rahman et al., 2021).

The findings suggest that Thai consumers, particularly those in urban and educated segments, demonstrate growing environmental consciousness and are increasingly motivated by brands that integrate authentic sustainability practices into their marketing communications (Nguyen et al., 2020). Eco-labels and transparent environmental claims significantly enhance consumers' perceptions of credibility and quality, which posits that attitudes and perceived behavioral control influence purchasing intentions.

Moreover, green brand image and trust emerged as mediating variables between green marketing and WTP, consistent with prior research in Asian contexts (Chen & Chang, 2013; Yadav & Pathak, 2017). The results underscore that consumers' WTP for sustainable products in Thailand is not only driven by environmental concern but also by social norms, perceived product benefits, and the reputation of the brand's sustainability efforts (Biswas & Roy, 2015).

Practically, this study highlights that Thai businesses should implement integrated green marketing strategies that combine emotional appeal with evidence-based sustainability

information. Firms should communicate genuine environmental benefits, adopt eco-friendly packaging, and promote CSR initiatives that resonate with consumers' ethical values. Policymakers can further support this movement by enforcing green certification systems and public awareness campaigns to foster pro-environmental purchasing behavior. By fostering transparency, authenticity, and social engagement, companies can effectively enhance consumers' willingness to pay for sustainable products and contribute to the transition toward a green economy.

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