

THE INFLUENCE OF CIRCULAR ECONOMY AWARENESS AND GREEN MARKETING ON SUSTAINABLE PURCHASE INTENTION AMONG F&B CONSUMERS IN INDONESIA

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Abstract

Sustainable consumption has become increasingly important in the food and beverage sector due to its contribution to resource use and waste generation. This study aims to examine the influence of Circular Economy Awareness and Green Marketing on Sustainable Purchase Intention among F&B consumers in Indonesia. A quantitative approach was employed using an online questionnaire distributed to 120 consumers selected through purposive sampling. Respondents were Indonesian residents aged 18 years or older who had purchased F&B products within the previous six months. Data were analyzed using multiple linear regression after conducting validity, reliability, normality, heteroscedasticity, and multicollinearity tests. The results indicate that Circular Economy Awareness has a positive and significant influence on Sustainable Purchase Intention, with a standardized coefficient of 0.561 and a significance level below 0.001. Green Marketing also has a positive and significant influence, with a standardized coefficient of 0.261 and a significance level of 0.003. Simultaneously, both variables significantly influence Sustainable Purchase Intention and explain 59.9% of its variance. Circular Economy Awareness demonstrates a stronger influence than Green Marketing, indicating that consumers' understanding of circular economy principles plays an important role in encouraging sustainable purchasing intentions. These findings highlight the importance of combining consumer education on circular economy practices with credible and environmentally oriented marketing strategies to promote sustainable consumption in the Indonesian F&B sector.

Keywords: Circular Economy Awareness; Green Marketing; Sustainable Purchase Intention; F&B Consumers; Sustainable Consumption

1. Introduction

The transition toward sustainable consumption has become increasingly important as economic growth and changing consumption patterns continue to generate pressure on natural resources and waste management systems. In Indonesia, this challenge is particularly relevant to the food and beverage (F&B) sector, where consumer purchases are frequently accompanied by single-use packaging, including plastic cups, food containers, straws, and other disposable materials. The scale of the F&B sector further strengthens the importance of this issue. Statistics Indonesia reported that there were approximately 5.28 million food and beverage service businesses operating in Indonesia in 2024, demonstrating the extensive scale of food and beverage consumption and its potential environmental implications (Badan Pusat Statistik [BPS], 2025). At the same time, national waste management remains a substantial challenge. Data reported through Indonesia's National Waste Management Information System indicated that 34.21 million tons of waste were generated annually based on reporting from 317 districts and cities in 2024, while approximately 40.26% remained unmanaged (Kementerian Lingkungan Hidup dan Kehutanan [KLHK], 2025). These conditions indicate that shifting consumption patterns toward more sustainable choices is not only an environmental concern but also an important management and marketing issue.

The F&B sector is closely connected to the circular economy because many of its environmental impacts occur throughout the product and packaging life cycle. Circular economy principles emphasize maintaining the value and utility of products and materials for as long as possible through strategies such as reducing resource consumption, reusing products and packaging, recovering materials, and recycling waste. In the Indonesian context, the government has identified food and beverage manufacturers as important actors in waste reduction, while restaurants, cafés, hotels, and catering businesses are also associated with single-use waste such as plastic straws, utensils, beverage bottles, and disposable food

containers (KLHK, 2022). Consequently, the transition toward circular consumption cannot rely solely on changes in production practices; consumer participation is also essential because consumers ultimately determine whether products with circular attributes are selected, purchased, reused, and properly managed after use.

Consumer awareness therefore represents an important starting point for encouraging circular consumption. Circular Economy Awareness refers to consumers' understanding and recognition of principles related to maintaining product and material value, reducing waste, reusing resources, and extending product life cycles. Previous research demonstrates that consumers' environmental perspectives can shape their responses toward circular economy products. Yang et al. (2024), for example, found that environmental awareness and environmental concern were important antecedents of consumer attitudes and relationship quality toward circular economy products, which subsequently influenced purchase intention. Similarly, Chao and Yu (2024) demonstrated that consumer attitudes and other psychological factors significantly affected purchase intention toward circular economy products. These findings suggest that consumers' understanding and environmental orientation can contribute to the formation of intentions to participate in more sustainable forms of consumption. However, much of the existing literature has examined circular economy products in general or specific product categories, leaving opportunities to investigate circular consumption specifically within the F&B context.

