# THE INFLUENCE OF ENVIRONMENTAL CONCERN AND GREEN MARKETING ON PURCHASE DECISION WITH ENVIRONMENTAL KNOWLEDGE AS A MEDIATING VARIABLE IN UPVC PRODUCTS IN LOMBOK

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## Abstract

This study aims to identify and analyze the influence of environmental concern and green marketing on purchase decisions for UPVC products in Lombok, with environmental knowledge serving as a mediating variable. This research employs a causal-associative design and utilizes a survey sampling method. The sample consists of 110 respondents, selected using a purposive sampling technique. The analytical tool used is SmartPLS. The results of this study indicate that environmental concern has a positive and significant effect on purchase decisions. Green marketing shows a positive but not significant effect on purchase decisions. Furthermore, environmental concern has a positive and significant effect on environmental knowledge, while green marketing also has a positive and significant effect on environmental knowledge. Environmental knowledge has a positive and significant influence on purchase decisions. Moreover, environmental knowledge positively and significantly mediates the relationship between environmental concern and purchase decisions, as well as between green marketing and purchase decisions.

**Keywords:** Environmental Concern, Environmental Knowledge, Green Marketing, Purchase Decision

## INTRODUCTION

The rapid advancement of modernization and technology has significantly transformed various aspects of human life (Wardynski, 2019). These developments have shaped a society that increasingly values convenience, practicality, and efficiency. However, as industries race to meet these evolving demands, the exploitation of natural resources and the resulting pollution have contributed to global warming and climate change (Wardynski, 2019).

Environmental issues have thus emerged as an urgent global concern (Bahroni et al., 2025). Challenges such as climate change, global warming, air pollution, and the increasing accumulation of plastic and construction waste have heightened public awareness of sustainable living practices. This awareness compels not only governments to take strategic measures but also encourages businesses to adapt by offering products that align with sustainability principles. Consumers today are more attentive to the environmental impact of their consumption choices, prompting companies to integrate eco-friendly values into their production and marketing strategies (Chen & Chai, 2010).

The rise in environmental awareness has consequently influenced consumer behavior, with individuals showing a stronger preference for eco-friendly products. Studies have found that environmental concern plays an important role in shaping purchase intentions, encouraging consumers to support sustainable products (Ekawati et al., 2020; Febriani, 2019). One notable innovation in the building materials industry reflecting this shift is the introduction of Unplasticized Polyvinyl Chloride (UPVC), which is widely regarded as an environmentally friendly alternative to conventional materials such as wood and aluminum. UPVC offers various advantages—durability, energy efficiency, low maintenance, recyclability, and resistance to extreme weather—making it a key component in supporting green building and energy-saving initiatives.

In regions such as Lombok, which has experienced rapid growth in property development, tourism, and infrastructure, the adoption of sustainable materials like UPVC is particularly relevant. This material supports the growing demand for environmentally responsible construction aligned with the island's development goals (Triono & Baharsyah, 2023). The increasing preference for eco-friendly building products also reflects a shift in consumer values, where long-term environmental benefits are becoming an essential consideration in purchasing decisions (Fitriani et al., 2021).

Consumers are increasingly aware of how their consumption patterns impact the environment, including their choice of construction materials. Products like UPVC, which reduce carbon footprints and offer greater durability, tend to attract environmentally conscious consumers (Wang et al., 2023). Consequently, marketing approaches emphasizing sustainability, social responsibility, and transparent communication about environmental benefits have become crucial in influencing purchase behavior.

In this regard, environmental concern plays an essential role in shaping consumer attitudes and purchasing behavior. Individuals with high concern for environmental issues are more inclined to purchase products that minimize ecological damage. Studies by Sutanto et al. (2025) and Amaliah et al. (2023) found that higher levels of environmental concern are associated with stronger purchase intentions toward eco-friendly products. Nevertheless, contrasting evidence from Robu et al. (2021) suggests that environmental concern does not

always have a significant impact on purchase decisions, indicating the need for further investigation.

At the same time, companies play a crucial role through green marketing, which highlights sustainability values such as the use of eco-friendly materials, environmental certifications, and educational marketing communication. Green marketing serves as an effective medium to raise awareness and influence consumer perceptions about environmentally friendly products (Correia et al., 2023; Hameed & Waris, 2018). Lauwrensia and Ariestya (2022) argue that storytelling-based marketing, which connects product value with environmental benefits, can strengthen purchasing intentions. Empirical evidence from Agustin and Hakim (2022) also supports the positive influence of green marketing on purchase decisions. However, other studies such as Maharani and Purwanto (2024) found that this relationship may not always be significant, suggesting that additional factors could moderate or mediate this effect.

Among these factors, environmental knowledge has been identified as an important mediating variable linking environmental concern and green marketing with purchase decisions. Consumers who possess higher environmental knowledge are more capable of evaluating green marketing claims and making informed purchasing choices. Studies by Manopo et al. (2021) and Li et al. (2019) indicate that environmental knowledge enhances consumer attitudes toward green products, while Marhadi et al. (2024) found that both environmental concern and knowledge significantly influence attitudes and purchase intentions. These findings underscore that increasing consumer knowledge can strengthen the effectiveness of green marketing and environmental concern in encouraging sustainable consumption.

In the context of Lombok, where tourism and infrastructure development are expanding rapidly, the integration of environmentally friendly materials like UPVC becomes increasingly vital. Understanding the factors that influence consumers' decisions to purchase such products—particularly the roles of environmental concern, green marketing, and environmental knowledge—is essential for developing effective marketing strategies that align with sustainability goals.

Previous studies on green marketing and environmental concern have primarily focused on consumer goods and daily-use products, whereas research on eco-friendly construction materials remains limited. In Lombok, where sustainable development continues to progress, investigating how these variables influence consumer decisions offers both academic and practical relevance. Therefore, this study aims to fill this empirical gap by analyzing the effect of environmental concern and green marketing on purchase decisions for UPVC products, with environmental knowledge as a mediating variable. The findings are expected to provide insights that enhance understanding of green consumer behavior and assist businesses in formulating sustainability-oriented marketing strategies in the construction materials industry.

## REVIEW OF LITERATURE

### Purchase Decision

According to Ananda and Supryadi (2025), purchase decision is defined as a problem-solving process in human activities aimed at fulfilling needs through the acquisition of goods or services. Meanwhile, Rahayu and Athar (2025) describe purchase decision as the final

stage of the consumer decision-making process, in which an individual decides to buy a product after evaluating various available alternatives. In the context of environmentally oriented products, purchase decisions are influenced not only by economic considerations but also by moral and ecological values (Chan, 2001).

According to Engel et al. (1986), the process of consumer decision-making consists of five main stages: need recognition, information search, evaluation of alternatives, purchase decision, and post-purchase evaluation. Each of these stages can be influenced by consumers' environmental awareness and their exposure to green marketing efforts. Consumers with greater environmental consciousness tend to assess product options not only in terms of function or price but also through their perceived contribution to sustainability.

In the context of UPVC products, purchase decisions are driven by the perception that these materials are durable, recyclable, and energy-efficient—characteristics aligned with the principles of green building. Empirical findings by Yadav and Pathak (2016) and Paul et al. (2016) indicate that purchase decisions for eco-friendly products are significantly affected by environmental concern, green marketing, and environmental knowledge. Therefore, understanding the dynamics behind consumer purchase decisions for UPVC in Lombok provides valuable insights for companies seeking to promote sustainable consumption in developing markets.

**Environmental Knowledge**

Environmental knowledge reflects an individual's understanding of ecological issues, human impacts on the environment, and potential solutions for sustainability (Fryxell & Lo, 2003). It encompasses cognitive awareness, factual understanding, and the ability to apply such knowledge in decision-making processes. Herédia-Colaço (2023) emphasizes that environmental knowledge plays a crucial role in promoting pro-environmental behavior because it shapes how individuals interpret environmental messages and evaluate product claims.

Research has shown that environmental knowledge serves as a mediating variable linking environmental concern and purchase decision (G. Li et al., 2019). Individuals with strong environmental concern may not necessarily act upon it unless they have sufficient knowledge to recognize environmentally friendly options. Similarly, Kumar (2015) highlight that green marketing becomes more effective when consumers possess high environmental knowledge, as it enhances their capacity to distinguish authentic green products from misleading claims.