In addition to consumer awareness, the role of Green Marketing is increasingly important in translating sustainability principles into consumer-facing information and value propositions. Green marketing enables firms to communicate environmental attributes through green products, packaging, distribution, promotion, and other marketing activities. Sharma (2021) highlighted that green marketing constitutes an important component of consumers' green purchase decision-making, while also identifying environmental knowledge, eco-labeling, perceived usefulness, trust, and organizational image as factors associated with green consumer behavior. In the F&B industry, Sembiring (2021) found that green marketing mix dimensions, consisting of green product, green price, green distribution, and green promotion, positively influenced corporate image and purchase intention among consumers of food and beverage companies in Indonesia. More recently, Fitria et al. (2026) demonstrated that green marketing and environmental knowledge positively influenced green purchase intention among Indonesian consumers of Fore Coffee, with green brand image serving as a mediating mechanism. These findings indicate that sustainability-oriented marketing communication can play an important role in shaping consumers' willingness to purchase environmentally friendly F&B products.

The relationship between circular economy awareness, green marketing, and purchase intention becomes increasingly relevant when viewed from the perspective of sustainable consumption. Sustainable consumption is not limited to purchasing products labeled as environmentally friendly; rather, it reflects consumers' intention to make purchasing choices that consider environmental consequences and resource use. Previous studies have established that product attributes and environmental considerations influence green purchase decisions (Sharma & Foropon, 2019). Meanwhile, research on circular economy consumption has shown that consumer awareness, attitudes, perceived benefits, and other psychological factors can influence willingness to purchase circular products (Chao & Yu, 2024; Yang et al., 2024). Nevertheless, there remains a need to connect consumer awareness of circular economy principles with firm-level green marketing efforts within a specific consumption context, particularly the F&B sector in an emerging economy such as Indonesia.

This gap is also reflected in the recent development of sustainable gastronomy research. Munawar et al. (2025) found that Indonesian culinary enterprises have increasingly incorporated sustainable practices such as local sourcing, waste management, sustainable packaging, product innovation, and sustainability-oriented marketing. Their findings indicate that sustainability practices can improve efficiency, reduce waste, and strengthen competitiveness, but the study primarily examined sustainability from the perspective of culinary businesses rather than consumers. Thus, an important question remains: to what extent do consumers' awareness of circular economy principles and their exposure to green marketing influence their intention to make sustainable F&B purchases? Addressing this question is particularly important because business-level sustainability initiatives may not generate meaningful environmental impact if consumers do not recognize, value, and respond to the sustainability attributes communicated through the marketplace.

Furthermore, a recent systematic literature review by Adhikari et al. (2025) identified the growing intersection between green marketing, consumer purchasing decisions, and the circular economy. The review emphasized that credible and transparent sustainability communication is important for strengthening consumer trust and green purchase intentions, while greenwashing remains a significant challenge that can weaken consumer confidence and contribute to the attitude-behavior gap. This highlights the need for empirical research that examines not only whether sustainability-oriented

marketing exists, but also whether it is associated with consumers' intention to engage in sustainable purchasing.

Based on these considerations, this study aims to examine the influence of Circular Economy Awareness and Green Marketing on Sustainable Purchase Intention among F&B Consumers in Indonesia. The study focuses on the consumer perspective and integrates two complementary drivers of sustainable purchasing: consumers' internal awareness of circular economy principles and their external exposure to sustainability-oriented marketing activities. By examining these relationships in the Indonesian F&B context, this research is expected to contribute to the sustainable consumption and circular economy literature while providing practical implications for F&B businesses seeking to translate sustainability commitments into consumer participation and, ultimately, more meaningful sustainable impact.