In the case of UPVC, environmental knowledge allows consumers to comprehend the advantages of using this material—such as its recyclability, energy efficiency, and low maintenance requirements—compared to conventional materials like wood or aluminum. Chen (2013) categorizes environmental knowledge into three dimensions: cognitive understanding, awareness of environmental impact, and application of knowledge. These aspects collectively determine how effectively individuals can translate environmental awareness into concrete purchasing actions.

**Environmental Concern**

Environmental concern represents a psychological state in which individuals acknowledge environmental problems and express a desire to contribute to their solution (Dunlap & Jones, 2002). It embodies an ethical and emotional connection toward nature and sustainability. People who exhibit strong environmental concern tend to integrate

environmental values into their consumption choices, supporting products and companies that demonstrate ecological responsibility (Ahmad & Thyagaraj, 2015).

Empirical studies confirm that environmental concern positively affects consumer attitudes toward green products (Ogiemwonyi & Harun, 2020). This variable also influences environmental knowledge, as individuals who care deeply about ecological issues are more motivated to learn about environmental impacts and sustainable alternatives (Haron et al., 2005; Mostafa, 2007).

Angelovska et al. (2012) divide environmental concern into three dimensions: egoistic, altruistic, and biospheric concern. Egoistic concern focuses on environmental protection for personal well-being, altruistic concern reflects care for other people and communities, while biospheric concern emphasizes the preservation of ecosystems and non-human species. These dimensions collectively shape consumer attitudes and behaviors, making environmental concern a key antecedent in understanding sustainable purchasing decisions for UPVC products.

**Green Marketing**

Green marketing is defined as a strategic process of planning and executing marketing activities that emphasize environmental sustainability across product design, pricing, distribution, and promotion (Polonsky, 2011; Prakash, 2002). It aims to satisfy consumer needs while reducing environmental impact and communicating ecological value effectively.

Piercy et al. (2016) state that green marketing encompasses four main components—green product, green price, green place, and green promotion—which collectively shape consumer perceptions and attitudes toward environmentally responsible consumption. Studies by Tan et al. (2022) indicate that effective green marketing strategies enhance consumer trust, build positive brand images, and ultimately influence purchase behavior.

However, the success of green marketing depends heavily on credibility and consumer understanding. Chen and Chang (2013) warn that misleading claims or "greenwashing" can erode trust and diminish marketing effectiveness. Therefore, transparent communication and genuine environmental practices are essential. In the UPVC industry, green marketing plays an instrumental role in distinguishing sustainable building materials from conventional ones, particularly by highlighting the product's recyclability, durability, and contribution to energy efficiency.

The reviewed literature suggests that purchase decision is influenced by both environmental concern and green marketing, with environmental knowledge serving as a mediating variable that links these relationships. Consumers with greater environmental concern and higher exposure to green marketing campaigns are more likely to make sustainable purchasing decisions—provided they possess sufficient environmental knowledge to evaluate product claims.

Nevertheless, empirical evidence exploring these relationships within the context of sustainable building materials, especially in developing regions like Lombok, remains limited. Most prior research focuses on fast-moving consumer goods or household products, leaving a gap in understanding how sustainability perceptions shape construction material choices.

This study addresses that gap by investigating how environmental concern and green marketing influence purchase decisions for UPVC products in Lombok, with environmental knowledge as a mediator. The findings are expected to contribute to the theoretical

enrichment of green consumer behavior and offer practical insights for companies aiming to strengthen their sustainability-oriented marketing strategies.

**Research Hypothesis**

This study aims to examine the influence of Environmental Concern and Green Marketing on Purchase Decision for environmentally friendly UPVC products in Lombok, with Environmental Knowledge serving as a mediating variable. Drawing upon the theoretical framework and supported by prior empirical findings, the following hypotheses are proposed:

- **H1:** Environmental Concern has a positive and significant effect on Purchase Decision.
- **H2:** Green Marketing has a positive and significant effect on Purchase Decision.
- **H3:** Environmental Concern has a positive and significant effect on Environmental Knowledge.
- **H4:** Green Marketing has a positive and significant effect on Environmental Knowledge.
- **H5:** Environmental Knowledge has a positive and significant effect on Purchase Decision.
- **H6:** Environmental Knowledge mediates the relationship between Environmental Concern and Purchase Decision.
- **H7:** Environmental Knowledge mediates the relationship between Green Marketing and Purchase Decision.

## RESEARCH METHOD

This study adopted a quantitative approach with an associative causal design to examine the influence of environmental concern and green marketing on purchase decision, with environmental knowledge serving as a mediating variable. This approach was selected to statistically verify the causal relationships among constructs and to identify both direct and indirect effects (Hair et al., 2021). The research context focuses on the adoption of environmentally friendly UPVC products in Lombok, West Nusa Tenggara, as part of a growing demand for sustainable construction materials in Indonesia.

The population in this study comprises consumers who have purchased or considered purchasing UPVC products within the last twelve months. The sample was determined using a non-probability purposive sampling technique, as the total population was unknown and the respondents had to meet specific inclusion criteria (Sugiyono, 2016). The respondents were individuals aged 18 years or older, residing in Lombok for at least one year, and either having purchased or planning to purchase UPVC products—such as window frames, doors, or pipes—within six months. A total of 110 valid responses were collected and analyzed, which aligns with the minimum recommended sample size for multivariate analysis (Sekaran & Bougie, 2016).

Data were collected using a structured online questionnaire consisting of closed-ended statements adapted from validated instruments in previous research. Each construct was measured using a seven-point semantic differential scale, ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). The questionnaire items were adapted from well-established sources: *environmental concern* from Angelovska et al. (2012), *green marketing*

from Prakash (2002), *environmental knowledge* from Chen (2013), and *purchase decision* from Kotler (2016).

Before hypothesis testing, data screening was conducted to ensure completeness and consistency. Reliability and validity were assessed using Cronbach's Alpha, Composite Reliability (CR), rho_A, and Average Variance Extracted (AVE), with all constructs exceeding the threshold values of 0.70 for reliability and 0.50 for AVE, indicating internal consistency and convergent validity (Fornell & Larcker, 1981; Hair et al., 2021).

The data were analyzed using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) method through SmartPLS version 4. This method was chosen because it is suitable for predictive research models and mediation analysis with relatively small sample sizes (Henseler et al., 2015). The analytical process comprised two stages: (1) the measurement model (*outer model*), which evaluated indicator reliability, convergent validity, and discriminant validity, and (2) the structural model (*inner model*), which examined the strength and significance of the hypothesized relationships among latent variables.

The bootstrapping technique with 5,000 resamples was employed to estimate the significance of path coefficients and determine the mediating role of *environmental knowledge*. The coefficient of determination ($R^2$) was also assessed to evaluate the model's predictive power, with values of 0.75, 0.50, and 0.25 indicating substantial, moderate, and weak explanatory power, respectively (Ghozali, 2021).

Through this methodological framework, the study provides empirical insights into how environmental concern and green marketing drive purchase decisions for sustainable UPVC products, mediated by consumers' environmental knowledge. This analysis contributes to a broader understanding of green consumer behavior in emerging markets and supports strategic efforts toward sustainable marketing practices in Indonesia's construction industry.

**Table 1.**
**Recapitulation of Questionnaire Results**

| Variable | Item Code | Mean | Category |
|---|---|---|---|
| Environmental Concern (X1) | X1.1 | 5.28 | Fairly High |
| | X1.2 | 5.24 | Fairly High |
| | X1.3 | 5.15 | Fairly High |
| | X1.4 | 5.28 | Fairly High |
| | X1.5 | 5.19 | Fairly High |
| | X1.6 | 5.04 | Fairly High |
| Green Marketing (X2) | X2.1 | 5.25 | Fairly High |
| | X2.2 | 5.15 | Fairly High |
| | X2.3 | 5.02 | Fairly High |
| | X2.4 | 5.18 | Fairly High |
| | X2.5 | 5.15 | Fairly High |
| | X2.6 | 5.19 | Fairly High |
| | X2.7 | 5.14 | Fairly High |
| | X2.8 | 5.16 | Fairly High |
| Environmental Knowledge (Z) | Z.1 | 5.26 | Fairly High |
| | Z.2 | 5.16 | Fairly High |
| | Z.3 | 4.97 | Fairly High |

| | | | |
|---|---|---|---|
| | Z.4 | 4.99 | Fairly High |
| | Z.5 | 5.1 | Fairly High |
| | Z.6 | 4.99 | Fairly High |
| Purchase Decision (Y) | Y.1 | 5.26 | Fairly High |
| | Y.2 | 5.25 | Fairly High |
| | Y.3 | 5.15 | Fairly High |
| | Y.4 | 5.17 | Fairly High |