2. Literature Review (*Times New Roman, font size 10*)

2.1. Circular Economy Awareness

The circular economy shifts the conventional linear model of “take make dispose” toward maintaining the value and utility of products, materials, and resources for as long as possible. In the consumer context, this transition requires awareness of practices such as waste reduction, reuse, recycling, product life extension, and responsible resource consumption. Circular Economy Awareness refers to consumers' understanding of circular economy principles, their environmental implications, and their benefits. In the F&B sector, this awareness is particularly relevant due to packaging waste, disposable containers, plastic utensils, straws, and other single-use materials.

Previous studies indicate that environmental awareness and psychological factors influence consumer responses toward circular economy products. Yang et al. (2024) found that environmental awareness and concern contribute to consumer attitudes and purchase intention, while Chao and Yu (2024) demonstrated the role of attitudes and psychological factors in purchase intention toward circular economy products. Thus, consumers with greater awareness are expected to be more willing to consider environmental consequences when making F&B purchasing decisions.

2.2. Green Marketing

Green marketing refers to marketing activities that incorporate environmental considerations into product development, communication, distribution, and promotion. It enables businesses to communicate environmental value through sustainable products, eco-friendly packaging, waste reduction, responsible sourcing, recycling, and other environmental initiatives. Sharma (2021) highlighted that green marketing is associated with green purchasing behavior, although consumer responses also depend on knowledge, trust, perceived benefits, and the credibility of environmental claims.

In the Indonesian F&B context, Sembiring (2021) found that the green marketing mix positively influences purchase intention, while Fitria et al. (2026) demonstrated a positive relationship between green marketing and green purchase intention among Indonesian coffee consumers. However, green marketing needs to be supported by credible environmental practices. Adhikari et al. (2025) emphasized that transparent green communication is important for consumer trust, while greenwashing can weaken consumers' responses to environmental claims.

2.3. Green Marketing

Sustainable Purchase Intention refers to consumers' willingness or intention to purchase products or services while considering their environmental and sustainability implications. The concept extends conventional purchase intention by incorporating considerations of resource use, waste generation, and environmental impact. It is particularly relevant to F&B because frequent consumption and single-use packaging create substantial opportunities for sustainable purchasing choices, including recyclable or reusable packaging and waste-reduction practices.

Previous research has shown that environmental and circular-economy-related factors are associated with purchasing intentions. Sharma and Foropon (2019) identified the relevance of green product attributes and environmental considerations to green purchase behavior, while Chao and Yu (2024) demonstrated that psychological and environmental factors contribute to purchase intention toward circular economy products. However, previous studies have more commonly examined general green products or specific circular economy categories rather than everyday F&B consumption.

2.4. Circular Economy Awareness and Sustainable Purchase Intention

Circular Economy Awareness is expected to positively influence Sustainable Purchase Intention because consumers who understand circular economy principles are more likely to recognize the environmental consequences of resource consumption and waste generation. Such awareness can provide a cognitive basis for evaluating sustainable alternatives. Yang et al. (2024) and Chao and Yu (2024) provide empirical support for the role of environmental awareness and psychological factors in consumer

responses toward circular economy products. In the F&B sector, consumers who recognize the environmental impacts of single-use packaging and waste are expected to show greater willingness to choose more sustainable alternatives.

H1: Circular Economy Awareness has a positive influence on Sustainable Purchase Intention among F&B consumers in Indonesia.

2.5. Green Marketing and Sustainable Purchase Intention

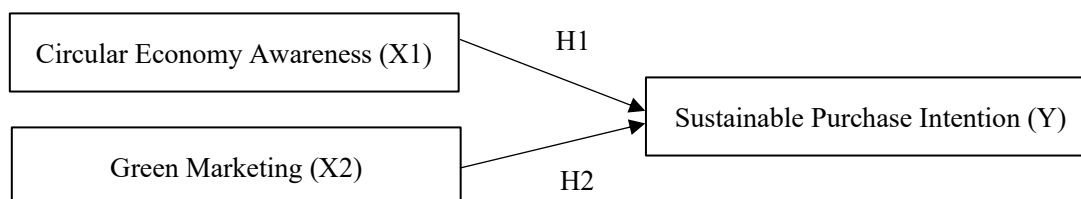
Green Marketing is expected to positively influence Sustainable Purchase Intention because environmental marketing provides consumers with information about sustainable product attributes and business practices. Credible information regarding sustainable packaging, waste reduction, resource efficiency, recycling, and reuse can help consumers identify and evaluate sustainable alternatives. This relationship is supported by Sembiring (2021), Fitria et al. (2026), and Sharma (2021), who found positive relationships between green marketing and consumer purchasing responses. However, the effectiveness of green marketing depends on the credibility and substance of environmental claims. Therefore, green marketing supported by genuine sustainability practices is expected to strengthen consumers' intention to choose sustainable F&B products.