Source: Researcher's own data processing (2025)

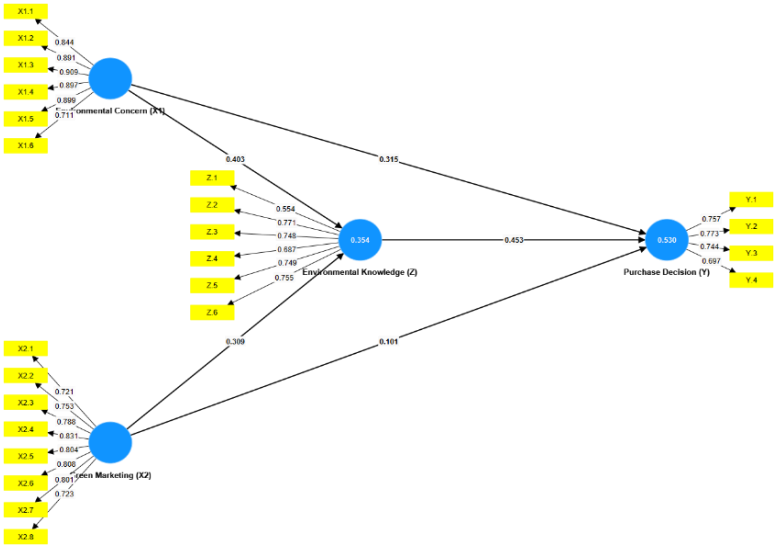
## RESULTS AND DISCUSSION

The evaluation of the measurement and structural models was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4. The analysis followed two stages: (1) assessment of the outer model to verify construct validity and reliability, and (2) evaluation of the inner model to test the structural relationships among the latent variables.

### Measurement Model (Outer Model)

The convergent validity test assessed factor loadings, Average Variance Extracted (AVE), and Composite Reliability (CR). As illustrated in Figure 1, all indicators for Environmental Concern (X1), Green Marketing (X2), Environmental Knowledge (Z), and Purchase Decision (Y) demonstrated standardized loading values above the recommended threshold of 0.70, confirming indicator validity.

**Figure 1.**
**Structural Outer Model**




Source: Researcher's own data processing (2025)

**Table 2.**
**Average Variance Extracted (AVE) Values**

| Variable | Average Variance Extracted (AVE) |
|---|---|
| Environmental Concern (X1) | 0.712 |
| Green Marketing (X2) | 0.748 |
| Environmental Knowledge (Z) | 0.744 |
| Purchase Decision (Y) | 0.603 |

Source: Researcher's own data processing (2025)

All constructs achieved AVE values above 0.50 (Table 2), signifying that more than 50% of the variance in each indicator is captured by its latent construct (Fornell & Larcker, 1981; Hair et al., 2021).

**Table 3.**
**Reliability Test Results**

| Variable | Cronbach's Alpha | rho_A | Composite Reliability | Rule of Thumb | Evaluation |
|---|---|---|---|---|---|
| Environmental Concern (X1) | 0.934 | 0.936 | 0.946 | > 0.70 | Reliable |
| Green Marketing (X2) | 0.947 | 0.948 | 0.956 | > 0.70 | Reliable |
| Environmental Knowledge (Z) | 0.92 | 0.922 | 0.938 | > 0.70 | Reliable |
| Purchase Decision (Y) | 0.911 | 0.913 | 0.928 | > 0.70 | Reliable |

Source: Researcher's own data processing (2025)

Reliability assessment through Cronbach's Alpha, rho_A, and Composite Reliability (CR) revealed values exceeding 0.70 for all constructs, indicating high internal consistency and measurement stability.