H2: Green Marketing has a positive influence on Sustainable Purchase Intention among F&B consumers in Indonesia.

2.6. Research Gap and Conceptual Framework

Previous research has established the importance of environmental awareness and green marketing in sustainable purchasing behavior. Nevertheless, research on circular economy consumption has predominantly focused on general circular economy products, while studies in the Indonesian F&B sector have largely examined green purchase intention or brand-related outcomes. In addition, research on sustainable practices in Indonesian culinary businesses has primarily emphasized the business perspective rather than consumer purchasing responses.

Munawar et al. (2025), for example, identified sustainable practices among Indonesian culinary enterprises, including local sourcing, waste management, sustainable packaging, and product innovation. However, consumer responses to these practices remain less explored. Therefore, this study integrates Circular Economy Awareness as an internal consumer factor and Green Marketing as an external market factor to explain Sustainable Purchase Intention among F&B consumers in Indonesia. The conceptual framework is formulated as follows:



Based on the theoretical and empirical evidence, both Circular Economy Awareness and Green Marketing are expected to positively contribute to Sustainable Purchase Intention among F&B consumers in Indonesia.

3. Research Methods

3.1. Object, time and Place

This study employed a quantitative research approach to examine the influence of Circular Economy Awareness and Green Marketing on Sustainable Purchase Intention among food and beverage (F&B) consumers in Indonesia. The unit of analysis was individual consumers who had experience purchasing F&B products in Indonesia. The research focused on consumers' perceptions of circular economy practices and green marketing activities and their intention to make sustainable F&B purchasing decisions.

The research was conducted from June to August 2026. Data were collected through an online questionnaire distributed to F&B consumers residing in Indonesia. The research object consisted of consumers who had purchased F&B products and were therefore considered capable of evaluating sustainability-related attributes and marketing activities associated with F&B products.

The study involved two independent variables, namely Circular Economy Awareness (X1) and Green Marketing (X2), and one dependent variable, namely Sustainable Purchase Intention (Y). Circular Economy Awareness represents consumers' understanding and recognition of circular economy principles in consumption, including waste reduction, reuse, recycling, and efficient resource use. Green Marketing represents consumers' perceptions of marketing activities that communicate or provide

environmental value. Sustainable Purchase Intention represents consumers' willingness or intention to purchase F&B products while considering their environmental and sustainability implications.

3.2. Data Collection Techniques

Primary data were collected using a structured online questionnaire. Respondents were selected using purposive sampling based on predetermined criteria: (1) respondents were at least 18 years old; (2) respondents resided in Indonesia; and (3) respondents had purchased F&B products within the last six months. These criteria were established to ensure that respondents had relevant and recent experience with F&B consumption.

The questionnaire consisted of demographic questions and measurement items for the three research variables. The measurement items were adapted from relevant previous studies and adjusted to the context of F&B consumption in Indonesia. The instrument contained 24 statements, consisting of indicators for Circular Economy Awareness, Green Marketing, and Sustainable Purchase Intention. Each statement was measured using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree.

A total of 120 respondents participated in the survey, and all responses meeting the predetermined criteria were included in the analysis. Before hypothesis testing, the research instrument was evaluated through validity and reliability testing. Validity was assessed using item-total correlation, while reliability was evaluated using Cronbach's alpha. Items meeting the established criteria were retained for further analysis.

3.3. Data Analysis Techniques

The data were analyzed using Statistical Package for the Social Sciences (SPSS) version 26. The analysis consisted of descriptive statistics, classical assumption testing, and multiple linear regression analysis.