**Table 4.**
**Fornell–Larcker Criterion Values**

| Variable | X1 | X2 | Z | Y |
|---|---|---|---|---|
| X1 | 0.844 | | | |
| X2 | 0.567 | 0.865 | | |
| Z | 0.831 | 0.562 | 0.862 | |
| Y | 0.77 | 0.764 | 0.751 | 0.777 |

Source: Researcher's own data processing (2025)

Discriminant validity was confirmed through the Fornell–Larcker criterion, as the square roots of the AVE values (diagonal elements) exceeded their corresponding inter-construct correlations, confirming that each construct is empirically distinct.

**Table 5.**
**Heterotrait-Monotrait Ratio of Correlations (HTMT) Values**

| Variable | X1 | X2 | Z | Y |
|---|---|---|---|---|
| X1 | — | | | |
| X2 | 0.577 | — | | |

| | | | | |
|---|---|---|---|---|
| Z | 0.862 | 0.58 | — | |
| Y | 0.796 | 0.8 | 0.787 | — |

Source: Researcher's own data processing (2025)

All HTMT ratios were below 0.85, which supports the discriminant validity criteria recommended by Henseler et al. (2015).

**Structural Model (Inner Model)**

The structural model was evaluated using R-square ($R^2$), effect size ($f^2$), and predictive relevance ($Q^2$), followed by hypothesis testing via bootstrapping with 5,000 resamples.

**Table 6.**
**R-Square and Adjusted R-Square Values**

| Variable | R Square | Adjusted R Square |
|---|---|---|
| Environmental Knowledge (Z) | 0.354 | 0.339 |
| Purchase Decision (Y) | 0.53 | 0.515 |

Source: Researcher's own data processing (2025)

The results indicate that Environmental Concern and Green Marketing explain 35.4% of the variance in Environmental Knowledge, while Environmental Concern, Green Marketing, and Environmental Knowledge jointly explain 53.0% of the variance in Purchase Decision, indicating moderate explanatory power (Hair et al., 2021).

**Table 8.**
**Effect Size ($f^2$) Values**

| Variable | Environmental Knowledge (Z) | Purchase Decision (Y) |
|---|---|---|
| Environmental Concern | 0.177 | 0.097 |
| Green Marketing | 0.125 | 0.058 |
| Environmental Knowledge | — | 0.224 |

Source: Researcher's own data processing (2025)

Effect size analysis (Table 8) shows that Environmental Concern has a medium effect on Environmental Knowledge and a small effect on Purchase Decision, while Environmental Knowledge demonstrates a moderate impact on Purchase Decision.

**Table 9.**
**Predictive Relevance ($Q^2$) Value**

| Endogenous Variable | $Q^2$ (= 1 – SSE/SSO) |
|---|---|
| Purchase Decision | 0.421 |

Source: Researcher's own data processing (2025)

The $Q^2$ value above zero (0.421) indicates strong predictive relevance of the structural model (Chin, 1998).

**Table 10.**
**Hypothesis Testing Results**

| Hypothesis | Path Relationship | β | t-value | p-value | Result |
|---|---|---|---|---|---|
| H1 | Environmental Concern → Purchase Decision | 0.315 | 2.029 | 0.043 | Significant |
| H2 | Green Marketing → Purchase Decision | 0.101 | 0.685 | 0.493 | Not Significant |
| H3 | Environmental Concern → Environmental Knowledge | 0.403 | 3.613 | 0 | Significant |
| H4 | Green Marketing → Environmental Knowledge | 0.309 | 2.99 | 0.003 | Significant |
| H5 | Environmental Knowledge → Purchase Decision | 0.453 | 3.145 | 0.002 | Significant |
| H6 | Environmental Concern → Environmental Knowledge → Purchase Decision | 0.182 | 2.916 | 0.004 | Significant |
| H7 | Green Marketing → Environmental Knowledge → Purchase Decision | 0.14 | 2.451 | 0.014 | Significant |

Source: Researcher's own data processing (2025)

All effects were found to be positive, with four showing significant relationships and Both mediation paths were significant, confirming the mediating role of Environmental Knowledge.