Classical assumption testing included normality, multicollinearity, and heteroscedasticity tests. The normality test was conducted to determine whether the regression residuals were normally distributed. The multicollinearity test was used to identify whether a high correlation existed among the independent variables, while the heteroscedasticity test was performed to determine whether the variance of the regression residuals was constant.

After the assumptions were fulfilled, multiple linear regression analysis was employed to examine the influence of Circular Economy Awareness and Green Marketing on Sustainable Purchase Intention. The regression model was formulated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

where Y represents Sustainable Purchase Intention, X_1 represents Circular Economy Awareness, X_2 represents Green Marketing, α represents the constant, β_1 and β_2 represent the regression coefficients, and ε represents the error term.

Hypothesis testing was conducted using the t-test and F-test. The t-test was used to examine the partial influence of each independent variable on Sustainable Purchase Intention, while the F-test was used to examine their simultaneous influence. The coefficient of determination (R^2) was also used to determine the proportion of variation in Sustainable Purchase Intention explained by Circular Economy Awareness and Green Marketing.

The significance level was set at 5% ($\alpha = 0.05$). A hypothesis was considered supported when the significance value was below 0.05 and the direction of the regression coefficient was consistent with the proposed hypothesis.

4. Results and Discussion

4.1. Research Results

4.1.1. Descriptive Statistics

Descriptive statistics were used to provide an overview of the respondents' responses to the three research variables. The analysis includes the minimum, maximum, mean, and standard deviation values for Circular Economy Awareness, Green Marketing, and Sustainable Purchase Intention.

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Circular Economy Awareness (X1)	120	24	40	33.2	3.90561
Green Marketing (X2)	120	20	40	33.5917	3.93753
Sustainable Purchase Intention (Y)	120	16	40	32.1417	5.19744

Sources: Primary data, processed using SPSS 26 (2026)

The results indicate that Green Marketing had the highest mean score of 33.5917, followed by Circular Economy Awareness at 33.2000 and Sustainable Purchase Intention at 32.1417. Based on the

eight indicators measured for each variable using a five-point Likert scale, the average scores per item were approximately 4.20 for Green Marketing, 4.15 for Circular Economy Awareness, and 4.02 for Sustainable Purchase Intention. These results indicate that respondents generally reported positive perceptions of circular economy awareness and green marketing practices, as well as a relatively high intention to make sustainable purchase choices. The standard deviation values ranged from 3.90561 to 5.19744, indicating variation in respondents' responses across the three variables.

4.1.2. Instrument Test

The validity test was conducted using Pearson correlation to determine whether each questionnaire item appropriately measured its respective variable. With 120 respondents, the critical r -value was 0.179 at a 5% significance level. The results show that all 24 indicators had correlation coefficients greater than the critical value, ranging from 0.473 to 0.782, with significance values below 0.05. Therefore, all questionnaire items were considered valid and retained for further analysis.

Reliability was assessed using Cronbach's Alpha to examine the internal consistency of the indicators within each variable. As presented in Table 2, the Cronbach's Alpha values for Circular Economy Awareness, Green Marketing, and Sustainable Purchase Intention were 0.769, 0.777, and 0.864, respectively. Since all values exceeded the commonly accepted threshold of 0.70, the three variables demonstrated satisfactory internal consistency. Thus, the research instrument was considered valid and reliable for subsequent statistical analysis.

Table 2. Summary of Instrument Test Results

Variable	Items	Validity Range	Cronbach's Alpha	Result
Circular Economy Awareness (X1)	8	0.473–0.756	0.769	Valid & Reliable
Green Marketing (X2)	8	0.527–0.710	0.777	Valid & Reliable
Sustainable Purchase Intention (Y)	8	0.639–0.782	0.864	Valid & Reliable

Sources: Primary data, processed using SPSS 26 (2026)

Note: All validity coefficients were significant at $p < 0.001$. The critical r -value was 0.179 ($\alpha = 0.05$).

A Cronbach's Alpha value ≥ 0.70 indicates acceptable reliability.

4.1.3. Classical Assumption Tests

a. Normality Test

The normality test was conducted to determine whether the residuals of the regression model were approximately normally distributed. In this study, normality was assessed using the Normal P–P Plot of Regression Standardized Residual. The normality assumption is considered satisfied when the residual points generally follow and are distributed around the diagonal line.

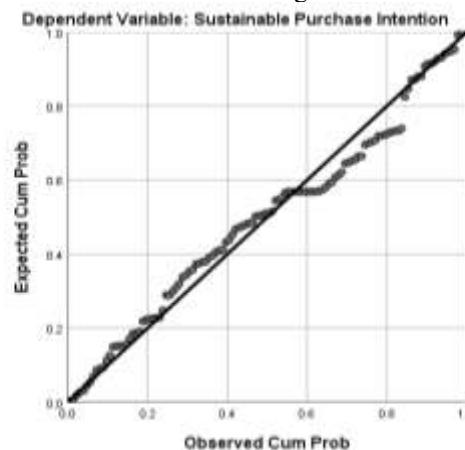


Figure 1. Normal P–P Plot of Regression Standardized Residual

The Normal P–P Plot shows that the observed residual points generally follow the diagonal line, although some deviations can be observed in several areas of the plot. Overall, the points remain distributed around the diagonal pattern, indicating that the residuals can be considered approximately normally distributed. Therefore, the regression model satisfies the normality assumption and can be continued to the subsequent analysis.

b. Heteroscedasticity Test

The heteroscedasticity test was performed using the Glejser Test to determine whether the residual variance was consistent across observations. The test was conducted by regressing the absolute residual values against the independent variables. A significance value greater than 0.05 indicates that there is no evidence of heteroscedasticity.

Table 3. Result of Heteroscedasticity Test

Independent Variable	t	Sig.	Conclusion
Circular Economy Awareness (X1)	-0.906	0.367	No heteroscedasticity
Green Marketing (X2)	-1.842	0.068	No heteroscedasticity

Sources: Primary data, processed using SPSS 26 (2026)

The results in Table 3 show that the significance value for Circular Economy Awareness is 0.367, while Green Marketing has a significance value of 0.068. Both values are greater than 0.05. Therefore, the regression model shows no indication of heteroscedasticity, meaning that the residual variance can be considered relatively constant across observations.

c. Multicollinearity Test

The multicollinearity test was conducted to determine whether a high correlation existed among the independent variables in the regression model. Multicollinearity was assessed using Tolerance and Variance Inflation Factor (VIF). A Tolerance value greater than 0.10 and a VIF value below 10 indicate that the model does not suffer from multicollinearity.

Table 3. Result of Multicollinearity Test

Independent Variable	Tolerance	VIF	Conclusion
Circular Economy Awareness (X1)	0.457	2.189	No multicollinearity
Green Marketing (X2)	0.457	2.189	No multicollinearity

Sources: Primary data, processed using SPSS 26 (2026)

The results indicate that both independent variables have Tolerance values of 0.457 and VIF values of 2.189. The Tolerance values are above 0.10, while the VIF values are below 10. Therefore, no multicollinearity problem was identified among the independent variables. The regression model thus meets the multicollinearity assumption.

4.1.4. Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to examine the influence of Circular Economy Awareness and Green Marketing on Sustainable Purchase Intention. The analysis included the coefficient of determination, F-test, t-test, and regression equation.

a. Coefficient of Determination

The coefficient of determination (R^2) indicates the extent to which the independent variables can explain the variation in the dependent variable.

Table 4. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.774	0.599	0.592	3.31881

Sources: Primary data, processed using SPSS 26 (2026)

The regression results show an R Square value of 0.599, indicating that Circular Economy Awareness and Green Marketing jointly explain 59.9% of the variation in Sustainable Purchase Intention. The remaining 40.1% is explained by other factors that are not included in the research model. The Adjusted R Square value of 0.592 indicates that, after adjusting for the number of predictors and sample size, the model explains 59.2% of the variation in Sustainable Purchase Intention.

b. F-Test (Simultaneous Test)

The F-test was conducted to determine whether Circular Economy Awareness and Green Marketing simultaneously have a significant influence on Sustainable Purchase Intention.