**Environmental Concern → Purchase Decision**

Environmental Concern has a significant positive influence on Purchase Decision, implying that consumers with higher ecological awareness are more likely to purchase environmentally friendly UPVC products. This result aligns with Ogiemwonyi and Harun (2020) who found that environmental concern enhances pro-environmental buying behavior. However, this study revealed that egoistic concern (personal benefit such as health and comfort) dominated over altruistic or biospheric concern, supporting Do Paco et al. (2019) who note that practical self-interest often underlies green consumption decisions.

In Lombok, many respondents were young homeowners and construction professionals whose purchase motivations emphasized long-term comfort, safety, and durability — reflecting the practical integration of environmental awareness into everyday economic reasoning (Lee, 2009).

**Green Marketing → Purchase Decision**

Green Marketing had a positive but non-significant effect on Purchase Decision, suggesting that promotional efforts alone are insufficient to change consumer behavior. This finding is consistent with Saeed (2023) and Chen & Chang (2013), who argue that green skepticism and limited environmental literacy can weaken the impact of marketing campaigns. In Lombok, consumers tend to focus more on product attributes (green product) than on marketing communication. Although they acknowledge the environmental value of UPVC, purchasing decisions remain driven by durability and price considerations (Dangelico & Vocalelli, 2017; Maharani & Purwanto, 2024).

**Environmental Concern → Environmental Knowledge**

A significant positive link between Environmental Concern and Environmental Knowledge was observed. Environmentally concerned consumers are more motivated to learn about ecological issues and sustainable materials (F. Li et al., 2018; Zulfa et al., 2023). This relationship reflects an active cognitive process where concern fosters knowledge acquisition, leading to more informed and responsible consumption (Fawehinmi et al., 2022). In Lombok, rising awareness of local environmental challenges—such as waste and deforestation—encourages consumers to seek information on sustainable materials like UPVC, thus strengthening the knowledge–concern nexus (Dangelico & Vocalelli, 2017).

**Green Marketing → Environmental Knowledge**

Green Marketing significantly influenced Environmental Knowledge, reaffirming its educational role. Marketing campaigns highlighting UPVC's durability and recyclability have enhanced public understanding of its environmental benefits (Ali, 2021; Maichum et al., 2016). This confirms that effective green marketing should function as both promotion and education, shaping consumers' environmental literacy and guiding them toward more sustainable preferences (Alrizki & Dewi, 2024; Annisa & Jadmiko, 2023).

**Environmental Knowledge → Purchase Decision**

Environmental Knowledge was found to significantly predict Purchase Decision. Consumers who understand environmental issues tend to evaluate product choices more critically and are more inclined toward sustainable options (Fryxell & Lo, 2003; Joshi & Rahman, 2015). Nevertheless, as Mei et al. (2012) and Yadav and Pathak (2016) observed, the knowledge–action gap persists — knowledge alone is not always sufficient to trigger green purchasing behavior. In this study, consumers' knowledge levels were moderately high but remained largely cognitive, not yet fully translated into consistent pro-environmental action. Hence, educational interventions and transparent product information are essential to bridge this gap (Silintowe & Sukresna, 2023).

**Mediating Role of Environmental Knowledge**

Environmental Knowledge significantly mediates the influence of both Environmental Concern and Green Marketing on Purchase Decision. This supports the findings of Kumar (2015), Li et al. (2019), and Mohd Suki (2016) that knowledge transforms awareness and marketing exposure into real behavioral outcomes. In Lombok, this mediation demonstrates that knowledge acts as the rational bridge converting environmental sensitivity and marketing messages into tangible buying behavior.

## CONCLUSION

This study concludes that Environmental Concern and Green Marketing play a crucial role in influencing consumers' purchasing decisions for UPVC products in Lombok, with Environmental Knowledge acting as a key mediating variable. The findings confirm that individuals with higher environmental concern demonstrate a stronger tendency to purchase eco-friendly products. This indicates that consumers who are more aware of and emotionally connected to environmental issues tend to translate their concerns into tangible purchasing behavior. However, the analysis also reveals that consumers' environmental concern in Lombok is primarily egoistic rather than altruistic, meaning their motivation is largely driven by personal benefits such as health, comfort, and home quality rather than collective ecological preservation. This finding align with previous research which suggests that pro-

environmental behavior often stems from self-interest that coincides with environmental benefits.