Table 5. Result of ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1925.897	2	962.948	87.426	0
Residual	1288.695	117	11.014		
Total	3214.592	119			

Sources: Primary data, processed using SPSS 26 (2026)

The ANOVA results show an F-value of 87.426 with a significance value of 0.000. Since the significance value is below 0.05, Circular Economy Awareness and Green Marketing simultaneously have a significant influence on Sustainable Purchase Intention. Therefore, the regression model is

statistically significant, indicating that the two independent variables collectively contribute to explaining Sustainable Purchase Intention.

c. t-Test (Partial Test)

The t-test was conducted to examine the individual effect of each independent variable on Sustainable Purchase Intention.

Table 6. Result of t-Test

Independent Variable	B	Std. Error	Beta	t	Sig.
Constant	-4.229	2.797		-1.512	0.133
Circular Economy Awareness (X1)	0.747	0.115	0.561	6.483	0
Green Marketing (X2)	0.344	0.114	0.261	3.011	0.003

Sources: Primary data, processed using SPSS 26 (2026)

The results indicate that Circular Economy Awareness has a positive and significant effect on Sustainable Purchase Intention, with a regression coefficient of 0.747, a t-value of 6.483, and a significance value of 0.000. Since the significance value is below 0.05, the first hypothesis (H₁) is supported. This finding indicates that higher levels of consumers' awareness of circular economy principles are associated with stronger intentions to make sustainable purchases.

Green Marketing also has a positive and significant effect on Sustainable Purchase Intention, with a regression coefficient of 0.344, a t-value of 3.011, and a significance value of 0.003. As the significance value is below 0.05, the second hypothesis (H₂) is supported. This result indicates that stronger green marketing practices are associated with higher consumer intentions to purchase products in a more sustainable manner.

Based on the standardized regression coefficients, Circular Economy Awareness has a higher Beta coefficient ($\beta = 0.561$) than Green Marketing ($\beta = 0.261$). This suggests that Circular Economy Awareness has a relatively stronger contribution to Sustainable Purchase Intention within the regression model.

d. Regression Equation Model

Based on the multiple linear regression analysis, the regression equation can be expressed as follows:

$$Y = -4.229 + 0.747X_1 + 0.344X_2$$

Where:

- Y = Sustainable Purchase Intention
- X₁ = Circular Economy Awareness
- X₂ = Green Marketing

The regression equation indicates that:

- A one-unit increase in Circular Economy Awareness, assuming Green Marketing remains constant, is associated with an increase of 0.747 units in Sustainable Purchase Intention.
- A one-unit increase in Green Marketing, assuming Circular Economy Awareness remains constant, is associated with an increase of 0.344 units in Sustainable Purchase Intention.
- The constant value of -4.229 represents the predicted value of Sustainable Purchase Intention when both independent variables are zero. However, this value has limited practical interpretation because the variables are measured using Likert-scale scores.

Overall, the regression results demonstrate that both Circular Economy Awareness and Green Marketing have positive and significant individual effects on Sustainable Purchase Intention. Among the two predictors, Circular Economy Awareness demonstrates the stronger relative contribution based on its standardized coefficient.

4.2. Discussion

The findings demonstrate that both Circular Economy Awareness and Green Marketing have positive and significant influences on Sustainable Purchase Intention among F&B consumers in Indonesia. The regression model explains 59.9% of the variation in Sustainable Purchase Intention, while the remaining 40.1% is attributable to other factors outside the model. The significant F-test ($F = 87.426$; $p < 0.001$) further indicates that the two variables collectively provide a meaningful explanation of consumers' intention to make sustainable F&B purchases. These findings reinforce the view that sustainable consumption is shaped by both consumers' internal awareness and external market stimuli.

First, Circular Economy Awareness has a positive and significant influence on Sustainable Purchase Intention ($\beta = 0.561$; $t = 6.483$; $p < 0.001$), supporting H₁. This result indicates that consumers who have a stronger understanding of circular economy principles tend to demonstrate stronger intentions to choose sustainable F&B products. The finding is consistent with Yang et al. (2024), who found that

environmental awareness and environmental concern influence consumer responses toward circular economy products, and with Chao and Yu (2024), who demonstrated that psychological and environmental factors contribute to purchase intention toward circular economy products. The present finding extends these studies by demonstrating that the relevance of circular economy awareness is also evident in everyday F&B consumption, where consumers frequently encounter issues related to packaging waste, single-use materials, reuse, and recycling.

The stronger standardized coefficient of Circular Economy Awareness compared with Green Marketing ($\beta = 0.561$ versus $\beta = 0.261$) provides an additional insight. This suggests that, within the present research model, consumers' internal understanding of circular economy principles contributes more strongly to Sustainable Purchase Intention than their perceptions of green marketing. One possible explanation is that awareness provides a cognitive basis for consumers to recognize the environmental consequences of their purchasing decisions. When consumers understand the importance of reducing waste, reusing resources, and maintaining material value, sustainability considerations may become part of their evaluation of F&B alternatives. Thus, sustainable purchasing is not solely dependent on information communicated by businesses but can also emerge from consumers' own understanding and environmental consciousness.

Second, Green Marketing also has a positive and significant influence on Sustainable Purchase Intention ($\beta = 0.261$; $t = 3.011$; $p = 0.003$), supporting H2. This finding is consistent with Sembiring (2021), who found that green marketing mix dimensions positively influence purchase intention in the Indonesian F&B sector. It also supports Fitria et al. (2026), who demonstrated that green marketing positively influences green purchase intention among Indonesian coffee consumers. The finding further supports Sharma (2021), who identified green marketing as an important component of green purchasing decision-making.

The positive effect of Green Marketing indicates that sustainability-oriented marketing can help consumers identify and evaluate environmentally preferable F&B alternatives. Information concerning sustainable packaging, waste reduction, recycling, responsible sourcing, and other environmental initiatives can provide external cues that make sustainability attributes more visible at the point of purchase. However, the lower standardized coefficient of Green Marketing relative to Circular Economy Awareness suggests that marketing communication alone may not be sufficient to generate strong sustainable purchase intentions. Consistent with Adhikari et al. (2025), the effectiveness of green marketing is likely to depend on the credibility, transparency, and substance of environmental claims. Marketing messages that are not supported by genuine sustainability practices may be less capable of generating consumer confidence.

The simultaneous significance of both predictors is also important from a sustainable consumption perspective. Circular Economy Awareness and Green Marketing represent complementary mechanisms: awareness operates primarily as an internal consumer factor, while green marketing functions as an external source of information and environmental cues. Their combined contribution suggests that sustainable purchasing may be strengthened when consumers understand circular economy principles and businesses communicate genuine sustainability practices clearly. This finding supports the conceptual argument developed in the literature review that the transition toward circular consumption requires interaction between consumer participation and business-level sustainability initiatives.

The findings also contribute to the research gap identified in the introduction. Previous studies have frequently examined circular economy products in general or investigated green marketing within specific brands and product categories. In contrast, this study connects Circular Economy Awareness and Green Marketing within the broader context of sustainable F&B purchasing among Indonesian consumers. The results therefore provide empirical evidence from the consumer perspective, complementing previous research that has primarily examined sustainability practices from the business perspective, such as Munawar et al. (2025).

Overall, the findings do not contradict the proposed hypotheses. Both H1 and H2 are supported, while Circular Economy Awareness emerges as the stronger predictor. The results imply that efforts to encourage sustainable F&B consumption should not rely exclusively on promotional communication. F&B businesses and other stakeholders should also strengthen consumer understanding of circular economy practices while ensuring that green marketing claims are transparent and supported by substantive environmental actions.

4.3. Relevance to Research Objectives

The findings are directly relevant to the research objective of examining the influence of Circular Economy Awareness and Green Marketing on Sustainable Purchase Intention among F&B consumers in Indonesia. The results show that both variables have positive and significant partial influences on

Hidup dan Kehutanan.

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