Although Green Marketing was found to have a positive but insignificant direct effect on purchase decisions, it remains an essential factor in shaping consumer perceptions. The insignificant relationship indicates that while green marketing campaigns may improve awareness and create positive brand associations, they are insufficient to directly stimulate actual purchase behavior without corresponding consumer understanding. This implies that the effectiveness of green marketing in Lombok depends heavily on consumers' level of environmental literacy and their ability to interpret sustainability messages accurately. In this sense, the findings highlight the existence of a communication gap between promotional intent and consumer comprehension, which reflects earlier evidence from Chen and Chang (2013) that green messages alone cannot overcome skepticism or low environmental awareness among consumers in developing markets.

Furthermore, the study reveals that both Environmental Concern and Green Marketing significantly influence Environmental Knowledge. This demonstrates that individuals who possess strong ecological awareness are more likely to seek information about environmental issues and sustainable products, while effective green marketing strategies enhance this knowledge through educational and persuasive messages. This relationship supports the argument of Pan et al. (2018) and Fawehinmi et al. (2022) that concern acts as a motivational trigger leading to knowledge acquisition, which in turn strengthens environmentally responsible behavior. It also reinforces the role of marketing as a tool not only for persuasion but also for environmental education that deepens consumers' cognitive engagement with sustainability concepts.

The results further confirm that Environmental Knowledge has a positive and significant impact on Purchase Decision, underscoring that consumers with greater understanding of ecological issues are more likely to choose sustainable products such as UPVC. This finding corroborates prior studies (Joshi & Rahman, 2015; Yadav & Pathak, 2016) suggesting that environmental knowledge forms a cognitive foundation for pro-environmental purchasing behavior. In the context of Lombok, this relationship is particularly relevant because consumers who recognize the environmental advantages of UPVC—such as its durability, recyclability, and energy efficiency—are more confident in making sustainable purchasing choices.

Importantly, Environmental Knowledge is also proven to mediate the effects of both Environmental Concern and Green Marketing on Purchase Decision, indicating that knowledge serves as a cognitive bridge transforming environmental awareness and marketing stimuli into actual consumer behavior. In other words, while concern and marketing create initial awareness, it is knowledge that empowers consumers to act upon that awareness. This mediating mechanism supports the Theory of Planned Behavior (Ajzen, 1991), which posits that behavioral intentions and actions are most effectively shaped when attitudes and external influences are reinforced by sufficient cognitive understanding.

From a theoretical standpoint, this study contributes to the development of green consumer behavior literature by demonstrating the interdependent roles of environmental concern, marketing communication, and environmental knowledge in driving purchase decisions. It extends existing frameworks by integrating cognitive and behavioral components that explain how psychological motivation interacts with marketing efforts to

produce sustainable consumption outcomes. Moreover, it emphasizes that environmental knowledge acts not merely as a passive variable but as an active mechanism that strengthens the link between consumer concern and sustainable purchasing.

From a managerial perspective, the results imply that companies producing UPVC and other eco-friendly materials should focus on educational-based green marketing strategies. Rather than relying solely on promotional claims, firms should provide clear, evidence-based information regarding the environmental and functional benefits of their products. For instance, campaigns that demonstrate how UPVC conserves energy, reduces pollution, and supports long-term cost savings are more likely to build consumer trust and stimulate purchase decisions. Policymakers should also prioritize public education programs to enhance environmental literacy, ensuring that consumer awareness evolves into sustainable consumption behavior. Furthermore, businesses can leverage existing environmental concern by connecting it to credible, transparent product information that aligns with consumers' personal values and perceived benefits.

Despite its valuable contributions, this study has several limitations. The sample was limited to consumers in Lombok, which may restrict the generalizability of the results to other regions with different cultural and environmental awareness contexts. Additionally, the study examined only four variables—Environmental Concern, Green Marketing, Environmental Knowledge, and Purchase Decision—while excluding potentially relevant factors such as Green Trust, Perceived Value, and Perceived Consumer Effectiveness. Future research should therefore expand the geographical scope across Indonesia and incorporate these additional constructs to develop a more comprehensive model of sustainable purchasing behavior. Employing mixed-method approaches—such as in-depth interviews or focus groups—could also provide richer insights into the psychological and contextual dynamics behind consumers' green decisions.

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